UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-Q

☒ **QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the quarterly period ended September 30, 2018

OR

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the transition period from _____to_____.

Commission file number: 001-35005

ASSEMBLY BIOSCIENCES, INC.

(Exact name of Registrant as specified in its charter)

Delaware	**20-8729264**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)
11711 N. Meridian St., Suite 310 Carmel, Indiana	**46032**
(Address of principal executive offices)	(zip code)

(317) 210-9311
(Registrant's telephone number, including area code)

(Former name, former address and former fiscal year, if changed since last report)

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. YES ☒ NO ☐

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). YES ☒ NO ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See definition of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large Accelerated Filer	☐	Accelerated Filer	☒
Non-accelerated Filer	☐	Smaller Reporting Company	☐
Emerging growth company	☐		

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Indicate by check mark whether registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). YES ☐ NO ☒

As of November 5, 2018, there were 25,463,172 shares of the registrant's common stock outstanding.

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PART I - FINANCIAL INFORMATION
Item 1. Condensed Consolidated Financial Statements (unaudited)

ASSEMBLY BIOSCIENCES, INC.
CONDENSED CONSOLIDATED BALANCE SHEETS

	September 30, 2018 (Unaudited)	December 31, 2017
ASSETS		
Current assets		
Cash and cash equivalents	$ 119,752,339	$ 82,033,209
Marketable securities, at fair value	114,187,793	37,914,482
Accounts receivable from collaboration	2,589,862	2,273,421
Prepaid expenses and other current assets	3,342,759	897,400
Total current assets	239,872,753	123,118,512
Long-term assets		
Marketable securities, at fair value	-	3,347,213
Property, plant and equipment, net	515,798	860,026
Security deposits	950,515	339,558
Intangible assets	29,000,000	29,000,000
Goodwill	12,638,136	12,638,136
Total long-term assets	43,104,449	46,184,933
Total assets	**$ 282,977,202**	**$ 169,303,445**
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities		
Accounts payable	$ 2,987,565	$ 2,123,939
Accrued expenses	6,517,053	6,139,000
Deferred revenue - short-term	5,105,104	5,229,227
Total current liabilities	14,609,722	13,492,166
Long-term liabilities		
Deferred rent	7,903	-
Deferred tax liabilities	2,107,300	2,135,802
Deferred revenue - long-term	36,819,053	40,555,708
Total long-term liabilities	38,934,256	42,691,510
Total liabilities	**53,543,978**	**56,183,676**
Commitments and contingencies		
Stockholders' equity		
Preferred stock, $0.001 par value; 5,000,000 shares authorized; 0 shares issued and outstanding	-	-
Common stock, $0.001 par value; 100,000,000 and 50,000,000 shares authorized as of September 30, 2018 and December 31, 2017; 25,460,122 and 20,137,974 shares issued and outstanding as of September 30, 2018 and December 31, 2017, respectively	25,460	20,138
Additional paid-in capital	545,388,704	364,528,037
Accumulated other comprehensive loss	(354,896)	(392,391)
Accumulated deficit	(315,626,044)	(251,036,015)
Total stockholders' equity	229,433,224	113,119,769
Total liabilities and stockholders' equity	**$ 282,977,202**	**$ 169,303,445**

See Notes to Condensed Consolidated Financial Statements.

ASSEMBLY BIOSCIENCES, INC.
CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS AND COMPREHENSIVE LOSS
(UNAUDITED)

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2018	2017	2018	2017
Collaboration revenue	$ 4,285,848	$ 2,659,613	$ 11,068,773	$ 5,703,293
Operating expenses:				
Research and development	19,108,918	10,929,436	51,490,220	33,628,196
General and administrative	7,752,493	4,180,357	25,992,186	12,022,357
Total operating expenses	26,861,411	15,109,793	77,482,406	45,650,553
Loss from operations	**(22,575,563)**	**(12,450,180)**	**(66,413,633)**	**(39,947,260)**
Other income (expenses)				
Interest and other income	1,116,053	241,326	2,015,475	617,668
Realized loss from marketable securities	(82,070)	(99,068)	(232,320)	(577,300)
Total other income	1,033,983	142,258	1,783,155	40,368
Loss before income taxes	(21,541,580)	(12,307,922)	(64,630,478)	(39,906,892)
Income tax benefit	6,542	35,903	40,449	105,416
Net loss	**$ (21,535,038)**	**$ (12,272,019)**	**$ (64,590,029)**	**$ (39,801,476)**
Other comprehensive (loss) income				
Unrealized loss recognized in accumulated other comprehensive loss before reclassification, net of tax benefit of $50,664, $31,844, $44,192 and $89,281, respectively	(8,749)	(51,203)	(138,686)	(143,562)
Reclassification adjustment of unrealized loss included in net loss, net of tax expense of $56,139, $37,987, $56,139 and $221,358, respectively	25,931	61,081	176,181	355,942
Comprehensive loss	**$ (21,517,856)**	**$ (12,262,141)**	**$ (64,552,534)**	**$ (39,589,096)**
Net loss per share, basic and diluted	$ (0.87)	$ (0.71)	$ (2.95)	$ (2.30)
Weighted average common shares outstanding, basic and diluted	24,878,413	17,367,523	21,900,943	17,326,506

See Notes to Condensed Consolidated Financial Statements.

ASSEMBLY BIOSCIENCES, INC.
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(UNAUDITED)

	Nine Months Ended September 30,	
	2018	**2017**
Cash flows from operating activities		
Net loss	$ (64,590,029)	$ (39,801,476)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	473,430	124,676
Stock-based compensation	21,677,510	5,833,010
Amortization of premium (discount) on investment securities, net	232,320	577,300
Deferred income tax benefit	(40,449)	(105,416)
Changes in operating assets and liabilities:		
Accounts receivable from collaboration	(316,441)	(1,400,374)
Prepaid expenses and other current assets	(2,445,359)	(340,158)
Accounts payable	863,626	(1,497,524)
Accrued expenses	378,053	1,599,689
Deferred revenue	(3,860,778)	46,810,840
Deferred rent	7,903	-
Security deposits	(610,957)	(170,423)
Net cash (used in) provided by operating activities	(48,231,171)	11,630,144
Cash flows from investing activities		
Purchases of fixed assets	(129,202)	(503,115)
Purchases of marketable securities	(115,029,814)	(40,022,384)
Redemptions of marketable securities	41,920,838	26,556,566
Net cash used in investing activities	(73,238,178)	(13,968,933)
Cash flows from financing activities		
Proceeds from common stock sold, net of underwriters' discounts and cost	155,425,765	-
Proceeds from the exercise of stock options	3,762,714	1,010,936
Net cash provided by financing activities	159,188,479	1,010,936
Net increase (decrease) in cash and cash equivalents	37,719,130	(1,327,853)
Cash and cash equivalents at the beginning of the period	82,033,209	28,575,085
Cash and cash equivalents at the end of the period	**$ 119,752,339**	**$ 27,247,232**
Supplemental disclosure of cash flow information:		
Shares issued for option exercise - receivable	$ -	$ 8
Change in unrealized gain on marketable securities available-for-sale, before tax expense	$ 49,442	$ 344,457

See Notes to Condensed Consolidated Financial Statements.

ASSEMBLY BIOSCIENCES, INC.
CONDENSED CONSOLIDATED STATEMENT OF CHANGES IN STOCKHOLDERS' EQUITY
(UNAUDITED)

	Common Stock		Additional	Accumulated Other	Accumulated	Total Stockholders'
	Shares	Amount	Paid-in Capital	Comprehensive Loss	Deficit	Equity
Balance as of December 31, 2017	**20,137,974**	**$ 20,138**	**$ 364,528,037**	**$ (392,391)**	**$ (251,036,015)**	**$ 113,119,769**
Proceeds from common stock sold, net of underwriters' discounts and cost	4,600,000	4,600	155,421,165	-	-	155,425,765
Proceeds from the exercise of stock options	721,210	721	3,761,993	-	-	3,762,714
Settlement of restricted stock units into common stock	938	1	(1)	-	-	-
Change in unrealized gain on marketable securities, net of income tax expense of $11,947	-	-	-	37,495	-	37,495
Stock-based compensation	-	-	21,677,510	-	-	21,677,510
Net loss	-	-	-	-	(64,590,029)	(64,590,029)
Balance as of September 30, 2018	**25,460,122**	**$ 25,460**	**$ 545,388,704**	**$ (354,896)**	**$ (315,626,044)**	**$ 229,433,224**

See Notes to Condensed Consolidated Financial Statements

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Note 1 - Nature of Business

Overview

Assembly Biosciences, Inc., together with its subsidiaries (Assembly or the Company), is a clinical-stage biotechnology company advancing two innovative platform programs: a new class of oral therapeutic candidates for the treatment of hepatitis B virus (HBV) infection and a novel class of oral synthetic live biotherapeutic candidates, which are designed to treat disorders associated with the microbiome.

The Company's HBV-cure program is pursuing multiple drug candidates that inhibit the HBV lifecycle and block the generation of covalently closed circular DNA (cccDNA), with the aim of increasing the current low cure rates for patients with HBV. Assembly has discovered multiple novel core inhibitors, which are small molecules that directly target and allosterically modify the HBV core (HBc) protein.

The Company's Microbiome program consists of a fully integrated platform that includes a disease targeted strain identification and selection process, methods for strain isolation and growth under current Good Manufacturing Practices (cGMP) conditions, and a licensed patented delivery system called GEMICEL®, which is designed to allow for targeted oral delivery of live biologic and conventional therapies to the lower gastrointestinal (GI) tract. The Microbiome program is prioritizing efforts on optimizing the Company's lead product candidates, ABI-M201 (Ulcerative Colitis), which is currently undergoing IND-enabling studies, and ABI-M301 (Crohn's disease). Using its microbiome platform, the Company is exploring additional product candidates for other disease indications, including irritable bowel syndrome, non-alcoholic steatohepatitis (NASH) and immuno-oncology, which indications the Company may pursue either internally or in collaboration with partners.

In January 2017, the Company entered into a Research, Development, Collaboration and License Agreement (the Collaboration Agreement) with Allergan Pharmaceuticals International Limited (Allergan) to develop and commercialize select microbiome gastrointestinal programs. Pursuant to the terms of the Collaboration Agreement, in connection with the closing of the transaction in February 2017, Allergan paid the Company an upfront payment of $50 million. Additionally, the Company is eligible to receive up to approximately $630 million in payments related to seven development milestones and up to approximately $2.15 billion in payments related to 12 commercial development and sales milestones in connection with the successful development and commercialization of licensed compounds for up to six different indications (see Note 7). Allergan and the Company have agreed to share development costs up to an aggregate of $75 million through proof-of-concept (POC) studies on a ⅔, ⅓ basis, respectively, and Allergan has agreed to assume all post-POC development costs. Additionally, the Company has an option to co-promote the licensed programs in the United States and China, subject to certain conditions set forth in the Collaboration Agreement.

On July 16, 2018, the Company issued to various investors an aggregate of 4,600,000 shares of common stock in a public offering at $36.00 per share, which included the exercise in full by the underwriters of their option to purchase 600,000 additional shares of common stock. The Company received aggregate net proceeds of approximately $155.4 million from the offering and the option exercise, after deducting underwriting discounts and commissions and offering expenses payable by the Company.

Liquidity

The Company has not derived any revenue from product sales to date and currently has no approved products. Once a product has been developed, it will need to be approved for sale by the U.S. Food and Drug Administration (FDA) or an applicable foreign regulatory agency. Since inception, the Company's operations have been financed primarily through the sale of equity securities, the proceeds from the exercise of warrants and stock options, the issuance of debt and an up-front payment related to the Collaboration Agreement. The Company has incurred losses from operations since inception and expects to continue to incur substantial losses for the next several years as it continues its product development efforts. Management believes the Company currently has sufficient funds to meet its operating requirements for at least the next twelve months. If the Company cannot generate significant cash from its operations, it intends to obtain any additional funding it requires through strategic relationships, public or private equity or debt financings, grants or other arrangements. The Company cannot assure such funding will be available on reasonable terms, if at all.

If the Company is unable to generate enough revenue from the Collaboration Agreement when needed or to secure additional sources of funding and receive related full and timely collections of amounts due, it may be necessary to significantly reduce the current rate of spending through reductions in staff and delaying, scaling back, or stopping certain research and development programs, including more costly clinical trials.

Note 2 - Summary of Significant Accounting Policies and Recent Accounting Pronouncements

Basis of Presentation

The accompanying condensed consolidated interim financial statements include the accounts of the Company and its subsidiaries. All intercompany balances and transactions have been eliminated in consolidation.

The accompanying condensed consolidated financial statements have been prepared in accordance with the accounting principles generally accepted in the United States of America (U.S. GAAP) for interim financial information and pursuant to the instructions to Form 10-Q and Rule 10-01 of Regulation S-X of the U.S. Securities and Exchange Commission (SEC) and on the same basis as the Company prepares its annual audited consolidated financial statements. The condensed consolidated balance sheet at September 30, 2018, condensed consolidated statements of operations and comprehensive loss for the three and nine months ended September 30, 2018 and 2017, condensed consolidated statements of cash flows for the nine months ended September 30, 2018 and 2017, and condensed consolidated statement of changes in stockholders' equity for the nine months ended September 30, 2018 are unaudited, but include all adjustments, consisting only of normal recurring adjustments, that the Company considers necessary for a fair presentation of the financial position, operating results and cash flows for the periods presented. The results for the three and nine months ended September 30, 2018 are not necessarily indicative of results to be expected for the year ending December 31, 2018 or for any future interim period. The consolidated balance sheet at December 31, 2017 has been derived from audited financial statements; however, it does not include all of the information and notes required by U.S. GAAP for complete financial statements. The accompanying condensed consolidated financial statements should be read in conjunction with the audited consolidated financial statements for the year ended December 31, 2017 and notes thereto included in the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2017 filed with the SEC on March 8, 2018 (the 2017 Annual Report).

Use of Estimates

The preparation of the condensed consolidated financial statements in conformity with the U.S. GAAP requires management to make estimates and assumptions that may affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and reported amounts of expenses during the reporting period. Actual results could differ from those estimates.

Significant estimates inherent in the preparation of the accompanying condensed consolidated financial statements include recoverability and useful lives (indefinite or finite) of intangible assets, assessment of impairment of goodwill, provisions for income taxes, amounts receivable under the collaboration agreement, and the fair value of stock options, restricted stock units (RSUs) granted to employees and directors.

The Company's estimates could be affected by external conditions, including those unique to the Company and general economic conditions. It is reasonably possible that these external factors could have an effect on the Company's estimates and could cause actual results to differ from those estimates and assumptions.

Significant Accounting Policies

There have been no material changes in the Company's significant accounting policies to those previously disclosed in the 2017 Annual Report other than the adoption of the Financial Accounting Standards Board (FASB) Accounting Standard Updates (ASU) 606, *Revenue from Contracts with Customers* (see Note 7).

Loss per Share of Common Stock

Basic net loss per share of common stock excludes dilution and is computed by dividing net loss by the weighted average number of shares of common stock outstanding during the period. Diluted net loss per share of common stock reflects the potential dilution that could occur if securities or other contracts to issue common stock were exercised or converted into common stock or resulted in the issuance of common stock that then shared in the earnings of the entity unless inclusion of such shares would be anti-dilutive. Since the Company has only incurred losses, basic and diluted net loss per share is the same. Securities that could potentially result in diluted loss per share in the future that were not included in the computation of diluted loss per share at September 30, 2018 and 2017 are as follows:

	Nine Months Ended September 30,	
	2018	**2017**
Warrants to purchase common stock	15,296	16,909
Options to purchase common stock	4,422,194	4,859,680
Unvested restricted stock units	343,465	-
Total	**4,780,955**	**4,876,589**

Revenue Recognition

The Company recognizes revenue under the FASB's Accounting Standards Codification (ASC) 606, *Revenue from Contracts with Customers*. The core principle of the new revenue standard is that a company should recognize revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the company expects to be entitled in exchange for those goods or services. The following five steps are applied to achieve that core principle:

- Step 1: Identify the contract with the customer
- Step 2: Identify the performance obligations in the contract
- Step 3: Determine the transaction price
- Step 4: Allocate the transaction price to the performance obligations in the contract
- Step 5: Recognize revenue when the company satisfies a performance obligation

In order to identify the performance obligations in a contract with a customer, a company must assess the promised goods or services in the contract and identify each promised good or service that is distinct. A performance obligation meets ASC 606's definition of a "distinct" good or service (or bundle of goods or services) if both of the following criteria are met:

- the customer can benefit from the good or service either on its own or together with other resources that are readily available to the customer (i.e., the good or service is capable of being distinct); and
- the entity's promise to transfer the good or service to the customer is separately identifiable from other promises in the contract (i.e., the promise to transfer the good or service is distinct within the context of the contract).

If a good or service is not distinct, the good or service is combined with other promised goods or services until a bundle of goods or services is identified that is distinct.

The transaction price is the amount of consideration to which an entity expects to be entitled in exchange for transferring promised goods or services to a customer, excluding amounts collected on behalf of third parties (e.g., some sales taxes). The consideration promised in a contract with a customer may include fixed amounts, variable amounts or both. When determining the transaction price, an entity must consider the effects of all of the following:

- variable consideration;
- constraining estimates of variable consideration;
- existence of a significant financing component in the contract;
- non-cash consideration; and
- consideration payable to a customer.

Variable consideration is included in the transaction price only to the extent that it is probable that a significant reversal in the amount of cumulative revenue recognized will not occur when the uncertainty associated with the variable consideration is subsequently resolved.

The transaction price is allocated to each performance obligation on a relative standalone selling price basis.

The transaction price allocated to each performance obligation is recognized when that performance obligation is satisfied, at a point in time or over time as appropriate.

Revenue for a sales-based or usage-based royalty promised in exchange for a license of intellectual property is recognized only when (or as) the later of the following events occurs:

- the subsequent sale or usage occurs; or
- the performance obligation to which some or all of the sales-based or usage-based royalty has been allocated has been satisfied (or partially satisfied).

Adoption of Recent Accounting Pronouncements

In May 2014, the FASB issued ASU 2014-09, *Revenue from Contracts with Customers (Topic 606)*, as modified by ASU 2015-14, *Revenue from Contracts with Customers (Topic 606): Deferral of the Effective Date*, ASU 2016-08, *Revenue from Contracts with Customers (Topic 606): Principal versus Agent Considerations (Reporting Revenue Gross versus Net)*, ASU 2016-10, *Revenue from Contracts with Customers (Topic 606): Identifying Performance Obligations and Licensing*, and ASU 2016-12, *Revenue from Contracts with Customers (Topic 606): Narrow-Scope Improvements and Practical Expedients*. The revenue recognition principle in ASU 2014-09 is that an entity should recognize revenue to depict the transfer of goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. In addition, new and enhanced disclosures will be required. Companies may adopt the new standard either using the full retrospective approach, a modified retrospective approach with practical expedients, or a cumulative effect upon adoption approach. The Company adopted the new standard on January 1, 2018 using the modified retrospective approach. The Collaboration Agreement is the Company's only revenue contract, and adoption of ASU 2014-09 did not have any impact on the Company's accounting for the Collaboration Agreement in the accompanying condensed consolidated financial statements.

In January 2016, the FASB issued ASU 2016-01, *Recognition and Measurement of Financial Assets and Financial Liabilities*. ASU 2016-01 requires equity investments to be measured at fair value with changes in fair value recognized in net income; simplifies the impairment assessment of equity investments without readily determinable fair values by requiring a qualitative assessment to identify impairment; eliminates the requirement for public business entities to disclose the method(s) and significant assumptions used to estimate the fair value that is required to be disclosed for financial instruments measured at amortized cost on the balance sheet; requires public business entities to use the exit price notion when measuring the fair value of financial instruments for disclosure purposes; requires an entity to present separately in other comprehensive income the portion of the total change in the fair value of a liability resulting from a change in the instrument-specific credit risk when the entity has elected to measure the liability at fair value in accordance with the fair value option for financial instruments; requires separate presentation of financial assets and financial liabilities by measurement category and form of financial assets on the balance sheet or the accompanying notes to the financial statements and clarifies that an entity should evaluate the need for a valuation allowance on a deferred tax asset related to available-for-sale securities in combination with the entity's other deferred tax assets. ASU 2016-01 is effective for financial statements issued for fiscal years beginning after December 15, 2017 and interim periods within those fiscal years. On January 1, 2018, the Company implemented ASU 2016-01 without any impact on the Company's condensed consolidated financial statements and related disclosures.

In August 2016, the FASB issued ASU 2016-15, *Statement of Cash Flows - Classification of Certain Cash Receipts and Cash Payments*, which addresses eight specific cash flow issues with the objective of reducing the existing diversity in practice in how certain cash receipts and cash payments are presented and classified in the statement of cash flows. On January 1, 2018, the Company implemented ASU 2016-15 without any material impact on the Company's condensed consolidated statement of cash flows and related disclosures.

In May 2017, the FASB issued ASU 2017-09, *Compensation-Stock Compensation (Topic 718): Scope of Modification Accounting*. ASU 2017-09 provides clarity and reduces both (1) diversity in practice and (2) cost and complexity when applying the guidance in Topic 718, to a change to the terms or conditions of a share-based payment award. The amendments in ASU 2017-09 should be applied prospectively to an award modified on or after the adoption date. On January 1, 2018, the Company implemented ASU 2017-09 without any material impact on the Company's condensed consolidated financial statements and related disclosures.

Recent Accounting Pronouncements

In February 2016, the FASB issued ASU 2016-02, *Leases (Topic 842)*, which supersedes FASB Topic 840, *Leases (Topic 840)* and provides principles for the recognition, measurement, presentation and disclosure of leases for both lessees and lessors. The new standard requires lessees to apply a dual approach, classifying leases as either finance or operating leases based on the principle of whether or not the lease is effectively a financed purchase by the lessee. This classification will determine whether lease expense is recognized based on an effective interest method or on a straight-line basis over the term of the lease, respectively. A lessee is also required to record a right-of-use asset and a lease liability for all leases with a term of greater than 12 months regardless of classification. Leases with a term of 12 months or less will be accounted for similar to existing guidance for operating leases. In January 2018, the FASB issued ASU 2018-01, *Leases (Topic 842) Land Easement Practical Expedient for Transition to Topic 842*, which amends ASU 2016-02 to provide entities an optional transition practical expedient to not evaluate under Topic 842 existing or expired land easements that were not previously accounted for as leases under the current leases guidance in Topic 842. An entity that elects this practical expedient should evaluate new or modified land easements under Topic 842 beginning at the date that the entity adopts Topic 842. In July 2018, the FASB also issued ASU 2018-11, *Leases (Topic 842): Targeted Improvements*, which provides an optional transition method that allows entities to elect to apply the standard prospectively at its effective date, versus recasting the prior periods presented. The standard will be effective for annual and interim periods beginning after December 15, 2018, with early adoption permitted upon issuance. The Company is currently evaluating the impact of pending adoption on its condensed consolidated financial statements and related disclosures. The Company currently expects that its operating lease commitments will be subject to the new standard and recognized as operating lease liabilities and right-of-use assets upon adoption of Topic 842, which will increase the total assets and total liabilities that the Company reports relative to such amounts prior to adoption.

In June 2016, the FASB issued ASU 2016-13, *Financial Instruments - Credit Losses: Measurement of Credit Losses on Financial Instruments*, which requires that expected credit losses relating to financial assets measured on an amortized cost basis and available-for-sale debt securities be recorded through an allowance for credit losses. ASU 2016-13 limits the amount of credit losses to be recognized for available-for-sale debt securities to the amount by which carrying value exceeds fair value and also requires the reversal of previously recognized credit losses if fair value increases. The new standard will be effective on January 1, 2020. Early adoption will be available on January 1, 2019. The Company is currently evaluating the effect that the updated standard will have on its condensed consolidated financial statements and related disclosures.

In February 2018, the FASB issued ASU 2018-02, *Income Statement - Reporting Comprehensive Income, (Topic 220): Reclassification of Certain Tax Effects from Accumulated Other Comprehensive Income*, which allows a reclassification from accumulated other comprehensive income to retained earnings for stranded tax effects resulting from the federal corporate income tax rate enacted under the Tax Cuts and Jobs Act (the Tax Act). The amount of the reclassification would be the difference between the historical corporate income tax rate and the Tax Act's 21% corporate income tax rate. The new standard is effective for fiscal years and interim periods beginning after December 15, 2018 with early adoption permitted in any interim period. The Company is currently evaluating the effect that the updated standard will have on its condensed consolidated financial statements and related disclosures.

In March 2018, the FASB issued a new accounting standard to incorporate SEC Staff Accounting Bulletin No. 118 (SAB 118), which addresses accounting implications of the Tax Act. SAB 118 allows an entity to record provisional amounts during a measurement period not to extend beyond one year from the enactment date and was effective upon issuance. The Company is currently evaluating the effect that the updated standard will have on its condensed consolidated financial statements and related disclosures.

In June 2018, the FASB issued ASU 2018-07, *Compensation-Stock Compensation (Topic 718): Improvements to Nonemployee Share-Based Payment Accounting*. ASU 2018-07 simplifies several aspects of the accounting for nonemployee share-based payment transactions resulting from expanding the scope of Topic 718, Compensation-Stock Compensation, to include share-based payment transactions for acquiring goods and services from nonemployees. ASU 2018-07 is effective for public business entities for fiscal years and interim periods beginning after December 15, 2018. The Company is currently evaluating the effect that the updated standard will have on its condensed consolidated financial statements and related disclosures.

In August 2018, the SEC adopted the final rule under SEC Release No. 33-10532, *Disclosure Update and Simplification*, amending certain disclosure requirements that were redundant, duplicative, overlapping, outdated or superseded. In addition, the amendments expanded the disclosure requirements on the analysis of stockholders' equity for interim financial statements. Under the amendments, an analysis of changes in each caption of stockholders' equity presented in the balance sheet must be provided in a note or separate statement. The analysis should present a reconciliation of the beginning balance to the ending balance of each period for which a statement of comprehensive income is required to be filed. This final rule became effective on November 5, 2018. The Company is evaluating the impact of this guidance on its condensed consolidated financial statements.

In August 2018, the FASB issued ASU 2018-13, *Fair Value Measurement (Topic 820), – Disclosure Framework – Changes to the Disclosure Requirements for Fair Value Measurement*, which makes a number of changes meant to add, modify or remove certain disclosure requirements associated with the movement amongst or hierarchy associated with Level 1, Level 2 and Level 3 fair value measurements. This guidance is effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2019. Early adoption is permitted upon issuance of the update. The Company does not expect the adoption of this guidance to have a material impact on its condensed consolidated financial statements and related disclosures.

Note 3 - Marketable Securities

Marketable securities consisted of the following as of September 30, 2018 and December 31, 2017:

	September 30, 2018			
	Amortized Cost	Gross Unrealized Gain [1]	Gross Unrealized Loss [1]	Fair Value
Short-term available-for-sale securities				
Corporate bonds	$ 112,354,731	$ 35,030	$ (192,407)	$ 112,197,354
Commercial paper	1,972,288	18,151	-	1,990,439
Total	$ 114,327,019	$ 53,181	$ (192,407)	$ 114,187,793

(1) Gross unrealized gain (loss) is pre-tax.

	December 31, 2017			
	Amortized Cost	Gross Unrealized Gain [1]	Gross Unrealized Loss [1]	Fair Value
Short-term available-for-sale securities				
Corporate bonds	$ 38,092,585	$ 5,635	$ (183,738)	$ 37,914,482
Long-term available-for-sale securities				
Corporate bonds	3,357,778	-	(10,565)	3,347,213
Total	$ 41,450,363	$ 5,635	$ (194,303)	$ 41,261,695

[1] Gross unrealized gain (loss) is pre-tax.

The contractual term to maturity of short-term marketable securities held by the Company as of September 30, 2018 is less than one year. There were no long-term marketable securities held by the Company as of September 30, 2018.

The fair value of marketable securities was classified into fair value measurement categories as of September 30, 2018 and December 31, 2017 as follows:

	September 30, 2018	December 31, 2017
Quoted prices in active markets for identical assets (Level 1)	$ -	$ -
Quoted prices for similar assets observable in the marketplace (Level 2)	114,187,793	41,261,695
Significant unobservable inputs (Level 3)	-	-
Total	$ 114,187,793	$ 41,261,695

The fair values of marketable securities are determined using quoted market prices from daily exchange traded markets based on the closing prices as of September 30, 2018 and December 31, 2017.

There were no transfers of marketable securities between Levels 1, 2 or 3 for the nine months ended September 30, 2018 and 2017.

The following table shows the Company's investments' gross unrealized losses and fair value, aggregated by investment category and length of time that individual securities have been in a continuous unrealized loss position at September 30, 2018.

	Less than 12 Months		12 Months or More		Total	
	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses
Corporate bonds	$ 50,178,552	$ (185,687)	$ 999,390	$ (6,720)	$ 51,177,942	$ (192,407)
Total	**$ 50,178,552**	**$ (185,687)**	**$ 999,390**	**$ (6,720)**	**$ 51,177,942**	**$ (192,407)**

The Company has determined that the unrealized losses are deemed to be temporary as of September 30, 2018. The Company believes that the unrealized losses generally are caused by increases in the risk premiums required by market participants rather than an adverse change in cash flows or a fundamental weakness in the credit quality of the issuer or underlying assets. Because the Company has the ability and intent to hold these investments until a recovery of fair value, which may be maturity, it does not consider the investment in corporate bonds to be other-than-temporarily impaired at September 30, 2018.

Note 4 - Property, Plant and Equipment, Net

Property, plant and equipment, consists of the following:

	Useful life (Years)	September 30, 2018	December 31, 2017
Computer hardware and software	3	$ 175,355	$ 104,968
Lab equipment	3 to 5	369,827	369,827
Office equipment	7	68,004	25,354
Leasehold improvement	1 to 3.25	789,865	773,700
Total property, plant and equipment		1,403,051	1,273,849
Less: Accumulated depreciation and amortization		(887,253)	(413,823)
Property, plant and equipment, net		$ 515,798	$ 860,026

Depreciation expense for the three months ended September 30, 2018 and 2017 was approximately $161,484 and $41,846, respectively, and was recorded in both research and development expense and general and administrative expense in the condensed consolidated statements of operations.

Depreciation expense for the nine months ended September 30, 2018 and 2017 was approximately $473,430 and $124,676, respectively, and was recorded in both research and development expense and general and administrative expense in the condensed consolidated statements of operations.

Note 5 - Accrued Expenses

Accrued expenses consist of the following:

	September 30, 2018	December 31, 2017
Accrued expenses:		
Salaries, bonuses and employee benefits	$ 4,229,895	$ 4,518,128
Research and development expenses	1,435,902	674,686
General and administrative expenses	851,256	946,186
Total accrued expenses	$ 6,517,053	$ 6,139,000

Note 6 - Stockholders' Equity

Common Stock

On May 30, 2018, the Company's stockholders approved the adoption of the Fourth Amended and Restated Certificate of Incorporation, which amended and restated the Company's Third Amended and Restated Certificate of Incorporation, as amended, to, among other things, increase the authorized number of shares of common stock, par value $0.001 per share, from 50,000,000 shares to 100,000,000 shares. The Fourth Amended and Restated Certificate of Incorporation was filed with the Secretary of State of the State of Delaware on May 31, 2018.

On July 16, 2018, the Company issued to various investors an aggregate of 4,600,000 shares of common stock in a public offering at $36.00 per share, which included the exercise in full by the underwriters of their option to purchase 600,000 additional shares of common stock. The purchase price paid by investors was $36.00 per share. The Company received aggregate net proceeds of approximately $155.4 million from the offering and the option exercise, after deducting underwriting discounts and commissions and offering expenses payable by the Company.

For the nine months ended September 30, 2018, the Company issued an aggregate of 721,210 shares of common stock and received gross proceeds of approximately $3.8 million from the exercise of options.

Preferred Stock

On January 24, 2018, the Board authorized the filing of a Certificate of Elimination with the Secretary of State of the State of Delaware to remove the Certificate of Designation of Series A Non-Voting Convertible Preferred Stock (the Series A Preferred Stock) from the Company's Third Amended and Restated Certificate of Incorporation, as amended (which was amended and restated on May 31, 2018), because no shares of the Series A Preferred Stock were outstanding and no shares were available to be issued.

Options

On May 30, 2018, the Company's stockholders approved the Assembly Biosciences, Inc. 2018 Stock Incentive Plan (the 2018 Plan) pursuant to which the Company reserved 1,900,000 shares of common stock for issuance.

As of September 30, 2018, the Company had awards outstanding under the following shareholder approved plans: 2010 Equity Incentive Plan (the 2010 Plan), which has been frozen; the Amended and Restated 2014 Stock Incentive Plan (the 2014 Plan); and the 2018 Stock Incentive Plan (the 2018 Plan). Shares of common stock underlying awards that are forfeited under the 2010 Plan on or after June 2, 2016 will become available for issuance under the 2014 Plan. Shares underlying awards that are forfeited under the 2014 Plan on or after May 30, 2018 will also become available for issuance under the 2018 Plan. The Company also had awards outstanding under the Assembly Biosciences, Inc. 2017 Inducement Award Plan.

A summary of the Company's option activity and related information for the nine-month period ended September 30, 2018 is as follows:

	Number of Shares	Weighted Average Exercise Price Per Share	Total Intrinsic Value
Outstanding as of December 31, 2017	4,551,819	$ 9.66	$ 162,002,439
Granted	760,854	50.31	-
Exercised	(761,404)	7.22	30,982,452
Forfeited	(129,075)	17.30	3,189,211
Outstanding as of September 30, 2018	4,422,194	$ 16.85	$ 99,742,377
Options vested and exercisable	2,977,705	$ 8.82	$ 84,359,401

The fair value of the options granted for the nine months ended September 30, 2018 and 2017, were based on the following assumptions:

	Nine Months Ended September 30,	
	2018	2017
Exercise price	$38.88 - $57.53	$12.81 - $25.96
Expected volatility	76.0% - 86.1%	83.3% - 87.0%
Risk-free rate	2.56% - 2.94%	2.02% - 2.23%
Expected term (years)	5.5 - 7.0	5.5 - 7.0

Estimated future stock-based compensation expense relating to unvested stock options is as follows:

	Future Stock Option Compensation Expenses
Three Months Ending December 31, 2018	$ 5,058,506
Year Ending December 31, 2019	10,864,062
Year Ending December 31, 2020	3,859,597
Year Ending December 31, 2021	973,485
Year Ending December 31, 2022	52,638
Total	$ 20,808,288

The weighted average remaining contractual term of exercisable options is approximately 6.4 years at September 30, 2018.

Warrants

There was no warrant activity during the nine months ended September 30, 2018.

Restricted Stock Units

A summary of the Company's RSUs and related information is as follows:

	Number of RSUs	Weighted average grant price
Unvested as of December 31, 2017	120,000	$ 44.28
Granted	231,559	46.56
Vested and Settled	(938)	49.14
Forfeited	(7,156)	49.14
Unvested as of September 30, 2018	343,465	$ 45.70

As of September 30, 2018, the Company had unrecognized stock-based compensation expense related to all unvested RSUs of $6.7 million. The weighted average remaining contractual term of unvested RSUs is approximately 9.4 years at September 30, 2018.

ESPP

On May 30, 2018, the Company’s stockholders approved the Assembly Biosciences, Inc. 2018 Employee Stock Purchase Plan (the 2018 ESPP). The 2018 ESPP provides for the purchase by employees of up to an aggregate of 400,000 shares of the Company’s common stock.

Eligible employees can purchase the Company’s Common Stock at the end of a predetermined offering period at 85% of the lower of the fair market value at the beginning or end of the offering period. The ESPP is compensatory and results in stock-based compensation expense.

As of September 30, 2018, no shares have been purchased and 400,000 shares are available for future sale under the Company’s 2018 ESPP. Share-based compensation expense recorded was approximately $104,239 and $123,126 for the three and nine months ended September 30, 2018, respectively.

Total stock-based compensation expense for the three and nine months ended September 30, 2018 and 2017 is as follows:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2018	2017	2018	2017
Research and development	$ 2,473,405	$ 1,557,298	$ 8,686,926	$ 3,735,494
General and administrative	3,532,367	1,039,803	12,990,584	2,097,516
Total stock-based compensation expense	$ 6,005,772	$ 2,597,101	$ 21,677,510	$ 5,833,010

Note 7 - Collaboration Agreement

In January 2017, the Company entered into the Collaboration Agreement with Allergan to develop and commercialize select microbiome gastrointestinal programs. Pursuant to the Collaboration Agreement, the Company granted Allergan an exclusive worldwide license to certain of its intellectual property, including its intellectual property arising under the Collaboration Agreement, to develop and commercialize licensed compounds for ulcerative colitis (UC), Crohn's disease, and irritable bowel syndrome (IBS). Allergan and the Company will collaborate on research and development activities with respect to the licensed compounds in accordance with a mutually agreed upon research and development plan.

In connection with the closing of the transaction in February 2017, Allergan paid the Company an upfront payment of $50 million. Additionally, the Company is eligible to receive variable consideration in the form of cost-sharing reimbursements, up to approximately $630 million related to seven development milestones and up to approximately $2.15 billion related to 12 commercial development and sales milestones in connection with the successful development and commercialization of licensed compounds for up to six different indications. There is significant uncertainty as to whether the stated milestones will be achieved, and the Company has not included the associated variable consideration in the transaction price as it is not probable that a significant reversal in the amount of cumulative revenue recognized would not occur.

In addition, the Company is eligible to receive tiered royalties at rates ranging from the mid-single digits to the mid-teens based on net sales. Allergan and the Company have agreed to share development costs up to an aggregate of $75 million through POC studies on a ⅔, ⅓ basis, respectively, and Allergan has agreed to assume all post-POC development costs. In the event any pre-POC development costs exceed $75 million in the aggregate, the Company may elect either (a) to fund ⅓ of such costs in excess of $75 million or (b) to allow Allergan to deduct from future development milestone payments ⅓ of the development costs funded by Allergan in excess of $75 million plus a premium of 25%. The Company has an option to co-promote the licensed programs in the U.S. and China, subject to certain conditions set forth in the Collaboration Agreement. Allergan may terminate the Collaboration Agreement for convenience at any time upon either 90 days' (prior to the initiation of the first POC trial of a licensed product) or 120 days' (after the initiation of the first POC trial of a licensed product), as applicable, advance written notice to the Company. The Collaboration Agreement also contains customary provisions for termination by either party, including in the event of breach of the Collaboration Agreement, subject to cure.

The Company determined that it has four performance obligations under the Collaboration Agreement associated with the transfer of the license and the performance of the research and development services combined for each of the four indications; the license is not distinct because Allergan cannot obtain value from the license without the research and development services that the Company is uniquely able to perform. The deferred revenue associated with the $50 million upfront payment will be recorded proportionally over a ten-year service period as the research and development services are expected to be performed. As such, the Company recognized the upfront payment received of $50.0 million as approximately $5.0 million in short-term deferred revenue and $45.0 million in long-term deferred revenue as of the closing date. Given the early stage of development, the Company has determined the relative selling price for each of the four indications to be $12.5 million. For the three months ended September 30, 2018 and 2017, the Company recorded approximately $1.2 million and $1.3 million, respectively, in revenue related to the amortization of deferred revenue. For the nine months ended September 30, 2018 and 2017, the Company recorded approximately $3.7 million and $3.2 million, respectively, in revenue related to the amortization of deferred revenue. Short-term and long-term deferred revenue contract liabilities related to the Collaboration Agreement were approximately $5.1 million and approximately $36.8 million at September 30, 2018 and approximately $5.2 million and approximately $40.6 million at December 31, 2017.

Expense reimbursements will be recognized as collaboration revenue when the related expenses are incurred. The reimbursable expenses incurred in connection with the Collaboration Agreement during the three months ended September 30, 2018 and 2017 were approximately $3.1 million and $1.4 million, and during the nine months ended September 30, 2018 and 2017 were approximately $7.4 million and $2.5 million, respectively, and recorded in collaboration revenue on the condensed consolidated statement of operations. On the condensed consolidated balance sheets, contract balances of approximately $2.6 million and approximately $2.3 million were recorded as accounts receivable from collaboration as of September 30, 2018 and December 31, 2017, respectively. As of January 1, 2018, and September 30, 2018, the Company had a contract liability balance of $0.2 million and $0.1 million, respectively, related to expense reimbursement performance obligations that were not satisfied.

Note 8 - Commitments and Contingencies

Real Property Leases

The Company leases office space for corporate functions in Carmel, Indiana under a lease agreement that expires in August 2023. The leased location in Carmel, Indiana supports both the HBV-cure and Microbiome programs. The Company leases office and laboratory space in San Francisco, California under a sublease that currently expires in December 2018. The leased location in San Francisco, California supports both the HBV-cure and Microbiome programs. On July 18, 2018, the Company entered into a sub-sublease for office and laboratory space in South San Francisco, California, and on September 24, 2018, a portion of the leased space was delivered to the Company. The sub-sublease expires December 15, 2023. The Company expects to move its San Francisco operations to the South San Francisco location around the beginning of 2019. The Company also conducts research, development and small-scale manufacturing activities for the Microbiome program at office and laboratory space in Groton, Connecticut under a lease that expires in March 2019.

The total rent expense for real property for the three months ended September 30, 2018 and 2017 were approximately $0.5 million and $0.4 million, respectively. The total rent expense for real property for the nine months ended September 30, 2018 and 2017 were approximately $1.3 million and $1.1 million, respectively.

Equipment Lease

Pursuant to a Master Lease Agreement dated November 25, 2014, the Company leases certain equipment. The equipment lease expense for the three months ended September 30, 2018 and 2017 amounted to approximately $0.3 million and $0.2 million, respectively. The equipment lease expense for the nine months ended September 30, 2018 and 2017 amounted to approximately $1.0 million and $0.6 million, respectively. These equipment leases began to expire in 2017, with the final lease expiring in 2021. The sum of all future payments through termination is approximately $2.2 million.

Litigation

The Company is not a party to any material legal proceedings. From time to time, the Company may be subject to various legal proceedings and claims that arise in the ordinary course of its business activities.

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations.

The interim financial statements and this Management's Discussion and Analysis of Financial Condition and Results of Operations should be read in conjunction with the financial statements and notes thereto for the year ended December 31, 2017, and the related Management's Discussion and Analysis of Financial Condition and Results of Operations, both of which are contained in our Annual Report on Form 10-K for the fiscal year ended December 31, 2017 filed with the SEC on March 8, 2018 (2017 Annual Report). In addition to historical information, this discussion and analysis contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended and Section 21E of the Securities Exchange Act of 1934, as amended (the Exchange Act). These forward-looking statements are subject to risks and uncertainties, including those set forth under "Part I. Item 1A. Risk Factors" in our 2017 Annual Report, "Part II. Item 1A. Risk Factors" in this report, and elsewhere in this report, that could cause actual results to differ materially from historical results or anticipated results.

Overview

We are a clinical-stage biotechnology company advancing two innovative platform programs: a new class of oral therapeutic candidates for the treatment of hepatitis B virus (HBV) infection and a novel class of oral synthetic live biotherapeutic candidates, which are designed to treat disorders associated with the microbiome.

HBV-cure Program

Over 250 million people worldwide are chronically infected with HBV. Our HBV-cure program is pursuing multiple drug candidates that inhibit the HBV lifecycle and block the generation of covalently closed circular DNA (cccDNA), with the aim of increasing the current low cure rate for patients with HBV. We have discovered multiple novel core inhibitors, which are small molecules that directly target and allosterically modulate the HBV core (HBc) protein. The lead product candidate from this program, ABI-H0731, has completed a Phase 1a/1b human clinical trial in New Zealand and other countries outside the United States. We have also completed an additional Phase 1a (ABI-H0731-102) pharmacokinetic (PK), safety and tolerability study of ABI-H0731 in healthy volunteers in the United States.

ABI-H0731

Interim data from our completed Phase 1a (ABI-H0731-102) safety and PK study and Phase 1b (ABI-H0731-101b) study of antiviral effects was presented at The International Liver Congress, the Annual Meeting of the European Association for the Study of the Liver (EASL) on April 12, 2018. The poster presented data for two cohorts (100 mg and 200 mg) of HBV patients that had completed dosing in the Phase 1b trial. Initial results from two incomplete patient cohorts (300 mg and 400 mg) were also reported. The poster also presented the safety and PK from three additional cohorts (100 mg, 200 mg and 300 mg) from study ABI-H0731-102, which was a separate Phase 1a study in healthy volunteers.

The Phase 1b patient study enrolled both HBV e-antigen (HBeAg) positive and negative patients. Potent antiviral activity was observed across patient cohorts in a dose dependent manner. Specifically, in the 300 mg dose cohort, the mean maximal declines from baseline was reported as ≥2.8 $\log_{10}$ IU/mL, with ≥2.9 and 2.5 $\log_{10}$ IU/mL mean declines in HBeAg positive and negative patients, respectively. Maximal viral load declines of 3.6 to 4.0 $\log_{10}$ IU/mL were observed in HBeAg negative patients treated at all dose levels (100 mg to 400 mg). We expect to present the final results from the completed study at the upcoming American Association for the Study of Liver Diseases (AASLD) Annual Meeting (The Liver Meeting®) on November 11, 2018.

Across all cohorts in the Phase 1a and Phase 1b studies, ABI-H0731 was generally well tolerated. No serious adverse effects or dose-limiting toxicities were identified, and there was no pattern of treatment emergent clinical or laboratory abnormalities observed. Among the 62 patients and volunteers treated for 14-28 days, all treatment emergent adverse events were observed to be minor (Grade 1), with the exception of an isolated Grade 3 rash at the 400 mg dose that resolved with no intervention required other than treatment discontinuation. No other drug discontinuations have occurred in these studies.

In July 2018, we commenced two Phase 2a combination studies for ABI-H0731. The first Phase 2a trial, ABI-H0731-201 (the 201 Study), is enrolling HBV patients whose viral load has already been suppressed on a standard of care nucleos(t)ide therapy. Approximately 70 patients will be randomized 3:2 to receive either daily ABI-H0731 (300 mg) or placebo in addition to their continued nucleos(t)ide therapy for six months. The 201 Study will compare the safety and tolerability of combination therapy with ABI-H0731 as well as declines in HBV S antigen (HBsAg) and HBV E antigen (HBeAg) to those seen in patients on monotherapy. Blood levels of HBsAg and HBeAg can be biomarkers for the presence of active cccDNA in HBV infected liver cells. Accordingly, a decline in these markers would be expected to correlate with loss of cccDNA anticipated with more effective inhibition of cccDNA generation.

The second Phase 2a trial, ABI-H0731-202 (the 202 Study), is enrolling HBeAg positive HBV patients who are naïve to nucleos(t)ide treatment. Approximately 25 patients will be randomized 1:1 to receive either daily ABI-H0731 (300 mg) or placebo in combination with standard of care entecavir (0.5 mg) for six months. The 202 Study will assess the antiviral potency of the combination compared with entecavir alone. Endpoints include the speed and depth of viral suppression, as well as changes in biomarkers (HBsAg and HBeAg) for the presence of cccDNA, and the safety and tolerability of ABI-H0731.

ABI-H2158

ABI-H2158, our second product candidate in the HBV-cure program, is an internally discovered and developed drug product candidate that is chemically distinct from ABI-H0731. In November 2018, we initiated a Phase 1a dose-ranging clinical trial of ABI-H2158, which will assess the safety, tolerability and PK of ABI-H2158 in healthy volunteers. Following this Phase 1a trial, ABI-H2158 may advance to a Phase 1b dose-ranging study in non-cirrhotic patients with chronic HBV infection. Initial data from this trial is expected in mid-2019.

Other Product Candidates

We also selected a third-generation candidate, ABI-H3733, which is a novel chemical scaffold separate from ABI-H0731 and ABI-H2158 and is currently undergoing its investigational new drug (IND) enabling studies. We plan to conduct additional research and development to identify additional product candidates for our HBV-cure program.

Microbiome Program

Our Microbiome program consists of a fully integrated platform that includes a disease-targeted strain identification and selection process, methods for strain isolation and growth under current Good Manufacturing Practice (cGMP) conditions, and a patented delivery system that we call GEMICEL®, which is designed to allow for targeted oral delivery of live biologic and conventional therapies to the lower gastrointestinal (GI) tract. The Microbiome program is prioritizing efforts on optimizing our lead product candidates, ABI-M201 (Ulcerative Colitis), which is currently undergoing IND-enabling studies, and ABI-M301 (Crohn's disease). Pending the successful completion of IND-enabling studies and clearance of an IND, ABI-M201 is expected to begin a Phase 1b human clinical trial in 2019. Using our microbiome platform, we are exploring additional product candidates for other disease indications, including irritable bowel syndrome, non-alcoholic steatohepatitis (NASH) and immuno-oncology, which indications we may pursue either internally or in collaboration with partners.

In January 2017, we entered into the Research, Development, Collaboration and License Agreement (the Collaboration Agreement) with Allergan Pharmaceuticals International Limited (Allergan) to develop and commercialize select microbiome gastrointestinal programs. Pursuant to the terms of the Collaboration Agreement, in connection with the closing of the transaction in February 2017, Allergan paid us an upfront payment of $50 million. Additionally, we are eligible to receive up to approximately $630 million in payments related to seven development milestones and up to approximately $2.15 billion in payments related to 12 commercial development and sales milestones in connection with the successful development and commercialization of licensed compounds for up to six different indications. We have agreed with Allergan to share development costs up to an aggregate of $75 million through proof-of-concept (POC) studies on a ⅔, ⅓ basis, respectively, and Allergan has agreed to assume all post-POC development costs. Additionally, we have an option to co-promote the licensed programs in the United States and China, subject to certain conditions set forth in the Collaboration Agreement.

Operations

We currently have corporate and administrative offices in Carmel, Indiana, administrative offices and research laboratory space in San Francisco, California and research, development and small-scale manufacturing activities for the Microbiome program in facilities located in Groton, Connecticut. On July 18, 2018, we entered into a sublease for administrative and laboratory space in South San Francisco, California. The term of the sublease began on September 24, 2018 and continues until December 15, 2023. Assuming the necessary permits are obtained, we expect to move our administrative and research laboratory operations currently located in San Francisco to this new location around the beginning of 2019.

Critical Accounting Policies and Significant Judgments and Estimates

Our management's discussion and analysis of our financial condition and results of operations are based on our condensed consolidated financial statements, which have been prepared in accordance with U.S. GAAP. The preparation of these financial statements requires us to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenues, and expenses.

We evaluate our estimates and judgments, including those related to accrued expenses and stock-based compensation, on an ongoing basis. We base our estimates on historical experience and on various other factors that we believe are reasonable under the circumstances, the results of which form the basis for making judgments about the carrying value of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions.

Our critical accounting policies and significant estimates are detailed in our 2017 Annual Report. Our critical accounting policies and significant estimates have not changed from those previously disclosed in our 2017 Annual Report, except for those accounting subjects mentioned in the section of the notes to the condensed consolidated financial statements titled Adoption of Recent Accounting Pronouncements.

Results of Operations

Comparison of the Three Months Ended September 30, 2018 and 2017

Collaboration Revenue

Collaboration revenue consists of the amortization of deferred revenue and reimbursement revenue incurred under the Collaboration Agreement. Collaboration revenue was approximately $4.3 million for the three months ended September 30, 2018, an increase of approximately $1.6 million from approximately $2.7 million for the same period in 2017. This increase is the result of an increase in activities under the Collaboration Agreement and related reimbursements received from Allergan.

Research and Development Expense

Research and development expense, excluding stock-based compensation expense, was approximately $16.6 million for the three months ended September 30, 2018, an increase of approximately $7.2 million from approximately $9.4 million for the same period in 2017. The increase was primarily due to an increase of approximately $5.5 million in research and development expenses for our HBV-cure program and an increase of approximately $1.6 million in research and development expenses for our Microbiome program.

Research and development-related stock-based compensation expense was approximately $2.5 million for the three months ended September 30, 2018, an increase of approximately $0.9 million from approximately $1.6 million for the same period in 2017.

General and Administrative Expense

General and administrative expense consists primarily of salaries, consulting fees and other related costs, professional fees for legal services and accounting services, insurance and travel expenses, as well as the stock-based compensation expense associated with equity awards to our employees, consultants, and directors.

General and administrative expense, excluding stock-based compensation expense, was approximately $4.2 million for the three months ended September 30, 2018, an increase of approximately $1.1 million from approximately $3.1 million for the same period in 2017. The increase was primarily due to an increase of approximately $0.3 million in salary and benefits expenses due to additional employees in IT, HR and Finance, an increase of approximately $0.3 million in legal expenses, $0.3 million in office and equipment rent expenses and $0.2 million in recruitment expenses.

General and administrative-related stock-based compensation expense was approximately $3.5 million for the three months ended September 30, 2018, an increase of approximately $2.5 million from approximately $1.0 million for the same period in 2017.

Comparison of the Nine Months Ended September 30, 2018 and 2017

Collaboration Revenue

Collaboration revenue consists of the amortization of deferred revenue and reimbursement revenue in each case incurred under the Collaboration Agreement. Collaboration revenue was approximately $11.1 million for the nine months ended September 30, 2018, an increase of approximately $5.4 million from approximately $5.7 million for the same period in 2017. This increase is the result of an increase in activities under the Collaboration Agreement and related reimbursements received from Allergan.

Research and Development Expense

Research and development expense, excluding stock-based compensation expense, was approximately $42.8 million for the nine months ended September 30, 2018, an increase of approximately $12.9 million from approximately $29.9 million for the same period in 2017. The increase was primarily due to an increase of approximately $2.7 million in research and development expenses for our Microbiome program and an increase of approximately $10.2 million in research and development expenses for our HBV-cure program, which were offset by a decrease of approximately $0.1 million in research expenses for outsourced chemistry.

Research and development-related stock-based compensation expense was approximately $8.7 million for the nine months ended September 30, 2018, an increase of approximately $5.0 million from approximately $3.7 million for the same period in 2017.

General and Administrative Expense

General and administrative expense consists primarily of salaries, consulting fees and other related costs, professional fees for legal services and accounting services, insurance and travel expenses, as well as the stock-based compensation expense associated with equity awards to our employees, consultants, and directors.

General and administrative expense, excluding stock-based compensation expense, was approximately $13.0 million for the nine months ended September 30, 2018, an increase of approximately $3.1 million from approximately $9.9 million for the same period in 2017. The increase was primarily due to an increase of approximately $1.9 million in salary and benefits expenses due to additional employees in IT, HR and Finance, an increase of approximately $0.6 million in office and equipment rent expenses, and $0.3 million in recruitment expenses.

General and administrative-related stock-based compensation expense was approximately $13.0 million for the nine months ended September 30, 2018, an increase of approximately $10.9 million from approximately $2.1 million for the same period in 2017.

Liquidity and Capital Resources

Sources of Liquidity

As a result of our significant research and development expenditures and the lack of any FDA-approved products to generate product sales revenue, we have not been profitable and have generated operating losses since we were incorporated in October 2005. We have funded our operations through September 30, 2018 principally through equity financing, raising an aggregate of approximately $412.8 million in net proceeds, and a strategic partnership raising an aggregate of $50 million in upfront payments.

Cash Flows for the Nine Months Ended September 30, 2018 and 2017

Net Cash from Operating Activities

Net cash used in operating activities was approximately $48.2 million for the nine months ended September 30, 2018. This was primarily due to approximately $64.6 million of net loss and a decrease of $6.0 million of operating assets and liabilities, which were offset by a $21.7 million non-cash expense recorded for the stock-based compensation, $0.5 million of depreciation and amortization expense and approximately $0.2 million of realized loss from marketable securities.

Net cash provided by operating activities was approximately $11.6 million for the nine months ended September 30, 2017 and funded our research and development program build out and general and administrative expenses. This was primarily due to $46.8 million of deferred revenue related to the Collaboration Agreement, $5.8 million of non-cash stock-based compensation expense and $0.6 million of realized loss from marketable securities, which were offset by a $39.8 million of net loss, a $1.8 million of changing in operating assets and liabilities, excluding deferred revenue, and a $0.1 million of deferred income tax benefit.

Net Cash from Investing Activities

Net cash used in investing activities from continuing operations for the nine months ended September 30, 2018 was approximately $73.2 million primarily due to a purchase of approximately $115.0 million marketable securities and $0.1 million of fixed assets and construction in progress, which were offset by approximately $41.9 million for the redemption of marketable securities.

Net cash used in investing activities from continuing operations for the nine months ended September 30, 2017 was $14.0 million and primarily due to a purchase of $40.0 million marketable securities and $0.5 million of fixed assets and construction in progress, which were offset by $26.6 million of redemptions of marketable securities.

Net Cash from Financing Activities

Net cash provided by financing activities from continuing operations for the nine months ended September 30, 2018 was approximately $159.2 million, resulting from the net proceeds of approximately $155.4 million from our public offering of 4,600,000 shares of common stock, including 600,000 shares of common stock purchased by the underwriters pursuant to their 30-day option to purchase additional shares, and approximately $3.8 million from the exercise of stock options to purchase 721,210 shares of common stock.

Net cash provided by financing activities from continuing operations for the nine months ended September 30, 2017 was $1.0 million, resulting from the exercise of stock options to purchase 142,911 shares of common stock (139,019 shares of common stock on a net exercise basis).

Funding Requirements

We expect our expenses to increase in connection with our ongoing activities, particularly as we continue the research, development and clinical trials of our product candidates. Furthermore, we expect to continue to incur additional costs associated with operating as a public company. Accordingly, we will need to obtain substantial additional funding in connection with our continuing operations. If we are unable to raise capital when needed or on attractive terms, we will be forced to delay, reduce or eliminate our research and development programs or future commercialization efforts.

We monitor our cash needs and the status of the capital markets on a continuous basis. From time to time, we opportunistically raise capital and have done so multiple times since our initial public offering by issuing equity securities, most recently in July 2018. We expect to continue to raise capital when and as needed and at the time and in the manner most advantageous to us.

Based upon our cash position as of September 30, 2018, we expect that our existing cash, cash equivalents and marketable securities, will enable us to fund our operating expenses and capital expenditure requirements for at least the next twelve months. Our future capital requirements will depend on many factors, including:

- the initiation, scope, progress, timing, results and costs of our ongoing discovery, nonclinical development, laboratory testing and clinical trials of our product candidates and any additional clinical trials we may conduct in the future;
- the extent to which we further acquire or in-license other medicines and technologies;
- the number and characteristics of product candidates that we pursue in preclinical and clinical development;
- our ability to manufacture, and to contract with third parties to manufacture, adequate supplies of our product candidates for our clinical trials and any eventual commercialization;
- the costs, timing and outcome of regulatory review of our product candidates;
- the costs of preparing, filing and prosecuting patent applications, maintaining and enforcing our intellectual property rights and defending intellectual property-related claims; and
- our ability to establish and maintain collaborations on favorable terms, if at all.

Identifying potential product candidates and conducting preclinical testing and clinical trials is a time-consuming, expensive and uncertain process that takes years to complete, and we may never generate the necessary data or results required to obtain marketing approval and achieve product sales. In addition, our product candidates, if approved, may not achieve commercial success. Our commercial revenues, if any, will be derived from sales of medicines that we do not expect to be commercially available for many years, if at all. Accordingly, we will need to continue to rely on additional financing to achieve our business objectives. Adequate additional financing may not be available to us on acceptable terms, or at all.

Until such time, if ever, as we can generate substantial product revenues, we expect to finance our cash needs through a combination of equity offerings, debt financings, collaborations, strategic alliances and licensing arrangements. We do not have any committed external source of funds. To the extent that we raise additional capital through the sale of equity or convertible debt securities, the ownership interest of our stockholders will be diluted, and the terms of these securities may include liquidation or other preferences that adversely affect the rights of the holders of our common stock. Debt financing, if available, may involve agreements that include covenants limiting or restricting our ability to take specific actions, such as incurring additional debt, making capital expenditures or declaring dividends.

If we raise funds through additional collaborations, strategic alliances or licensing arrangements with third parties, we may have to relinquish valuable rights to our technologies, future revenue streams, research programs or product candidates or to grant licenses on terms that may not be favorable to us. If we are unable to raise additional funds through equity or debt financings when needed, we may be required to delay, limit, reduce or terminate our product development or future commercialization efforts or grant rights to develop and market product candidates that we would otherwise prefer to develop and market ourselves.

Off-Balance Sheet Arrangements

None.

Contractual Obligations

Sublease of Office and Laboratory Space in South San Francisco, California

On July 18, 2018, we entered into a sub-sublease with Prothena Biosciences Inc. (Sub-Sublandlord) for approximately 46,641 square feet of office and laboratory space (the Sublease) in South San Francisco, California (the Premises). The term of the Sublease continues until December 15, 2023. Our obligation to pay rent began on September 24, 2018.

We are obligated to pay monthly base rent in the following approximate amounts:

Months	Monthly Base Rent per Rentable Square Foot	Total Monthly Base Rent for the Complete Premises (following delivery of Premises)
September 24, 2018 - August 31, 2019	$ 4.85	$ 226,208 (prorated)
September 1, 2019 - August 31, 2020	$ 5.02	$ 234,137
September 1, 2020 - August 31, 2021	$ 5.20	$ 242,533
September 1, 2021 - August 31, 2022	$ 5.38	$ 250,928
September 1, 2022 - August 31, 2023	$ 5.57	$ 259,790
September 1, 2023 - December 15, 2023	$ 5.76	$ 268,652 (prorated)

In addition to our monthly base rent obligations, we are obligated to pay Sub-Sublandlord (1) all of the operating expenses allocated to the Premises, (2) additional charges, costs, fees or expenses for which Sub-Sublandlord is separately charged under the sublease or the master lease, (3) other sums of money relating to the Premises that are or become payable by Sub-Sublandlord to sublandlord that have accrued during the term, (4) any real property taxes and assessments related to the Premises that are separately billed to the sublandlord or Sub-Sublandlord during the term of the Sublease, (5) any and all charges of the master landlord or the sublandlord or other amounts payable to the master landlord or the sublandlord under the master lease or the sublease caused by our failure to perform our obligations under the Sublease.

Pursuant to the Sublease, we deposited $552,986 as security for our performance of the terms of the Sublease.

Item 3. Quantitative and Qualitative Disclosures about Market Risk.

There have been no material changes to our quantitative and qualitative disclosures about market risk as compared to the quantitative and qualitative disclosures about market risk described in our 2017 Annual Report.

Item 4. Controls and Procedures.

Evaluation of Disclosure Controls and Procedures

We maintain a system of disclosure controls and procedures, as defined in Rules 13a-15(e) and 15d-15(e) of the Exchange Act, which is designed to provide reasonable assurance that information that is required to be disclosed in our reports filed pursuant to the Exchange Act, is accumulated and communicated to management in a timely manner. At the end of the period covered by this report, we carried out an evaluation, under the supervision and with the participation of our management, including our Chief Executive Officer and our Chief Financial Officer, of the effectiveness of the design and operation of our disclosure controls and procedures pursuant to Exchange Act Rules 13a-15(b) and 15d-15(b). Based upon that evaluation, our Chief Executive Officer and Chief Financial Officer concluded that our disclosure controls and procedures as of the end of the period covered by this report were effective at the reasonable assurance level.

Changes in Internal Control over Financial Reporting

There were no changes in our internal control over financial reporting in the quarter ended September 30, 2018 that materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

PART II - OTHER INFORMATION

Item 1. Legal Proceedings.

We are not a party to any material legal proceedings. In the future, we might from time to time become involved in litigation relating to claims arising from our ordinary course of business.

Item 1A. Risk Factors.

This report contains forward-looking statements that involve risks and uncertainties. Our actual results could differ materially from those discussed in this report. Factors that could cause or contribute to these differences include, but are not limited to, those discussed below and elsewhere in this report and in any documents incorporated in this report by reference.

You should carefully consider the following risk factors, together with all other information in this report, including our financial statements and notes thereto, and in our other filings with the SEC. If any of the following risks, or other risks not presently known to us or that we currently believe to not be significant, develop into actual events, then our business, financial condition, results of operations or prospects could be materially adversely affected. If that happens, the market price of our common stock could decline, and stockholders may lose all or part of their investment.

Risks Related to Our Business

We have no approved products and currently are dependent on the future success of our HBV-cure and Microbiome programs.

To date, we have no approved products on the market and have generated no product revenues. Our prospects are substantially dependent on our ability to develop and commercialize our HBV and microbiome product candidates. Unless and until we receive approval from the FDA or other regulatory authorities for our product candidates, we cannot sell our product candidates and will not have product revenues. We will have to fund all of our operations and capital expenditures from cash on hand, any future securities offerings or debt financings and any fees we may generate from out-licensing, collaborations or other strategic arrangements. If we are unable to develop and commercialize any product candidates from our HBV-cure and Microbiome programs, we will be unable to generate revenues from the sale of products or build a sustainable or profitable business.

In addition, all of our product candidates are currently in early clinical development or in varying stages of nonclinical development and their risk of failure is high. The data supporting our drug discovery and nonclinical and clinical development programs are derived from either laboratory, nonclinical studies or Phase 1a/1b clinical data. We cannot predict when or if any one of our product candidates will prove safe and effective in humans or will receive regulatory approval. The scientific evidence to support the feasibility of our product candidates and therapeutic approaches is limited, and many companies, some with more resources than we have, are and may be developing competitive product candidates. For these and other reasons, our drug discovery and development may not be successful, and we may not generate viable products or revenue.

We depend entirely on the success of product candidates from our HBV-cure program and our Microbiome program. We cannot be certain that we or our collaborators will be able to obtain regulatory approval for, or successfully commercialize, product candidates from either of our current programs or any other product candidates we may subsequently identify.

We and our collaborators are not permitted to market or promote any product candidates in the United States, Europe or other countries before we receive regulatory approval from the FDA or comparable foreign regulatory authorities, and we may never receive such regulatory approval for our current product candidates. We have not submitted a biologics license application (BLA) or new drug application (NDA) to the FDA or comparable applications to other regulatory authorities and do not expect to be in a position to do so in the foreseeable future.

All of our product candidates are currently in early clinical development or in varying stages of nonclinical development. It may be years before the larger, pivotal trials necessary to support regulatory approval of our product candidates are initiated, if ever. The clinical trials of our product candidates are, and the manufacturing and marketing of our product candidates will be, subject to extensive and rigorous review and regulation by numerous government authorities in the United States and in other countries where we intend to test and, if approved, market any product candidate. Before obtaining regulatory approvals for the commercial sale of any product candidate, we must successfully meet a number of critical developmental milestones, including:

- developing dosages that will be tolerated, safe and effective;
- reaching agreement with the FDA or comparable foreign regulatory authorities regarding the scope, design and data necessary to support regulatory approval for the product candidate;
- demonstrating through clinical trials that the product candidate is safe and effective in patients for the intended indication;

- determining the appropriate delivery mechanism;
- demonstrating that the product candidate formulation will be stable for commercially reasonable time periods; and
- completing the development and scale-up to permit manufacture of our product candidates in quantities sufficient to execute on our clinical development plans and, eventually, in commercial quantities and at acceptable prices.

The time necessary to achieve these developmental milestones for any individual product candidate is long and uncertain, and we may not successfully complete these milestones for our HBV and microbiome therapies or any other product candidates that we may develop. We have not yet completed and may never complete the development of any products. If we are unable to complete clinical development of our HBV or microbiome therapies, or any other product candidates that we may identify, we will be unable to generate revenue from the sale of products or build a sustainable or profitable business.

Nonclinical studies may not be representative of disease behavior in clinical trials. The outcomes of nonclinical testing and clinical trials are uncertain, and results of earlier nonclinical studies and clinical trials may not be predictive of future clinical trial results.

The results of nonclinical studies may not be representative of disease behavior in a clinical setting and thus may not be predictive of the outcomes of our clinical trials. In addition, the results of nonclinical studies and early clinical trials of product candidates may not be predictive of the results of later-stage clinical trials, and the results of any study or trial for any of our product candidates may not be as positive as the results for any prior studies or trials, if at all.

Nonclinical studies and clinical testing are expensive, can take many years to complete and their outcomes are highly uncertain. Failure can occur at any time during the nonclinical study and clinical trial processes due to inadequate performance of a drug candidate or inadequate adherence by patients or investigators to clinical trial protocols. Further, clinical trials might not provide statistically significant data supporting a product candidate's safety and effectiveness to obtain the requisite regulatory approvals. In addition, there is a high failure rate for drugs and biologics proceeding through clinical trials. Our failure to replicate earlier positive results in later-stage clinical trials or otherwise demonstrate the required characteristics to support marketing approval for any of our product candidates would substantially harm our business, prospects, financial condition and results of operations.

Top-line or interim data may not accurately reflect the complete results of a particular study or trial.

We may publicly disclose top-line or interim data from time to time, which is based on a preliminary analysis of then-available efficacy, tolerability, PK and safety data, and the results and related findings and conclusions are subject to change following a more comprehensive review of the data related to the particular study or trial. We also make assumptions, estimations, calculations and conclusions as part of our analyses of data, and we may not have received or had the opportunity to evaluate fully and carefully all data. As a result, the top-line or interim results that we report may differ from future results of the same studies, or different conclusions or considerations may qualify such results, once additional data have been received and fully evaluated. Top-line data also remain subject to audit and verification procedures that may result in the final data being materially different from the interim or preliminary data we previously published. As a result, top-line and interim data should be viewed with caution until the final data are available.

Further, others, including regulatory agencies, may not accept or agree with our assumptions, estimations, calculations, conclusions or analyses or may interpret or weigh the importance of data differently, which could impact the value of the particular program, the approvability or commercialization of the particular drug candidate or biotherapeutic and our company in general. In addition, the information we may publicly disclose regarding a particular study or clinical trial is based on what is typically extensive information, and you or others may not agree with what we determine is the material or otherwise appropriate information to include in our disclosure, and any information we determine not to disclose may ultimately be deemed significant with respect to future decisions, conclusions, views, activities or otherwise regarding a particular drug, drug candidate or our business. If the top-line or interim data that we report differ from actual results, or if others, including regulatory authorities, disagree with the conclusions reached, our ability to obtain approval for, and commercialize, our product candidates may be harmed or delayed, which could harm our business, financial condition, operating results or prospects.

Nonclinical and clinical testing required for our product candidates is expensive and time-consuming and may result in delays or may fail to demonstrate safety and efficacy for desired indications.

In order to obtain FDA approval to market a new drug product, we must demonstrate safety and effectiveness in humans. To meet these requirements, we must conduct extensive nonclinical testing and sufficient adequate and well-controlled clinical trials. Conducting clinical trials is a lengthy, time consuming, and expensive process. The length of time might vary substantially according to the type, complexity, novelty, and intended use of the product candidate, and often can be several years or more per trial. Delays associated with product candidates for which we are directly conducting nonclinical studies or clinical trials might cause us to incur additional operating expenses. The commencement and rate of completion of clinical trials might be delayed by many factors, including, for example:

- delays in reaching agreement with regulatory authorities on trial design;
- delays in reaching agreement on acceptable terms with prospective contract research organizations (CROs) and clinical trial sites;
- failure to demonstrate efficiency during clinical trials;
- the emergence of unforeseen safety issues;
- inability to manufacture sufficient quantities of qualified materials under cGMP for use in clinical trials;
- slower than expected rates of patient recruitment;
- failure to recruit a sufficient number of patients;
- delays in having patients complete participation in a trial or return for post-treatment follow-up;
- delays caused by patients dropping out of a trial due to product side effects, disease progression or other reasons;
- clinical sites dropping out of a trial to the detriment of enrollment;
- modification of clinical trial protocols;
- delays by our contract manufacturers to produce and deliver sufficient supply of clinical trial materials;
- occurrence of adverse events associated with the product candidate that are viewed to outweigh its potential benefits;
- changes in regulatory requirements for clinical trials;
- delays, suspension, or termination of clinical trials by the institutional review board or ethics committee responsible for overseeing the study at a particular study site; and
- government, institutional review board, ethics committee, or other regulatory delays or clinical holds requiring suspension or termination of the trials.

We have used and intend to continue to rely on one or more CROs to conduct our nonclinical studies and clinical trials. We are highly dependent on these CROs to conduct our studies and trials in accordance with the requirements of the FDA, applicable local laws and good clinical and scientific practice. In the event the CROs fail to perform their duties in such a fashion, we may not be able to complete our clinical trials and may fail to obtain regulatory approval for any of our product candidates.

The failure of nonclinical studies and clinical trials to demonstrate safety and effectiveness of a product candidate for the desired indications could harm the development of that product candidate or other product candidates. This failure could cause us to abandon a product candidate and could delay development of other product candidates. Any delay in, or termination of, our nonclinical studies or clinical trials would delay the filing of our NDAs or BLAs with the FDA and, ultimately, our ability to commercialize our product candidates and generate product revenues. Any change in, or termination of, our clinical trials could materially harm our business, financial condition, and results of operation.

Any product candidates that we may discover and develop may cause undesirable side effects or have other properties that could delay or prevent their regulatory approval, limit the commercial profile of an approved label, or result in significant negative consequences following marketing approval, if any.

Many product candidates that initially showed promise in early stage testing have later been found to cause side effects that prevented their further development. Undesirable side effects caused by any product candidates that we may discover or develop, or safety, tolerability or toxicity issues that may occur in our nonclinical studies, clinical trials or in the future, could cause us or regulatory authorities to interrupt, restrict, delay, or halt clinical trials. Such results could also cause us to, or regulatory authorities to require us to, cease further development of our product candidates for any or all targeted indications. The drug-related side effects could affect patient recruitment or the ability of enrolled patients to complete the trial or result in potential product liability claims and could result in a more restrictive label or the delay or denial of regulatory approval by the FDA or other comparable foreign authorities. Any of these events could prevent us from achieving or maintaining market acceptance of the particular product candidate, if approved, and could significantly harm our business, prospects, financial condition and results of operations. The most common treatment-emergent adverse events that we observed in our completed Phase 1a (ABI-H0731-102) safety and PK study and Phase 1b (ABI-H0731-101b) study of antiviral effects were headaches and rashes, which were among the only adverse events deemed by clinical investigators to be probably or possibly related to the study drug, with the exception of a single isolated Grade 3 rash that resolved rapidly without intervention other than treatment discontinuation, which is the only study discontinuation to date.

Additionally, if any of our product candidates receives marketing approval and we or others later identify undesirable or unacceptable side effects caused by these product candidates, a number of potentially significant negative consequences could result, including:

- regulatory authorities may withdraw approvals of such product and require us to take them off the market;
- regulatory authorities may require the addition of labeling statements, specific warnings, a contraindication or field alerts to physicians and pharmacies;
- regulatory authorities may require a medication guide outlining the risks of such side effects for distribution to patients, or that we implement a Risk Evaluation Mitigation Strategies (REMS) plan to ensure that the benefits of the product outweigh its risks;
- we may be required to change the way a product is administered, conduct additional clinical trials or change the labeling of a product;
- we may be subject to limitations on how we may promote the product;
- sales of the product may decrease significantly;
- we may be subject to litigation or product liability claims; and
- our reputation may suffer.

Any of these events could prevent us or any collaborators from achieving or maintaining market acceptance of our product candidates or could substantially increase commercialization costs and expenses, which in turn could delay or prevent us from generating significant revenue from the sale of our product candidates.

We have a limited operating history and a history of operating losses and expect to incur significant additional operating losses.

We were established in October 2005, began active operations in the spring of 2007, terminated programs related to three prior product candidates, then merged with Assembly Pharmaceuticals, Inc. (Assembly Pharmaceuticals), a private company, in July 2014. We have only a limited operating history since the merger. Therefore, there is limited historical financial information upon which to base an evaluation of our performance. Our prospects must be considered in light of the uncertainties, risks, expenses, and difficulties frequently encountered by companies in their early stages of operations. We, and Assembly Pharmaceuticals prior to our merger, have generated losses since we began operations and as of September 30, 2018 and December 31, 2017, the combined company had an accumulated deficit of approximately $315.6 million and $251.0 million, respectively, and net losses of approximately $42.8 million, $44.3 million and $28.5 million for the years ended December 31, 2017, 2016 and 2015, respectively. These net losses have had, and will continue to have, an adverse effect on our stockholders' equity and working capital. We expect to incur substantial additional losses over the next several years as we continue to pursue our research, development, nonclinical studies and clinical trial activities. Further, since our initial public offering, we have incurred and will continue to incur as a public company significant additional legal, accounting and other expenses to which we were not subject to as a private company, including expenses related to our efforts in complying with the requirements of the Sarbanes-Oxley Act of 2002 (the Sarbanes-Oxley Act), the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 and other public company disclosure and corporate governance requirements and responding to requests of government regulators. The amount of future losses and when, if ever, we will achieve profitability are uncertain and will depend, in part, on the rate of increase in our expenses, our ability to generate revenues from the sale of products and our ability to raise additional capital. We have no products that have generated any commercial revenue, do not expect to generate revenues from the commercial sale of products unless and until our HBV or microbiome therapies or any other product candidate is approved by the FDA for sale, and we might never generate revenues from the sale of products.

We are not currently profitable and might never become profitable.

We have a history of losses and expect to incur significant operating and capital expenditures and resultant substantial losses and negative operating cash flow for the next several years and beyond if we do not successfully launch and commercialize any product candidates from our HBV or Microbiome programs. We might never achieve or maintain profitability. We anticipate that our expenses will continue to be substantial in the foreseeable future as we:

- advance ABI-H0731, our first HBV-cure candidate, through clinical development and conduct nonclinical studies and clinical trials with ABI-H2158 and ABI-H3733, our second and third HBV-cure product candidates, respectively;
- advance ABI-M201 and ABI-M301, the lead candidates from our Microbiome program, toward potential INDs;
- continue to undertake research and development to identify potential additional product candidates in both our HBV-cure and Microbiome programs;
- seek regulatory approvals for our product candidates; and
- pursue our intellectual property strategy.

Because of the numerous risks and uncertainties associated with pharmaceutical product development, we are unable to accurately predict the timing or amount of increased expenses or when, or if, we will be able to achieve profitability. In addition, our expenses could increase if we are required by the FDA or comparable foreign regulatory authorities to perform studies or trials in addition to those currently expected, or if there are any delays in completing our clinical trials or the development of any of our product candidates.

As a result, we will need to generate significant revenues in order to achieve and maintain profitability. Our ability to generate revenue from the sale of products and achieve profitability will depend on, among other things:

- successful completion of research, nonclinical studies and clinical trials for our product candidates;
- obtaining necessary regulatory approvals from the FDA and comparable foreign regulatory authorities for our product candidates;
- maintaining patent protection for our products, methods, processes and technologies;
- establishing manufacturing, sales, and marketing arrangements internally and/or with third parties for any approved products; and
- raising sufficient funds to finance our activities, if and when needed.

We might not succeed at any of these undertakings. If we are unsuccessful at some or all of these undertakings, our business, prospects, and results of operations might be materially adversely affected.

We are an early stage company and might not be able to commercialize any product candidates.

We are an early stage company and have not demonstrated our ability to perform the functions necessary for the successful commercialization of any product candidates. The successful commercialization of any product candidates will require us to perform a variety of functions, including:

- continuing to undertake research and development and nonclinical studies and clinical trials;
- participating in regulatory approval processes;
- formulating and manufacturing products; and
- conducting sales, marketing and distribution activities.

Our failure to commercialize successfully our product candidates would negatively impact the value of our company and could impair our ability to raise capital, expand our business, diversify our research and development pipeline, market our product candidates, if approved, or continue our operations.

Our development of product candidates is subject to risks and delays.

Our development of our product candidates is subject to the risks of failure and delay inherent in the development of new pharmaceutical products and products based on new technologies, including:

- delays in product development, nonclinical and clinical testing;
- unplanned expenditures in product development, nonclinical and clinical testing;
- failure of a product candidate to demonstrate acceptable safety and efficacy;

- failure to receive regulatory approvals;
- emergence of superior or equivalent products;
- inability to manufacture and sell on our own, or through others, product candidates on a commercial scale or at a financially viable cost; and
- failure to achieve market acceptance.

Because of these risks, our research and development efforts might not result in any commercially viable products. If we do not successfully complete a significant portion of these development efforts, obtain required regulatory approvals, and have commercial success with any approved products, our business, financial condition and results of operations will be materially harmed.

There are substantial risks inherent in attempting to commercialize new drugs and biologics, and, as a result, we may not be able to develop successfully products for commercial use.

Scientific research and development require significant amounts of capital and takes a long time to reach commercial viability, if it can be achieved at all. To date, our research and development projects have not produced commercially viable drugs or biologics and may never do so. During the research and development process, we may experience technological barriers that we may be unable to overcome. Further, certain underlying premises in our development programs are not fully proven.

Our HBV therapy research and development efforts involve therapeutics based on modulating forms of HBV core proteins with core inhibitors. The development of our core inhibitor technology is in early stages, and the commercial feasibility and acceptance of our core inhibitor technology is unknown. More specifically, the theory that treatment with core inhibitors may result in the loss of covalently closed circular DNA (cccDNA) compared to conventional (standard of care) therapies is unproven. It is also unknown if the biomarkers assumed to be indicators of active cccDNA (serum viral antigen levels in HBV patients) will be meaningfully altered in patients on treatment with core inhibitors. Additionally, even if core inhibitor technology is successful at targeting the HBV core protein and treatment is successful at reducing cccDNA levels in HBV patients, it may not result in a commercially viable drug if there is not a corresponding medical benefit related to the underlying HBV infection.

Similarly, our Microbiome program is based on a novel therapeutic approach designed to treat disorders associated with the microbiome. To our knowledge, no companies have received regulatory approval for, or manufactured on a commercial scale, any microbiome-based therapeutics. The technology for our microbiome therapy is in nonclinical development and our GEMICEL® dual-targeted release capsule formulation is novel and has not yet shown to deliver successfully live bacteria in patients. The ability to deliver bacteria effectively and reliably to the GI tract is unproven, and, even if it can be proven, it may be difficult or impossible to provide the treatment economically. Because of these uncertainties, it is possible that no commercial products will be successfully developed. If we are unable to develop successfully commercial products, we will be unable to generate revenue from the sale of products or build a sustainable or profitable business.

We will need additional financing to complete the development of any product candidate and fund our activities in the future.

We anticipate that we will incur operating losses for the next several years as we continue to develop our HBV product candidates and our microbiome platform as well as initiate any development of any other product candidates and will require substantial funds during that time to support our operations. We expect that our current resources will provide us with sufficient capital to fund our operations for at least the next twelve months. However, we might consume our available capital before that time if, for example, we are not efficient in managing our resources or if we encounter unforeseen costs, delays or other issues or if regulatory requirements change. If that happens, we may need additional financing to continue the development of our HBV product candidates and our Microbiome program, which we might seek and receive from the public financial markets or from third-party commercial partners. There is no assurance that we will be able to generate sufficient revenue from our Collaboration Agreement with Allergan when needed to or that we will be successful in raising any necessary additional capital on terms that are acceptable to us, or at all. If such event or other unforeseen circumstances occurred and we were unable to generate sufficient revenue or raise capital, we could be forced to delay, scale back or discontinue product development, sacrifice attractive business opportunities, cease operations entirely and sell or otherwise transfer all or substantially all of our remaining assets.

Our product candidates face significant development and regulatory hurdles prior to marketing, which could delay or prevent our receipt of licensing, sales and/or milestone revenue.

Before we or any commercial partners obtain the approvals necessary to sell any of our product candidates, we must show through nonclinical studies and human testing in clinical trials that each potential product is safe and effective. The rates at which we complete our scientific studies and clinical trials depend on many factors, including, but not limited to, our ability to obtain adequate supplies of the products to be tested and patient enrollment. Patient enrollment is a function of many factors, including the size of the patient population, the proximity of patients to clinical sites, the eligibility criteria for the trial, the design of the clinical trial, and other potential drug candidates being studied. Delays in patient enrollment for our trials may result in increased costs and longer development times. Further, we currently do not have the infrastructure to manufacture, market and sell our product candidates. If we partner with one or more third-party entities, those commercial partners may demand and receive rights to control product development and commercialization. As a result, these commercial partners may conduct these programs and activities more slowly or in a different manner than expected. If any of these events were to occur, the development of any product candidate could be significantly delayed, more expensive or less lucrative to us than anticipated, any of which would have a significant adverse effect on our business.

We are substantially dependent on our Collaboration Agreement with Allergan, which may be terminated or may not be successful due to a number of factors, which could have a material adverse effect on our business and operating results.

In January 2017, we entered into the Collaboration Agreement with Allergan for the development and commercialization of select microbiome gastrointestinal programs in ulcerative colitis, Crohn's disease and irritable bowel syndromes. Our collaboration with Allergan may be terminated, or may not be successful, due to a number of factors. In particular, Allergan may terminate the Collaboration Agreement for convenience at any time upon either 90 days' (prior to the initiation of the first proof of concept (POC) trial of a licensed product) or 120 days' (after the initiation of the first POC trial of a licensed product), as applicable, advance written notice to us. The Collaboration Agreement also contains customary provisions for termination by either party, including in the event of breach of the Collaboration Agreement, subject to cure. In addition, if we are unable to identify product candidates for the licensed indications or we are unable to protect our products by obtaining and defending patents, the collaboration could fail. If the collaboration is unsuccessful for these or other reasons, or is otherwise terminated for any reason, we may not receive all or any of the research program funding, milestone payments or royalties under the agreement. Any of the foregoing could result in a material adverse effect on our business, results of operations and prospects and would likely cause our stock price to decline.

We are dependent on a license relationship for each of our HBV-cure program and our Microbiome program.

Our license agreement with Indiana University Research and Technology Corporation (IURTC) from whom we have licensed ABI-H0731 and certain other HBV therapies, requires us to make milestone payments based upon the successful accomplishment of clinical and regulatory milestones related to ABI-H0731 and certain other HBV therapies. The aggregate amount of all performance milestone payments under the IURTC License Agreement, should all performance milestones through development be met, is $825,000, with a portion related to the first performance milestone having been paid. We also are obligated to pay IURTC royalty payments based on net sales of the licensed technology. We are also obligated to pay diligence maintenance fees ($25,000-$100,000) each year to the extent that the royalty, sublicensing, and milestone payments to IURTC are less than the diligence maintenance fee for that year. Our license with Therabiome, LLC (Therabiome), from whom we have licensed our delivery platform of our Microbiome program, also requires us to pay regulatory and clinical milestones as well as royalty payments to Therabiome. If we breach any of these obligations, we could lose our rights to the targeted delivery mechanism of our Microbiome program. If we fail to comply with similar obligations to any other licensor, then that licensor would have the right to terminate the license, in which event we would not be able to commercialize drug candidates or technologies that were covered by the license. In addition, the milestone and other payments associated with licenses will make it less profitable for us to develop our drug candidates than if we owned the technology ourselves.

Corporate and academic collaborators might take actions to delay, prevent, or undermine the success of our product candidates.

Our operating and financial strategy for the development, nonclinical and clinical testing, manufacture, and commercialization of drug candidates heavily depends on collaborating with corporations, academic institutions, licensors, licensees, and other parties. However, there can be no assurance that we will successfully establish or maintain these collaborations. In addition, should a collaboration be terminated, replacement collaborators might not be available on attractive terms, or at all. The activities of any collaborator will not be within our control and might not be within our power to influence. There can be no assurance that any collaborator will perform its obligations to our satisfaction or at all, that we will derive any revenue or profits from these collaborations, or that any collaborator will not compete with us. If any collaboration is not successful, we might require substantially greater capital to undertake development and marketing of our proposed products and might not be able to develop and market these products effectively, if at all. In addition, a lack of development and marketing collaborations might lead to significant delays in introducing proposed products into certain markets and/or reduced sales of proposed products in such markets.

We rely on data provided by our collaborators and others that has not been independently verified and could prove to be false, misleading, or incomplete.

We rely on third-party vendors, scientists, investigators and collaborators to provide us with significant data and other information related to our projects, nonclinical studies and clinical trials, and our business. If these third parties provide inaccurate, misleading, or incomplete data, our business, prospects, and results of operations could be materially adversely affected.

Research, development and commercialization goals may not be achieved in the timeframes that we publicly estimate, which could have an adverse impact on our business and could cause our stock price to decline.

We set goals, and make public statements regarding our expectations, regarding the timing of certain accomplishments, developments and milestones under our research and development programs. The actual timing of these events can vary significantly due to a number of factors, including, without limitation, the amount of time, effort and resources committed to our programs by us and any collaborators and the uncertainties inherent in the clinical development and regulatory approval process. As a result, there can be no assurance that we or any collaborators will initiate or complete clinical development activities, make regulatory submissions or receive regulatory approvals as planned or that we or any collaborators will be able to adhere to our current schedule for the achievement of key milestones under any of our programs. If we or any collaborators fail to achieve one or more of the milestones as planned, our business could be materially adversely affected, and the price of our common stock could decline.

We lack suitable facilities for certain nonclinical and clinical testing and expect to rely on third parties to conduct some of our research and nonclinical testing and our clinical trials, and those third parties may not perform satisfactorily, including failing to meet deadlines for the completion of such research, testing or trials.

We do not have sufficient facilities to conduct all of our anticipated nonclinical and clinical testing. As a result, we expect to contract with third parties to conduct a significant portion of our nonclinical and clinical testing required for regulatory approval for our product candidates. We will be reliant on the services of third parties to conduct studies on our behalf. If we are unable to retain or continue with third parties for these purposes on acceptable terms, we may be unable to develop successfully our product candidates. In addition, any failures by third parties to perform adequately their responsibilities may delay the submission of our product candidates for regulatory approval, which would impair our financial condition and business prospects.

Our reliance on these third parties for research and development activities also reduces our control over these activities but will not relieve us of our responsibilities. For example, we are responsible for ensuring that each of our studies is conducted in accordance with the applicable protocol, legal and regulatory requirements and scientific standards, including, in the case of clinical trials, good clinical practices, and our reliance on third parties does not relieve us of our regulatory responsibilities. Furthermore, these third parties may also have relationships with other entities, some of which may be our competitors. In addition, these third parties are not our employees, and except for remedies available to us under our agreements with such third parties, we cannot control whether or not they devote sufficient time and resources to our clinical and nonclinical programs. If these third parties do not successfully carry out their contractual duties or obligations or meet expected deadlines, if they need to be replaced or if the quality or accuracy of the clinical data they obtain is compromised due to the failure to adhere to our clinical protocols, regulatory requirements or for other reasons, our research, nonclinical studies or clinical trials may be extended, delayed or terminated and we may not be able to obtain, or may be delayed in obtaining, regulatory approvals for our product candidates. As a result, our results of operations and business prospects would be harmed, our costs could increase and our ability to generate revenues from the sale of products could be delayed.

We will need to either establish our own clinical and commercial manufacturing capabilities or rely on third parties to formulate and manufacture our product candidates, and we rely on third parties to manufacture products that we study in combination with our product candidates. Our use of third parties to manufacture these materials may increase the risk that we will not have sufficient quantities of our product candidates or other products, or necessary quantities of such materials on time or at an acceptable cost.

We currently do not have our own manufacturing facilities and rely on third-party manufacturers to supply the quantities of ABI-H0731, ABI-H2158 and ABI-H3733 used in our clinical and nonclinical trials and drug substance and drug product for our Microbiome program. In the past, we have relied exclusively on third-party manufacturers to supply drug substance and drug product materials for our Microbiome program. We are currently transitioning some of the third-party manufacturing to a small scale internal manufacturing facility to supply quantities of our microbiome drug substance and drug product for use in our planned nonclinical studies and early phase clinical trials. In addition, if any product candidate we might develop or acquire in the future receives FDA or other regulatory approval, we will need to either manufacture commercial quantities of the product on our own or rely on one or more third-party contractors to manufacture our products. The establishment of internal manufacturing capabilities is difficult and costly, and we may not be successful in doing so. If, for any reason, we are unable to establish our own manufacturing capabilities and we are unable to rely on any third-party sources we have identified to manufacture our product candidates, either for clinical trials or, at some future date, for commercial quantities, then we would need to identify and contract with additional or replacement third-party manufacturers to manufacture compounds, drug substance and drug products for nonclinical, clinical and commercial purposes. We might not be successful in identifying additional or replacement third-party manufacturers, or in negotiating acceptable terms with any that we do identify. If we are unable to establish and maintain manufacturing capacity either on our own or through third parties, the development and sales of our products and our financial performance will be materially and adversely affected.

In addition, before we or any of our collaborators can begin to commercially manufacture our product candidates, each manufacturing facility and process is subject to regulatory review. Manufacturing of drugs for clinical and commercial purposes must comply with the FDA's cGMPs and applicable non-U.S. regulatory requirements. The cGMP requirements govern quality control and documentation policies and procedures. Complying with cGMP and non-U.S. regulatory requirements will require that we expend time, money, and effort in production, recordkeeping, and quality control to assure that the product meets applicable specifications and other requirements. Any manufacturing facility must also pass a pre-approval inspection prior to FDA approval. Failure to pass a pre-approval inspection might significantly delay FDA approval of our product candidates. If we or any of our future collaborators fails to comply with these requirements with respect to the manufacture of any of our product candidates, regulatory action could limit the jurisdictions in which we are permitted to sell our products, if approved. As a result, our business, financial condition, and results of operations might be materially harmed.

We are exposed to the following risks with respect to the manufacture of our product candidates:

- If we are unable to establish our own manufacturing capabilities, we will need to identify manufacturers for commercial supply on acceptable terms, which we may not be able to do because the number of potential manufacturers is limited, and the FDA must approve any new or replacement contractor. This approval would generally require compliance inspections. In addition, a new manufacturer would have to be educated in, or develop substantially equivalent processes for, production of our products after receipt of FDA approval, if any.

- We or any third-party manufacturers with whom we contract might be unable to formulate and manufacture our product candidates in the volume and of the quality required to meet our clinical and, if approved, commercial needs in a timely manner.

- Any third-party manufacturers with whom we contract might not perform as agreed or might not remain in the contract manufacturing business for the time required to supply our clinical trials or to produce, store and distribute successfully our products.

- One or more of any third-party manufacturers with whom we contract could be foreign, which increases the risk of shipping delays and adds the risk of import restrictions.

- Drug manufacturers are subject to ongoing periodic unannounced inspection by the FDA and corresponding state agencies to ensure strict compliance with cGMP and other government regulations and corresponding foreign requirements. Any internal manufacturing facilities we establish may fail to comply, and we would not have complete control over any third-party manufacturers' compliance, with these regulations and requirements.

- We may be required to obtain additional intellectual property rights from third parties in order to manufacture our product candidates, and if any third-party manufacturer makes improvements in the manufacturing process for our product candidates, we might not own, or might have to share, the intellectual property rights to the innovation with our licensors.

- We may be required to share our trade secrets and know-how with third parties, thereby risking the misappropriation or disclosure of our intellectual property by or to third parties.

- If we contract with third-party manufacturers, we might compete with other companies for access to these manufacturers' facilities and might be subject to manufacturing delays if the manufacturers give other clients higher priority than us.

Each of these risks could delay our development efforts, nonclinical studies and clinical trials or the approval, if any, of our product candidates by the FDA or applicable non-U.S. regulatory authorities or the commercialization of our product candidates and could result in higher costs or deprive us of potential product revenues. As a result, our business, financial condition, and results of operations might be materially harmed.

If we or our collaborators cannot compete successfully for market share against other companies, we might not achieve sufficient product revenues and our business will suffer.

If our product candidates receive approval from the FDA or applicable non-U.S. regulatory authorities, they will compete with a number of existing and future drugs and biologics developed, manufactured and marketed by others. Existing or future competing drugs might provide greater therapeutic convenience or clinical or other benefits for a specific indication than our product candidates or might offer comparable performance at a lower cost. If our product candidates fail to capture and maintain market share, we might not achieve sufficient product revenues and our business will suffer.

We might compete against fully integrated pharmaceutical or biotechnology companies and smaller companies that are collaborating with larger pharmaceutical companies, academic institutions, government agencies and other public and private research organizations. Many of these competitors, either alone or together with their collaborative partners, operate larger research and development programs or have substantially greater financial resources than we do, as well as significantly greater experience in:

- developing drugs;

- undertaking nonclinical testing and human clinical trials;

- obtaining FDA and other regulatory approvals of drugs;

- formulating and manufacturing drugs; and

- launching, marketing and selling drugs.

We may not have or be able to obtain the same resources and experience as our competitors. If we are unable to perform these tasks effectively and efficiently, our results of operations might be materially adversely affected.

Developments by competitors might render our product candidates or technologies obsolete or non-competitive.

The pharmaceutical and biotechnology industries are intensely competitive. In addition, the clinical and commercial landscape for HBV, ulcerative colitis (UC), inflammatory bowel disease (IBD), including Crohn's disease, irritable bowel syndrome (IBS), nonalcoholic steatohepatitis disease (NASH) and immuno-oncology is rapidly changing; we expect new data from commercial and clinical-stage products to continue to emerge. We will compete with organizations that have existing treatments and that are or will be developing treatments for the indications that our product candidates target. If our competitors develop effective treatments for HBV, UC, IBD, IBS, NASH and immuno-oncology or any other indication or field we might pursue, and successfully commercialize those treatments, our business and prospects might be materially harmed, due to intense competition in these markets.

Our product candidates under development in our Microbiome program will be subject to regulation as biologics. These candidates, and any other future product candidates for which we or our collaborators intend to seek approval as biologic products, may face competition sooner than anticipated.

The Patient Protection and Affordable Care Act (ACA) signed into law on March 23, 2010, includes a subtitle called the Biologics Price Competition and Innovation Act of 2009 (BPCIA), which created an abbreviated approval pathway for biological products that are biosimilar to or interchangeable with an FDA-licensed reference biological product. Under the BPCIA, an application for a biosimilar product may not be submitted to the FDA until four years following the date that the reference product was first licensed by the FDA. In addition, the approval of a biosimilar product may not be made effective by the FDA until 12 years from the date on which the reference product was first licensed. During this 12-year period of exclusivity, another company may still market a competing version of the reference product if the FDA approves a full BLA for the competing product containing the sponsor's own preclinical data and data from adequate and well-controlled clinical trials to demonstrate the safety, purity and potency of their product. The law is complex and is still being interpreted and implemented by the FDA. As a result, its ultimate impact, implementation, and meaning are subject to uncertainty. While it is uncertain when such processes intended to implement the BPCIA may be fully adopted by the FDA, any such processes could have a material adverse effect on the future commercial prospects for our biological products.

We believe that if product candidates from our Microbiome program are approved as biological products under a BLA, they should qualify for the 12-year period of exclusivity. However, there is a risk that this exclusivity could be shortened due to congressional action or otherwise, or that the FDA will not consider our product candidates to be reference products for competing products, potentially creating the opportunity for generic competition sooner than anticipated. Other aspects of the BPCIA, some of which may impact the BPCIA exclusivity provisions, have also been the subject of recent litigation. Moreover, the extent to which a biosimilar, once approved, will be substituted for any one of our reference products in a way that is similar to traditional generic substitution for non-biological products is not yet clear, and will depend on a number of marketplace and regulatory factors that are still developing.

If we or our collaborators are not able to develop collaborative marketing relationships with licensees or partners, or create effective internal sales, marketing, and distribution capability, we might be unable to market our products successfully.

To market our product candidates, if approved, we will have to establish our own marketing and sales force or out-license our product candidates to, or collaborate with, larger firms with experience in marketing and selling pharmaceutical products. There can be no assurance that we will be able to successfully establish our own marketing capabilities or establish marketing, sales, or distribution relationships with third parties; that such relationships, if established, will be successful; or that we will be successful in gaining market acceptance for our product candidates. To the extent that we enter into any marketing, sales, or distribution arrangements with third parties, our product revenues will be lower than if we marketed and sold our products directly, and any revenues we receive will depend upon the efforts of such third parties. If we are unable to establish such third-party sales and marketing relationships, or choose not to do so, we will have to establish our own in-house capabilities. We, as a company, have no experience in marketing or selling pharmaceutical products and currently have no sales, marketing, or distribution infrastructure. To market any of our products directly, we would need to develop a marketing, sales, and distribution force that both has technical expertise and the ability to support a distribution capability. To establish our own marketing, sales, and distribution capacity would significantly increase our costs, and require substantial additional capital. In addition, there is intense competition for proficient sales and marketing personnel, and we might not be able to attract individuals who have the qualifications necessary to market, sell, and distribute our products. There can be no assurance that we will be able to establish internal marketing, sales, or distribution capabilities.

The commercial success of our product candidates will depend upon the degree of market acceptance by physicians, patients, third-party payors and others in the medical community.

The commercial success of our products, if approved for marketing, will depend in part on the medical community, patients and third-party payors accepting our product candidates as effective and safe. If these products do not achieve an adequate level of acceptance, we may not generate significant product revenue and may not become profitable. The degree of market acceptance of our products, if approved for marketing, will depend on a number of factors, including:

- the actual or perceived safety and efficacy of the products, and advantages over alternative treatments;
- the pricing and cost-effectiveness of our products relative to competing products or therapies, including generic drugs or biosimilars, if available;
- the labeling of any approved product;
- the prevalence and severity of any side effects, including any limitations or warnings contained in a product's approved labeling;
- the emergence, and timing of market introduction, of competitive products;
- the effectiveness of marketing and distribution efforts by us and our licensees and distributors, if any; and
- the availability of third-party insurance coverage or governmental reimbursement.

Even if a potential product displays a favorable efficacy and safety profile in nonclinical studies and clinical trials, market acceptance of the product will not be known until after it is launched. Any failure to achieve market acceptance for our product candidates will harm our business, results and financial condition.

If we lose key management or scientific personnel, cannot recruit qualified employees, directors, officers, or other significant personnel or experience increases in our compensation costs, our business might materially suffer.

We are highly dependent on the services of our executive officers and senior management team. Our employment agreements with our executive officers and senior management team members do not ensure their retention.

Furthermore, our future success also depends, in part, on our ability to identify, hire, and retain additional management team members as our operations grow and our ability to replace our management team members in the event any leave us for any reason. We expect to experience intense competition for qualified personnel and might be unable to attract and retain the personnel necessary for the development of our business. Finally, we do not currently maintain, nor do we intend to obtain in the future, “key man” life insurance that would compensate us in the event of the death or disability of any of the members of our management team.

The failure by us to retain, attract and motivate executives and other key employees could have a material adverse impact on our business, financial condition and results of operations.

If we are unable to hire additional qualified personnel, our ability to grow our business might be harmed.

As of September 30, 2018, we had 92 employees and contracts with a number of temporary contractors, consultants and contract research organizations. We will need to hire or contract with additional qualified personnel with expertise in clinical research and testing, formulation and manufacturing and sales and marketing to commercialize our HBV drug candidates and our microbiome biotherapeutic candidates or any other product candidate we may seek to develop. We compete for qualified individuals with numerous biopharmaceutical companies, universities and other research institutions. Competition for these individuals is intense, and we cannot be certain that our search for such personnel will be successful. Attracting and retaining qualified personnel will be critical to our success.

We might not successfully manage our growth.

Our success will depend upon the expansion of our operations and the effective management of our growth, which will place a significant strain on our current and future management and other administrative and operational resources. To manage this growth, we may need to expand our facilities, augment our operational, financial and management systems and hire and train additional qualified personnel. If we are unable to manage our growth effectively, our business would be harmed.

We might seek to develop our business through acquisitions of or investment in new or complementary businesses, products or technologies, and the failure to manage these acquisitions or investments, or the failure to integrate them with our existing business, could have a material adverse effect on us.

We might consider opportunities to acquire or invest in other technologies, products and businesses that might enhance our capabilities or complement our current product candidates. Potential and completed acquisitions and strategic investments involve numerous risks, including potential problems or issues associated with the following:

- assimilating the purchased technologies, products or business operations;
- maintaining uniform standards, procedures, controls and policies;
- unanticipated costs associated with the acquisition or investment;
- diversion of our management's attention from our preexisting business;
- maintaining or obtaining the necessary regulatory approvals or complying with regulatory requirements; and
- adverse effects on existing business operations.

We have no current commitments with respect to any acquisition or investment in other technologies or businesses. We do not know if we will identify suitable acquisitions, whether we will be able to successfully complete any acquisitions, or whether we will be able to successfully integrate any acquired product, technology or business into our business or retain key personnel, suppliers or collaborators.

Our ability to develop successfully our business through acquisitions would depend on our ability to identify, negotiate, complete and integrate suitable target businesses or technologies and obtain any necessary financing. These efforts could be expensive and time consuming and might disrupt our ongoing operations. If we are unable to integrate efficiently any acquired business, technology or product into our business, our business and financial condition might be adversely affected.

Risks Related to Our Regulatory and Legal Environment

We are and will be subject to extensive and costly government regulation and the failure to comply with these regulations may have a material adverse effect on our operations and business.

Product candidates employing our technology are subject to extensive and rigorous domestic government regulation including regulation by the FDA, the Centers for Medicare and Medicaid Services, other divisions of the U.S. Department of Health and Human Services, the U.S. Department of Justice, state and local governments, and their respective foreign equivalents. Both before and after approval of any product, we and our collaborators, suppliers, contract manufacturers and clinical investigators are subject to extensive regulation by governmental authorities in the United States and other countries, covering, among other things, testing, manufacturing, quality control, clinical trials, post-marketing studies, labeling, advertising, promotion, distribution, import and export, governmental pricing, price reporting and rebate requirements. Failure to comply with applicable requirements could result in one or more of the following actions: warning or untitled letters; unanticipated expenditures; delays in approval or refusal to approve a product candidate; voluntary product recall; product seizure; interruption of manufacturing or clinical trials; operating or marketing restrictions; injunctions; criminal prosecution and civil or criminal penalties including fines and other monetary penalties; exclusion from federal health care programs such as Medicare and Medicaid; adverse publicity; and disruptions to our business. Further, government investigations into potential violations of these laws would require us to expend considerable resources and face adverse publicity and the potential disruption of our business even if we are ultimately found not to have committed a violation. If products employing our technologies are marketed abroad, they will also be subject to extensive regulation by foreign governments, whether or not they have obtained FDA approval for a given product and its uses. Such foreign regulation might be equally or more demanding than corresponding U.S. regulation.

Government regulation substantially increases the cost and risk of researching, developing, manufacturing, and selling our product candidates. The regulatory review and approval process, which includes nonclinical testing and clinical trials of each product candidate, is lengthy, expensive, and uncertain. We or our collaborators must obtain and maintain regulatory authorization to conduct clinical trials and approval for each product we intend to market, and the manufacturing facilities used for the products must be inspected and meet legal requirements. Securing regulatory approval requires submitting extensive nonclinical and clinical data and other supporting information for each proposed therapeutic indication in order to establish the product's safety and efficacy for each intended use. The development and approval process might take many years, requires substantial resources, and might never lead to the approval of a product.

Even if we or our collaborators are able to obtain regulatory approval for a particular product, the approval might limit the intended medical uses for the product, limit our ability to promote, sell, and distribute the product, require that we conduct costly post-marketing surveillance, and/or require that we conduct ongoing post-marketing studies. Material changes to an approved product, such as, for example, manufacturing changes or revised labeling, might require further regulatory review and approval. Once obtained, any approvals might be withdrawn, including, for example, if there is a later discovery of previously unknown problems with the product, such as a previously unknown safety issue.

If we, our collaborators, or our contract manufacturers fail to comply with applicable regulatory requirements at any stage during the regulatory process, such noncompliance could result in, among other things, delays in the approval of applications or supplements to approved applications; refusal by a regulatory authority, including the FDA, to review pending market approval applications or supplements to approved applications; untitled letters or warning letters; fines; import and export restrictions; product recalls or seizures; injunctions; total or partial suspension of production; civil penalties; withdrawals of previously approved marketing applications; recommendations by the FDA or other regulatory authorities against governmental contracts; and/or criminal prosecutions.

The regulatory approval processes of the FDA and comparable foreign authorities are lengthy, time consuming and inherently unpredictable, and if we or our collaborators are ultimately unable to obtain regulatory approval for our product candidates, our business will be substantially harmed.

We, or any current or future collaborators, cannot assure you that we will receive the approvals necessary to commercialize for sale any of our product candidates, or any product candidate we acquire or develop in the future. We will need FDA approval to commercialize our product candidates in the United States and approvals from the applicable regulatory authorities in foreign jurisdictions to commercialize our product candidates in those jurisdictions. In order to obtain FDA approval of any product candidate, we must submit to the FDA an NDA, in the case of our HBV-cure program, or a BLA, in the case of our product candidates in our Microbiome program, demonstrating that the product candidate is safe for humans and effective for its intended use (for biological products, this standard is referred to as safe, pure and potent). This demonstration requires significant research, nonclinical studies, and clinical trials. Satisfaction of the FDA's regulatory requirements typically takes many years, depends upon the type, complexity and novelty of the product candidate and requires substantial resources for research, development and testing. We cannot predict whether our research and clinical approaches will result in drugs or biological products that the FDA considers safe for humans and effective for their indicated uses. The FDA has substantial discretion in the approval process and might require us to conduct additional nonclinical and clinical testing, perform post-marketing studies or otherwise limit or impose conditions on any approval we obtain.

The approval process might also be delayed by changes in government regulation, future legislation or administrative action or changes in FDA policy that occur prior to or during our regulatory review. Delays in obtaining regulatory approvals might:

- delay commercialization of, and our ability to derive product revenues from, our product candidates;
- impose costly procedures on us; and
- diminish any competitive advantages that we might otherwise enjoy.

Even if we comply with all FDA requests, the FDA might ultimately reject one or more of our NDAs or BLAs. We cannot be sure that we will ever obtain regulatory approval for our product candidates. Failure to obtain FDA approval of our product candidates will severely undermine our business by leaving us without a saleable product, and therefore without any source of revenues, until another product candidate could be developed or obtained. There is no guarantee that we will ever be able to develop an existing, or acquire another, product candidate.

In foreign jurisdictions, we must receive approval from the appropriate regulatory authorities before we can commercialize any product candidates. The risks associated with foreign regulatory approval processes are similar to the risks associated with the FDA approval procedures described above. We cannot assure you that we will receive the approvals necessary to commercialize our product candidates for sale outside the United States.

Even if our product candidates are approved, we and our collaborators will be subject to extensive post-approval regulation, including ongoing obligations and continued regulatory review, which may result in significant additional expense. If approved, our product candidates could be subject to post-marketing restrictions or withdrawal from the market and we, or any collaborators, may be subject to substantial penalties if we, or they, fail to comply with regulatory requirements or if we, or they, experience unanticipated problems with our products following approval.

Once a product candidate is approved, numerous post-approval requirements apply. Among other things, we and our collaborators will be subject to requirements regarding testing, manufacturing, quality control, clinical trials, post-marketing studies, labeling, advertising, promotion, distribution, import and export, governmental pricing, price reporting and rebate requirements. The holder of an approved NDA or BLA is subject to ongoing FDA oversight, monitoring and reporting obligations, including obligations to monitor and report adverse events and instances of the failure of a product to meet the specifications in the NDA or BLA. Application holders must submit new or supplemental applications and obtain FDA approval for changes to the approved product, product labeling, or manufacturing process, depending on the nature of the change. Application holders also must submit advertising and other promotional material to the FDA and report on ongoing clinical trials. The FDA also has the authority to require changes in the labeling of approved drug products and to require post-marketing studies. The FDA can also impose distribution and use restrictions under a REMS.

Advertising and promotional materials must comply with FDA rules in addition to other applicable federal and state laws. The distribution of product samples to physicians must comply with the requirements of the Prescription Drug Marketing Act. Manufacturing facilities remain subject to FDA inspection and must continue to adhere to the FDA's cGMP requirements. Sales, marketing, and scientific/educational grant programs, among other activities, must comply with the anti-fraud and abuse provisions of the Social Security Act, the False Claims Act, and similar state laws, each as amended. Pricing and rebate programs must comply with the Medicaid rebate requirements of the Omnibus Budget Reconciliation Act of 1990 and the Veterans Health Care Act of 1992, each as amended. If products are made available to authorized users of the Federal Supply Schedule of the General Services Administration, additional laws and requirements apply. All of these activities are also potentially subject to federal and state consumer protection and unfair competition laws.

Depending on the circumstances, failure to meet these post-approval requirements can result in criminal prosecution, fines, injunctions, recall or seizure of products, total or partial suspension of production, denial or withdrawal of pre-marketing product approvals, or refusal to allow us to enter into supply contracts, including government contracts. In addition, even if we comply with FDA and other requirements, new information regarding the safety or effectiveness of a product could lead the FDA to modify or withdraw product approval.

The policies of the FDA and of other regulatory authorities may change and additional government regulations may be enacted that could prevent, limit or delay regulatory approval of our product candidates. We cannot predict the likelihood, nature or extent of government regulation that may arise from future legislation or administrative or executive action, either in the United States or abroad. For example, certain policies of the current administration may impact our business and industry. Namely, the current administration has taken several executive actions, including the issuance of a number of Executive Orders, that could impose significant burdens on, or otherwise materially delay, FDA's ability to engage in routine oversight activities such as implementing statutes through rulemaking, issuance of guidance, and review and approval of marketing applications. Notably, on January 30, 2017, an Executive Order was issued directing all executive agencies, including the FDA, that, for each notice of proposed rulemaking or final regulation to be issued in fiscal years 2018 and beyond, the agencies must identify regulations to offset any incremental cost of a new regulation. On September 8, 2017, the FDA published notices in the Federal Register soliciting broad public comment to identify regulations that could be modified in compliance with these Executive Orders. It is difficult to predict how these requirements will be implemented, and the extent to which they will impact the FDA's ability to exercise its regulatory authority. If these executive actions impose restrictions on FDA's ability to engage in oversight and implementation activities in the normal course, our business may be negatively impacted. In addition, if we are slow or unable to adapt to changes in existing requirements or the adoption of new requirements or policies, or if we are not able to maintain regulatory compliance, we may lose any marketing approval that we may have obtained and we may not achieve or sustain profitability.

Even if we or our collaborators are able to commercialize any product candidates, those products may become subject to unfavorable pricing regulations, third-party coverage and reimbursement practices or healthcare reform initiatives, which would harm our business.

The regulations that govern marketing approvals, pricing and reimbursement for new medicines vary widely from country to country. In the United States, recently enacted legislation may significantly change the approval requirements in ways that could involve additional costs and cause delays in obtaining approvals. Some countries require approval of the sale price of a medicine before it can be marketed. In many countries, the pricing review period begins after marketing or product licensing approval is granted. In some foreign markets, prescription pharmaceutical pricing remains subject to continuing governmental control even after initial approval is granted. As a result, we might obtain marketing approval for a medicine in a particular country, but then be subject to price regulations that delay our commercial launch of the medicine, possibly for lengthy time periods, and negatively impact the revenues we are able to generate from the sale of the medicine in that country. Adverse pricing limitations may hinder our ability to recoup our investment in one or more product candidates, even if our product candidates obtain marketing approval.

Our ability to commercialize any medicines successfully also will depend in part on the extent to which reimbursement for these medicines and related treatments will be available from government health administration authorities, private health insurers and other organizations. Government authorities and third-party payors, such as private health insurers and health maintenance organizations, decide which medications they will pay for and establish reimbursement levels. A primary trend in the U.S. healthcare industry and elsewhere is cost containment. Government authorities and third-party payors have attempted to control costs by limiting coverage and the amount of reimbursement for particular medications. Increasingly, third-party payors are requiring that drug companies provide them with predetermined discounts from list prices and are challenging the prices charged for medical products. We cannot be sure that reimbursement will be available for any product candidate that we commercialize and, if reimbursement is available, the level of reimbursement. Reimbursement may impact the demand for, or the price of, any product candidate for which we obtain marketing approval. If reimbursement is not available or is available only to limited levels, we may not be able to commercialize successfully any product candidate for which we obtain marketing approval.

There may be significant delays in obtaining reimbursement for newly approved medicines, and coverage may be more limited than the purposes for which the medicine is approved by the FDA or similar regulatory authorities outside the United States. Moreover, eligibility for reimbursement does not imply that any medicine will be paid for in all cases or at a rate that covers our costs, including research, development, manufacture, sale and distribution. Interim reimbursement levels for new medicines, if applicable, may also not be sufficient to cover our costs and may not be made permanent. Reimbursement rates may vary according to the use of the medicine and the clinical setting in which it is used, may be based on reimbursement levels already set for lower cost medicines and may be incorporated into existing payments for other services. Net prices for medicines may be reduced by mandatory discounts or rebates required by government healthcare programs or private payors and by any future relaxation of laws that presently restrict imports of medicines from countries where they may be sold at lower prices than in the United States. Third-party payors often rely upon Medicare coverage policy and payment limitations in setting their own reimbursement policies. Our inability to obtain promptly coverage and profitable payment rates from both government-funded and private payors for any approved product candidates that we develop could have a material adverse effect on our operating results, our ability to raise capital needed to commercialize product candidates and our overall financial condition.

In the United States and in other countries, there have been, and we expect there will continue to be, a number of legislative and regulatory proposals to change the healthcare system in ways that could significantly affect our business. International, federal and state lawmakers regularly propose and, at times, enact legislation that would result in significant changes to the healthcare system, some of which are intended to contain or reduce the costs of medical products and services. The U.S. government and other governments have shown significant interest in pursuing healthcare reform, as evidenced by the Patient Protection and Affordable Care Act and its amendment, the Health Care and Education Reconciliation Act (the ACA).

Among the provisions of the ACA of importance to our potential drug candidates are the following:

- an annual, nondeductible fee on any entity that manufactures or imports specified branded prescription drugs and biologics;
- an increase in the statutory minimum rebates a manufacturer must pay under the Medicaid Drug Rebate Program;
- expansion of healthcare fraud and abuse laws, including the False Claims Act and the Anti-Kickback Statute, new government investigative powers, and enhanced penalties for noncompliance;
- a new Medicare Part D coverage gap discount program, in which manufacturers must agree to offer 50% point-of-sale discounts off negotiated prices;
- extension of manufacturers' Medicaid rebate liability;
- expansion of eligibility criteria for Medicaid programs;
- expansion of the entities eligible for discounts under the Public Health Service Act pharmaceutical pricing program;
- new requirements to report financial arrangements with physicians and teaching hospitals;
- a new requirement to annually report drug samples that manufacturers and distributors provide to physicians; and
- a new Patient-Centered Outcomes Research Institute to oversee, identify priorities in, and conduct comparative clinical effectiveness research, along with funding for such research.

Since its enactment, there have been many judicial, Presidential, and Congressional challenges to numerous aspects of the ACA. In 2012, the U.S. Supreme Court heard challenges to the constitutionality of the individual mandate and the viability of certain provisions of the Healthcare Reform Act. The Supreme Court's decision upheld most of the Healthcare Reform Act and determined that requiring individuals to maintain "minimum essential" health insurance coverage or pay a penalty to the Internal Revenue Service was within Congress's constitutional taxing authority. However, as a result of tax reform legislation passed in late December 2017, the individual mandate has been eliminated. The long ranging effects of the elimination of the individual mandate on the viability of the ACA are unknown at this time.

On January 20, 2017, President Trump signed an Executive Order directing federal agencies with authorities and responsibilities under the ACA to waive, defer, grant exemptions from, or delay the implementation of any provision of the ACA that would impose a fiscal burden on states or a cost, fee, tax, penalty or regulatory burden on individuals, healthcare providers, health insurers, or manufacturers of pharmaceuticals or medical devices. On October 13, 2017, President Trump signed an Executive Order terminating the cost-sharing subsidies that reimburse insurers under the ACA. Several state Attorneys General filed suit to stop the administration from terminating the subsidies, but their request for a restraining order was denied by a federal judge in California on October 25, 2017. In addition, Centers for Medicare & Medicaid Services has recently proposed regulations that would give states greater flexibility in setting benchmarks for insurers in the individual and small group marketplaces, which may have the effect of relaxing the essential health benefits required under the ACA for plans sold through such marketplaces. The full impact of the ACA, any law repealing and/or replacing elements of it, and the political uncertainty surrounding any repeal or replacement legislation on our business remains unclear.

In addition, other legislative changes have been proposed and adopted since the ACA was enacted. These changes included aggregate reductions to Medicare payments to providers of up to 2% per fiscal year, starting in 2013. In January 2013, then President Obama signed into law the American Taxpayer Relief Act of 2012, which, among other things, reduced Medicare payments to several providers, and increased the statute of limitations period for the government to recover overpayments to providers from three to five years. These laws may result in additional reductions in Medicare and other healthcare funding. Further, in some foreign jurisdictions, there have been a number of legislative and regulatory proposals to change the healthcare system in ways that could affect our ability to sell our products profitably. The continuing efforts of U.S. and other governments, insurance companies, managed care organizations and other payors of healthcare services to contain or reduce healthcare costs may adversely affect our ability to set satisfactory prices for our products, to generate revenues from the sale of products, and to achieve and maintain profitability.

We and our collaborators may be subject, directly or indirectly, to applicable U.S. federal and state anti-kickback, false claims laws, physician payment transparency laws, fraud and abuse laws or similar healthcare and security laws and regulations, and health information privacy and security laws, which could expose us or them to criminal sanctions, civil penalties, contractual damages, reputational harm and diminished profits and future earnings.

Healthcare providers, physicians and others play a primary role in the recommendation and prescription of any products for which we obtain regulatory approval. If we obtain FDA approval for any of our drug candidates and begin commercializing those drugs in the United States, our operations may be subject to various federal and state fraud and abuse laws, including, without limitation, the federal Anti-Kickback Statute, the federal False Claims Act, and physician payment sunshine laws and regulations. These laws may impact, among other things, our proposed sales, marketing and education programs. In addition, we may be subject to patient privacy regulation by both the federal government and the states in which we conduct our business. The laws that may affect our ability to operate include:

- the federal Anti-Kickback Statute, which prohibits, among other things, knowingly and willfully soliciting, receiving, offering or paying any remuneration (including any kickback, bribe, or rebate), directly or indirectly, overtly or covertly, in cash or in kind, to induce, or in return for, either the referral of an individual, or the purchase, lease, order or recommendation of any good, facility, item or service for which payment may be made, in whole or in part, under a federal healthcare program, such as the Medicare and Medicaid programs;

- federal civil and criminal false claims laws and civil monetary penalty laws, such as the federal False Claims Act, which impose criminal and civil penalties and authorize civil whistleblower or qui tam actions, against individuals or entities for, among other things: knowingly presenting, or causing to be presented, to the federal government, claims for payment that are false or fraudulent; making a false statement or record material to a false or fraudulent claim or obligation to pay or transmit money or property to the federal government; or knowingly concealing or knowingly and improperly avoiding or decreasing an obligation to pay money to the federal government. In addition, the government may assert that a claim including items and services resulting from a violation of the federal Anti-Kickback Statute constitutes a false or fraudulent claim for purposes of the False Claims Act;

- the federal Health Insurance Portability and Accountability Act of 1996 (HIPAA), which created new federal criminal statutes that prohibit knowingly and willfully executing, or attempting to execute, a scheme to defraud any healthcare benefit program or obtain, by means of false or fraudulent pretenses, representations, or promises, any of the money or property owned by, or under the custody or control of, any healthcare benefit program, regardless of the payor (e.g., public or private) and knowingly and willfully falsifying, concealing or covering up by any trick or device a material fact or making any materially false statements in connection with the delivery of, or payment for, healthcare benefits, items or services relating to healthcare matters;

- HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act of 2009, and their respective implementing regulations, which impose requirements on certain covered healthcare providers, health plans, and healthcare clearinghouses as well as their respective business associates that perform services for them that involve the use, or disclosure of, individually identifiable health information, relating to the privacy, security and transmission of individually identifiable health information;

- the federal false statements statute prohibits knowingly and willfully falsifying, concealing or covering up a material fact or making any materially false statement in connection with the delivery of or payment for healthcare benefits, items or services;

- the U.S. federal Food, Drug and Cosmetic Act (FDCA), which prohibits, among other things, the adulteration or misbranding of drugs, biologics and medical devices, and the Public Health Service Act (PHSA), which prohibits, among other things, the introduction into interstate commerce of a biological product unless a biologics license is in effect for that product;

- the federal transparency requirements under the ACA, including the provision commonly referred to as the Physician Payments Sunshine Act, which requires manufacturers of drugs, devices, biologics and medical supplies for which payment is available under Medicare, Medicaid or the Children's Health Insurance Program to report annually to the U.S. Department of Health and Human Services information related to payments or other transfers of value made to physicians and teaching hospitals, as well as ownership and investment interests held by physicians and their immediate family members; and

- federal consumer protection and unfair competition laws, which broadly regulate marketplace activities and activities that potentially harm consumers.

Additionally, we are subject to state and non-U.S. equivalents of each of the healthcare laws described above, among others, some of which may be broader in scope and may apply regardless of the payor. Many U.S. states have adopted laws similar to the federal Anti-Kickback Statute, some of which apply to the referral of patients for healthcare services reimbursed by any source, not just governmental payors, including private insurers. In addition, some states have passed laws that require pharmaceutical companies to comply with the April 2003 Office of Inspector General Compliance Program Guidance for Pharmaceutical Manufacturers and/or the Pharmaceutical Research and Manufacturers of America's Code on Interactions with Healthcare Professionals. Several states also impose other marketing restrictions or require pharmaceutical companies to make marketing or price disclosures to the state. There are ambiguities as to what is required to comply with these state requirements and if we fail to comply with an applicable state law requirement we could be subject to penalties.

In addition, regulators globally are also imposing greater monetary fines for privacy violations. For example, in 2016, the European Union adopted a new regulation governing data practices and privacy called the General Data Protection Regulation (GDPR), which became effective on May 25, 2018. The GDPR applies to any company established in the European Union as well as to those outside the European Union if they collect and use personal data in connection with the offering goods or services to individuals in the European Union or the monitoring of their behavior. The GDPR enhances data protection obligations for processors and controllers of personal data, including, for example, expanded disclosures about how personal information is to be used, limitations on retention of information, mandatory data breach notification requirements and onerous new obligations on services providers. Non-compliance with the GDPR may result in monetary penalties of up to €20 million or 4% of worldwide revenue, whichever is higher. The GDPR and other changes in laws or regulations associated with the enhanced protection of certain types of personal data, such as healthcare data or other sensitive information, could greatly increase our cost of providing our products and services or even prevent us from offering certain services in jurisdictions that we may operate in.

Because of the breadth of these laws and the narrowness of the statutory exceptions and safe harbors available, it is possible that some of our business activities could be subject to challenge under one or more of such laws. In addition, recent health care reform legislation has strengthened these laws. For example, the ACA, among other things, amends the intent requirement of the federal Anti-Kickback and criminal healthcare fraud statutes. As a result of such amendment, a person or entity no longer needs to have actual knowledge of these statutes or specific intent to violate them in order to have committed a violation. Moreover, the ACA provides that the government may assert that a claim including items or services resulting from a violation of the federal Anti-Kickback Statute constitutes a false or fraudulent claim for purposes of the False Claims Act.

Violations of fraud and abuse laws may be punishable by criminal and/or civil sanctions, including penalties, fines and/or exclusion or suspension from federal and state healthcare programs such as Medicare and Medicaid and debarment from contracting with the U.S. government. In addition, private individuals have the ability to bring actions on behalf of the U.S. government under the federal False Claims Act as well as under the false claims laws of several states.

Law enforcement authorities are increasingly focused on enforcing fraud and abuse laws, and it is possible that some of our practices may be challenged under these laws. Efforts to ensure that our business arrangements with third parties will comply with applicable healthcare laws and regulations will involve substantial costs. It is possible that governmental authorities will conclude that our business practices may not comply with current or future statutes, regulations or case law involving applicable fraud and abuse or other healthcare laws and regulations. If any such actions are instituted against us, and we are not successful in defending ourselves or asserting our rights, those actions could have a significant impact on our business, including the imposition of civil, criminal and administrative penalties, damages, disgorgement, monetary fines, possible exclusion from participation in Medicare, Medicaid and other federal healthcare programs, contractual damages, reputational harm, diminished profits and future earnings, and curtailment of our operations, any of which could adversely affect our ability to operate our business and our results of operations. In addition, the approval and commercialization of any of our drug candidates outside the United States will also likely subject us to non-U.S. equivalents of the healthcare laws mentioned above, among other non-U.S. laws.

If any of the physicians or other providers or entities with whom we expect to do business with are found to be not in compliance with applicable laws, they may be subject to criminal, civil or administrative sanctions, including exclusions from government funded healthcare programs, which may also adversely affect our business.

If we fail to maintain an effective system of disclosure controls and internal control over financial reporting, our ability to produce timely and accurate financial statements or comply with applicable regulations could be impaired.

The Sarbanes-Oxley Act requires, among other things, that we maintain effective disclosure controls and procedures and internal control over financial reporting. We are continuing to refine our disclosure controls and other procedures that are designed to ensure that the information that we are required to disclose in the reports that we will file with the SEC is properly recorded, processed, summarized and reported within the time periods specified in SEC rules and forms. We are also continuing to improve our internal control over financial reporting. We have expended, and anticipate that we will continue to expend, significant resources in order to maintain and improve the effectiveness of our disclosure controls and procedures and internal control over financial reporting.

Our current controls and any new controls that we develop in the future may become inadequate because of changes in conditions in our business. Further, weaknesses in our disclosure controls or our internal control over financial reporting may be discovered in the future. Any failure to develop or maintain effective controls, or any difficulties encountered in their implementation or improvement, could harm our operating results or cause us to fail to meet our reporting obligations and may result in a restatement of our financial statements for prior periods. Any failure to implement and maintain effective internal control over financial reporting could also adversely affect the results of management reports and independent registered public accounting firm audits of our internal control over financial reporting that we will be required to include in our periodic reports that will be filed with the SEC. If we were to have ineffective disclosure controls and procedures or internal control over financial reporting, our investors could lose confidence in our reported financial and other information, which would likely have a negative effect on the market price of our common stock.

We face the risk of product liability claims and might not be able to obtain insurance.

Our business exposes us to the risk of product liability claims that are inherent in the development of drugs and biotherapeutics. If the use of one or more of our product candidates or approved drugs, if any, harms people, we might be subject to costly and damaging product liability claims brought against us by clinical trial participants, consumers, health care providers, pharmaceutical companies or others selling our products. Our inability to obtain sufficient product liability/clinical trial insurance at an acceptable cost to protect against potential product liability claims could prevent or inhibit the commercialization of pharmaceutical products we develop. We cannot predict all of the possible harms or side effects that might result and, therefore, the amount of insurance coverage we maintain might not be adequate to cover all liabilities we might incur. We intend to expand our insurance coverage to include product liability insurance covering the sale of commercial products if we obtain marketing approval for our drug candidates in development, but we might be unable to obtain commercially reasonable product liability insurance for any products approved for marketing. If we are unable to obtain insurance at an acceptable cost or otherwise protect against potential product liability claims, we will be exposed to significant liabilities, which might materially and adversely affect our business and financial position. If we are sued for any injury allegedly caused by our products, our liability could exceed our total assets and our ability to pay the liability. Any successful product liability claims or series of claims brought against us would decrease our cash and could cause the value of our common stock to decrease.

We might be exposed to liability claims associated with the use of hazardous materials and chemicals.

Our research, development and manufacturing activities and/or those of our third-party contractors might involve the controlled use of hazardous materials and chemicals. Although we will strive to have our safety procedures, and those of our contractors, for using, storing, handling and disposing of these materials comply with federal, state and local laws and regulations, we cannot completely eliminate the risk of accidental injury or contamination from these materials. In the event of such an accident, we could be held liable for any resulting damages, and any liability could materially adversely affect our business, financial condition and results of operations. In addition, the federal, state and local laws and regulations governing the use, manufacture, storage, handling and disposal of hazardous or radioactive materials and waste products might require us to incur substantial compliance costs that could materially adversely affect our business, financial condition and results of operations. We currently do not carry hazardous materials liability insurance. We intend to obtain such insurance in the future, if necessary, but cannot give assurance that we could obtain such coverage.

Our employees, independent contractors, consultants, collaborators and contract research organizations may engage in misconduct or other improper activities, including noncompliance with regulatory standards and requirements, which could result in significant liability for us and harm our reputation.

We are exposed to the risk of fraud or other misconduct, including intentional failure to:

- comply with FDA regulations or similar regulations of comparable foreign regulatory authorities;
- provide accurate information to the FDA or comparable foreign regulatory authorities;
- comply with federal and state healthcare fraud and abuse laws and regulations and similar laws and regulations established and enforced by comparable foreign regulatory authorities;

- comply with the United States Foreign Corrupt Practices Act (the FCPA), the U.K. Bribery Act 2010, the PRC Criminal Law, the PRC Anti-unfair Competition Law and other anti-bribery laws;
- report financial information or data accurately; or
- disclose unauthorized activities to us.

Misconduct could also involve the improper use or misrepresentation of information obtained in the course of clinical trials, creating fraudulent data in our nonclinical studies or clinical trials or illegal misappropriation of product materials, which could result in regulatory sanctions, delays in clinical trials, or serious harm to our reputation. We have adopted a code of conduct for our directors, officers and employees (the Code of Conduct), but it is not always possible to identify and deter employee misconduct. The precautions we take to detect and prevent this activity may not be effective in controlling unknown or unmanaged risks or losses or in protecting us from governmental investigations or other actions or lawsuits stemming from a failure to be in compliance with such laws or regulations. Additionally, we are subject to the risk that a person or government could allege such fraud or other misconduct, even if none occurred. If any such actions are instituted against us and we are not successful in defending ourselves or asserting our rights, those actions could harm our business, results of operations, financial condition and cash flows, including through the imposition of significant fines or other sanctions.

We are subject to certain U.S. and foreign anti-corruption, anti-money laundering, export control, sanctions, and other trade laws and regulations (collectively, Trade Laws). We can face serious consequences for violations.

Among other matters, Trade Laws prohibit companies and their employees, agents, clinical research organizations, legal counsel, accountants, consultants, contractors, and other partners from authorizing, promising, offering, providing, soliciting, or receiving directly or indirectly, corrupt or improper payments or anything else of value to or from recipients in the public or private sector. Violations of Trade Laws can result in substantial criminal fines and civil penalties, imprisonment, the loss of trade privileges, debarment, tax reassessments, breach of contract and fraud litigation, reputational harm, and other consequences. We have direct or indirect interactions with officials and employees of government agencies or government-affiliated hospitals, universities, and other organizations. We also expect our non-U.S. activities, particularly in China, to increase in time. We engage third parties for clinical trials and/or to obtain necessary permits, licenses, patent registrations, and other regulatory approvals. We can be held liable for the corrupt or other illegal activities of our personnel, agents, or partners, even if we do not explicitly authorize or have prior knowledge of such activities.

We have international operations, including in China, and conduct clinical trials outside of the United States. A number of risks associated with international operations could materially and adversely affect our business.

We expect to be subject to a number of risks related with our international operations, many of which may be beyond our control. These risks include:

- different regulatory requirements for drug approvals in foreign countries;
- different standards of care in various countries that could complicate the evaluation of our product candidates;
- different U.S. and foreign drug import and export rules;
- different reimbursement systems and different competitive drugs indicated to treat the indication for which our product candidates are being developed;
- reduced protection for intellectual property rights in certain countries;
- unexpected changes in tariffs, trade barriers and regulatory requirements;
- compliance with the FCPA and other anti-corruption and anti-bribery laws;
- compliance with tax, employment, immigration and labor laws for employees living or traveling abroad;
- foreign taxes, including withholding of payroll taxes;
- foreign currency fluctuations and compliance with foreign currency exchange rules, which could result in increased operating expenses and reduced revenues, and other obligations incident to doing business in another country; and
- business interruptions resulting from geopolitical actions, including tariffs, war and terrorism, or natural disasters.

Risks Related to Our Intellectual Property

Our business depends on protecting our intellectual property.

If we and our licensors, IURTC and Therabiome, do not obtain protection for our respective intellectual property rights, our competitors might be able to take advantage of our research and development efforts to develop competing drugs. Our success, competitive position and future revenues, if any, depend in part on our ability and the abilities of our licensors to obtain and maintain patent protection for our products, methods, processes and other technologies, to preserve our trade secrets, to prevent third parties from infringing on our proprietary rights and to operate without infringing the proprietary rights of third parties.

We seek to protect our proprietary position by filing patent applications in the United States and abroad related to our novel technologies and chemical and biological compositions that are important to our business. To date, although our licensors and the Company have filed patent applications and we have an issued patent in the U.S. related to our licensed delivery technology, which is expected to expire in 2034, we do not own or have any rights to any issued patents that cover any of our product candidates, and we cannot be certain that we will secure any rights to any issued patents with claims that cover any of our proprietary product candidates and technologies. The patent prosecution process is expensive and time-consuming, and we may not be able to file and prosecute all necessary or desirable patent applications at a reasonable cost or in a timely manner. It is also possible that we will fail to identify patentable aspects of our research and development output before it is too late to obtain patent protection.

The patent process also is subject to numerous risks and uncertainties, and there can be no assurance that we will be successful in protecting our products by obtaining and defending patents. These risks and uncertainties include the following:

- Any patent rights, if obtained, might be challenged, invalidated, or circumvented, or otherwise might not provide any competitive advantage;
- Our competitors, many of which have substantially greater resources than we do and many of which might make significant investments in competing technologies, might seek, or might already have obtained, patents that will limit, interfere with, or eliminate our ability to make, use, and sell our potential products either in the United States or in international markets;
- As a matter of public policy regarding worldwide health concerns, there might be significant pressure on the U.S. government and other international governmental bodies to limit the scope of patent protection both inside and outside the United States for disease treatments that prove successful; and
- Countries other than the United States might have patent laws that provide less protection than those governing U.S. courts, allowing foreign competitors the ability to exploit these laws to create, develop, and market competing products.

In addition, the U.S. Patent and Trademark Office (the USPTO) and patent offices in other jurisdictions have often required that patent applications concerning pharmaceutical and/or biotechnology-related inventions be limited or narrowed substantially to cover only the specific innovations exemplified in the patent application, thereby limiting the scope of protection against competitive challenges. Thus, even if we or our licensors are able to obtain patents, the patents might be substantially narrower than anticipated.

Patent and other intellectual property protection is crucial to the success of our business and prospects, and there is a substantial risk that such protections, if obtained, will prove inadequate. Our business and prospects will be harmed if we fail to obtain these protections or they prove insufficient.

If we fail to comply with our obligations under our license agreements, we could lose rights to our product candidates or key technologies.

We have obtained rights to develop, market and sell some of our product candidates and technologies through intellectual property license agreements with third parties, including IURTC and Therabiome. These license agreements impose various diligence, milestone payment, royalty and other obligations on us. If we fail to comply with our obligations under our license agreements, we could lose some or all of our rights to develop, market and sell products covered by these licenses, and our ability to form collaborations or partnerships may be impaired. In addition, disputes may arise under our license agreements with third parties, which could prevent or impair our ability to maintain our current licensing arrangements on acceptable terms and to develop and commercialize the affected product candidates.

We may incur substantial costs as a result of litigation or other proceedings relating to patent and other intellectual property rights.

If we choose to go to court to stop another party from using the inventions claimed in any patents we obtain, that individual or company has the right to ask the court to rule that such patents are invalid or should not be enforced against that third party. These lawsuits are expensive and would consume time and resources and divert the attention of managerial and scientific personnel even if we were successful in stopping the infringement of such patents. There is a risk that the court will decide that such patents are not valid and that we do not have the right to stop the other party from using the inventions. There is also the risk that, even if the validity of such patents is upheld, the court will refuse to stop the other party on the ground that such other party's activities do not infringe our rights to such patents. If we were not successful in defending our intellectual property, our competitors could develop and market products based on our discoveries, which may reduce demand for our products.

We rely on trade secret protections through confidentiality agreements with our employees, collaborators and other parties, and the breach of these agreements could adversely affect our business and prospects.

We rely on trade secrets and proprietary know-how, which we seek to protect, in part, through confidentiality, invention, and non-disclosure agreements with our employees, scientific advisors, consultants, collaborators, suppliers, and other parties. There can be no assurance that these agreements will not be breached, that we would have adequate remedies for any such breach or that our trade secrets will not otherwise become known to or independently developed by our competitors. If any of these events occurs, or we otherwise lose protection for our trade secrets or proprietary know-how, the value of this information may be greatly reduced.

If our employees or consultants breach their confidentiality obligations, to be able to enforce these confidentiality provisions, we would need to know of the breach and have sufficient funds to enforce the provisions. We cannot assure you that we would know of or be able to afford enforcement of any breach. In addition, such provisions are subject to state law and interpretation by courts, which could limit the scope and duration of these provisions. Any limitation on or non-enforcement of these confidentiality provisions could have an adverse effect on our business.

We may infringe the intellectual property rights of others, which may prevent or delay our product development efforts and stop us from commercializing or increase the costs of commercializing our product candidates.

Our success will depend in part on our ability to operate without infringing the proprietary rights of third parties. Our competitors may have filed, and may in the future file, patent applications covering products and technologies similar to ours. Any such patent application may have priority over our patent applications, which could further require us to obtain rights from third parties to issued patents covering such products and technologies. We cannot guarantee that the manufacture, use or marketing of any product candidates that we develop will not infringe third-party patents.

A third party may claim that we are using inventions covered by the third party's patent rights and may go to court to stop us from engaging in our normal operations and activities, including making or selling our product candidates. Patent litigation is costly and time consuming. We may not have sufficient resources to address these actions, and such actions could affect our results of operations and divert the attention of managerial and scientific personnel.

If a patent infringement suit were brought against us, we may be forced to stop or delay developing, manufacturing, or selling potential products that are claimed to infringe a third party's intellectual property, unless that third party grants us rights to use its intellectual property. In such cases, we may be required to obtain licenses to patents or proprietary rights of others in order to continue development, manufacture or sale of our products. If we are unable to obtain a license or develop or obtain non-infringing technology, or if we fail to defend an infringement action successfully, or if we are found to have infringed a valid patent, we may incur substantial monetary damages, encounter significant delays in bringing our product candidates to market and be precluded from manufacturing or selling our product candidates, any of which could harm our business significantly.

If our efforts to protect our proprietary technologies are not adequate, we may not be able to compete effectively in our market.

We rely upon a combination of patents, trade secret protection and contractual arrangements to protect the intellectual property related to our technologies. We will only be able to protect our products and proprietary information and technology by preventing unauthorized use by third parties to the extent that our patents, trade secrets, and contractual position allow us to do so. Any disclosure to or misappropriation by third parties of our trade secrets or confidential information could compromise our competitive position. Moreover, we may in the future be involved in legal or administrative proceedings involving our intellectual property initiated by third parties, and which proceedings can result in significant costs and commitment of management time and attention. As our product candidates continue in development, third parties may attempt to challenge the validity and enforceability of our patents and proprietary information and technologies.

We may in the future be involved in initiating legal or administrative proceedings involving the product candidates and intellectual property of our competitors. These proceedings can result in significant costs and commitment of management time and attention, and there can be no assurance that our efforts would be successful in preventing or limiting the ability of our competitors to market competing products.

Composition-of-matter patents relating to the active pharmaceutical ingredient (API) are generally considered to be the strongest form of intellectual property protection for pharmaceutical products. Such patents provide protection not limited to any one method of use. Method-of-use patents protect the use of a product for the specified method(s), and do not prevent a competitor from making and marketing a product that is identical to our product for an indication that is outside the scope of the patented method. We rely on a combination of these and other types of patents to protect our product candidates, and there can be no assurance that our intellectual property will create and sustain the competitive position of our product candidates.

Biotechnology and pharmaceutical product patents involve highly complex legal and scientific questions and can be uncertain. Any patent applications that we own or license may fail to result in issued patents. Even if patents do successfully issue from our applications, third parties may challenge their validity or enforceability, which may result in such patents being narrowed, invalidated, or held unenforceable. Even if our patents and patent applications are not challenged by third parties, those patents and patent applications may not prevent others from designing around our claims and may not otherwise adequately protect our product candidates. If the breadth or strength of protection provided by the patents and patent applications we hold with respect to our product candidates is threatened, competitors with significantly greater resources could threaten our ability to commercialize our product candidates. Discoveries are generally published in the scientific literature well after their actual development, and patent applications in the United States and other countries are typically not published until 18 months after filing, and in some cases are never published. Therefore, we cannot be certain that we or our licensors were the first to make the inventions claimed in our owned and licensed patents or patent applications, or that we or our licensors were the first to file for patent protection covering such inventions. Subject to meeting other requirements for patentability, for U.S. patent applications filed prior to March 16, 2013, the first to invent the claimed invention is entitled to receive patent protection for that invention while, outside the United States, the first to file a patent application encompassing the invention is entitled to patent protection for the invention. The United States moved to a "first to file" system under the Leahy-Smith America Invents Act (AIA), effective March 16, 2013. The effects of this change and other elements of the AIA are currently unclear, as the USPTO is still implementing associated regulations, and the applicability of the AIA and associated regulations to our patents and patent applications have not been fully determined. This new system also includes new procedures for challenging issued patents and pending patent applications, which creates additional uncertainty. We may become involved in any variety of proceedings challenging our patents and patent applications or the patents and patent applications of others, and the outcome of any such proceedings are highly uncertain. An unfavorable outcome in any such proceedings could reduce the scope of, invalidate, and/or find our patent rights unenforceable, allowing third parties to commercialize our technology and compete directly with us, or result in our inability to manufacture, develop or commercialize our product candidates without infringing the patent rights of others. In addition to ongoing changes with the AIA and USPTO regulations, recent decisions of the Supreme Court of the United States, and the possibility of statutory change to patent subject matter eligibility law advocated by such groups as the Intellectual Property Owners Association and the American Intellectual Property Law Association, provide additional uncertainty.

In addition to the protection afforded by patents, we seek to rely on trade secret protection and confidentiality agreements to protect proprietary know-how, information, or technology that is not covered by our patents. Although our agreements require all of our employees to assign their inventions to us, and we require all of our employees, consultants, advisors and any third parties who have access to our trade secrets, proprietary know-how and other confidential information and technology to enter into appropriate confidentiality agreements, we cannot be certain that our trade secrets, proprietary know-how and other confidential information and technology will not be subject to unauthorized disclosure or that our competitors will not otherwise gain access to or independently develop substantially equivalent trade secrets, proprietary know-how and other information and technology. Furthermore, the laws of some foreign countries, in particular China, where we anticipate increasing our activity and commercializing our product candidates, do not protect proprietary rights to the same extent or in the same manner as the laws of the United States. As a result, we may encounter significant problems in protecting and defending our intellectual property globally. If we are unable to prevent unauthorized disclosure of our intellectual property related to our product candidates and technology to third parties, we may not be able to establish or maintain a competitive advantage in our market, which could materially adversely affect our business and operations.

Our reliance on third parties and agreements with collaboration partners requires us to share our trade secrets, which increases the possibility that a competitor may discover them or that our trade secrets will be misappropriated or disclosed.

Our reliance on third-party contractors to develop and manufacture our product candidates is based upon agreements that limit the rights of the third parties to use or disclose our confidential information, including our trade secrets and know-how. Despite the contractual provisions, the need to share trade secrets and other confidential information increases the risk that such trade secrets and information are disclosed or used, even if unintentionally, in violation of these agreements. In the highly competitive markets in which our product candidates are expected to compete, protecting our trade secrets, including our strategies for addressing competing products, is imperative, and any unauthorized use or disclosure could impair our competitive position and may have a material adverse effect on our business and operations.

In addition, some of our collaboration partners are larger, more complex organizations than ours, and the risk of inadvertent disclosure of our proprietary information may be increased despite their internal procedures and contractual obligations in place with our collaboration partners. Despite our efforts to protect our trade secrets and other confidential information, a competitor's discovery of such trade secrets and information could impair our competitive position and have an adverse impact on our business.

We are developing an extensive worldwide patent portfolio. The cost of maintaining our patent protection is high and maintaining our patent protection requires continuous review and compliance in order to maintain worldwide patent protection. We may not be able to maintain effectively our intellectual property position throughout the major markets of the world.

The USPTO and foreign patent authorities require maintenance fees and payments as well as continued compliance with a number of procedural and documentary requirements. Noncompliance may result in abandonment or lapse of the subject patent or patent application, resulting in partial or complete loss of patent rights in the relevant jurisdiction. Non-compliance may result in reduced royalty payments for lack of patent coverage in a particular jurisdiction from our collaboration partners or may result in competition, either of which could have a material adverse effect on our business.

We have made, and will continue to make, certain strategic decisions in balancing costs and the potential protection afforded by the patent laws of certain countries. As a result, we may not be able to prevent third parties from practicing our inventions in all countries throughout the world, or from selling or importing products made using our inventions in and into the United States or other countries. Third parties may use our technologies in territories in which we have not obtained patent protection to develop their own products and, further, may infringe our patents in territories which provide inadequate enforcement mechanisms, even if we have patent protection. Such third-party products may compete with our product candidates, and our patents or other intellectual property rights may not be effective or sufficient to prevent them from competing.

The laws of some foreign countries do not protect proprietary rights to the same extent as do the laws of the United States, and we may encounter significant problems in securing and defending our intellectual property rights outside the United States

Many companies have encountered significant problems in protecting and defending intellectual property rights in certain countries. The legal systems of certain countries, particularly countries such as China, do not always favor the enforcement of patents, trade secrets, and other intellectual property rights, particularly those relating to pharmaceutical and biotechnology products, which could make it difficult for us to stop infringement of our patents, misappropriation of our trade secrets, or marketing of competing products in violation of our proprietary rights. In China, our intended establishment of significant operations will depend in substantial part on our ability to enforce effectively our intellectual property rights in that country. Proceedings to enforce our intellectual property rights in foreign countries could result in substantial costs and divert our efforts and attention from other aspects of our business and could put our patents in these territories at risk of being invalidated or interpreted narrowly, or our patent applications at risk of not being granted and could provoke third parties to assert claims against us. We may not prevail in all legal or other proceedings that we may initiate and, if we were to prevail, the damages or other remedies awarded, if any, may not be commercially meaningful. Accordingly, our efforts to enforce our intellectual property rights around the world may be inadequate to obtain a significant commercial advantage from the intellectual property that we develop or license.

Intellectual property rights do not address all potential threats to any competitive advantage we may have.

The degree of future protection afforded by our intellectual property rights is uncertain because intellectual property rights have limitations, and intellectual property rights may not adequately protect our business or permit us to maintain our competitive advantage. The following examples are illustrative:

- Others may be able to make compounds that are the same as or similar to our current or future product candidates but that are not covered by the claims of the patents that we own or have exclusively licensed.
- We or any of our licensors or strategic partners might not have been the first to make the inventions covered by the issued patents or pending patent applications that we own or have exclusively licensed.
- We or any of our licensors or strategic partners might not have been the first to file patent applications covering certain of our inventions.
- Others may independently develop similar or alternative technologies or duplicate any of our technologies without infringing our intellectual property rights.
- The prosecution of our pending patent applications may not result in granted patents.
- Granted patents that we own or have exclusively licensed may not provide us with any competitive advantages, or may be held invalid or unenforceable, as a result of legal challenges by our competitors.
- Patent protection on our product candidates may expire before we are able to develop and commercialize the product, or before we are able to recover our investment in the product.
- Our competitors might conduct research and development activities in the United States and other countries that provide a safe harbor from patent infringement claims for such activities, as well as in countries in which we do not have patent rights and may then use the information learned from such activities to develop competitive products for sale in markets where we intend to market our product candidates.

The existence of counterfeit pharmaceutical products in pharmaceutical markets may damage our brand and reputation and have a material adverse effect on our business, operations and prospects.

Counterfeit products, including counterfeit pharmaceutical products, are a significant problem, particularly in China. Counterfeit pharmaceuticals are products sold or used for research under the same or similar names, or similar mechanism of action or product class, but which are sold without proper licenses or approvals. The proliferation of counterfeit pharmaceuticals has grown in recent years and may continue to grow in the future. Such products may be used for indications or purposes that are not recommended or approved or for which there is no data or inadequate data with regard to safety or efficacy. Such products divert sales from genuine products, often are of lower cost, often are of lower quality (having different ingredients or formulations, for example), and have the potential to damage the reputation for quality and effectiveness of the genuine product. If counterfeit pharmaceuticals illegally sold or used for research result in adverse events or side effects to consumers, we may be associated with any negative publicity resulting from such incidents. Consumers may buy counterfeit pharmaceuticals that are in direct competition with our pharmaceuticals, which could have an adverse impact on our revenues, business and results of operations. In addition, counterfeit products could be used in nonclinical studies or clinical trials or could otherwise produce undesirable side effects or adverse events that may be attributed to our products as well, which could cause us or regulatory authorities to interrupt, delay or halt clinical trials and could result in the delay or denial of regulatory approval by the FDA or other regulatory authorities and potential product liability claims. With respect to China, although the government has recently been increasingly active in policing counterfeit pharmaceuticals, there is not yet an effective counterfeit pharmaceutical regulation control and enforcement system in China. As a result, we may not be able to prevent third parties from selling or purporting to sell our products in China. The existence of and any increase in the sales and production of counterfeit pharmaceuticals, or the technological capabilities of counterfeiters, could negatively impact our revenues, brand reputation, business and results of operations.

Risks Related to Our Common Stock

We might not be able to maintain the listing of our common stock on the Nasdaq Capital Market.

Our common stock is listed on the Nasdaq Capital Market under the symbol “ASMB.” We might not be able to maintain the listing standards of that exchange. If we fail to maintain the listing requirements, our common stock might trade on the OTC Bulletin Board or in the “pink sheets” maintained by OTC Markets Group Inc. These alternative markets are generally considered to be markets that are less efficient and less broad than the Nasdaq Capital Market. A delisting of our common stock from the Nasdaq Capital Market and our inability to list the stock on another national securities exchange could negatively impact us by: (i) reducing the liquidity and market price of our common stock; (ii) reducing the number of investors willing to hold or acquire our common stock, which could negatively impact our ability to raise equity financing; (iii) limiting our ability to use a registration statement to offer and sell freely tradable securities, thereby preventing us from accessing the public capital markets and (iv) impairing our ability to provide equity incentives to our employees.

The price of our common stock might fluctuate significantly, and you could lose all or part of your investment.

Since our merger with Assembly Pharmaceuticals on July 11, 2014 through September 30, 2018, the closing price of our common stock has fluctuated between $4.54 and $64.16. Continued volatility in the market price of our common stock might prevent a stockholder from being able to sell shares of our common stock at or above the price paid for such shares. The trading price of our common stock might be volatile and subject to wide price fluctuations in response to various factors, including:

- the progress, results and timing of our clinical trials and nonclinical studies and other studies involving our product candidates;
- success or failure of our product candidates;
- the receipt or loss of required regulatory approvals for our product candidates;
- availability of capital;
- future issuances by us of our common stock or securities exercisable for or convertible into common stock;
- sale of shares of our common stock by our significant stockholders or members of our management;
- additions or departures of key personnel;
- investor perceptions of us and the pharmaceutical industry;
- issuance of new or changed securities analysts’ reports or recommendations, or the announcement of any changes to our credit rating;

- introduction of new products or announcements of significant contracts, acquisitions or capital commitments by us or our competitors;
- threatened or actual litigation and government investigations;
- legislative, political or regulatory developments;
- the overall performance of the equity markets;
- actual or anticipated fluctuations in our quarterly financial and operating results;
- general economic conditions;
- changes in interest rates; and
- changes in accounting standards, policies, guidance, interpretations or principles.

These and other factors might cause the market price of our common stock to fluctuate substantially, which might limit or prevent investors from readily selling their shares of our common stock and might otherwise negatively affect the liquidity of our common stock. In addition, in recent years, the stock market has experienced significant price and volume fluctuations. This volatility has had a significant impact on the market price of securities issued by many companies across many industries. The changes frequently appear to occur without regard to the operating performance of the affected companies. Accordingly, the price of our common stock could fluctuate based upon factors that have little or nothing to do with our company, and these fluctuations could materially reduce our share price.

We may be subject to securities litigation, which is expensive and could divert management attention.

The market price of our common stock may be volatile, and in the past, companies that have experienced volatility in the market price of their stock have been subject to securities class action litigation. We may be the target of this type of litigation in the future. Securities litigation against us could result in substantial costs and divert our management's attention from other business concerns, which could seriously harm our business.

Our principal stockholders and management own a significant percentage of our stock and will be able to exert significant control over matters subject to stockholder approval.

At September 30, 2018, our executive officers and directors owned approximately 6.3% of our outstanding voting common stock, and this group together with other stockholders holding beneficially 5% of more of our outstanding voting common stock, owned approximately 43.7% of our outstanding voting common stock. Therefore, these stockholders, if acting together, have the ability to influence us through their ownership position. These stockholders may be able to determine the outcome of certain significant matters requiring stockholder approval. For example, these stockholders may be able to control elections of directors, amendments of our organizational documents, or approval of any merger, sale of assets, or other major corporate transaction. This may prevent or discourage unsolicited acquisition proposals or offers for our common stock that you may feel are in your best interest as one of our stockholders.

Our ability to use our net operating loss and credit carryforwards to offset future taxable income may be subject to certain limitations.

At December 31, 2017, we had potentially utilizable gross Federal net operating loss carryforwards of approximately $153.2 million, State net operating loss carry-forwards of approximately $165.0 million and research and development credit carry forward of approximately $5.6 million, all of which expire between 2027 and 2037. Our ability to utilize our net operating loss and credit carryforwards is dependent upon our ability to generate taxable income in future periods and may be limited due to restrictions imposed on utilization of net operating loss and credit carryforwards under federal and state laws upon a change in ownership.

Under Sections 382 and 383 of the Internal Revenue Code of 1986, as amended, a corporation that undergoes an "ownership change," is subject to annual limitations on its ability to use its pre-change net operating loss carryforwards (NOLs) and other pre-change tax attributes (such as research tax credits) to offset its post-change income or taxes. For these purposes, an ownership change generally occurs where the equity ownership of one or more stockholders or groups of stockholders who owns at least 5% of a corporation's stock increases its ownership by more than 50 percentage points over its lowest ownership percentage within a three-year period (calculated on a rolling basis). We have determined that an ownership change occurred in each of December 2010, January 2013 and October 2014. The result of these ownership changes is that approximately $40.0 million of our approximately $153.2 million of net operating losses will not be available to us to offset future taxable income. In addition, we may experience ownership changes in the future, some of which are outside our control. Accordingly, we may not be able to utilize a material portion of our net operating losses or credits. Limitations on our ability to utilize our net operating losses to offset U.S. federal taxable income could potentially result in increased future tax liability to us. In addition, at the state level, there may be periods during which the use of net operating losses is suspended or otherwise limited, which could accelerate or permanently increase state taxes owed.

Because U.S. federal net operating losses incurred in taxable periods beginning before January 1, 2018 generally may be carried forward for up to 20 years, the annual limitation may effectively provide a cap on the cumulative amount of pre-ownership change losses, including certain recognized built-in losses that may be utilized. Such pre-ownership change losses in excess of the cap may be lost. In addition, if an ownership change were to occur, it is possible that the limitations imposed on our ability to use pre-ownership change losses and certain recognized built-in losses could cause a net increase in our U.S. federal income tax liability and require U.S. federal income taxes to be paid earlier than otherwise would be paid if such limitations were not in effect. Further, if for financial reporting purposes the amount or value of these deferred tax assets is reduced, such reduction would have a negative impact on the book value of our common stock.

In addition, under the Tax Cuts and Jobs Act (the Tax Act), the amount of U.S. federal net operating losses generated in taxable periods beginning after December 31, 2017 that we are permitted to deduct in any taxable year is limited to 80% of our taxable income in such year, where taxable income is determined without regard to the NOL deduction itself. The Tax Act generally eliminates the ability to carry back any post-2017 NOL to prior taxable years, while allowing unused post-2017 NOLs to be carried forward indefinitely. There is a risk that due to ownership changes, changes in law or other unforeseen reasons, our existing NOLs could expire or otherwise be unavailable to offset future income tax liabilities.

We do not intend to pay dividends for the foreseeable future and our stock may not appreciate in value.

We currently intend to retain our future earnings, if any, to finance the operation and growth of our business and do not expect to pay any cash dividends in the foreseeable future. As a result, the success of an investment in shares of our common stock will depend upon any future appreciation in its value. There is no guarantee that shares of our common stock will appreciate in value or that the price at which our stockholders have purchased their shares will be able to be maintained.

The requirements of being a public company add to our operating costs and might strain our resources and distract our management.

As a public company, we face increased legal, accounting, administrative and other costs and expenses not faced by private companies. We are subject to the reporting requirements of the Exchange Act, which requires that we file annual, quarterly and current reports with respect to our business and financial condition, and the rules and regulations implemented by the SEC, the Sarbanes-Oxley Act, and the listing standards of the Nasdaq Capital Market, each of which imposes additional reporting and other obligations on public companies. Although we are currently unable to estimate these costs with any degree of certainty, we expect that the requirements of these rules and regulations will continue to increase our legal, accounting and financial compliance costs, make some activities more difficult, time consuming and costly and place significant strain on our personnel, systems and resources. These increased costs will require us to divert a significant amount of money that we could otherwise use to develop our product candidates or otherwise expand our business. Complying with these requirements might divert management's attention from other business concerns, which could have a material adverse effect on our prospects, business, and financial condition. If we are unable to satisfy our obligations as a public company, we could be subject to delisting of our common stock, fines, sanctions and other regulatory action and potentially civil litigation.

Several provisions of the Delaware General Corporation Law and our charter documents could discourage, delay or prevent a merger or acquisition, which could adversely affect the market price of our securities.

Several provisions of the Delaware General Corporation Law and our charter documents could discourage, delay or prevent a merger or acquisition that stockholders may consider favorable, and the market price of our securities could be reduced as a result. These provisions may include:

- authorizing the issuance of "blank check" preferred stock, the terms of which we may establish and shares of which we may issue without stockholders' approval;
- prohibiting us from engaging in a "business combination" with an "interested stockholder" for a period of three years after the date of the transaction in which the person became an interested stockholder unless certain provisions are met;
- prohibiting cumulative voting in the election of directors;
- prohibiting shareholder action by written consent;
- limiting the persons who may call special meetings of stockholders; and
- establishing advance notice requirements for nominations for election to our board of directors or for proposing matters that can be acted on by stockholders at stockholder meetings.

If securities analysts downgrade our stock or cease coverage of us, the price of our stock could decline.

The trading market for our common stock relies in part on the research and reports that industry or financial analysts publish about us or our business. Currently, a limited number of financial analysts publish reports about us and our business. We do not control these analysts or any other analysts. Furthermore, there are many large, well-established, publicly traded companies active in our industry and market, which may mean that it is less likely that we will receive widespread analyst coverage. If any analyst who covers us downgrades our stock, our stock price would likely decline rapidly. If one or more analysts cease coverage of our company, we could lose visibility in the market, which in turn could cause our stock price to decline.

Item 2. Unregistered Sales of Equity Securities and Use of Proceeds.

None.

Item 3. Defaults upon Senior Securities.

None.

Item 4. Mine Safety Disclosures.

Not applicable.

Item 5. Other Information.

Not applicable.

Item 6. Exhibits

(a) *Exhibits.* The following exhibits are filed as part of this quarterly report on Form 10-Q:

Exhibit Number	Description of Document	Filed Herewith	Incorporated by Reference from	Date	Number
10.1	Sub-Sublease, dated as of July 18, 2018, between Prothena Biosciences, Inc., as Sub-Sublandlord, and Assembly Biosciences, Inc., as Sub-Subtenant.	X			
31.1	Certification of Chief Executive Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.	X			
31.2	Certification of Chief Financial Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.	X			
32.1*	Certification of Chief Executive Officer Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.	X			
32.2*	Certification of Chief Financial Officer Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.	X			
101	Financials in XBRL format.	X			

* The certifications attached as Exhibits 32.1 and 32.2 that accompany this Quarterly Report on Form 10-Q are not deemed filed with the SEC and are not to be incorporated by reference into any filing of Assembly Biosciences, Inc. under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended, whether made before or after the date of this Quarterly Report on Form 10-Q, irrespective of any general incorporation language contained in such filing.

In accordance with the requirements of the Securities Exchange Act of 1934, the registrant caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

Assembly Biosciences, Inc.

Date: November 8, 2018

By: /s/ Derek A. Small
Derek A. Small
President and Chief Executive Officer
(Principal Executive Officer)

Date: November 8, 2018

By: /s/ Graham Cooper
Graham Cooper
Chief Financial Officer and Chief Operating Officer
(Principal Financial Officer and Principal Accounting Officer)

Exhibit 10.1

SUB-SUBLEASE

Dated as of July 18, 2018

between

PROTHENA BIOSCIENCES INC,
as Sub-Sublandlord

and

ASSEMBLY BIOSCIENCES, INC.,
as Sub-Subtenant

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SUB-SUBLEASE

THIS SUB-SUBLEASE (this "***Sub-Sublease***") is made and entered into this 18th day of July 2018 (the "***Effective Date***"), by and between **PROTHENA BIOSCIENCES INC**, a Delaware corporation ("***Sub-Sublandlord***"), and **ASSEMBLY BIOSCIENCES, INC.**, a Delaware corporation ("***Sub-Subtenant***", and together with Sub-Sublandlord, the "***Parties***").

RECITALS

A. Tularik Inc. ("***Original Tenant***"), the predecessor-in-interest of Amgen Inc., a Delaware corporation ("***Sublandlord***"), entered into that certain Build-to-Suit Lease dated as of December 20, 2001 (the "***Original Master Lease***") with HCP BTC, LLC ("***Master Landlord***"), a Delaware limited liability company, formerly known as Slough BTC, LLC, for the initial lease of three (3) buildings in the Oyster Point center in South San Francisco, California (the "***Center***") and rights to lease additional buildings to be constructed in the Center. The Original Master Lease was subsequently amended on numerous occasions to, among other things, lease additional space and buildings located in the Center to Original Tenant or Sublandlord.

B. Sublandlord and Master Landlord entered into that certain Fifth Amendment to Build-to-Suit Lease and Second Amendment to Workletter dated as of June 19, 2006 (the "***Master Amendment***"), pursuant to which Master Landlord leased to Sublandlord and Sublandlord leased from Master Landlord those certain two (2) buildings in the Center with the addresses of 331 Oyster Point Boulevard, as depicted on Exhibit B-1 attached hereto (such building, the "***Subleased Premises***" or the "***331 Building***"), and 333 Oyster Point Boulevard (such building, the "***333 Building***"). The 331 Building consists of 128,751 rentable square feet and the 333 Building consists of 121,706 rentable square feet. The 331 Building and the 333 Building are collectively referred to herein as the "***Buildings***". As used herein, the Original Master Lease, as amended by the Master Amendment only shall be referred to as the "***Master Lease***", a copy of which is attached as Exhibit A-1 hereto.

C. Sub-Sublandlord and Sublandlord entered into that certain Sublease, dated as of March 22, 2016 (the "***Sublease***"), pursuant to which Sublandlord leased to Sub-Sublandlord and Sub-Sublandlord leased from Sublandlord the Subleased Premises. A copy of the Sublease is attached as Exhibit A-2 hereto.

D. Sub-Sublandlord and Sub-Subtenant now desire to provide for a sub-sublease of part of the Subleased Premises that comprises a portion of the first (1st) floor of the 331 Building (the "***First Floor Premises***") and the entire fourth (4th) floor of the 331 Building (the "***Fourth Floor Premises***"), all as depicted on Exhibit B-2 attached hereto (the "***Complete Premises***"), subject to and conditioned upon the terms and conditions set forth herein.

AGREEMENT

NOW, THEREFORE, in consideration of the recitals set forth above, the agreements set forth below and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Sub-Sublandlord and Sub-Subtenant hereby agree as follows:

1. Sub-Sublease of Premises; Access 24/7. Subject and pursuant to the provisions hereof, Sub-Sublandlord subleases to Sub-Subtenant, and Sub-Subtenant subleases from Sub-Sublandlord, the Premises. As used in this Sub-Sublease, at any time the "***Premises***" shall mean each Delivery Portion (as defined below) that Sub-Sublandlord shall have then delivered to Sub-Subtenant. Sub-Sublandlord may from time to time designate portions of the Complete Premises to deliver to Sub-Subtenant (each, a "***Delivery Portion***") (which may comprise all of the Complete Premises); provided, however, that (a) Sub-Subtenant must have reasonable access to such Delivery Portion and (b) the first Delivery Portion with respect to the Fourth Floor Premises must include as much of the Fourth Floor Premises as can then be delivered in accordance with applicable law, it being understood that (x) if the Stair Closure Work (as defined below) has been completed at such time, then the first Delivery Portion with respect to the Fourth Floor Premises is expected to include all of the Fourth Floor Premises and (y) if the Stair Closure Work has not been completed at such time, then the first Delivery Portion with respect to the Fourth Floor Premises will include as much of the Fourth Floor Premises as can then be delivered in accordance with applicable law (but in no event shall such delivery consist of less than 35,020 rentable square feet). Sub-Sublandlord shall use good faith efforts to (1) submit and obtain any and all necessary permits required to be obtained by Sub-Sublandlord under this Lease for Sub-Sublandlord to deliver the Complete Premises to Sub-Subtenant, (2) complete any and all improvements required to be completed by Sub-Sublandlord under this Lease for Sub-Sublandlord to deliver the Complete Premises to Sub-Subtenant, (3) deliver the Fourth Floor Premises not later than the date that is ninety (90) days after the Effective Date, and (4) deliver the Complete Premises not later than November 30, 2018. As used in this Sub-Sublease, "***Delivery Date***" shall mean each date on which Sub-Sublandlord delivers a Delivery Portion to Sub-Subtenant. Sub-Sublandlord shall have no obligation to deliver any Delivery Portion to Sub-Subtenant until all of the following have been satisfied: (i) this Sub-Sublease has been executed and delivered by Sub-Sublandlord and Sub-Subtenant, (ii) all consents necessary for the effectiveness of this Sub-Sublease have been executed and delivered, including, without limitation, any consents required pursuant to the Master Lease, including the Master Landlord Consent (as defined in Section 14.11.2), and the Sublease, including the Sublandlord Consent (as defined in Section 14.11.1), (iii) as a condition to the delivery of the first Delivery Portion to be delivered by Sub-Sublandlord to Sub-Subtenant only, (A) Sub-Subtenant has delivered to Sub-Sublandlord the first month's Base Rent, Operating Expenses and Building Operating Expenses, as more particularly set forth in Sections 3.1, 3.3.1 and 3.4.1 below and (B) Sub-Subtenant has delivered to Sub-Sublandlord the Security Deposit (as defined in Section 12 below); (iv) Sub-Subtenant has delivered to Sub-Sublandlord written evidence that Sub-Subtenant carries the insurance Sub-Subtenant is required to carry as set forth in Section 9.15 of this Sub-Sublease in form and substance reasonably acceptable to Sub-Sublandlord; and (v) as a condition to the delivery of any Delivery Portion that constitutes First

Floor Premises only, Sub-Sublandlord shall have received, to the extent required by applicable law, approval from the applicable local and state governmental authorities with respect to decommissioning of any such Delivery Portion that is currently used as wet laboratory space (each such approval, a "***Decommissioning Approval***"). Sub-Sublandlord shall deliver the First Floor Premises vacant, in good condition with all systems serving the First Floor Premises in good repair, and fully demised including doorways to adjacent premises not subleased sealed. Following receipt of the Master Landlord Consent and the Sublandlord Consent, Sub-Sublandlord shall diligently proceed to close the stairs connecting the third (3rd) and fourth (4th) floors of the 331 Building (the "***Stair Closure Work***"). Sub-Subtenant acknowledges and agrees that Sub-Sublandlord intends to vacate portions of the first floor of the 331 Building and to convert portions of the first floor of the 331 Building into laboratory space before Sub-Sublandlord seeks any Decommissioning Approval for certain portions of the first floor of the 331 Building.

Subject to the terms of the Sublease and the Master Lease incorporated into this Sub-Sublease, Sub-Subtenant shall have access to the Premises 24 hours per day, seven days a week, 52 weeks per year. For the avoidance of doubt, Sub-Subtenant's access to the 331 Building prior to the first Delivery Date shall be at Sub-Sublandlord's sole discretion.

2. Term; Rent Commencement Date; Early Access.

2.1 Term; Measurement. The term (the "***Term***") of this Sub-Sublease shall commence upon the date (the "***Commencement Date***") that this Sub-Sublease has been executed and delivered by Sub-Sublandlord and Sub-Subtenant, all consents necessary for the effectiveness of this Sub-Sublease have been executed and delivered, including, without limitation, any consents required pursuant to the Master Lease, including the Master Landlord Consent, and the Sublease, including the Sublandlord Consent, and shall continue until December 15, 2023 (the "***Expiration Date***"), unless sooner terminated pursuant to the provisions of this Sub-Sublease. The obligation to pay Rent (as defined in Section 3.3.5 below) shall commence upon the earliest Rent Commencement Date as described in Section 2.2 below, and shall continue throughout the Term. Sub-Sublandlord and Sub-Subtenant hereby agree that (i) the Complete Premises are deemed to consist of 46,641 rentable square feet (comprised of 37,955 usable square feet plus 8,686 shared square feet), (ii) the First Floor Premises are deemed to consist of 7,730 rentable square feet (comprised of 6,290 usable square feet plus 1,440 shared square feet), (ii) the three (3) labs constituting a portion of the First Floor Premises are deemed to consist of 4,467 rentable square feet (comprised of 3,635 usable square feet plus 832 shared square feet), (iii) the tissue culture space constituting a portion of the First Floor Premises is deemed to consist of 3,263 rentable square feet (comprised of 2,655 usable square feet plus 608 shared square feet) and (iv) the Fourth Floor Premises are deemed to consist of 38,911 rentable square feet (comprised of 31,665 usable square feet plus 7,246 shared square feet), in each case, without regard to the actual rentable square feet, usable square feet or shared square feet of such areas. Neither Party makes, and neither Party has made, any representation or warranty with respect to the size of the Premises or the Complete Premises; each Party is responsible for undertaking its own analysis of the size of the Premises and the Complete Premises; and neither Party is relying on any representation, warranty or

statement made by the other Party with respect to the size of the Premises or the Complete Premises in connection with this Sub-Sublease.

2.2 Rent Commencement.

2.2.1 Rent Commencement Date. Sub-Subtenant's obligation to pay Base Rent, Operating Expenses and Building Operating Expenses under this Sub-Sublease shall commence, with respect to any Delivery Portion, on the Delivery Date with respect to such Delivery Portion (each, a "***Rent Commencement Date***").

2.2.2 Confirmation of Dates and Measurements. Following the request of either Party, the Parties agree to promptly execute and deliver a factually-correct written confirmation documenting the Commencement Date, each Rent Commencement Date, and the Expiration Date. Sub-Sublandlord and Sub-Subtenant shall jointly determine the rentable square feet of any Delivery Portion and the Premises, subject to the agreed determinations of the rentable square feet of the Complete Premises and certain portions thereof as set forth in Section 2.1. Following the request of either Party, the Parties agree to promptly execute and deliver a written confirmation documenting the rentable square feet of each Delivery Portion and the Premises.

2.3 Utilities. From and after each Delivery Date, Sub-Subtenant shall be solely responsible to pay for all utilities and services provided to the Premises (including water, electricity, gas, heat, sewer, telephone, alarm system and janitorial), including any taxes on such services and utilities. However, if any of the utilities are not separately metered, then Sub-Subtenant shall pay, within five (5) business days of Sub-Subtenant's receipt of Sub-Sublandlord's invoice therefor, the amount reasonably determined by Sub-Sublandlord to be Sub-Subtenant's equitable share of the monthly charge for any such utilities (or Sub-Sublandlord may include such costs in Building Operating Expenses (as defined in Section 3.4.1 below). Sub-Subtenant shall not, without Sub-Sublandlord's prior written consent, use heat-generating machines, machines other than normal fractional horsepower office machines, or equipment or lighting other than building standard lights in the Premises, which may affect the temperature otherwise maintained by the air conditioning system or increase the water normally furnished for the Premises. If such consent is given Sub-Sublandlord shall have the right to require installation of supplementary air conditioning units or other facilities in or serving the Premises, including supplementary or additional metering devices, and all of the reasonable costs thereof allocable to the Premises, including the cost of installation, operation and maintenance, increased wear and tear on existing equipment (subject to normal wear and tear) and other similar charges, shall be paid by Sub-Subtenant to Sub-Sublandlord upon billing by Sub-Sublandlord.

3. Rent.

3.1 Base Rent. Commencing on the earliest Rent Commencement Date, Sub-Subtenant shall pay as monthly base rent for the Premises ("***Base Rent***") at the rates set forth in the following table:

Months	**Monthly Base Rent per rentable square foot**	**Monthly Base Rent for the Complete Premises** (following delivery of Premises)
Rent Commencement Date –August 31, 2019	$4.85 per rentable square foot	$226,208.85 (prorated)
September 1, 2019-August 31, 2020	$5.02 per rentable square foot	$234,137.82
September 1, 2020-August 31, 2021	$5.20 per rentable square foot	$242,533.20
September 1, 2021-August 31, 2022	$5.38 per rentable square foot	$250,928.58
September 1, 2022-August 31, 2023	$5.57 per rentable square foot	$259,790.37
September 1, 2023-December 15, 2023	$5.76 per rentable square foot	$268,652.16 (prorated for December)

Such Base Rent shall be applicable to the months set forth above without regard to when any Rent Commencement Date actually occurs. Base Rent and Additional Rent (as defined herein) shall be paid to Sub-Sublandlord without demand, deduction, set-off or counterclaim, in each case except as expressly provided to the contrary herein, in advance, with respect to any calendar month during the Term of this Sub-Sublease, on the date that is at least five (5) days before the end of the preceding calendar month during the Term of this Sub-Sublease, except Sub-Subtenant shall pay the Base Rent that would be payable with respect to the Complete Premises for the first (1st) full calendar month within two (2) business days following the earliest Rent Commencement Date (as if the Premises were comprised of the Complete Premises at such time) (which amount is $226,208.85). Such pre-paid Base Rent shall be applied to the Monthly Base Rent of the Premises as it becomes due for subsequent months until exhausted. In the event of a partial rental month as a result of a Rent Commencement Date occurring on a day other than the first (1st) day of a calendar

month, Base Rent with respect to the Delivery Portion to which such Rent Commencement Date relates shall be prorated on the basis of the number of actual days in such month. All payments due to Sub-Sublandlord shall be paid to Sub-Sublandlord by wire transfer to the following bank account:

[redacted]

or such other payment method as Sub-Sublandlord may specify in a written notice delivered pursuant to Section 10.1 below.

3.2 Management Fee. Concurrently with each payment of Base Rent, Sub-Subtenant shall pay to Sub-Sublandlord a management fee equal to 3.0% of such payment of Base Rent for any Premises delivered (the "***Management Fee***"). Notwithstanding the foregoing, Sub-Subtenant shall not be required to pay the Management Fee if Sub-Sublandlord has retained a manager to manage the 331 Building and includes the management fee owed to such manager as a Building Operating Expense.

3.3 Operating Costs And Expenses.

3.3.1 Payment; Annual Statement of Operating Expenses. Commencing on the earliest Rent Commencement Date, Sub-Subtenant shall pay to Sub-Sublandlord, as "Additional Rent" hereunder, all of the Operating Expenses (as defined in the Master Lease) allocated to the Premises under this Sub-Sublease, the Sublease and the Master Lease. All Operating Expenses shall be payable, in advance, with respect to any calendar month during the Term of this Sub-Sublease, on the date that is at least five (5) days before the end of the preceding calendar month during the Term of this Sub-Sublease in accordance with Section 9.3 of the Original Master Lease, except Sub-Subtenant shall pay the estimated Operating Expenses that would be payable with respect to the Complete Premises for the first (1st) full calendar month after the earliest Rent Commencement Date (as if the Premises were comprised of the Complete Premises at such time) (currently estimated to be $41,063.30, subject to adjustment and reconciliation in accordance with the terms hereof) within two (2) business days following the earliest Rent Commencement Date (as if the Premises were comprised of the Complete Premises at such time). Such pre-payment of Operating Expenses shall be applied to Operating Expenses as amounts become due until exhausted. Within thirty (30) days following Sub-Sublandlord's receipt thereof, Sub-Sublandlord shall provide Sub-Subtenant with copies of (i) Master Landlord's estimated statement of Operating Expenses (as applicable to the Premises) provided to Sub-Sublandlord pursuant to Section 3.3.1 of the Sublease, as may be adjusted from time to time pursuant to the terms of the Master Lease or the Sublease, and (ii) Master Landlord's annual

statement of Operating Expenses (as applicable to the Premises) provided to Sub-Sublandlord pursuant to Section 3.3.1 of the Sublease (with reference to Section 9.3 of the Master Lease), as may be adjusted from time to time pursuant to the terms of the Master Lease or the Sublease). Sub-Sublandlord agrees that Sub-Subtenant shall be entitled, upon reasonable written notice to Sub-Sublandlord and during normal business hours at Sub-Sublandlord's office or such other place as Sub-Sublandlord shall designate, to inspect and examine Sub-Sublandlord's books and records relating to the determination and payment of Operating Expenses (including, for the avoidance of doubt, the Building Operating Expenses) related to the Premises for the immediately preceding Lease Year. Subject to the Incorporation Provisions (defined below), the provisions of Article 9 of the Master Lease are incorporated herein only to the extent specifically referenced in this Sub-Sublease. Further, Sub-Subtenant acknowledges and agrees that, although Article 9 of the Original Master Lease is not otherwise specifically incorporated into this Sub-Sublease, Article 9 of the Master Lease governs and controls for all purposes the determination of Operating Expenses payable by Sub-Sublandlord that Sub-Sublandlord is passing through to Sub-Subtenant in accordance with the terms of this Section 3.3. Notwithstanding anything in this Sub-Sublease to the contrary, Sub-Subtenant shall not be required to pay any Operating Expenses attributable to or arising from the Phase I Buildings (as defined in the Original Master Lease), it being agreed that Sub-Subtenant shall only be obligated to pay Operating Expenses that Sub-Sublandlord is obligated to pay under the Master Lease or the Sublease that are allocated by Master Landlord or Sublandlord to the Subleased Premises (and further allocated by the Sub-Sublandlord to the Premises), without duplication, subject to Sub-Subtenant's audit rights set forth in Section 3.3.3. Notwithstanding anything in this Sub-Sublease to the contrary, in no event shall the Operating Expenses allocated to the Premises under the Sublease or the Master Lease be less than the Proportional Share of Operating Expenses of the Operating Expenses that are allocated to the Subleased Premises under the Sublease. "***Proportional Share of Operating Expenses***" means a fraction, the numerator of which is the number of rentable square feet of the Premises at the time of the calculation and the denominator of which is the number of rentable square feet of the Subleased Premises that is occupied by Sub-Sublandlord, Sub-Subtenant or any other person or entity (the "***Occupied Subleased Premises***"), which as of the first Delivery Date is expected to be equal to approximately 39.6% and, upon the date of delivery of the Complete Premises, is expected to be equal to 47.5%.

3.3.2 Pro-ration. If the Term shall commence on any day other than January 1 or expire or earlier terminate on any date other than December 31, Sub-Subtenant's obligations under Section 3.3.1 for such first or last partial calendar year shall be prorated on the basis of (a) the number of days elapsed during such calendar year during which this Sub-Sublease is in effect bears to (b) 365. In the event that the Term shall expire or earlier terminate on any date other than December 31, for purposes of Section 3.3.1, Sub-Sublandlord may either reasonably project, as of the date of such expiration or termination, the Operating Expenses for such calendar year and bill Sub-Subtenant for Sub-Subtenant's share thereof at any time thereafter or wait until receipt of Master Landlord's calculation thereof for the entire calendar year in question and bill Sub-Subtenant for Sub-Subtenant's share thereof at any time thereafter; provided, however, if Sub-Sublandlord reasonably projects the amount of such Operating

Expenses, Sub-Sublandlord shall reconcile such projection with the actual Operating Expenses due following the receipt of the actual annual statement of Operating Expenses for such calendar year and shall follow the terms of Section 9.4(a) of the Original Master Lease with respect to the amounts owed or to be reimbursed. Sub-Sublandlord shall from time to time equitably adjust the estimated Operating Expenses payable by Sub-Subtenant to reflect, with respect to the then-current calendar year, (i) the delivery by Sub-Sublandlord to Sub-Subtenant of any Delivery Portion during such calendar year and the increase in the Proportional Share of Operating Expenses in connection therewith and (ii) any increase or decrease in the Occupied Subleased Premises and the increase or decrease, as applicable, in the Proportional Share of Operating Expenses in connection therewith; provided, that for purposes of this Section 3.3, the Occupied Subleased Premises shall not be deemed to decrease as a result of Sub-Sublandlord's failure to occupy any portion of the Subleased Premises that is occupied by Sub-Sublandlord as of the Effective Date.

If the obligation to pay any component of Rent under this Sub-Sublease commences on a day other than the first day of a calendar month, or if the Term of this Sub-Sublease terminates on a day other than the last day of a calendar month, the Rent for such first or last month of the Term shall be prorated based on the number of days the Term of this Sub-Sublease is in effect during such month. If an increase in Rent becomes effective on a day other than the first day of a calendar month, the calculation of Rent for such month shall be the sum of the two applicable rates, each prorated for the portion of the month during which such rate is in effect.

3.3.3 Annual Reconciliation; Accounting; Audit Rights. Because the Master Lease and the Sublease provide for the payment by Sub-Sublandlord of Operating Expenses on the basis of an estimate thereof, as and when adjustments between estimated and actual Operating Expenses are made under the Master Lease or the Sublease, as applicable, the obligations of Sub-Sublandlord and Sub-Subtenant hereunder shall be adjusted in a like manner; and if any such adjustment shall occur after the expiration or earlier termination of the Term, then the obligations of Sub-Sublandlord and Sub-Subtenant under this Section 3 shall survive such expiration or termination. Sub-Subtenant shall pay those Operating Expenses allocated to the Premises by the Sub-Sublandlord based on Master Landlord's estimate thereof (as it may be adjusted from time to time in accordance with the Master Lease) provided to Sub-Subtenant pursuant to Section 3.3.1 above. Within thirty (30) days after Sub-Sublandlord receives from the Sublandlord the annual statement of actual Operating Expenses incurred by Master Landlord (the "***Accounting***"), Sub-Sublandlord shall provide Sub-Subtenant an accounting of the actual Operating Expenses payable with respect to the Premises as reflected in the Accounting. Sub-Sublandlord shall equitably adjust the Accounting, with respect to the period to which the Accounting relates, to reflect the delivery by Sub-Sublandlord to Sub-Subtenant of any Delivery Portion during such period and the increase in the Proportional Share of Operating Expenses in connection therewith. In the event that the Accounting shows that Sub-Subtenant paid more or less than the actual Operating Expenses payable by Sub-Subtenant hereunder, then Sub-Subtenant shall either promptly receive a credit against future Rent (or such amount shall be promptly paid to Sub-Subtenant if the Term has expired or been terminated) or shall be required to pay to Sub-Sublandlord the deficient amount within twenty (20) days after Sub-Subtenant's receipt of such

Accounting. Sub-Sublandlord shall, upon the written request of Sub-Subtenant and at Sub-Subtenant's sole cost and expense, request in writing that Sublandlord exercise its rights to examine Master Landlord's books and records in a commercially reasonable manner (subject to, and in accordance with, the terms of the Sublease and the Master Lease), to confirm the accuracy of the Operating Expenses identified in the annual statement provided by Master Landlord as payable with respect to the Premises. In such event, Sub-Sublandlord shall deliver the results of such examination to Sub-Subtenant promptly after Sub-Sublandlord receives such results from Sublandlord, and shall reasonably cooperate with Sub-Subtenant, Sublandlord and Master Landlord to resolve any outstanding issues or concerns in accordance with the terms of the Master Lease and the Sublease. Subject to the foregoing, any and all amounts paid by Sub-Sublandlord under the Sublease or the Master Lease for Operating Expenses, real estate taxes or assessments, and other charges with respect to the Premises accrued during the Term (or otherwise due to the actions of Sub-Subtenant, or its agents, employees or contractors) shall be conclusively deemed to be accurate and binding upon Sub-Subtenant for purposes of interpretation of this Section 3.

3.3.4 Payment of Extra Charges. In addition to the amounts payable under Section 3.3.1, Sub-Subtenant shall pay to Sub-Sublandlord within seven (7) days of Sub-Subtenant's receipt of Sub-Sublandlord's written invoice therefor: (i) any charges, costs, fees or expenses for which Sub-Sublandlord or Sublandlord is separately charged under the Sublease or the Master Lease (and which are not part of Operating Expenses) and which are attributable to the Premises and accrued during the Term, including, without limitation, personal property taxes and excess electrical consumption charges (if any); (ii) any and all other sums of money (other than those attributable to Operating Expenses and the charges, costs, fees or expenses covered by clause (i) above) which are or may become payable by Sub-Sublandlord to Sublandlord or by Sublandlord to Master Landlord relating to the Premises and that have accrued during the Term; (iii) any real property taxes and assessments related to the Premises that are separately billed to Sublandlord or Sub-Sublandlord and that have accrued during the Term; (iv) any and all charges of Master Landlord or other amounts payable to Master Landlord under the Master Lease caused by Sub-Subtenant's failure to perform its obligations under this Sub-Sublease and (v) any and all charges of Sublandlord or other amounts payable to Sublandlord under the Sublease caused by Sub-Subtenant's failure to perform its obligations under this Sub-Sublease.

3.3.5 "Rent" Definition. All forms of additional rent and any other amounts payable by Sub-Subtenant to Sub-Sublandlord shall be payable by Sub-Subtenant without notice, demand, deduction, offset or abatement, in each case except as expressly provided to the contrary herein, in lawful money of the United States to Sub-Sublandlord at such places and to such persons as Sub-Sublandlord may direct. All such amounts, together with Base Rent, are collectively referred to herein as "***Rent.***"

3.3.6 Interest and Late Charges. Subject to the Incorporation Provisions (defined below), Section 3.2 of the Original Master Lease is hereby incorporated by reference. Any interest and late charges accrued under this Section and Section 3.4 below shall be deemed to be "Additional Rent" payable hereunder. Notwithstanding anything

in this Sub-Sublease to the contrary, Sub-Subtenant shall be entitled to a grace period of five (5) business days for the first delinquent payment of Base Rent without the payment of interest or late charges, provided, however, that such late charge and payment of interest shall accrue from and after expiration of such 5-business day grace period.

3.4 Building Operating Costs And Expenses.

3.4.1 Payment; Annual Statement of Building Operating Expenses. Commencing on the earliest Rent Commencement Date, Sub-Subtenant shall pay to Sub-Sublandlord, as "Additional Rent" hereunder, Sub-Subtenant's Proportional Share of Building Operating Expenses of the cost of (i) repairing and maintaining the Subleased Premises (including the Building Common Areas and the Building Common Systems (each as defined in Section 9.13 below)) (other than costs, if any, that are included in Operating Expenses or costs paid directly by Sub-Subtenant), but excluding any portion of the Subleased Premises that is not available for use by Sub-Subtenant, (ii) paying real estate taxes and assessments for the Subleased Premises and (iii) procuring and maintaining insurance for the Subleased Premises (other than, in each case, costs that are included in Operating Expenses) (collectively, the "***Building Operating Expenses***"). All Building Operating Expenses shall be payable, in advance, with respect to any calendar month during the Term of this Sub-Sublease, on the date that is at least five (5) days before the end of the preceding calendar month during the Term of this Sub-Sublease in accordance with Section 9.3 of the Original Master Lease, except Sub-Subtenant shall pay the estimated Building Operating Expenses that would be payable with respect to the Complete Premises for the first (1st) full calendar month after the earliest Rent Commencement Date (as if the Premises were comprised of the Complete Premises at such time) (currently estimated to be $18,525.00, subject to adjustment and reconciliation in accordance with the terms hereof and excluding the cost of utilities) within two (2) business days following the earliest Rent Commencement Date (as if the Premises were comprised of the Complete Premises at such time). Such pre-payment of Building Operating Expenses shall be applied to Building Operating Expenses as amounts become due until exhausted. Sub-Sublandlord shall provide to Sub-Subtenant an estimated statement of Building Operating Expenses with respect to any calendar year (an "***Estimate***") not later than March 15 of such calendar year. Sub-Sublandlord shall endeavor to provide an Estimate for the calendar year in which the Commencement Date occurs on or before the Commencement Date. The Estimate may be revised and reissued by Sub-Sublandlord from time to time. "***Proportional Share of Building Operating Expenses***" means a fraction, the numerator of which is the number of rentable square feet of the Premises at the time of the calculation and the denominator of which is the number of rentable square feet of the Occupied Subleased Premises, which as of the first Delivery Date is expected to be equal to approximately 39.6% and, upon the date of delivery of the Complete Premises, is expected to be equal to 47.5%. In no event will Building Operating Expenses allocated to the Premises be less than the Proportional Share of Building Operating Expenses of the Building Operating Expenses.

3.4.2 Pro-ration. If the Term shall commence on any day other than January 1 or expire or earlier terminate on any date other than December 31, Sub-

Subtenant's obligations under Section 3.4.1 for such first or last partial calendar year shall be prorated on the basis of (a) the number of days elapsed during such calendar year during which this Sub-Sublease is in effect bears to (b) 365. In the event that the Term shall expire or earlier terminate on any date other than December 31, for purposes of Section 3.4.1, Sub-Sublandlord may reasonably project, as of the date of such expiration or termination, the Building Operating Expenses for such calendar year and bill Sub-Subtenant for Sub-Subtenant's share thereof at any time thereafter; provided, however, if Sub-Sublandlord reasonably projects the amount of such Building Operating Expenses, Sub-Sublandlord shall reconcile such projection with the actual Building Operating Expenses due following the delivery to Sub-Subtenant of the actual annual statement of Building Operating Expenses for such calendar year. If on the basis of such statement Sub-Subtenant owes an amount that is more or less than the estimated payments for such calendar previously made by Sub-Subtenant, Sub-Subtenant or Sub-Sublandlord, as the case may be, shall pay the deficiency to the other Party within thirty (30) days after delivery of the statement. Sub-Sublandlord shall from time to time equitably adjust the estimated Building Operating Expenses payable by Sub-Subtenant to reflect, with respect to the then-current calendar year, (i) the delivery by Sub-Sublandlord to Sub-Subtenant of any Delivery Portion during such calendar year and the increase in the Proportional Share of Building Operating Expenses in connection therewith and (ii) any increase or decrease in the Occupied Subleased Premises and the increase or decrease, as applicable, in the in the Proportional Share of Building Operating Expenses in connection therewith.

3.4.3 Annual Reconciliation; Accounting. Sub-Subtenant shall pay those Building Operating Expenses allocated to the Premises by the Sub-Sublandlord based on the Estimate (as it may be adjusted from time to time). Within one hundred twenty (120) days after the end of any calendar year, Sub-Sublandlord shall provide Sub-Subtenant an accounting of the actual Building Operating Expenses payable with respect to the Premises (the "***Sub-Sublease Accounting***"). Such Sub-Sublease Accounting shall include an equitable adjustment of the actual Building Operating Expenses to reflect, with respect to preceding calendar year, the delivery by Sub-Sublandlord to Sub-Subtenant of any Delivery Portion during such calendar year and the increase in the Proportional Share of Building Operating Expenses in connection therewith. In the event that the Sub-Sublease Accounting shows that Sub-Subtenant paid more or less than the actual Building Operating Expenses payable by Sub-Subtenant hereunder, then Sub-Subtenant shall either promptly receive a credit against future Rent (or such amount shall be promptly paid to Sub-Subtenant if the Term has expired or been terminated) or shall be required to pay to Sub-Sublandlord the deficient amount within fifteen (15) days after Sub-Subtenant's receipt of such Sub-Sublease Accounting.

At any time within one hundred twenty (120) days after receipt of such Sub-Sublease Accounting, Sub-Subtenant shall be entitled, upon reasonable written notice to Sub-Sublandlord and during normal business hours at Sub-Sublandlord's office, to request an independent audit to inspect and examine those books and records of Sub-Sublandlord relating to the determination and payment of Building Operating Expenses relating to the immediately preceding lease year covered by such annual Sub-Sublease Accounting. The independent audit of the books and records shall

be conducted by a certified public accountant or professional lease auditor reasonably acceptable to both Sub-Sublandlord and Sub-Subtenant or, if the parties are unable to agree, by a certified public accountant appointed by the Presiding Judge of the San Mateo County Superior Court upon the application of either Sub-Sublandlord or Sub-Subtenant (with notice to the other party). In either event, such certified public accountant shall be one who (i) is not then or at any time within the preceding five (5) years employed in any capacity by Sub-Sublandlord or Sub-Subtenant or by any of their respective affiliates and (ii) is not retained on a contingency fee basis. If it is determined, by mutual agreement of Sub-Sublandlord and Sub-Subtenant or by independent audit, that the amount of Building Operating Expenses billed to or paid by Sub-Subtenant for the applicable lease year was incorrect, then the appropriate party shall pay to the other party the deficiency or overpayment, as applicable, within thirty (30) days after the final determination of such deficiency or overpayment. All costs and expenses of the audit shall be paid by Sub-Subtenant unless the audit shows that Sub-Sublandlord overstated Building Operating Expenses for the subject lease year by more than five percent (5%), in which case Sub-Sublandlord shall pay all costs and expenses of the audit.

3.5 **Shared Services Fee**. Sub-Sublandlord and Sub-Subtenant shall negotiate in good faith a side letter agreement to address allocation of costs for shared services which, to the extent agreed by Sub-Sublandlord and Sub-Subtenant, may include, but are not limited to, specialty gas delivery, lab coat service, glass washing, loading dock receiving, and security.

4. Use. Sub-Subtenant shall use and occupy the Premises only for the purposes set forth in Section 13.1 of the Original Master Lease, and for no other purpose.

5. Parking.

5.1 Spaces. Subject to the provisions of this Section 5, Sub-Subtenant shall have the same parking rights as Sub-Sublandlord has with respect to the Premises under the Sublease (the "***Parking Spaces***") during the Term, including, without limitation, as set forth in Section 21.20 of the Original Master Lease and Section 1(g) of the Master Amendment; provided, that, for the avoidance of doubt, Sub-Subtenant shall not be entitled to more than Sub-Subtenant's Proportional Share of the parking spaces constituting the Parking Spaces (rounded up to the next whole parking space). Sub-Sublandlord shall not take any action to cause Master Landlord or Sublandlord to reduce Sub-Sublandlord's parking rights with respect to the Premises under the Master Lease or the Sublease. All Parking Spaces are unassigned and nonexclusive spaces, and notwithstanding any provision herein or in the Master Lease to the contrary, shall be provided to Sub-Subtenant at no cost or expense, except for expenses included in Operating Expenses pursuant to (i) Section 9.2(a)(vi) of the Master Lease or (ii) the second to last sentence of Section 9.2(b) of the Master Lease.

5.2 Compliance. Sub-Subtenant shall comply (and cause each of its employees, contractors, representatives, and invitees using such privileges to comply) with all

rules, regulations and requirements of Master Landlord with respect to use of the Parking Spaces, the Transportation Demand Management Plan (TDMP) and other matters relating thereto.

6. Additional Rights.

6.1 Signage. Subject to the Incorporation Provisions, Section 11.5 of the Original Master Lease is hereby incorporated by reference; provided, however, that the phrase "with lighted signage" is hereby replaced with "one lighted sign, which shall be located in a location reasonably determined by Sub-Sublandlord to provide Subtenant with visibility". All signage of Sub-Subtenant, and the right of Sub-Subtenant to install such signage, shall (i) be subject to the terms of the Sublease and the Master Lease, Sublandlord's reasonable approval, Sub-Sublandlord's reasonable approval and Master Landlord's approval, including, without limitation, as to design, composition, size and location (as and to the extent set forth in the Sublease, Master Lease, the Sublandlord Consent or the Master Landlord Consent), (ii) comply with all restrictions and requirements of applicable law and of any covenants, conditions and restrictions or other written agreements now or hereafter applicable to the 331 Building and (iii) be undertaken at Sub-Subtenant's sole cost and expense, including, without limitation, all costs of installation, maintenance, repair, restoration and removal. Should the signage constructed pursuant to this Section 6.1 (the "***Signage***") require maintenance or repairs as determined in Sub-Sublandlord's reasonable judgment, Sub-Sublandlord shall have the right to provide written notice thereof to Sub-Subtenant and Sub-Subtenant shall cause such repairs and/or maintenance to be performed within sixty (60) days after receipt of such notice from Sub-Sublandlord at Sub-Subtenant's sole cost and expense. Should Sub-Subtenant fail to perform such maintenance and repairs within the period described in the immediately preceding sentence, Sub-Sublandlord shall have the right to cause such work to be performed and to charge Sub-Subtenant, as "Additional Rent," for the cost of such work. Upon the expiration or earlier termination of this Sub-Sublease, Sub-Subtenant shall, at Sub-Subtenant's sole cost and expense, cause the Signage to be removed from the exterior of the 331 Building and shall cause the exterior of the 331 Building to be restored to its condition existing prior to the placement of such Signage (normal wear and tear excepted). If Sub-Subtenant fails to remove such Signage or fails to restore the exterior of the 331 Building as provided in the immediately preceding sentence within thirty (30) days following the expiration or earlier termination of this Sub-Sublease, then Sub-Sublandlord may perform such work, and all costs and expenses incurred by Sub-Sublandlord in so performing such work shall be reimbursed by Sub-Subtenant to Sub-Sublandlord within ten (10) business days after Sub-Subtenant's receipt of invoice therefor. The immediately preceding sentence shall survive the expiration or earlier termination of this Sub-Sublease. As of the Effective Date, Master Landlord has approved the installation of only one (1) sign on the exterior of the 331 Building. Nothing in this Section 6.1 shall require Sub-Sublandlord to modify or remove Sub-Sublandlord's signage located on the 331 Building as of the Effective Date so as to permit Sub-Subtenant to install signage on the 331 Building.

6.2 Other Permits. Sub-Subtenant will be responsible for obtaining its own permits with respect to any new building systems or any improvements to existing building

systems serving the Premises exclusively or which are required for operation of Sub-Subtenant's business or occupancy of the Premises, including without limitation, certificates of occupancy, fire protection system permits and any necessary permits allowing use of chemicals in the Premises, except for any such permits that may have already been obtained by Sub-Sublandlord and which are freely transferable to Sub-Subtenant without the payment of any transfer fee and without any requirement to obtain the consent of any regulatory, governmental, or quasi-governmental agency with respect to such transfer. Sub-Sublandlord will be responsible for obtaining the Decommissioning Approval and all necessary permits with respect to the Stair Closure Work.

7. Broker Commissions. Each Party represents and warrants that it has dealt with no broker in connection with this Sub-Sublease and the transactions contemplated herein, except that Sub-Sublandlord has been represented by Savills Studley (the "***Primary Broker***") and Sub-Subtenant has been represented by Newmark Cornish & Carey (the "***Secondary Broker***"). Following full execution and delivery of this Sub-Sublease and the Consents, Sub-Sublandlord shall pay the commission payable to the Primary Broker as a result of or in connection with this Sub-Sublease (the "***Commission***") pursuant to, and in accordance with, the terms of a separate agreement between the Primary Broker and Sub-Sublandlord (the "***Primary Broker Agreement***"), and neither Sub-Sublandlord nor Sub-Subtenant shall have any obligation to pay any portion of the Commission or any other commission to the Secondary Broker. It is Sub-Sublandlord's and Sub-Subtenant's understanding that the Primary Broker will share the Commission with the Secondary Broker pursuant to the Primary Broker Agreement. Each Party shall indemnify, defend and hold the other Party free and harmless from and against any claim, loss, damage, liability, obligation, cost or expense, including reasonable attorneys' fees suffered, incurred or asserted arising from the breach of the indemnifying Party's representations and warranties set forth in this Section 7. Under no circumstances will the Primary Broker, the Secondary Broker or any other broker or agent be deemed to be a third party beneficiary of this Sub-Sublease.

8. Condition Of Premises.

8.1 AS IS. Subject to Sub-Sublandlord's obligation to perform the Stair Closure Work and to demise the First Floor Premises, Sub-Subtenant has inspected the Premises and all improvements located therein, and has agreed to accept the Premises in their "***AS-IS***" condition, existing as of the Effective Date, and subject to all applicable municipal, county, state and federal laws, ordinances and regulations governing and regulating the use and occupancy of the Premises. Sub-Subtenant hereby agrees that the Stair Closure Work and Sub-Sublandlord's actions in connection therewith shall in no way constitute a constructive eviction of Sub-Subtenant nor entitle Sub-Subtenant to any abatement of Rent. Sub-Sublandlord shall have no responsibility or for any reason be liable to Sub-Subtenant for any direct or indirect injury to or interference with Sub-Subtenant's business arising from the Stair Closure Work, nor shall Sub-Subtenant be entitled to any compensation or damages from Sub-Sublandlord for (i) loss of the use of the whole or any part of the Premises or of Sub-Subtenant's personal property or improvements resulting from the Stair Closure Work or Sub-Sublandlord's actions in connection therewith or (ii) any inconvenience or annoyance occasioned by such Stair Closure Work or Sub-Sublandlord's actions in connection

therewith, all provided Sub-Sublandlord makes commercially reasonable efforts not to interfere with Sub-Subtenant's access to or use of the Premises.

9. Sublease and Master Lease.

9.1 Compliance With The Sublease and The Master Lease. The terms of this Section 9.1 (including, without limitation, subsections 9.1.1, and 9.1.2 below) shall govern incorporation of any provisions into this Sub-Sublease and such provisions are collectively referred to herein as the "***Incorporation Provisions***." Sub-Subtenant shall not cause a breach of the Master Lease or the Sublease, as more particularly set forth in Section 9.1.3 below. Except as otherwise expressly provided hereunder, or as the context of this Sub-Sublease directly indicates otherwise, all of the rights and obligations granted to or imposed on the "Tenant" under the Master Lease with respect to the Premises are hereby granted to or imposed on Sub-Subtenant and all of the rights and granted to the "Landlord" under the Master Lease with respect to the Premises are hereby granted to Sub-Sublandlord. All of the terms and conditions contained in the Master Lease are incorporated herein, except as specifically provided below or in the Sublease, and shall together with the terms and conditions specifically set forth in this Sub-Sublease constitute the complete terms and conditions of this Sub-Sublease. Subject to the following sentence, capitalized terms used but not defined herein have the meanings given thereto in the Master Lease. To the extent the Master Lease terms are incorporated herein, the following defined terms in the Master Lease shall be deemed to have the respective meanings set forth below for purposes of this Sub-Sublease:

Defined Term in Master Lease	**Definition Under This Sub-Sublease**
Building(s)	331 Building (as defined herein), provided, that, if it is clear from the context of the applicable use that references to the "Buildings" should refer to more than just the 331 Building (such as for purposes of calculating the allocation of costs or responsibilities among the 331 Building and other buildings), the reference shall be adjusted as appropriate to equitably allocate such costs or responsibilities to the 331 Building.
Landlord	Sub-Sublandlord (as defined herein)
Lease	Sub-Sublease (as defined herein)
Minimum Rental	Base Rent (as defined herein)
Phase II Building(s)	331 Building (as defined herein), provided, that, if it is clear from the context of the applicable use that references to the "Phase II Buildings" should refer to more than just the 331 Building (such as for purposes of calculating the allocation of costs or responsibilities among the 331 Building and other buildings), the reference shall be adjusted as

Defined Term in Master Lease	Definition Under This Sub-Sublease
	appropriate to equitably allocate such costs or responsibilities to the 331 Building.
Phase II Rent Commencement Date	Rent Commencement Date (as defined herein)
Property	The Phase II site shown on the Phase II Site Plan attached to the Master Amendment as Exhibit A.
Rent Commencement Date	Rent Commencement Date (as defined herein)
Tenant	Sub-Subtenant (as defined herein)

Subtenant acknowledges that it has read the attached copies of the Sublease and the Master Lease and agrees that this Sub-Sublease is in all respects subject and subordinate to any mortgage, deed, deed of trust, ground lease or other instrument now or hereafter encumbering the Premises or the land on which it is located, to the terms and conditions of the Sublease and the Master Lease and to the matters to which the Sublease or the Master Lease, including, in each case, any amendments thereto, is or shall be subordinate. Sub-Sublandlord agrees that Sub-Sublandlord shall not subordinate its interest in the Sublease or the Master Lease to any future ground Lessor, mortgagee, trustee, beneficiary or leaseback lessor without first receiving a Non-Disturbance Agreement in accordance with Section 19.1 of the Master Lease. Sub-Sublandlord represents and warrants to Sub-Subtenant that (i) the copy of the Sublease attached hereto as Exhibit A-2 is a true and correct copy, (ii) the Sublease is in full force and effect, and, to Sub-Sublandlord's knowledge, there does not exist any uncured default or event or circumstance which, with the passage of time, would become a default thereunder by either Sub-Sublandlord or Sublandlord, (iii) the redacted copy of each of the Original Master Lease and Master Amendment attached hereto as Exhibit A-1 is a true and correct copy of the redacted version of such document that Sub-Sublandlord received from Sublandlord, (iv) to Sub-Sublandlord's knowledge, the Master Lease is in full force and effect, and, to Sub-Sublandlord's knowledge, there does not exist any uncured default or event or circumstance which, with the passage of time, would become a default thereunder by either Sublandlord or Master Landlord, and (v) to Sub-Sublandlord's knowledge, the expiration date of the Sublease and the Master Lease with respect to the Premises is December 31, 2023. As used herein, the phrase "***to Sub-Sublandlord's knowledge***" or similar phrases will be deemed to refer exclusively to matters (i) of which Sub-Sublandlord has received written notice pursuant to the requirements of Section 10.1 of the Sublease or Section 21.1 of the Master Lease, or (ii) within the current actual (as opposed to constructive or imputed) knowledge of Chi Johnson, Senior Manager, Facilities, Prothena Biosciences Inc or Chi Johnson's successor ("***Sub-Sublandlord's Representative***"). No duty of inquiry or investigation on the part of Sub-Sublandlord or Sub-Sublandlord's Representative will be required or implied and in no event shall Sub-Sublandlord's Representative have any personal liability therefor.

Notwithstanding anything to the contrary set forth herein:

9.1.1 Sub-Sublandlord Has No Duty to Perform Sublandlord's Obligations or Master Landlord's Obligations.

(a) Sub-Sublandlord shall have no duty to perform any obligations of Sublandlord. The Parties contemplate that Sublandlord will perform such obligations under the Sublease to the extent required therein and in the event of any default or failure of such performance by Sublandlord, Sub-Sublandlord agrees that it will, upon written request from Sub-Subtenant detailing the nature of such failure, exercise Sub-Sublandlord's right under the Sublease to require Sublandlord to perform its obligations under the Sublease for the benefit of Sub-Subtenant, including, without limitation, (i) to obtain, at Sub-Subtenant's sole cost and expense, the consent of Sublandlord whenever the consent of Sublandlord is required under the Sublease, (ii) to make any permitted claims for rent abatement from Sublandlord under the terms of the Sublease, and (iii) upon Sub-Subtenant's written request, to promptly notify Sublandlord of its nonperformance under the Sublease and request that Sublandlord perform its obligations under the Sublease. Except as specifically provided in Section 13 below, under no circumstances shall Sub-Subtenant be entitled to any free rent period, construction allowance, tenant improvements, or any other such economic incentives provided to Sub-Sublandlord as set forth in the Sublease.

(b) Sub-Sublandlord shall have no duty to perform any obligations of Master Landlord which are, by their nature, the obligation of an owner or manager of real property, except to the extent that Sub-Sublandlord elects to do so pursuant to Section 8 hereof. For example, Sub-Sublandlord shall not be required to (i) provide services, utilities, repairs, maintenance or other tasks which the Master Landlord is required to provide under the Master Lease, (ii) construct any improvements, (iii) procure or maintain the insurance which the Master Landlord is required to procure and maintain under the Master Lease, (iv) develop or implement the Transportation Demand Management Plan (as defined in the Master Lease) or perform its related obligations and activities, or (v) provide any non-disturbance protection in connection with any mortgage, deed, deed of trust, ground lease or other instrument now or hereafter encumbering the Premises. The Parties contemplate that Master Landlord will perform such obligations under the Master Lease to the extent required therein and in the event of any default or failure of such performance by Master Landlord, Sub-Sublandlord agrees that it will, upon written request from Sub-Subtenant detailing the nature of such failure, use good faith, commercially reasonable efforts to require Sublandlord to exercise Sublandlord's right under the Master Lease to cause Master Landlord to perform its obligations under the Master Lease for the benefit of Sub-Subtenant, and such good faith, commercially reasonable efforts shall include, without limitation, efforts to cause Sublandlord (i) to cause Master Landlord to perform its obligations under the Master Lease for the benefit of Sub-Subtenant, (ii) to obtain, at Sub-Subtenant's sole cost and expense, the consent of Master Landlord whenever the consent of Master Landlord is required under the Master Lease, (iii) to make any permitted claims for rent abatement from Master Landlord under the terms of the Master Lease, and (iv) upon Sub-Subtenant's written request, to promptly notify Master Landlord of its nonperformance under the Master Lease and request that Master Landlord perform its obligations under the Master Lease. Except as specifically provided in Section 13 below, under no circumstances shall Sub-Subtenant be entitled to any free rent period, construction allowance, tenant improvements, or any other such economic incentives provided to Sublandlord as set forth in the Master Lease.

9.1.2 Time Periods for Performance; Approvals by Master Landlord, Sublandlord and Sub-Sublandlord. Whenever any provision of the Master Lease specifies a time period in connection with the performance of any liability or obligation by Sub-Subtenant or any notice period or other time condition to the exercise of any right or remedy by Sublandlord or Sub-Sublandlord, such time period shall be shortened in each instance by five (5) business days for the purposes of incorporation into this Sub-Sublease, but in no case shall such period be less than two (2) days or the actual time period for performance set forth in the Master Lease, if shorter. Any default notice or other notice of any obligations (including any billing or invoice for any rent or any other expense or charge due under the Master Lease) from Master Landlord which is received by Sub-Subtenant (whether directly or as a result of being forwarded by Sublandlord or Sub-Sublandlord) shall constitute such notice from Sub-Sublandlord to Sub-Subtenant under this Sub-Sublease without the need for any additional notice from Sub-Sublandlord. Whenever any provision of the Master Lease requires Sub-Subtenant to pay the costs and expenses of "Landlord," Sub-Subtenant shall pay the costs and expenses of Master Landlord, Sublandlord and Sub-Sublandlord to the extent arising out of this Sub-Sublease (other than costs incurred in connection with obtaining the Consents, which shall be Sub-Sublandlord's responsibility) or Sub-Subtenant's use or occupancy of the Premises. Whenever any provision of the Master Lease requires Sub-Subtenant to submit evidence, certificates or other documents or materials, Sub-Subtenant shall submit such items to Sub-Sublandlord, Sublandlord and Master Landlord, and whenever any provision of the Master Lease requires Sub-Subtenant to obtain the approval or consent of "Landlord," Sub-Subtenant shall be required to obtain the approval or consent of Sub-Sublandlord, Sublandlord and Master Landlord; provided however, that if Master Landlord and Sublandlord provide such consent, Sub-Sublandlord shall not unreasonably withhold, condition or delay consent. In the event of a conflict between the express provisions of this Sub-Sublease and the incorporated provisions of the Master Lease, as between Sub-Sublandlord and Sub-Subtenant, the express provisions of this Sub-Sublease shall control.

9.1.3 Sub-Subtenant Shall Not Cause a Breach of Sublease or Master Lease.

(a) Sub-Subtenant shall not do, permit or suffer any act, occurrence or omission which if done, permitted or suffered by Sublandlord or Sub-Sublandlord would be (with notice, the passage of time or both) in violation of or a default by the "Tenant" under the Master Lease or could lead in any respect to the termination of the Master Lease. If Sub-Subtenant shall default in the performance of any of its obligations under this Sub-Sublease, other than its obligation to pay rent to Sub-Sublandlord, Sub-Sublandlord, without being under any obligation to do so and without thereby waiving such default, may remedy such default for the account and at the expense of Sub-Subtenant, without notice in a case of emergency and, in all other cases, if the default continues after three (3) business days from the date of written notice thereof from Sub-Sublandlord. Sub-Subtenant shall defend, indemnify and hold Sublandlord and Sub-Sublandlord harmless from any and all third-party claims, suits, judgments, losses, costs, obligations, damages, expenses, or liabilities (collectively, "***Claims***"), including reasonable attorneys' fees and costs, arising out of or in connection with any acts or failures to act by Sub-

Subtenant, or its agents, employees or contractors that causes Sublandlord or Sub-Sublandlord to be in a default under the Master Lease or otherwise increases Sublandlord's or Sub-Sublandlord's liability or responsibilities under the Master Lease, provided, that, Sub-Subtenant shall not be required to indemnify or defend Sublandlord or Sub-Sublandlord for any Claims to the extent resulting from the negligence or willful misconduct of Sublandlord or Sub-Sublandlord, as applicable.

(b) Sub-Subtenant shall not do, permit or suffer any act, occurrence or omission which if done, permitted or suffered by Sub-Sublandlord would be (with notice, the passage of time or both) in violation of or a default by the "Subtenant" under the Sublease or could lead in any respect to the termination of the Sublease. If Sub-Subtenant shall default in the performance of any of its obligations under this Sub-Sublease, other than its obligation to pay rent to Sub-Sublandlord, Sub-Sublandlord, without being under any obligation to do so and without thereby waiving such default, may remedy such default for the account and at the expense of Sub-Subtenant, without notice in a case of emergency and, in all other cases, if the default continues after five (5) business days from the date of written notice thereof from Sub-Sublandlord. Sub-Subtenant shall defend, indemnify and hold Sub-Sublandlord harmless from any and all Claims, including reasonable attorneys' fees and costs, arising out of or in connection with any acts or failures to act by Sub-Subtenant, or its agents, employees or contractors that causes Sub-Sublandlord to be in a default under the Sublease or otherwise increases Sub-Sublandlord's liability or responsibilities under the Sublease, provided, that, Sub-Subtenant shall not be required to indemnify or defend Sub-Sublandlord for any Claims to the extent resulting from the negligence or willful misconduct of Sub-Sublandlord.

9.1.4 Sub-Sublandlord Shall Not Cause a Breach of the Sublease or the Master Lease. So long as Sub-Subtenant is not in default under this Sub-Sublease beyond the expiration of any applicable notice and cure periods, Sub-Sublandlord shall fully perform all Sub-Sublandlord's covenants, obligations and agreements set forth in the Sublease and Master Lease (except to the extent they are the corresponding covenants, obligations or agreements of Sub-Subtenant hereunder that Sub-Subtenant has failed to comply with pursuant to the terms hereof), including without limitation, the payment of rent and all other sums payable by Sub-Sublandlord thereunder. Sublandlord shall be a third party beneficiary of the previous sentence.

9.2 Excluded Provisions. Notwithstanding any provision of this Sub-Sublease to the contrary, the following provisions of the Master Lease shall not be incorporated into this Sub-Sublease:

Provisions in the Original Master Lease

- Section 1.1(a), except for the definitions of "Improvements" and "Common Areas"
- Section 1.1(c)
- Section 1.2, except as referenced in Section 9.8 of this Sub-Sublease.

- Sections 2.1 through 2.6
- Section 3.1(a) through (e)
- Section 5.1
- Section 5.2
- Section 5.3
- Article 6
- Section 9.1 through 9.5, except as referenced in Section 3.3 above
- Unless otherwise agreed by Master Landlord in the Master Landlord Consent, the last portion of the first sentence in Section 11.1 beginning with "except that Tenant shall not be required…"
- The fifth sentence of Section 11.2, beginning with "Tenant shall also be responsible…"
- Section 10.1
- Section 12.1(b)
- Section 12.2(a)
- The second sentence of Section 12.2(c)
- Section 14.6
- The second sentence and parenthetical third sentence of Section 19.1
- Article 20
- Section 21.1, except as referenced in Section 10.1 of this Sub-Sublease.
- Section 21.2
- Section 21.3
- Section 21.5
- Section 21.8
- Section 21.9
- Section 21.15
- Section 21.16
- Section 21.17
- Section 21.18
- Section 21.19
- The fourth sentence (which begins with "The monthly fee") and the last parenthetical sentence of Section 21.20(b)
- Exhibits A, B, C, D and E (in each case except to the extent expressly referenced in any portion of the Master Lease affirmatively incorporated herein)

Provisions in the Master Amendment

- Recitals
- Sections 1(a) through (d), including the paragraph that precedes (a)
- Section 1(e), except as referenced in Section 3.3 of this Sub-Sublease.
- Section 1(f)

- Clause (ii) of Section 1(g)
- Section 1(h)
- The second, third and fourth sentences of Section 2
- The first sentence of Section 2(b)
- Section 2(a)
- The first two (2) sentences of Section 2(c)
- Section 2(d)
- Sections 3 through 4
- The last sentence of Section 5
- Sections 6 through 8
- Exhibit B
- Schedule C-1
- Schedule C-2

9.3 Inapplicable Amendments. Except for provisions of this Sub-Sublease that refer to the Amended Master Lease, the following amendments to the Original Master Lease are inapplicable to the Premises and are not part of the Master Lease for purposes of this Sub-Sublease:

(a) First Amendment to Build-to-Suit Lease dated January 22, 2003;

(b) Second Amendment to Build-to-Suit Lease dated March 26, 2004;

(c) Third Amendment to Build-to-Suit Lease dated August 12, 2004;

(d) Fourth Amendment to Build-to-Suit Lease and First Amendment to Workletter dated June 19, 2006;

(e) Sixth Amendment to Build-to-Suit Lease and Third Amendment to Workletter dated November 21, 2006; and

(f) Seventh Amendment to Build-to-Suit Lease and Fourth Amendment to Workletter dated February 21, 2008.

As used in this Sub-Sublease, the term "Amended Master Lease" shall mean the Original Master Lease as amended by all amendments thereto (whether on, before or after the Effective Date), including the aforementioned inapplicable amendments.

9.4 Termination Of Sublease or Master Lease.

9.4.1 If for any reason the term of the Master Lease is terminated prior to the Expiration Date of this Sub-Sublease, this Sub-Sublease shall thereupon terminate and Sub-Sublandlord shall not be liable to Sub-Subtenant by reason thereof for damages or otherwise unless and to the extent such termination is due to Sub-Sublandlord's default under this Sub-Sublease. In the event of any such early termination, Sub-Sublandlord shall return to Sub-Subtenant that portion of any rent paid in advance by Sub-Subtenant, if any, which is applicable to the period following the date of such termination.

9.4.2 If for any reason the term of the Sublease is terminated prior to the Expiration Date of this Sub-Sublease, this Sub-Sublease shall thereupon terminate and Sub-Sublandlord shall not be liable to Sub-Subtenant by reason thereof for damages or otherwise unless and to the extent such termination is due to Sub-Sublandlord's default under this Sub-Sublease (including, without limitation, a default under Section 9.1.4). In the event of any such early termination, Sub-Sublandlord shall return to Sub-Subtenant that portion of any rent paid in advance by Sub-Subtenant, if any, which is applicable to the period following the date of such termination. Notwithstanding the foregoing, so long as Sub-Subtenant is not in default after the expiration of applicable notice and cure periods hereunder, Sub-Sublandlord agrees that, except in the event of a casualty or condemnation where Sub-Sublandlord is entitled under this Sub-Sublease or the Sublease to terminate the Sublease with respect to the Subleased Premises, Sub-Sublandlord shall not voluntarily terminate the Sublease with respect to all of or any portion of the Complete Premises without Sub-Subtenant's consent, in its sole discretion, unless Sublandlord agrees to recognize this Sub-Sublease as a direct agreement with Sub-Subtenant upon substantially the same terms set forth in this Sub-Sublease, or Sub-Subtenant otherwise has the right to continue to occupy all of or any portion of the Complete Premises pursuant to a direct agreement with Sublandlord or, with the consent of Sublandlord, Master Landlord upon terms satisfactory to Sub-Subtenant, in its sole discretion. Nothing herein shall prevent Sub-Sublandlord from terminating the Sublease with respect to spaces other than the Complete Premises. Sub-Sublandlord agrees not to modify the Sublease in any manner that materially affects the Complete Premises or Sub-Subtenant's rights or obligations under the Sublease, without obtaining Sub-Subtenant's prior written consent, to be provided in Sub-Subtenant's sole discretion. Sub-Sublandlord shall not do or omit to do anything that shall interfere with or impair Sub-Subtenant's expansion rights under Section 14.16 of this Sub-Sublease or right of first refusal under Section 14.17 of this Sub-Sublease.

9.5 **Holding Over.** If Sub-Subtenant holds possession of the Premises or any portion thereof after the expiration or earlier termination of this Sub-Sublease, then Sub-Subtenant shall become a tenant at sufferance only, at a sublease base rental rate equal to one hundred fifty percent (150%) of the Base Rent in effect upon the date of such expiration or termination, plus all additional rent payable by Sub-Subtenant hereunder (pro-rated on a daily basis) (such amounts, collectively, the "***Holdover Rent Payments***"). Acceptance by Sub-Sublandlord of rent after such expiration or termination date shall not result in a renewal of this Sub-Sublease and shall not waive or modify Sub-Sublandlord's rights to pursue any and all legal remedies available to Sub-Sublandlord under applicable law with respect to such holding over by Sub-Subtenant. It is acknowledged that if Sub-Subtenant holds over after the expiration or earlier termination of this Sub-Sublease, Sub-Sublandlord may be subject to holdover rent with respect to the Subleased Premises. Accordingly, (i) Sub-Sublandlord expressly reserves the right to require Sub-Subtenant to surrender possession of the Premises upon the expiration of the Term or upon the earlier termination hereof and the right to assert any remedy at law or in equity to evict Sub-Subtenant and/or collect damages in connection with any such holding over, and (ii) Sub-Subtenant shall indemnify, defend and hold Sub-Sublandlord harmless from and against any and all Claims, including, without limitation, attorneys' fees incurred or suffered by Sub-Sublandlord by reason of Sub-Subtenant's failure to surrender the Premises on the expiration or earlier

termination of this Sub-Sublease in accordance with the provisions of this Sub-Sublease (including, without limitation, the cost of all rent and holdover amounts payable by, and all indemnification and other obligations of, Sub-Sublandlord (including, without limitation, under the Sublease and the Master Lease) that are caused by or result from Sub-Subtenant's holdover) to the extent greater than the Holdover Rent Payments, unless Sub-Subtenant has vacated the Premises in accordance with the terms hereof and such holdover rent with respect to the Premises is due to the negligence or willful misconduct of Sub-Sublandlord. Notwithstanding the foregoing, Sub-Subtenant shall be entitled to make separate arrangements with Sublandlord or, with the consent of Sublandlord, Master Landlord permitting Sub-Subtenant to remain in the Premises after expiration of the Term, provided, that, (a) Sub-Sublandlord is released from its obligation to surrender the Premises to Sublandlord under the terms of the Sublease, and (b) the Sublease terminates with respect to the Premises for all purposes on the Expiration Date.

9.6 Compliance with Law. Sub-Subtenant warrants to Sub-Sublandlord that any improvements constructed by Sub-Subtenant on the Premises from time to time shall not violate any applicable law, building code, regulations or ordinance in effect on the earliest Rent Commencement Date or at the time such improvements are placed in service. If it is determined that such warranty has been violated, then Sub-Subtenant shall, upon written notice from Sub-Sublandlord, promptly correct such violation, at Sub-Subtenant's sole cost and expense. Sub-Subtenant acknowledges that neither Sub-Sublandlord nor any agent of Sub-Sublandlord has made any representation or warranty as to the present of future suitability of the Premises for the conduct of Sub-Subtenant's business or proposed business therein.

9.7 Definitions. Subject to the Incorporation Provisions, the definitions of "***Improvements***" and "***Common Areas***" set forth in Section 1.1(a) of the Original Master Lease are hereby incorporated by reference; provided however, that the phrase "in the Center" of the definition of "***Common Areas***" is hereby deleted and replaced with "on the Property".

9.8 Use of Common Areas. Subject to the Incorporation Provisions, Section 1.1(b) of the Original Master Lease is hereby incorporated by reference; provided however, that the phrase "pursuant to Section 1.1(a)" is hereby deleted therefrom. Sub-Subtenant acknowledges Master Landlord's reserved rights set forth in Section 1.2 of the Original Master Lease.

9.9 Personal Property. Subject to the Incorporation Provisions, Section 8.1 of the Original Master Lease is hereby incorporated by reference.

9.10 Real Property. Subject to the Incorporation Provisions, Section 8.2 of the Original Master Lease is hereby incorporated by reference.

9.11 Intentionally Omitted.

9.12 Alterations; Surrender Obligations. Subject to the Incorporation Provisions, Sections 11.1 through 11.4 of the Original Master Lease are hereby incorporated by reference, except for (i) the first sentence in Section 11.1 and (ii) the fifth sentence of Section 11.2 (which begins with "Tenant shall also be responsible"). Sub-Subtenant shall make no alterations, additions or improvements to the Premises or the Property without the prior written consent of Sub-Sublandlord, which consent shall not be unreasonably withheld, conditioned, or delayed. Further, notwithstanding anything to the contrary herein, Sub-Subtenant's removal and restoration obligations hereunder shall include any removal and restoration obligations of Sub-Sublandlord under the Sublease with respect to the Premises (including, without limitation, removal and restoration obligations with respect to improvements installed by Sub-Sublandlord prior to this Sub-Sublease if so required). Sub-Subtenant shall not be required to remove any alterations or improvements made by or for the account of Sub-Sublandlord unless the Sublandlord or the Master Landlord requires the removal of the same. Sub-Sublandlord may require Sub-Subtenant, at Sub-Subtenant's expense, to remove, upon the expiration or earlier termination of this Sub-Sublease, any alterations installed by Sub-Subtenant and to repair any damage to the Premises and the 331 Building caused by such removal and return the affected portion of the Premises to a building standard condition as reasonably determined by Sub-Sublandlord.

9.13 Maintenance and Repairs. Subject to the Incorporation Provisions, Section 12.1(a) and Section 12.2(b) of the Original Master Lease are hereby incorporated by reference, except for (i) the phrase "pursuant to the indemnification provided in Section 14.6 hereof" of Section 12.1(a) and (ii) the phrase "except to the extent expressly set forth in Section 12.1(b)," of Section 12.1(a). Except as set forth in the preceding sentence, Sub-Subtenant at its sole cost and expense shall keep and maintain in good and sanitary order, condition and repair the Premises (from and after the Commencement Date) and every part thereof, including but not limited to the signs, interiors, ceilings, electrical systems and plumbing systems that exclusively serve the Premises, telephone and communications systems that serve the Premises, the HVAC equipment and related mechanical systems that exclusively serve the Premises (for which equipment and systems Sub-Subtenant shall enter into a service contract with a person or entity designated or approved by Sub-Sublandlord), all doors, door checks, windows, plate glass, door fronts, those exposed plumbing and sewage and other utility facilities that exclusively serve the Premises, fixtures, lighting, wall surfaces, floor surfaces and ceiling surfaces of the Premises and all other interior repairs, foreseen and unforeseen, with respect to the Premises, as required; provided, however, that Sub-Subtenant's ordinary repair obligation with respect to building systems in Premises shall be limited to building systems or portions thereof that serve only the

Premises and shall not include Building Common Systems. "***Building Common Systems***" means (i) building systems or portions thereof that serve, in common, the Premises and any other areas in the 331 Building (such as the elevator systems in the 331 Building, and the electrical system, plumbing system, exposed plumbing and sewage and other utility facilities, and the HVAC equipment and related mechanical systems that serve, in common, the Premises and any other areas in the 331 Building) or that serve the Building Common Areas and (ii) to the extent not maintained by Master Landlord or Sublandlord, the roofs, exterior walls (other than interior faces of exterior walls that are not in the Building Common Areas) and any demising walls in the 331 Building. "***Building Common Areas***" means the areas depicted on Exhibit B-3 attached hereto. Sub-Sublandlord shall repair and maintain, or cause to be repaired and maintained, the Building Common Systems and the Building Common Areas, and the cost of such work shall be included as Building Operating Expenses hereunder.

9.14 Use; No Nuisance, Compliance with Laws, Liquidation Sales, & Environmental Matters. Subject to the Incorporation Provisions, Sections 13.1 through 13.6 of the Original Master Lease are hereby incorporated by reference; provided however, that notwithstanding anything to the contrary contained in this Sub-Sublease, under no circumstances shall Sub-Subtenant ever have any responsibility for any breach or default of these provisions existing on or prior to the Effective Date or first arising after the expiration of the Term (unless actually caused by Sub-Subtenant); further provided, that (i) the reference to "Landlord" in the first line of Section 13.4(b) hereby refers to Master Landlord, (ii) the reference to "14.6" in the last line of Section 13.6(b)(xi) is hereby deleted, and (iii) Section 13.6(d) is hereby deleted in its entirety.

9.15 Insurance. Subject to the Incorporation Provisions, Sections 14.1 through 14.5 of the Original Master Lease and Section 14.7 of the Original Master Lease are hereby incorporated by reference, except Sections 14.1(c) and 14.1(e) are hereby deleted. Without limiting the generality of the foregoing, Sub-Subtenant acknowledges and agrees that Sub-Subtenant shall carry (a) the same insurance that Sublandlord is obligated to carry under the Original Master Lease and (b) without duplication of the preceding clause (a), the same insurance that Sub-Sublandlord is obligated to carry under the Sublease, provided, however, that Sub-Subtenant shall name Sub-Subtenant, Sub-Sublandlord, Sublandlord and Master Landlord (and any other third parties identified by Sub-Sublandlord, Sublandlord or Master Landlord) as insureds or additional insureds under such insurance policies as their interests may appear.

9.16 Sublease and Assignment. Subject to the Incorporation Provisions, Article 15 of the Original Master Lease, as amended by Section 1(i) of the Master Amendment, is hereby incorporated by reference and shall govern any such assignment or subletting, except as set forth in this Section 9.16. Sub-Subtenant shall not voluntarily or involuntarily, by operation of law or otherwise, assign, sublet, mortgage or otherwise encumber all or any portion of its interest in this Sub-Sublease or in the Premises without obtaining the prior written consent of Sub-Sublandlord, Sublandlord and Master Landlord with respect thereto. So long as Master Landlord's consent and Sublandlord's Consent is obtained, Sub-Sublandlord shall

not unreasonably withhold, condition, or delay its consent to any proposed assignment or sublease; provided, however, that Sub-Sublandlord, Sublandlord or Master Landlord, as the case may be, may require as a condition of granting any such consent that (i) the proposed transferee demonstrate that its financial resources and tangible net worth are at least equal to Sub-Subtenant's financial resources and tangible net worth as of the Effective Date, (ii) the nature of the transferee's proposed use of the Premises and the transferee's reputation shall be reasonably satisfactory to Sub-Sublandlord and (iii) Sub-Subtenant reaffirms, in form satisfactory to Sub-Sublandlord, its continuing liability under this Sub-Sublease. Notwithstanding the foregoing, Sub-Sublandlord confirms that Sub-Subtenant is entitled to complete a Permitted Transfer (as defined in Section 15.1 of the Original Master Lease) without Sub-Sublandlord's consent, but with prior or concurrent notice by Sub-Subtenant to Sub-Sublandlord (a "***Sub-Subtenant Permitted Transfer***"). Any assignment, subletting, mortgage or other encumbrance attempted by Sub-Subtenant to which Sub-Sublandlord, Sublandlord and/or Master Landlord has not consented in writing pursuant to the provisions hereof (unless such consent is not required) shall be null and void and of no effect. Sub-Sublandlord hereby agrees to reimburse Sublandlord at its own expense for any fees due to the Sublandlord under the Sublease or the Master Landlord under the Master Lease in connection with the subletting of the Premises to Sub-Subtenant.

9.17 Right of Entry and Quiet Enjoyment. Subject to the Incorporation Provisions, Article 16 of the Original Master Lease is hereby incorporated by reference.

9.18 Casualty and Taking. Subject to the Incorporation Provisions, Article 17 of the Original Master Lease is hereby incorporated by reference, provided, that, Sub-Sublandlord shall have no right to terminate this Sub-Sublease as a result of damage, destruction or taking, unless (i) such damage, destruction or taking affects the 331 Building, and is of such a magnitude that the Sub-Sublandlord has the right to terminate the Sublease with respect to the 331 Building as a result, provided, that, without limiting clauses (ii) and (iii) below, Sub-Sublandlord shall not exercise such termination right with respect to the Premises if Sub-Subtenant certifies to Sub-Sublandlord in writing that Sub-Subtenant (1) will fully perform and indemnify Sub-Sublandlord for (x) all restoration obligations of Sub-Sublandlord under the Sublease with respect to the 331 Building and (y) all restoration obligations of Sublandlord under the Master Lease with respect to the 331 Building and (2) can reasonably demonstrate to Sub-Sublandlord that Sub-Subtenant has the financial ability to perform such restoration; (ii) the damage, destruction or taking (A) affects spaces other than the Subleased Premises, (B) is of such magnitude that Sub-Sublandlord has the right to terminate the Sublease, and (C) Sub-Sublandlord is not entitled to terminate the Sublease with respect to the affected spaces without also terminating the Sub-Sublease with respect to the Premises; or (iii) Sublandlord or Master Landlord have terminated the Sublease or the Master Lease.

9.19 Default. Subject to the Incorporation Provisions, Article 18 of the Original Master Lease is hereby incorporated by reference, except that "Abandonment of one or more Buildings" shall be replaced with "Abandonment of the Premises."

9.20 Subordination. Subject to the Incorporation Provisions (except as provided below), Section 19.1 of the Original Master Lease is hereby incorporated by reference, except for the second and parenthetical third sentence. Notwithstanding anything to the contrary in the Incorporation Provisions, it is acknowledged and agreed that references in Section 19.1 of the Original Master Lease to any assignee, ground lessor, mortgagee, trustee, beneficiary or sale/leaseback lessor or other party with an interest in the Buildings, the Property, the Center or any of them, are deemed to be references to Master Landlord's (as opposed to Sub-Sublandlord's) assignee, ground lessor, mortgagee, trustee, beneficiary or sale/leaseback lessor. This Sub-Sublease is subordinate to the Master Lease, the Sublease and any ground lease, mortgage, deed of trust or other instrument to which the Master Lease or the Sublease is subordinate.

9.21 Sale of Sublandlord's Interest. Subject to the Incorporation Provisions, Section 19.2 of the Original Master Lease is hereby incorporated by reference, provided however, that, (i) references to "interest in the Buildings and the Property" are hereby deemed to be references to "interest in the Master Lease," and (ii) the phrase ", except as otherwise expressly provided in Section 21.2 hereof" is hereby deleted.

9.22 Estoppel Certificate. Subject to the Incorporation Provisions, Section 19.3 of the Original Master Lease is hereby incorporated by reference, provided however, that, notwithstanding anything to the contrary in the Incorporation Provisions, references therein to the term "Landlord" shall be deemed to refer to Master Landlord, Sublandlord and Sub-Sublandlord; provided, however, that Sub-Subtenant shall be entitled to request and receive any such certificate only from Sub-Sublandlord.

9.23 Subordination to CC&Rs. Subject to the Incorporation Provisions, Section 19.4 of the Original Master Lease is hereby incorporated by reference, provided however that (i) references to "sublease" therein are hereby replaced with "sub-sublease", (ii) the phrase "(including any buildings occupied by or leased to Tenant pursuant to Tenant's exercise of any of the rights contained in Article 6 of this Lease)" therein is hereby deleted, (iii) the phrase "or, if Tenant exercises its rights under Section 6.3 of this Lease, on the Expansion Property" therein is hereby deleted, and (iv) the reference to "Tenant" in the first proviso therein is hereby replaced with "Sublandlord".

9.24 Mortgagee Protection. Subject to the Incorporation Provisions, Section 19.5 of the Original Master Lease is hereby incorporated by reference, provided that, notwithstanding anything to the contrary in the Incorporation Provisions, references therein to the term "Landlord" are hereby deemed to refer to Master Landlord.

9.25 Severability. Subject to the Incorporation Provisions, Section 21.4 of the Original Master Lease is hereby incorporated by reference.

9.26 Surrender; No Merger. Subject to the Incorporation Provisions, Section 21.6 of the Original Master Lease is hereby incorporated by reference.

9.27 **Interpretation**. Subject to the Incorporation Provisions, Section 21.7 of the Original Master Lease is hereby incorporated by reference.

9.28 **No Partnership**. Subject to the Incorporation Provisions, Section 21.10 of the Original Master Lease is hereby incorporated by reference.

9.29 **Financial Information**. Subject to the Incorporation Provisions, Section 21.11 of the Original Master Lease is hereby incorporated by reference. Notwithstanding the foregoing, Sub-Subtenant confirms that, as of the Effective Date, Sub-Sublandlord may access true, correct and complete, consolidated financial statements for Sub-Subtenant at www.asssemblybio.com.

9.30 **Costs**. Subject to the Incorporation Provisions, Section 21.12 of the Original Master Lease is hereby incorporated by reference, and Sub-Subtenant acknowledges that the costs referred to in Section 21.12 of the Original Master Lease include costs to be incurred by Master Landlord, Sublandlord and Sub-Sublandlord.

9.31 **Time**. Subject to the Incorporation Provisions, Section 21.13 of the Original Master Lease is hereby incorporated by reference.

9.32 **Rules and Regulations**. Subject to the Incorporation Provisions, Section 21.14 of the Original Master Lease is hereby incorporated by reference.

9.33 **Parking and Traffic**. Subject to the Incorporation Provisions, Section 21.20 of the Original Master Lease (as amended by Section 1(g) of the Master Amendment) is hereby incorporated by reference, except for the following provisions which require payment of a monthly fee for parking: (A) the fourth sentence of Section 21.20(b) of the Original Master Lease, which begins with the phrase "The monthly fee", (B) the last parenthetical sentence of Section 21.20(b) of the Original Master Lease, and (C) clause (ii) of Section 1(g) of the Master Amendment. Without limiting the generality of the Incorporation Provisions, it is acknowledged that the TDMP program and the administration and management thereof are obligations of the Master Landlord and Sub-Sublandlord shall have no responsibility with respect thereto.

9.34 **Site Plan**. Subject to the Incorporation Provisions, the Site Plan attached to the Master Amendment as Exhibit A is hereby incorporated by reference.

10. **Additional Provisions**.

10.1 **Notices**. In the event that (i) Sub-Sublandlord or Sub-Subtenant shall receive any notice or documentation from Sublandlord or Master Landlord for any reason pertaining to the Premises or this Sub-Sublease (it being agreed that Sublandlord has no obligation to deliver to Sub-Subtenant notices under the Sublease or the Master Lease that relate solely to spaces other than the Premises leased by Sub-Sublandlord under the Sublease, unless such notice

could adversely impact Sub-Subtenant's rights or obligations hereunder (such as a notice of Sub-Sublandlord's breach or default under the Sublease)), or (ii) Sub-Sublandlord or Sub-Subtenant send any notice or documentation to Sublandlord or the Master Landlord for any reason pertaining to the Premises or this Sub-Sublease (it being agreed that Sub-Sublandlord has no obligation to deliver to Sub-Subtenant notices to Sublandlord or Master Landlord under the Sublease or the Master Lease that relate solely to spaces other than the Complete Premises leased by Sub-Sublandlord under the Sublease, unless such notice could adversely impact Sub-Subtenant's rights or obligations hereunder (such as a notice of Sublandlord's breach or default under the Sublease)), then, within three (3) business days from the date of such receipt or delivery (as applicable), such Party shall send a copy of such notice or document to the other Party. All notices, demands, consents and approvals which may or are required to be given by either Party to the other hereunder shall be given in the manner provided in Section 21.1 of the Original Master Lease at the addresses shown below (or such other addresses as the Parties may designate in writing and delivered in compliance with this Section 10.1). Subject to the Sublandlord Consent, notices to the Sublandlord shall be given in accordance with Section 10.1 of the Sublease. Subject to the Master Landlord Consent, notices to the Master Landlord shall be given in accordance with Section 21.1 of the Master Lease.

Notices to Sub-Sublandlord:	Prothena Biosciences Inc 331 Oyster Point Boulevard South San Francisco, CA 94080 Attention: Chief Financial Officer
With a Copy to:	Prothena Biosciences Inc 331 Oyster Point Boulevard South San Francisco, CA 94080 Attention: Chief Legal Officer
Notices To Sub-Subtenant:	Assembly Biosciences, Inc. Before Rent Commencement Date: 409 Illinois Street San Francisco, CA 94158 Attention: Chief Financial Officer After Rent Commencement Date: 331 Oyster Point Boulevard Fourth Floor South San Francisco, CA 94080 Attention: Chief Financial Officer

With a copy to: Assembly Biosciences, Inc.
11711 N. Meridian Street, Suite 310
Carmel, IN 46032
Attention: General Counsel

10.2 [Intentionally Omitted]

10.3 [Intentionally Omitted]

10.4 **Furniture**. During the Term, Sub-Subtenant shall have the right to use the furniture that is located within the Fourth Floor Premises as of the Delivery Date with respect to the first Delivery Portion thereof (the "***Leased Furniture***"). Sub-Subtenant shall accept the Leased Furniture in its "as-is" condition as of such Delivery Date, without any representation or warranty from Sub-Sublandlord, express or implied (including, without limitation, any warranty of merchantability, warranty of quality, warranty of fitness for a particular purpose, warranty against interference, or warranty against infringement of any patent, copyright, trademark, trade secret or other proprietary rights of a third party). Sub-Subtenant shall maintain the Leased Furniture in the condition received as of the Delivery Date (reasonable wear and tear excepted). Sub-Sublandlord shall have no obligation to maintain, repair or replace the Leased Furniture. Upon the expiration or earlier termination of this Sub-Sublease: (a) Sub- Subtenant shall return to Sub-Sublandlord the items of Leased Furniture to be described by Sub-Sublandlord on or before the Delivery Date with respect to the first Delivery Portion of the Fourth Floor Premises (the "***Returned Leased Furniture***") in the condition received as of such Delivery Date, reasonable wear and tear excepted, and shall repair or replace any Returned Leased Furniture to the extent necessary to return the Returned Leased Furniture to Sub-Sublandlord in such condition and (b) Sub-Subtenant shall dispose of all Leased Furniture other than the Returned Leased Furniture in compliance with applicable law.

10.5 **Removal of Personal Property**. All articles of personal property, and all business and trade fixtures, machinery and equipment (installed by Sub-Subtenant and that can be removed without damage to the 331 Building or negatively impacting building systems unless Sub-Subtenant repairs any such damage or mitigates any negative impact), cabinet work, furniture and movable partitions (collectively, the "***Sub-Subtenant's Property***"), if any, owned or installed by Sub-Subtenant at its expense in the Premises shall be and remain the property of Sub-Subtenant and may be removed by Sub-Subtenant at any time, provided that Sub-Subtenant, at its expense, shall repair any damage to the Premises caused by such removal or by the original installation. Any articles of personal property, or all business and trade fixtures, machinery and equipment, cabinet work, furniture (including the Leased Furniture) and movable partitions provided by Sub-Sublandlord shall remain the property of Sub-Sublandlord, and Sub-Subtenant shall not remove any of them from the Premises without the prior written consent of Sub-Sublandlord; provided, that upon the expiration of this Sub-Sublease on the Expiration Date, (i) the Leased Furniture that is not Returned Furniture shall become the property of Sub-Subtenant

and (ii) Sub-Subtenant shall, at Sub-Subtenant's expense, remove such Leased Furniture that is not Returned Furniture from the Premises.

10.6 **Waiver**. The waiver of either Party of any agreement, condition or provision contained herein or any provision incorporated herein by reference shall not be deemed to be a waiver of any subsequent breach of the same or any other agreement, condition or provision, nor shall any custom or practice which may evolve between the Parties in the administration of the terms hereof be construed to waive or to lessen the right of a Party to insist upon the performance by the other Party in strict accordance with said terms. The subsequent acceptance of Rent hereunder by Sub-Sublandlord shall not be deemed to be a waiver of any preceding breach by Sub-Subtenant of any agreement or condition of this Sub-Sublease or the same incorporated herein by reference, other than the failure of Sub-Subtenant to pay the particular Rent so accepted, regardless of Sub-Sublandlord's knowledge of such preceding breach at the time of acceptance of such Rent.

10.7 **Complete Agreement**. Except for the Consents and that certain Mutual Non- Disclosure Agreement by and between Sub-Subtenant and Sub-Sublandlord dated as of June 20, 2018 (the "*Confidentiality Agreement*"), this written Sublease, together with all exhibits hereto, contains all the representations and the entire understanding between the Parties with respect to the subject matter hereof. There are no oral agreements between Sub-Sublandlord and Sub-Subtenant affecting this Sub-Sublease, and this Sub-Sublease supersedes and cancels any and all previous negotiations, arrangements, brochures, agreements and understandings, if any, between Sub-Sublandlord and Sub-Subtenant or displayed by Sub-Sublandlord, its agents or real estate brokers to Sub-Subtenant with respect to the subject matter of this Sub-Sublease, the Premises or the 331 Building. There are no representations between Sub-Sublandlord and Sub-Subtenant other than those contained in or incorporated by reference into this Sub-Sublease.

11. Indemnification; Exculpation.

11.1 **Non-Liability Of Sub-Sublandlord**. None of Master Landlord, Sublandlord and Sub-Sublandlord shall be liable to Sub-Subtenant, and Sub-Subtenant hereby waives and releases all Claims against Master Landlord, Sublandlord and Sub-Sublandlord and each of their respective partners, officers, directors, employees, trustees, successors, assigns, agents, servants, affiliates, representatives, and contractors (collectively, herein "***Released Affiliates***") for injury or damage to any person or property occurring or incurred in connection with the use of the Premises by Sub-Subtenant or any invitees, sub-sublessees, licensees, assignees, agents, employees or contractors of Sub-Subtenant. Without limiting the foregoing, none of Master Landlord, Sublandlord, Sub-Sublandlord nor any of the Released Affiliates shall be liable for and there shall be no abatement of Rent, except to the extent (i) – (iii) was caused by the negligence or willful misconduct of Master Landlord, Sublandlord or Sub-Sublandlord in the performance of their respective obligations under this Sub-Sublease, the Sublease, or the Master Lease, for: (i) any damage to Sub-Subtenant's property stored with or entrusted to Master Landlord, Sublandlord, Sub-Sublandlord or any of the Released Affiliates, or (ii) loss of or damage to any property by theft or any other wrongful or illegal act, or (iii) any injury or damage to persons

or property resulting from fire, explosion, falling plaster, steam, gas, electricity, water or rain which may leak from any part of the Premises or from the pipes, appliances, appurtenances or plumbing works therein or from the roof, street or sub-surface or from any other place or resulting from dampness or any other cause whatsoever or from the acts or omissions of other sublessees, occupants or other visitors to the Premises or from any other cause whatsoever, or (iv) any latent or other defect in the Premises. Notwithstanding anything to the contrary set forth herein, in the Sublease or in the Master Lease, in no event shall Sub-Sublandlord ever be liable to Sub-Subtenant for (and Sub-Subtenant hereby waives any right to recover from Sub-Sublandlord for) any lost profits, business interruption or any form of consequential, special or punitive damages.

11.2 **Non-Liability of Sub-Subtenant**. Notwithstanding anything to the contrary set forth herein, in the Sublease or in the Master Lease, in no event shall Sub-Subtenant ever be liable to Sub-Sublandlord for (and Sub-Sublandlord hereby waives any right to recover from Sub-Subtenant for) any lost profits, business interruption or any form of consequential, special or punitive damages, except arising out of a holdover by Sub-Subtenant after expiration or earlier termination of the Sub-Sublease, as described in Section 9.5 hereof.

11.3 **Indemnification of Sublandlord; Indemnification of Master Landlord**. Sub-Subtenant shall indemnify, defend, protect and hold Sub-Sublandlord, Sublandlord, Master Landlord's managing agent, Master Landlord and their respective members, partners, shareholders, officers, directors, agents, employees and contractors (collectively, the "***Indemnified Parties***"), harmless from and against any and all liability for all Claims, including, without limitation, reasonable attorneys' fees and costs, incurred by Sub-Sublandlord or asserted against Sub-Sublandlord and occurring within the Premises or arising in connection with (i) the use of, or activities in or about, the Premises (including, without limitation, the use, occupancy and enjoyment of the Property) by Sub-Subtenant or any invitees, sublessees, licensees, assignees, agents, employees or contractors of Sub-Subtenant or holding under Sub-Subtenant, (ii) the act, negligence, fault or omission (with respect to omissions, of any act required under this Sub-Sublease) of Sub-Subtenant, its agents, servants, contractors, employees, representatives, licensees or invitees, or (iii) Sub-Subtenant's actions under this Sub-Sublease or material breach of this Sub-Sublease, including, without limitation, Claims arising out of (1) Sub-Subtenant's direct communications with Master Landlord or Sublandlord (provided Sub-Sublandlord has satisfied its obligations under this Sub-Sublease regarding communication with Master Landlord or Sublandlord for the benefit of Sub-Subtenant) or (2) Sub-Subtenant's breach of Section 5.2. Notwithstanding any provision of this Section 11.3 to the contrary, the indemnification contained in this Section 11.3 shall not apply to Claims to the extent resulting from the negligence or willful misconduct or negligent omission of the party claiming indemnification or its agents, employees or contractors. Sub-Subtenant will give Sub-Sublandlord prompt notice of any casualty or accident in, on or about the Premises. The provisions of this Section 11.3 shall survive the expiration or earlier termination of this Sub-Sublease.

11.4 **Indemnification of Sub-Subtenant**. Sub-Sublandlord shall indemnify, defend and hold Sub-Subtenant and its members, partners, shareholders, officers,

directors, agents, employees and contractors harmless from and against any and all liability for all Claims, including, without limitation, reasonable attorneys' fees and costs, incurred by Sub-Subtenant or asserted against Sub-Subtenant to the extent solely arising out of the negligence or willful misconduct or negligent omission by Sub-Sublandlord or its agents, employees or contractors. Notwithstanding any provision of this Section 11.4 to the contrary, the indemnification contained in this Section 11.4 shall not apply to Claims to the extent resulting from the negligence or willful misconduct or negligent omission of the Sub-Subtenant, the party claiming indemnification or any of their respective agents, employees or contractors. The provisions of this Section 11.4 shall survive the expiration or earlier termination of this Sub-Sublease.

11.5 Sublandlord Default; Refusal of Consents. Notwithstanding any provision of this Sub-Sublease to the contrary, but subject to Sections 9.1.1(a) and 9.1.3(b) and 9.1.4 above, (a) Sub-Sublandlord shall not be liable or responsible in any way for any loss, damage, cost, expense, obligation or liability suffered by Sub-Subtenant by reason or as the result of any breach, default or failure to perform by the Sublandlord under the Sublease (provided the same do not arise from the failure of Sub-Sublandlord to perform Sub-Sublandlord's covenants, agreements, terms, provisions or conditions set forth in the Sublease or Sub-Subtenant's failure to perform Sub-Subtenant's covenants, agreements, terms, provisions or conditions set forth in this Sub-Sublease), and (b) if Sublandlord does not to grant Sub-Subtenant its consent or approval for any action or circumstances requiring Sublandlord's approval, Sub-Sublandlord shall be released from any obligation to grant its consent or approval with respect thereto.

11.6 Master Landlord Default; Refusal of Consents. Notwithstanding any provision of this Sub-Sublease to the contrary, but subject to Sections 9.1.1(b) and 9.1.3(a), (a) Sub-Sublandlord shall not be liable or responsible in any way for any loss, damage, cost, expense, obligation or liability suffered by Sub-Subtenant by reason or as the result of any breach, default or failure to perform by the Master Landlord under the Master Lease (provided the same do not arise from Sub-Subtenant's failure to perform Sub-Subtenant's covenants, agreements, terms, provisions or conditions set forth in this Sub-Sublease), including without limitation, in any case where services, utilities, repairs, maintenance or other performance is to be rendered by Master Landlord with respect to the Premises under the Master Lease and Master Landlord either fails to do so or does so in an improper, negligent, inadequate or otherwise defective manner, and (b) if Master Landlord does not to grant Sub-Subtenant its consent or approval for any action or circumstances requiring Master Landlord's approval, Sub-Sublandlord shall be released from any obligation to grant its consent or approval with respect thereto.

12. Security Deposit. Concurrent with Sub-Subtenant's execution of this Sub-Sublease, Sub-Subtenant shall deposit with Sub-Sublandlord a security deposit (the "***Security Deposit***") in the amount of Five Hundred Fifty-Two Thousand Nine Hundred Eighty-Six and 74/100 Dollars ($552,986.74). The Security Deposit shall be held by Sub-Sublandlord as security for the faithful performance by Sub-Subtenant of all the terms, covenants, and conditions of this Sub-Sublease to be kept and performed by Sub-Subtenant during the Term. If Sub-Subtenant

defaults with respect to any provisions of this Sub-Sublease, including, but not limited to, the provisions relating to the payment of Rent, Sub-Sublandlord may, but shall not be required to, use, apply or retain all or any part of the Security Deposit for the payment of any Rent or any other sum in default, or for the payment of any amount that Sub-Sublandlord may spend or become obligated to spend by reason of Sub-Subtenant's default, or to compensate Sub-Sublandlord for any other loss or damage that Sub-Sublandlord may suffer by reason of Sub-Subtenant's default. If any portion of the Security Deposit is so used or applied, Sub-Subtenant shall, within five (5) business days after written demand therefor, deposit cash with Sub-Sublandlord in an amount sufficient to restore the Security Deposit to its original amount, and Sub-Subtenant's failure to do so shall be a default under this Sub-Sublease. Except with respect to any amount of the Security Deposit that Sub-Sublandlord reasonably expects to spend to remedy any failure by Sub-Subtenant to fully perform its obligations under this Sub-Sublease, the Security Deposit, or any balance thereof, shall be returned to Sub-Subtenant, or, at Sub-Sublandlord's option, to the last assignee of Sub-Subtenant's interest hereunder, within sixty (60) days following the expiration of the Term. Sub-Subtenant shall not be entitled to any interest on the Security Deposit. Sub-Subtenant hereby waives the provisions of Section 1950.7 of the California Civil Code. Sub-Subtenant also waives all other provisions of law, now or hereafter in force, which provide that Sub-Sublandlord may claim from a security deposit only those sums reasonably necessary to remedy defaults in the payment of rent, to repair damage caused by Sub-Subtenant or to clean the Premises, it being agreed that Sub-Sublandlord may, in addition, claim those sums reasonably necessary to compensate Sub-Sublandlord for any other loss or damage, foreseeable or unforeseeable, caused by the acts or omissions of Sub-Subtenant or any officer, employee, agent, contractor or invitee of Sub-Subtenant.

13. **Abatement for Failure of Services**. If and to the extent that Sub-Sublandlord receives abatement of the rent or other charges required to be paid by Sub-Sublandlord under the Sublease with respect to the Premises in accordance with the Sublease, Sub-Sublandlord will abate the same proportion of Sub-Subtenant's Rent hereunder. This provision shall not reduce or mitigate the obligation of Sub-Sublandlord to make good faith, commercially reasonable efforts to cause (a) Sublandlord to comply with its obligations under the Sublease as set forth in Section 9.1.1(a) hereof and (b) Master Landlord to comply with its obligations under the Master Lease as set forth in Section 9.1.1(b) hereof.

14. **Miscellaneous**.

14.1 **Counterparts**. This Sub-Sublease may be executed in one or more counterparts by the Parties. All counterparts shall be construed together and shall constitute one agreement and delivery of PDF or other electronic versions thereof shall have the same force and effect as delivery of originals. However, notwithstanding any such exchange of electronic signatures, each of Sub-Sublandlord and Sub-Subtenant agree promptly to deliver original hard copies of this Sub-Sublease and the Consents to the other Party, the Sublandlord or Master Landlord upon request.

14.2 **Modification**. This Sub-Sublease may not be modified in any respect except by a document in writing executed by both Parties or their respective successors or assigns.

14.3 **Attorneys' Fees**. If either Party brings an action or other proceeding against the other to enforce, protect, or establish any right or remedy created under or arising out of this Sub-Sublease, the prevailing Party shall be entitled to recover from the other Party, all costs, fees and expenses, including, without limitation, reasonable attorneys' fees, accounting fees, expenses, and disbursements, incurred or sustained by such prevailing Party in connection with such action or proceeding (including, but not limited to, any appellate proceedings relating thereto) or in connection with the enforcement of any judgment or award rendered in such proceeds. The prevailing Party's rights to recover its costs, fees and expenses, and any award thereof, shall be separate from, shall survive, and shall not be merged with any judgment.

14.4 **Binding Effect**. The obligations of this Sub-Sublease shall be binding on and inure to the benefit of the Parties and their respective heirs, successors and assigns.

14.5 **Time Is Of Essence**. Time is of essence in respect of each and every term, covenant and condition of this Sub-Sublease.

14.6 **Governing Law**. This Sub-Sublease shall be governed by, and construed in accordance with, the laws of the State of California (without giving effect to any choice or conflict of law provision or rule (whether of the State of California or any other jurisdiction) that would cause the application of laws of any jurisdiction other than those of the State of California).

14.7 **Representations And Warranties Regarding Authority**. Sub-Subtenant and Sub-Sublandlord hereby represent and warrant to the other Party that (i) each person signing this Sub-Sublease on their behalf is duly authorized to execute and deliver this Sub-Sublease on their behalf, (ii) the execution, delivery and performance of this Sub-Sublease has been duly and validly authorized in accordance with the articles of incorporation, bylaws and other organizational documents of such Party, (iii) such Party is duly organized and in good standing under the laws of their State of incorporation and (iv) upon the execution and delivery of this Sub-Sublease, this Sub-Sublease shall be binding and enforceable against such Party in accordance with its terms.

14.8 **Confidentiality**. Sub-Sublandlord and Sub-Subtenant hereby agree that the information contained in this Sub-Sublease shall be held in strict confidence and none of the terms or conditions contained herein shall be disclosed to any person or entity, other than Master Landlord, Sublandlord and Sub-Sublandlord's and Sub-Subtenant's respective current or prospective attorneys, accountants, consultants, brokers, lenders, investors, acquirers, assignees and subtenants, all of whom (except the Master Landlord and Sublandlord) shall agree to the confidentiality of this Sub-Sublease. Sub-Subtenant and its agents shall avoid discussing with, or

disclosing to, any third parties (except those specifically listed above) any of the terms, conditions or particulars contained herein. This provision shall not be deemed breached if disclosure is required by applicable law or otherwise consented to in writing by the non-disclosing party.

14.9 Securities Filings. Notwithstanding anything to the contrary in this Sub-Sublease or the Confidentiality Agreement (but expressly subject to Sublandlord's and Master Landlord's prior written acknowledgment and consent), in the event either Party or any of its affiliates (such party, a "Filing Party") proposes to file with the Securities and Exchange Commission or the securities regulators of any state or other jurisdiction a registration statement or any other disclosure document which describes or refers to this Sub-Sublease under the Securities Act of 1933, as amended, the Securities Exchange Act, of 1934, as amended, any other applicable securities law or the rules of any national securities exchange, the Filing Party shall be entitled to file (i) a copy of this Sub-Sublease with those redactions reasonably required by the other Party, (ii) a copy of the Sublease with those redactions reasonably required by Sub-Sublandlord or Sublandlord and (iii) an unredacted copy of the Original Master Lease and a copy of the Master Amendment with those redactions of the Master Amendment reflected on Exhibit A-1 attached hereto. For the avoidance of doubt, no Sub-Sublandlord, Sublandlord or Master Landlord consent is required in connection with a filing of a current report on Form 8-K with the Securities and Exchange Commission that summarizes the terms of this Sub-Sublease; provided, that Sub-Subtenant shall provide Sub-Sublandlord with a reasonable opportunity to review and comment on such summary, and Sub-Subtenant shall consider in good faith Sub-Sublandlord's comments thereto.

14.10 Publicity. Subject to the Incorporation Provisions, Section 5 of the Master Amendment is hereby incorporated herein by reference, except for the sixth (6^{th}) and seventh (7^{th}) sentences thereof. In addition, Sub-Subtenant and Sub-Sublandlord each hereby acknowledges and agrees that, except as may be necessary to implement or otherwise effectuate the terms of this Sub-Sublease including but not limited to Section 14.9, (i) Sub-Subtenant shall not use, without Sub-Sublandlord's prior written approval, which may be withheld in Sub-Sublandlord's sole discretion, the name of Sub-Sublandlord, Sublandlord or Master Landlord, their respective affiliates, trade names, trademarks or trade dress, products, or any signs, markings, or symbols from which a connection to Sub-Sublandlord, Sublandlord or Master Landlord, in Sub-Sublandlord's absolute and sole discretion, may be reasonably inferred or implied, in any manner whatsoever, including, without limitation, press releases, marketing materials, or advertisements; and (ii) Sub-Sublandlord shall not use, without Sub-Subtenant's prior written approval, which may be withheld in Sub-Subtenant's sole discretion, the name of Sub-Subtenant, its affiliates, trade names, trademarks or trade dress, products, or any signs, markings, or symbols from which a connection to Sub-Subtenant, in Sub-Subtenant's absolute and sole discretion, may be reasonably inferred or implied, in any manner whatsoever, including, without limitation, press releases, marketing materials, or advertisements.

14.11 Consents.

14.11.1 **Consent of Sublandlord**. This Sub-Sublease is conditioned upon, and shall not take effect until, the first business day following the date after which both the written consent of the Sublandlord hereto (the "***Sublandlord Consent***") and the Master Landlord Consent (the "***Master Landlord Consent***", as provided in subsection 14.11.2 below, and together with the Sublandlord Consent, the "***Consents***") have been received in each case by Sub-Sublandlord and Sub-Subtenant, whichever is later. Sub-Subtenant hereby agrees for the benefit of Sub-Sublandlord and Sublandlord (as an express intended third party beneficiary) that (a) other than as expressly and specifically agreed to in writing by Sublandlord (in the Sublandlord Consent or other written agreement), no act, consent, approval or omission of Sublandlord pursuant to this Sub-Sublease shall (i) constitute any form of recognition of Sub-Subtenant as the direct tenant of Sublandlord, (ii) create any form of contractual duty or obligation on the part of Sublandlord in favor of Sub-Subtenant or (iii) waive, affect or prejudice in any way Sublandlord's right to treat this Sub-Sublease and Sub-Subtenant's rights to the Premises as being terminated upon any termination of the Sublease, (b) Sublandlord shall have the absolute right to evict Sub-Subtenant, and all parties holding under Sub-Subtenant, from the Premises upon any termination of the Sublease, and (c) without limiting the generality of (a) and (b) above (or Sub-Sublandlord's obligations to maintain the Sublease pursuant to this Sub-Sublease), a voluntary or other surrender of the Sublease or a termination of the Sublease shall not result in a merger but shall, at the option of Sublandlord, operate either as an assignment to Sublandlord of this Sub-Sublease, or a termination of this Sub-Sublease. Notwithstanding the foregoing, Sub-Sublandlord agrees to request recognition and non-disturbance protection for Sub-Subtenant's benefit from Sublandlord. Further, it is acknowledged that Sub-Subtenant may wish to obtain certain additional rights directly from Sublandlord with respect to Sub-Subtenant's use and occupancy of the Premises. Any such agreement with Sublandlord that would bind Sub-Sublandlord or otherwise modify or affect Sub-Sublandlord's rights under the Sublandlord or this Sub-Sublease shall be subject to Sub-Sublandlord's prior written consent. Notwithstanding anything to the contrary in this Sub-Sublease, Sub-Subtenant shall have the right to terminate this Sub-Sublease if the Sublandlord Consent is not executed and delivered by the date that is ninety (90) days after the date of full execution and delivery of this Sub-Sublease. Sub-Sublandlord shall make commercially reasonable efforts to obtain the Sublandlord Consent from Sublandlord.

14.11.2 **Consent of Master Landlord**. Sub-Subtenant hereby agrees for the benefit of Sub-Sublandlord and Master Landlord (as an express intended third party beneficiary) that (a) other than as expressly and specifically agreed to in writing by Master Landlord (in the Master Landlord Consent or other written agreement), no act, consent, approval or omission of Master Landlord pursuant to this Sub-Sublease shall (i) constitute any form of recognition of Sub-Subtenant as the direct tenant of Master Landlord, (ii) create any form of contractual duty or obligation on the part of Master Landlord in favor of Sub-Subtenant or (iii) waive, affect or prejudice in any way Master Landlord's right to treat this Sub-Sublease and Sub-Subtenant's rights to the Premises as being terminated upon any termination of the Master Lease, (b) Master Landlord shall have the absolute right to evict Sub-Subtenant, and all parties holding under Sub-Subtenant, from the Premises upon any termination of the Master Lease, and (c) without limiting the generality of (a) and (b) above (or Sub-Sublandlord's obligations to maintain the

Master Lease pursuant to this Sub-Sublease), a voluntary or other surrender of the Master Lease or a termination of the Master Lease shall not result in a merger but shall, at the option of Master Landlord, operate either as an assignment to Master Landlord of this Sub-Sublease, or a termination of this Sub-Sublease. Notwithstanding the foregoing, Sub-Sublandlord agrees to request recognition and non-disturbance protection for Sub-Subtenant's benefit from Master Landlord. Further, it is acknowledged that Sub-Subtenant may wish to obtain certain additional rights directly from Master Landlord with respect to Sub-Subtenant's use and occupancy of the Premises. Any such agreement with Master Landlord that would bind Sub-Sublandlord or otherwise modify or affect Sub-Sublandlord's rights under the Master Lease, the Sublease or this Sub-Sublease shall be subject to Sub-Sublandlord's prior written consent. Notwithstanding anything to the contrary in this Sub-Sublease, Sub-Subtenant shall have the right to terminate this Sub-Sublease if the Master Landlord Consent is not executed and delivered by the date that is ninety (90) days after the date of full execution and delivery of this Sub-Sublease. Sub-Sublandlord shall make commercially reasonable efforts to obtain the Master Landlord Consent from Master Landlord.

14.12 **Cooperation**. Each Party shall reasonably cooperate with the other Party with respect to seeking any necessary approvals from the Sublandlord and the Master Landlord, including without limitation approval of this Sub-Sublease. Sub-Subtenant and Sub-Sublandlord each agree to complete and return any and all forms requested by Sub-Sublandlord, Sublandlord or Master Landlord, as applicable, from time to time for administrative purposes related to this Sub-Sublease within five (5) business days of such Party's written request.

14.13 **Certified Access Specialist**. For purposes of Section 1938 of the California Civil Code, Sub-Sublandlord hereby discloses to Sub-Subtenant, and Sub-Subtenant hereby acknowledges, that the Real Property, the 331 Building and the Premises have not undergone inspection by a Certified Access Specialist. As required by Section 1938(e) of the California Civil Code, Sub-Sublandlord hereby states as follows: "A Certified Access Specialist (CASp) can inspect the subject premises and determine whether the subject premises comply with all of the applicable construction-related accessibility standards under state law. Although state law does not require a CASp inspection of the subject premises, the commercial property owner or lessor may not prohibit the lessee or tenant from obtaining a CASp inspection of the subject premises for the occupancy or potential occupancy of the lessee or tenant, if requested by the lessee or tenant. The parties shall mutually agree on the arrangements for the time and manner of the CASp inspection, the payment of the fee for the CASp inspection, and the cost of making any repairs necessary to correct violations of construction-related accessibility standards within the premises." In furtherance of the foregoing, Sub-Sublandlord and Sub-Subtenant hereby agree as follows: (a) any CASp inspection requested by Sub-Subtenant shall be conducted at Sub-Subtenant's sole cost and expense by a CASp approved in advance by Sub-Sublandlord; (b) pursuant to this Section 14.13, if as a result of anything done by

or for Sub-Subtenant in its use or occupancy of the Premises, repairs to the Premises are required to correct violations of construction-related accessibility standards, then Sub-Subtenant, at its cost, shall be responsible for making such repairs; and (c) pursuant to this Section 14.13, if as a result of anything done by or for Sub-Subtenant in its use or occupancy of the Premises, repairs to the 331 Building (outside the Premises) to correct violations of construction-related accessibility standards, then Sub-Subtenant shall, at Sub-Sublandlord's option, either perform such repairs at Sub-Subtenant's sole cost and expense or reimburse Sub-Sublandlord upon demand, as additional rent payable hereunder, for the cost to Sub-Sublandlord of performing such repairs.

14.14 Nonresidential Building Energy Use Disclosure Requirement Compliance. Sub-Subtenant hereby acknowledges that Sub-Sublandlord may be required to disclose to utility providers and other third parties certain information concerning the energy performance of the Premises' recent historical energy use data pursuant to California Public Resources Code Section 25402.10 and the regulations adopted pursuant thereto (collectively, the "***Energy Disclosure Requirements***"). Sub-Sublandlord shall not be liable to Sub-Subtenant for the accuracy or content of the information provided by or to utility providers or third parties pursuant to the Energy Disclosure Requirements. Sub-Subtenant acknowledges and agrees that (i) Sub-Sublandlord makes no representation or warranty regarding the energy performance of the Premises, and (ii) the energy performance of the Premises may vary depending on future condition, occupancy and/or use of the Premises. Further, Sub-Subtenant hereby releases Sub-Sublandlord from any and all losses, costs, damages, expenses and/or liabilities relating to, arising out of and/or resulting from the Energy Disclosure Requirements. Sub-Subtenant hereby agrees that, upon request from Sub-Sublandlord, Sub-Subtenant shall provide Sub-Sublandlord with any energy usage data for the Premises, including, without limitation, copies of utility bills for the Premises that are in Sub-Subtenant's possession.

14.15 Survival. Without limiting survival provisions which would otherwise be implied or construed under applicable law, the provisions of Sections 3.3.3, 3.3.4, 7, 9.1.3, 9.5, 9.12, 9.14, 9.33, 11.1, 11.2, 11.3, 11.4, 11.5, 11.6, and 14.14 hereof shall survive the expiration or earlier termination of this Sub-Sublease with respect to matters occurring or liabilities accruing prior to the expiration or earlier termination of this Sub-Sublease. This Section 14.15 shall survive the expiration or earlier termination of this Sub-Sublease.

14.16 Expansion Option.

14.16.1 Expansion Option; Expansion Space. Sub-Sublandlord grants to Sub-Subtenant the option (the "***Expansion Option***") to expand the Premises in accordance with and subject to the provisions of this Section 14.16. The Expansion Option shall apply to the second (2^{nd}) floor of the 331 Building (the "***Expansion Space***") consisting of approximately 33,137 rentable square feet.

14.16.2 Exercise of Expansion Option. Sub-Subtenant may exercise the Expansion Option only by giving unconditional, unequivocal and irrevocable written notice of such exercise (the "***Expansion Notice***") to Sub-Sublandlord no later than December 31, 2019. Time is of the essence for the delivery of the Expansion Notice by December 31, 2019.

14.16.3 Terms and Conditions Applicable to Exercise of Expansion Option. The Expansion Option shall be personal to the originally named Sub-Subtenant and shall be exercisable only by the originally named Sub-Subtenant (and not any assignee, sublessee, or other transferee of Sub-Subtenant's interest in this Sub-Sublease). The originally named Sub-Subtenant may exercise the Expansion Option only if that Sub-Subtenant occupies the entire Premises as of the last date on which that Sub-Subtenant may properly exercise the Expansion Option. Sub-Subtenant shall not have the right to exercise the Expansion Option if Tenant is in default under this Sub-Sublease as of the date of the attempted exercise or (at Sub-Sublandlord's option) as of the Expansion Space Delivery Date.

14.16.4 Delivery of Expansion Space. If Sub-Subtenant timely and validly exercises the Expansion Option, Sub-Sublandlord shall deliver the Expansion Space to Sub-Subtenant on a date selected by Sublandlord (the "***Expansion Space Delivery Date***") that is no later than sixty (60) days after the date of the Expansion Notice.

14.16.5 Terms and Conditions Applicable to Expansion Space. If Sub-Subtenant timely and validly exercises the Expansion Option, then, beginning on the Expansion Space Delivery Date and continuing for the balance of the Term, the Expansion Space shall be part of the Premises under this Sub-Sublease (so that the term "Premises" in this Sub-Sublease shall refer to the space in the original Premises, as originally described in this Sub-Sublease, plus the Expansion Space). Sub-Subtenant's lease of the Expansion Space shall be on the same terms and conditions as affect the original Premises. Sub-Subtenant's obligation to pay Rent with respect to the Expansion Space shall begin on the Expansion Space Delivery Date.

14.16.6 As-Is Condition. If Sub-Subtenant timely and validly exercises the Expansion Option, Sub-Subtenant shall lease the Expansion Space in its "as-is" condition as of the Expansion Space Delivery Date.

14.16.7 Confirmation of Terms. If Sub-Subtenant timely and validly exercises the Expansion Option, Sub-Sublandlord and Sub-Subtenant shall, within ten (10) days after Sub-Sublandlord's delivery of the Expansion Space to Sub-Subtenant, confirm in writing the addition of the Expansion Space to the Premises on the terms and conditions set forth in this Section 14.16. The written confirmation shall confirm: (i) the actual Expansion Space Delivery Date, (ii) the rentable square footage of the Premises (including the Expansion Space), (iii) the Base Rent and (iv) any other term that either Party reasonably requests be confirmed with respect to the Expansion Space.

14.16.8 Adjustment for Lease of Expansion Space to Third Party. If the Expansion Option terminates or expires and Sub-Sublandlord sub-subleases the Expansion Space to any person or entity other than Sub-Subtenant, the rentable square feet of the Complete Premises shall be deemed to be decreased by 2,397 rentable square feet for as long as the Expansion Space is sub-subleased to such other person or entity.

14.17 Right of First Refusal.

14.17.1 Right of First Refusal. Subject to the receipt of any consents required pursuant to the Master Lease, including the Master Landlord Consent, and the Sublease, including the Sublandlord Consent, Sub-Sublandlord hereby grants to the originally named Sub-Subtenant a right of first refusal with respect to any sub-sublease of any portion of the Subleased Premises located in the 331 Building (collectively, the "***First Refusal Space***").

14.17.2 Procedure. Sub-Sublandlord shall notify Sub-Subtenant (the "***First Refusal Notice***") from time to time when Sub-Sublandlord has entered into a letter of intent with a bona-fide prospective sub-subtenant that incorporates all of the basic terms of the transaction that Sub-Sublandlord is willing to accept and is for the sublease of any First Refusal Space (a "***LOI***"). The First Refusal Notice shall describe the space which is the subject of the LOI and shall set forth the material economic terms and conditions (including the proposed sublease term) set forth in the LOI (collectively, the "***LOI Terms***").

14.17.3 Procedure for Acceptance. If Sub-Subtenant wishes to exercise Sub-Subtenant's right of first refusal with respect to the space described in the First Refusal Notice, then within seven (7) days after delivery of the First Refusal Notice to Sub-Subtenant (the "***Election Date***"), Sub-Subtenant shall deliver written notice to Sub-Sublandlord ("***Sub-Subtenant's Election Notice")*** pursuant to which Sub-Subtenant shall elect either to (i) lease the entire space described in the First Refusal Notice upon the LOI Terms set forth in the First Refusal Notice or (ii) refuse to lease such space identified in the First Refusal Notice, in which event Sub-Sublandlord may lease such space to any person or entity on any terms that Sublandlord desires; provided, that (1) the space leased to such person or entity shall not be materially different than the space identified in the First Refusal Notice and (2) the rental rate is not less than ninety percent (90%) of the rental rate listed in the First Refusal Notice (such terms, the "***Permitted Leasing Terms***"). If Sub-Subtenant does not so respond in writing to Sub-Sublandlord's First Refusal Notice by the Election Date, Sub-Subtenant shall be deemed to have elected the option described in clause (ii) above. Notwithstanding anything herein to the contrary, Sub-Subtenant may only exercise its right of first refusal with respect to all of the space described in the First Refusal Notice, and not a portion thereof. Time is of the essence for the delivery of the Sub-Subtenant's Election Notice within seven (7) days after delivery of the First Refusal Notice to Sub-Subtenant.

14.17.4 Lease of First Refusal Space. If Sub-Subtenant timely exercises Sub-Subtenant's right to lease the First Refusal Space as set forth herein, Sub-Sublandlord and Sub-Subtenant shall execute at Sub-Sublandlord's sole election, an amendment to this Sub-Sublease incorporating into this Sub-Sublease the LOI Terms applicable to such First Refusal Space.

14.17.5 Termination of Right of First Refusal. If Sub-Subtenant elects not to lease the First Refusal Space (or is deemed to have elected not to lease the First

Refusal Space), then the Sub-Sublandlord will have 180 days to execute a lease with a prospective tenant. Sub-Sublandlord shall have no obligation to reoffer the First Refusal Space to Tenant during the 180-day period so long as, during the negotiation of the lease with any prospective tenant, the terms of such lease are consistent with the Permitted Leasing Terms. However, if a lease is not executed within 180 days or if the terms of such lease negotiated within the 180-day period are inconsistent with the Permitted Leasing Terms, then the space shall be reoffered to Sub-Subtenant under this right of first refusal. The right of first refusal granted herein shall terminate as to a particular offer of First Refusal Space upon the execution of a sub-sublease with a third party pursuant to the Permitted Leasing Terms. The right of first refusal shall remain in effect for any subsequent availability of all or any portion of the First Refusal Space not subject to a prior First Refusal Notice and an executed sub-sublease. Sub-Sublandlord shall not have any obligation to deliver the First Refusal Notice if, as of the date Sub-Sublandlord would otherwise deliver the First Refusal Notice to Sub-Subtenant, an Event of Default has occurred and is continuing or Sub-Subtenant does not physically occupy the entire Premises. In addition, at Sub-Sublandlord's option, if Sub-Subtenant has previously delivered Sub-Subtenant's Election Notice in accordance with Section 14.7.3 and, as of the scheduled date of delivery of such First Refusal Space to Sub-Subtenant, an Event of Default has occurred and is continuing or Sub-Subtenant does not physically occupy the entire Premises Sub-Subtenant shall not have the right to lease the First Refusal Space.

[Remainder of page intentionally left blank; signatures on next page]

IN WITNESS WHEREOF, the parties hereto have hereunto set their hand on the date first above written.

SUB-SUBLANDLORD:

PROTHENA BIOSCIENCES INC,
a Delaware corporation

By: /s/ Karin Walker

Name: Karin Walker

Its: CAO

By: _____

Name: _____

Its: _____

SUB-SUBTENANT:

ASSEMBLY BIOSCIENCES, INC.,
a Delaware corporation

By: /s/ Graham Cooper

Name: Graham Cooper

Its: CFO/COO

By: /s/ Derek Small

Name: Derek Small

Its: CEO

EXHIBIT A-1

MASTER LEASE

(to be attached)

BUILD-TO-SUIT LEASE

Landlord: Slough BTC, LLC

Tenant: Tularik Inc.

Date: December 20, 2001

TABLE OF CONTENTS

BUILD-TO-SUIT LEASE

THIS BUILD-TO-SUIT LEASE ("Lease") is made and entered into as of December 20, 2001, by and between SLOUGH BTC, LLC, a Delaware limited liability company ("Landlord"), and TULARIK INC., a Delaware corporation ("Tenant").

THE PARTIES AGREE AS FOLLOWS:

1. PROPERTY

1.1 Lease of Buildings.

(a) Landlord leases to Tenant and Tenant hires and leases from Landlord, on the terms, covenants and conditions hereinafter set forth, the buildings (individually, a "Building" and collectively, the "Buildings") to be constructed pursuant to Article 5 hereof and Exhibit C attached hereto on a portion of the real property described in Exhibit A attached hereto (the "Property"), as follows: (i) a three-story office and laboratory building containing approximately 103,000 square feet (the "Phase IA Building"), to be located on the Property substantially as shown for the building designated "Building A" on the site plan attached hereto as Exhibit B (the "Site Plan"); (ii) a three-story office and laboratory building containing approximately 84,000 square feet (the "Phase IB Building"), to be located on the Property substantially as shown for the building designated "Building B" on the Site Plan; (iii) a four-story building containing approximately 93,200 square feet (and in no event less than 90,000 square feet) of office and laboratory space and approximately 5,000 square feet of ground-floor retail space (the "Phase II Building"), to be located on the Property substantially as shown for the building designated "Building E" on the Site Plan; and (iv) subject to final design and to receipt of all required governmental approvals, an enclosed connector bridge connecting the Phase IA Building to the Phase IB Building at the second-story level (the "Connector Bridge"). With respect to the governmental approvals described in clause (iv) of the preceding sentence, Landlord has advised Tenant that the additional square footage created by construction of the Connector Bridge will cause the Project to exceed the maximum square footage amount for which the Project is presently entitled and that, without limiting any other governmental approvals that may be required, a modification of the maximum square footage amount under the existing Project entitlements will therefore be necessary in order to permit construction of the Connector Bridge. Landlord shall pursue diligently and reasonably the design of the Connector Bridge and the securing of all governmental approvals and permits necessary for the construction of the Connector Bridge (other than the interior improvements therein, which shall be Tenant's responsibility as part of the Tenant Improvements), and Tenant shall cooperate diligently and reasonably with Landlord, in any respects reasonably requested by Landlord, in connection with the design and authorization of the Connector Bridge. For purposes of this Lease, the Connector Bridge shall generally be considered to be a part of the Phase IB Building, and the square footage of the Connector Bridge (which is not presently included in the estimated square footage figure used in this Lease for the Phase IB Building), determined in accordance with Section 1.1(d) of this Lease, shall be included in the square footage of the Phase IB Building for purposes of calculating Tenant's Minimum Rent, additional rent and Operating Expense obligations with respect to the Phase IB Building and the Tenant Improvement Allowance with respect to the Phase IB Building; provided, however, that the square footage of the Connector Bridge shall not be taken into account in determining the number of parking spaces allocated to Tenant or required to be paid for by Tenant pursuant to Section 21.20(b) of this Lease. All references in this Lease to the Phase II Building as being leased to Tenant hereunder shall be construed to refer solely to the office and laboratory portion of the Phase II Building and not to the ground-floor retail portion of such building. The Phase IA Building and the Phase IB Building (including the Connector Bridge) are sometimes hereinafter collectively referred to as the "Phase I Buildings." The Property is commonly known as Britannia Oyster Point (the "Center") and is located at Oyster Point Boulevard and Veterans Boulevard in the City of South San Francisco, County of San Mateo, State of California. The Buildings and the other improvements to be constructed on the Property pursuant to Article 5 hereof and Exhibit C attached hereto are sometimes referred to collectively herein as the "Improvements." The parking areas, driveways, sidewalks, landscaped areas and other portions of the Center that lie outside the exterior walls of the Buildings and of the other buildings to be constructed in the Center, as depicted on the Site

Plan and as hereafter modified by Landlord from time to time in accordance with the provisions of this Lease, are sometimes referred to herein as the "Common Areas."

(b) As an appurtenance to Tenant's leasing of the Buildings pursuant to Section 1.1(a), Landlord hereby grants to Tenant, for the benefit of Tenant and its employees, suppliers, shippers, customers and invitees, during the term of this Lease, the non-exclusive right to use, in common with others entitled to such use, (i) those portions of the Common Areas improved from time to time for use as parking areas, driveways, sidewalks, landscaped areas, or for other common purposes, and (ii) all easements, access rights and similar rights and privileges relating to or appurtenant to the Center and created or existing from time to time under any easement agreements, declarations of covenants, conditions and restrictions, or other written agreements now or hereafter of record with respect to the Center, subject however to any limitations applicable to such rights and privileges under applicable law, under this Lease and/or under the written agreements creating such rights and privileges.

(c) Tenant shall be entitled to install, in areas of the Property adjacent to one or more of the Buildings, in what would otherwise constitute Common Areas, at Tenant's sole expense and for the exclusive use of Tenant and its employees and invitees, subject to all of the conditions set forth in this paragraph (c), (1) a half-court basketball court and (2) an equipment yard. In no event shall Tenant be obligated to pay rent for the use of such areas, nor shall such areas be considered part of the Buildings or premises leased by Tenant for purposes of any calculations of rent or of Tenant's Operating Cost Share under this Lease, but for all other purposes (including, but not limited to, the purposes specifically identified in this paragraph (c)), such areas shall be considered part of the Buildings leased by Tenant under this Lease. Without limiting the generality of the foregoing, Tenant's construction and use of such basketball court and equipment yard shall be subject to the following requirements and restrictions: (i) the locations in which such basketball court and equipment yard are to be constructed shall be subject to Landlord's prior written consent, in Landlord's sole discretion; (ii) the plans and specifications for construction of all improvements constituting such basketball court and equipment yard shall be subject to Landlord's prior written consent, in Landlord's sole discretion, and such improvements shall otherwise be constructed in full compliance with the requirements applicable to Tenant's Work under Exhibit C attached hereto; (iii) the liability insurance to be carried by Tenant pursuant to Section 14.1(a) of this Lease shall cover, to Landlord's satisfaction, any claims and liabilities arising out of the use of such basketball court and equipment yard; (iv) Tenant shall ensure that the construction and use of such basketball court and equipment yard do not interfere with the use of any parking or driveway areas on the Property and do not create any visual or noise interference with the use and enjoyment of the Property by the other tenants thereof; (v) Tenant shall be solely responsible for the maintenance and repair of such basketball court and equipment yard, at Tenant's sole expense, as part of Tenant's maintenance obligations under Section 12.2 of this Lease; and (vi) Tenant shall take all such steps as Landlord in its reasonable discretion may require in order to restrict access to and use of such basketball court and equipment yard to Tenant's employees and invitees.

(d) All measurements of building areas under this Lease shall be made by Landlord's architect in accordance with the same formula applied by Landlord to the building areas for the other leased buildings in the Center, which formula consists of measurement from the exterior faces of exterior walls, from the dripline of any overhangs and, where applicable, from the centerline of any demising walls. In measuring interior space (relevant only to the determination of space actually being used or occupied by Tenant in the Phase II Building during the phase-in of Tenant's occupancy thereof), measurements involving any demising walls separating space actually used or occupied by Tenant from space not used or occupied by Tenant shall be made to the centerline of the demising wall.

1.2 Landlord's Reserved Rights. To the extent reasonably necessary to permit Landlord to exercise any rights of Landlord and discharge any obligations of Landlord under this Lease, Landlord shall have, in addition to the right of entry set forth in Section 16.1 hereof, the following rights: (i) to make changes to the Common Areas, including, without limitation, changes in the location, size or shape of any portion of the Common Areas, and to construct and/or relocate parking structures and/or parking spaces in the Center, but not materially decrease the number of parking spaces in the Center; (ii) to close temporarily any of the Common Areas for maintenance or other reasonable purposes, provided that reasonable parking and reasonable access to the Buildings remain available; (iii) to construct, alter or add to other buildings or improvements in the Center; (iv) to build in areas adjacent to the Center and to add

such areas to the Center; (v) to use the Common Areas while engaged in making additional improvements, repairs or alterations to the Center or any portion thereof; and (vi) to do and perform such other acts with respect to the Common Areas and the Center as may be necessary or appropriate; provided, however, that notwithstanding anything to the contrary in this Section 1.2, Landlord's exercise of its rights hereunder (x) shall not cause any material diminution of Tenant's rights, nor any material increase of Tenant's obligations, under this Lease, and (y) shall be conducted in such a manner as to minimize, to the extent reasonably possible, any adverse effect on Tenant's business operations in the Buildings (including, but not limited to, reasonable prior notice to Tenant of any pile-driving or other activities of Landlord that will cause significant noise or vibration in the Buildings).

2. TERM

2.1 Term; Rent Commencement Dates. The term of this Lease shall commence upon mutual execution of this Lease by Landlord and Tenant.

(a) Tenant's Minimum Rental, additional rent and Operating Expense obligations with respect to the Phase I Buildings shall commence on the earlier to occur of (i) the date which is one hundred eighty (180) days after the date Landlord delivers to Tenant a Structural Completion Certificate for each of the Phase I Buildings (or, if the Structural Completion Certificates for the two Phase I Buildings are delivered on different dates, the date Landlord delivers to Tenant the Structural Completion Certificate for the second of the two Phase I Buildings) pursuant to the Workletter attached hereto as Exhibit C (the "Workletter"), subject to any adjustments in such time period to the extent authorized or required under the provisions of such Workletter, or (ii) the date Tenant takes occupancy of and commences operation of its business in either of the Phase I Buildings, the earlier of such dates being herein called the "Phase I Rent Commencement Date"; provided, however, that in no event shall the Phase I Rent Commencement Date occur earlier than May 1, 2003, unless determined pursuant to clause (ii) of this sentence or unless an earlier date is hereafter mutually agreed upon in writing by Landlord and Tenant; and provided further, however, that if the Phase I Rent Commencement Date is determined pursuant to clause (ii) of this sentence as a result of Tenant's occupancy of and commencement of business operations in one of the two Phase I Buildings, then notwithstanding any other provisions of this Lease to the contrary, Tenant's Minimum Rental, additional rent and Operating Expense obligations with respect to the second of the Phase I Buildings and with respect to the Connector Bridge (regardless of whether the Phase IB Building is the first Phase I Building to be occupied by Tenant) shall not commence until the earlier to occur of the date described in clause (i) of this sentence or the date Tenant takes occupancy of and commences operation of its business in the second Phase I Building. Based on the estimated construction schedules attached hereto as Exhibit D, the parties presently estimate that the Phase I Rent Commencement Date shall occur on May 1, 2003.

(b) Tenant shall be entitled to occupy the Phase II Building in up to four (4) successive phases. The first such phase ("Phase IIA") shall consist of a minimum of 23,300 square feet of the Phase II Building. The second such phase ("Phase IIB") shall consist of at least that amount of space which, when added to the Phase IIA space, shall equal a minimum of 46,600 square feet of the Phase II Building. The third such phase ("Phase IIC") shall consist of at least that amount of space which, when added to the Phase IIA and Phase IIB spaces, shall equal a minimum of 69,900 square feet of the Phase II Building. The fourth such phase ("Phase IID") shall consist of the remainder, if any, of the non-retail portion of the Phase II Building. As to any of such phases, Tenant shall have the right to take and occupy a larger portion of the Phase II Building than the minimum space required for the applicable phase, in which event the space for the applicable phase shall be deemed to consist of the greater of the minimum required amount of space for such phase or the amount of space actually occupied by Tenant. Tenant shall not be deemed to be occupying any portion of the Phase II Building solely by reason of constructing interior improvements in such portion in connection with Tenant's intended future use and occupancy of such portion or by reason of maintaining insurance on or performing maintenance or repair work in such portion, but use of any portion of the Phase II Building for any other purpose by Tenant (including, but not limited to, any storage uses other than storage or staging of materials on a temporary basis in the course of construction) shall be deemed to constitute occupancy of such portion by Tenant. At least thirty (30) days prior to the applicable Rent Commencement Date for each phase of Tenant's occupancy of the Phase II Building as set forth in subparagraphs (i) through (iv) below, Tenant shall notify Landlord in

writing of the portion of the Phase II Building that Tenant intends to actually use and occupy during such phase. Tenant acknowledges, however, that if Tenant in fact uses a greater portion of the Phase II Building than specified in Tenant's notice to Landlord with respect to the applicable phase, then Tenant's Minimum Rental, additional rent and Operating Expense obligations with respect to Tenant's occupancy of the Phase II Building during such phase shall be controlled by the amount of space actually used or occupied by Tenant. Landlord shall have the right to inspect the Phase II Building from time to time prior to the Phase IID Rent Commencement Date, on not less than one (1) business day's prior notice to Tenant, to confirm and measure the amount of space actually being occupied by Tenant in the Phase II Building, and the measurement and calculation of such space actually being occupied by Tenant shall be made by Landlord's architect as contemplated in Section 1.1(d) of this Lease. On the Phase IIA Rent Commencement Date as hereinafter defined, all of Tenant's obligations under this Lease shall become applicable and effective in full with respect to all of the Phase II Building, except that the following obligations with respect to each phase of Tenant's occupancy of the Phase II Building shall become effective only on the respective Rent Commencement Date for such phase: (A) Tenant's Minimum Rental, additional rent and Operating Expense obligations with respect to such phase; (B) Tenant's obligations under Section 8.2 of this Lease with respect to real property taxes and assessments upon Improvements constructed by Landlord and located within such phase; (C) Tenant's obligation under Section 10.1 of this Lease to pay for utilities or services supplied to or consumed in or with respect to such phase, but only to the extent such utilities or services are consumed by or supplied at the request of Landlord or its agents, employees or contractors and the cost thereof can reasonably be segregated from the cost of utilities or services furnished to the portions of the Phase II Building occupied by Tenant; (D) Tenant's maintenance and repair obligations under Section 12.2 of this Lease with respect to any Improvements constructed or installed in such phase by Landlord as part of Landlord's Work under the Workletter, except that Tenant shall be responsible for any such maintenance or repairs required as a result of the negligent or willful acts or omissions of Tenant or its agents, employees, contractors or invitees; and (E) Tenant's obligation to cause the applicable phase to comply with any applicable Requirements under Section 13.4(a) of this Lease, except to the extent the applicability of such Requirements is triggered by Tenant's actual use of any portion of the Building or by Tenant's construction of Improvements in any portion of the Building. The Rent Commencement Dates for the respective phases of the Phase II Building shall be as follows:

(i) Tenant's Minimum Rental, additional rent and Operating Expense obligations with respect to Phase IIA shall commence on the earlier to occur of (A) the date which is one hundred eighty (180) days after the date Landlord delivers to Tenant a Structural Completion Certificate for the Phase II Building pursuant to the Workletter, subject to any adjustments in such time period to the extent authorized or required under the provisions of such Workletter, or (B) the date Tenant takes occupancy of and commences operation of its business in any portion of the Phase II Building, the earlier of such dates being herein called the "Phase IIA Rent Commencement Date"; provided, however, that in no event shall the Phase IIA Rent Commencement Date occur earlier than May 1, 2004, unless determined pursuant to clause (B) of this sentence or unless an earlier date is hereafter mutually agreed upon in writing by Landlord and Tenant. Based on the foregoing provisions and on the estimated construction schedules attached hereto as Exhibit D, the parties presently estimate that the Phase IIA Rent Commencement Date shall occur on May 1, 2004.

(ii) Tenant's Minimum Rental, additional rent and Operating Expense obligations with respect to Phase IIB shall commence on the earlier to occur of (A) the date which is six (6) months after the Phase IIA Rent Commencement Date (as extended for any Landlord Delays occurring after the Phase IIA Rent Commencement Date in connection with Tenant's construction of Tenant Improvements in Phase IIB) or (B) the date Tenant takes occupancy of and commences operation of its business in any portion of Phase IIB of the Phase II Building, the earlier of such dates being herein called the "Phase IIB Rent Commencement Date"; provided, however, that in no event shall the Phase IIB Rent Commencement Date occur earlier than November 1, 2004, unless determined pursuant to clause (B) of this sentence or unless an earlier date is hereafter mutually agreed upon in writing by Landlord and Tenant.

(iii) Tenant's Minimum Rental, additional rent and Operating Expense obligations with respect to Phase IIC shall commence on the earlier to occur of (A) the date which is six (6) months after the Phase IIB Rent Commencement Date (as extended for any

Landlord Delays occurring after the Phase IIB Rent Commencement Date in connection with Tenant's construction of Tenant Improvements in Phase IIC) or (B) the date Tenant takes occupancy of and commences operation of its business in any portion of Phase IIC of the Phase II Building, the earlier of such dates being herein called the "Phase IIC Rent Commencement Date"; provided, however, that in no event shall the Phase IIC Rent Commencement Date occur earlier than May 1, 2005, unless determined pursuant to clause (B) of this sentence or unless an earlier date is hereafter mutually agreed upon in writing by Landlord and Tenant.

(iv) Tenant's Minimum Rental, additional rent and Operating Expense obligations with respect to Phase IID shall commence on the earlier to occur of (A) the date which is six (6) months after the Phase IIC Rent Commencement Date (as extended for any Landlord Delays occurring after the Phase IIC Rent Commencement Date in connection with Tenant's construction of Tenant Improvements in Phase IID) or (B) the date Tenant takes occupancy of and commences operation of its business in any portion of Phase IID of the Phase II Building, the earlier of such dates being herein called the "Phase IID Rent Commencement Date"; provided, however, that in no event shall the Phase IID Rent Commencement Date occur earlier than November 1, 2005, unless determined pursuant to clause (B) of this sentence or unless an earlier date is hereafter mutually agreed upon in writing by Landlord and Tenant.

(c) Notwithstanding any other provisions of this Section 2.1 or of Section 2.3 below, if Landlord has not delivered a Final Completion Certificate under the Workletter with respect to the Building Shell of a Building or phase of a Building, as applicable, and completed all Building Shell work that must be completed as a condition of delivery of such Final Completion Certificate for the applicable Building or phase, by the date the Rent Commencement Date for such Building or phase would otherwise occur under this Section 2.1, and if the incomplete elements of such Building Shell work materially impair Tenant's ability to occupy and commence operation of its business in the applicable Building or phase, then the Rent Commencement Date for the applicable Building or phase, to the extent it is determined by the passage of time since delivery of the Structural Completion Certificate and not by actual occupancy, shall be extended, day for day, for a period equal to the lesser of (i) the number of days from the date the Rent Commencement Date for such Building or phase would otherwise have occurred under this Section 2.1 until the date Landlord has completed all Building Shell work that must be completed as a condition of delivery of the Final Completion Certificate for the applicable Building or phase to such an extent that Tenant's ability to occupy and commence operation of its business in the applicable Building or phase is no longer materially impaired by any remaining incomplete elements of Landlord's Building Shell work in the applicable Building or phase, or (ii) the number of days by which Landlord's delay (beyond the date the applicable Rent Commencement Date would otherwise have occurred pursuant to this Section 2.1) in completing all Building Shell work that must be completed as a condition of delivery of the Final Completion Certificate for the applicable Building or phase has actually delayed Tenant's ability to occupy and commence operation of its business in the applicable Building or phase; provided, however, that the period (if any) for which any Rent Commencement Date is extended pursuant to this paragraph (c) shall be reduced, day for day, for a period equal to the length of any delays in Landlord's completion of the Building Shell work that must be completed as a condition of delivery of the Final Completion Certificate for the applicable Building or phase to the extent such delays are caused by any Tenant Delays (as defined in the Workletter). Nothing in this paragraph (c) is intended to imply or require that Landlord's Site Improvements relating to a Building or phase shall be completed by the Rent Commencement Date for such Building or phase; in fact, the parties expressly contemplate that completion of various elements of the Site Improvements may be deferred by Landlord, in its discretion, until after completion of Tenant's Work under the Workletter in order to avoid the risk of damage to such Site Improvements in the course of Tenant's Work, and Landlord agrees to complete such Site Improvements with reasonable diligence following completion of Tenant's Work under the Workletter, subject to the effects of any Tenant Delays and/or Unavoidable Delays (as defined in the Workletter).

(d) The term of this Lease shall end on the day (the "Termination Date") immediately preceding the fifteenth (15^{th}) anniversary of the last of the Phase II Rent Commencement Dates to occur, unless sooner terminated or extended as hereinafter provided.

2.2 Early Possession. Tenant shall have the nonexclusive right to occupy and take possession of the respective Buildings from and after the date of Landlord's delivery of the

Structural Completion Certificate described in the applicable portion of Section 2.1 for the applicable Building, even though Landlord will be continuing to construct the balance of Landlord's Work as contemplated in the Workletter, for the purpose of constructing Tenant's Work as contemplated in the Workletter and for the purpose of installing fixtures and furniture, laboratory equipment, computer equipment, telephone equipment, low voltage data wiring and personal property and other similar work related to the construction of Tenant's Work and/or preparatory to the commencement of Tenant's business in the applicable Building. Such occupancy and possession, and any early access under the next sentence of this Section 2.2, shall be subject to and upon all of the terms and conditions of this Lease and of the Workletter (including, but not limited to, conditions relating to the maintenance of required insurance), except that Tenant shall have no obligation to pay Minimum Rental or Operating Expenses for any period prior to the applicable Rent Commencement Date as determined under Section 2.1; such early possession shall not advance or otherwise affect the respective Rent Commencement Dates or the Termination Date determined under Section 2.1. Tenant shall also be entitled to have early access to the respective Buildings and the Property at all appropriate times prior to Landlord's delivery of the Structural Completion Certificate for the applicable Building, subject to the approval of Landlord and its general contractor (which approval shall not be unreasonably withheld or delayed) and to all other provisions of this Section 2.2 and of the Workletter (including, but not limited to, conditions relating to the maintenance of required insurance), solely for the purpose of installing fixtures and equipment and other similar work preparatory to the construction of Tenant's Work and the commencement of Tenant's business on the Property, and Tenant shall not be required to pay Minimum Rental or Operating Expenses by reason of such early access until the applicable Rent Commencement Date otherwise occurs; without limiting the generality of the preceding portion of this sentence, Tenant shall be entitled to have early access to the Property and the respective Buildings as soon as the roof metal decking of the applicable Building is in place, to begin hanging electrical, mechanical and plumbing services from the overhead structure, subject to all of the provisions of this Section 2.2.

2.3 Delay In Possession. Landlord agrees to use its best reasonable efforts to complete Landlord's Work (as defined in the Workletter) promptly, diligently and within the respective time periods set forth in the respective estimated construction schedules attached hereto as Exhibit D and incorporated herein by this reference, as such schedules may be modified from time to time by mutual written agreement of Landlord and Tenant, and subject to any Tenant Delays and Unavoidable Delays (as respectively defined in the Workletter); provided, however, that Landlord shall not be liable for any damages caused by any delay in the completion of such work, nor shall any such delay affect the validity of this Lease or the obligations of Tenant hereunder. Notwithstanding any other provision of this Section 2.3, however, unless Landlord delivers a Structural Completion Certificate for at least one of the two Phase I Buildings and tenders possession of those completed structural portions of the Building Shell for such Building that must be completed as a condition of delivery of the Structural Completion Certificate by the date which is one hundred twenty (120) days after the date specified for structural completion as to such Phase I Building in the applicable Estimated Construction Schedule attached hereto as **Exhibit D**, Tenant shall have the right to terminate this Lease without further liability hereunder by written notice delivered to Landlord at any time prior to Landlord's delivery of a Structural Completion Certificate for at least one Phase I Building and tender of possession of the completed structural portions of the Building Shell for such Phase I Building to Tenant; provided, however, that the applicable date on which Tenant's termination right becomes exercisable pursuant to this sentence shall be extended, day for day, for a period equal to the length of any delays in Landlord's design and construction of the respective Phase I Building Shells that are caused by any Unavoidable Delays or Tenant Delays (as respectively defined in the Workletter). If such a termination right arises in favor of Tenant and is properly exercised by Tenant, then Landlord shall reimburse Tenant for all of Tenant's out-of-pocket fees and costs incurred prior to the date of such termination for design, space planning, architectural, engineering and construction management services in connection with this Lease and the Workletter, which reimbursement shall be paid by Landlord to Tenant within thirty (30) days after Landlord's receipt of Tenant's written request for such reimbursement, accompanied by copies of such invoices and other supporting documentation as Landlord may reasonably request to evidence the nature and amount of the fees and costs for which such reimbursement is requested.

2.4 Acknowledgment Of Rent Commencement Dates. Promptly following the respective Rent Commencement Date for each Building or portion thereof, Landlord and Tenant

shall execute a written acknowledgment of such Rent Commencement Date, the square footage of the Building or portion thereof (in the case of the Phase II Rent Commencement Dates) as to which the Rent Commencement Date applies, the Termination Date (if then determined) and related matters, substantially in the form attached hereto as Exhibit E (with appropriate insertions), which acknowledgment shall be deemed to be incorporated herein by this reference. Notwithstanding the foregoing requirement, the failure of either party to execute such a written acknowledgment shall not affect the determination of the applicable Rent Commencement Date, the applicable minimum rental and Operating Expense obligations, the Termination Date and related matters in accordance with the provisions of this Lease.

2.5 Holding Over. If Tenant holds possession of the Property or any portion thereof after the term of this Lease with Landlord's written consent, then except as otherwise specified in such consent, Tenant shall become a tenant from month to month at one hundred twenty-five percent (125%) of the rental and otherwise upon the terms herein specified for the period immediately prior to such holding over and shall continue in such status until the tenancy is terminated by either party upon not less than thirty (30) days prior written notice. If Tenant holds possession of the Property or any portion thereof after the term of this Lease without Landlord's written consent, then Landlord in its sole discretion may elect (by written notice to Tenant) to have Tenant become a tenant either from month to month or at will, at one hundred fifty percent (150%) of the rental (prorated on a daily basis for an at-will tenancy, if applicable) and otherwise upon the terms herein specified for the period immediately prior to such holding over, or may elect to pursue any and all legal remedies available to Landlord under applicable law with respect to such unconsented holding over by Tenant. Tenant shall indemnify and hold Landlord harmless from any loss, damage, claim, liability, cost or expense (including reasonable attorneys' fees) resulting from any delay by Tenant in surrendering the Property (except with Landlord's prior written consent), including but not limited to any claims made by a succeeding tenant by reason of such delay. Acceptance of rent by Landlord following expiration or termination of this Lease shall not constitute a renewal of this Lease.

2.6 Option To Extend Term. Tenant shall have the option to extend the term of this Lease with respect to any one or more of the Buildings, on a Building by Building basis (provided, however, that notwithstanding any other provisions of this Section 2.6, if the Connector Bridge is constructed as contemplated in Section 1.1(a) of this Lease and if Tenant elects to exercise this extension option with respect to one but not both of the Phase I Buildings, then Landlord's election regarding removal of the Connector Bridge by Landlord at Tenant's expense, as provided in Section 12.2(c) of this Lease, shall be exercisable in Landlord's discretion either at the expiration of this Lease with respect to the Phase I Building for which the extension option was not exercised or at the expiration of this Lease with respect to the Phase I Building for which the extension option was exercised), at the Minimum Rental set forth in Section 3.1(b) and (c) (as applicable) and otherwise upon all the terms and provisions set forth herein with respect to the initial term of this Lease, for up to two (2) additional periods of five (5) years each, the first commencing upon the expiration of the initial term hereof and the second (applicable only to the Building or Buildings as to which a first extended term has been duly elected) commencing upon the expiration of such first extended term, if any. Exercise of such option with respect to the first such extended term shall be by written notice to Landlord at least nine (9) months and not more than twelve (12) months prior to the expiration of the initial term hereof; exercise of such option with respect to the second extended term, if the first extension option has been duly exercised, shall be by like written notice to Landlord at least nine (9) months and not more than twelve (12) months prior to the expiration of the first extended term hereof. If Tenant is in default hereunder on the date of such notice or on the date any extended term is to commence, then the exercise of the option shall be of no force or effect, the extended term shall not commence and this Lease shall expire at the end of the then current term hereof (or at such earlier time as Landlord may elect pursuant to the default provisions of this Lease). If Tenant properly exercises one or more extension options under this Section, then all references in this Lease (other than in this Section 2.6) to the "term" of this Lease shall be construed to include the extension term(s) thus elected by Tenant. Except as expressly set forth in this Section 2.6, Tenant shall have no right to extend the term of this Lease beyond its prescribed term.

3. RENTAL

3.1 Minimum Rental.

(a) Rental Amounts. Tenant shall pay to Landlord as minimum rental for the respective Buildings or applicable portions thereof, in advance, without deduction, offset (except as specifically authorized under Paragraph 4(c) of the Workletter, if applicable), notice or demand, on or before the applicable Rent Commencement Date for the respective Building and on or before the first day of each subsequent calendar month of the initial term of this Lease, the following amounts per month (the "Minimum Rental"), subject to adjustment in accordance with the terms of this Section 3.1:

(i) For the Phase IA Building, beginning on the Phase I Rent Commencement Date, an amount equal to the applicable amount per square foot from the following table multiplied by the square footage of the Phase IA Building as determined pursuant to Section 3.1(d):

Months	Monthly Minimum Rental
001 - 012	$4.0500/sq ft
013 - 024	$4.1715/sq ft
025 - 036	$4.2966/sq ft
037 - 048	$4.4255/sq ft
049 - 060	$4.5583/sq ft
061 - 072	$4.6951/sq ft
073 - 084	$4.8359/sq ft
085 - 096	$4.9810/sq ft
097 - 108	$5.1304/sq ft
109 - 120	$5.2843/sq ft
121 - 132	$5.4429/sq ft
133 - 144	$5.6061/sq ft
145 - 156	$5.7743/sq ft
157 - 168	$5.9476/sq ft
169 - 180	$6.1260/sq ft
181 - 192	$6.3098/sq ft
193 - 204	$6.4991/sq ft
205 - 216 (if applicable)	$6.6940/sq ft
217 and after (if applicable), continued 3.0% annual escalations	

(ii) For the Phase IB Building, beginning on the Phase I Rent Commencement Date, an amount equal to the applicable amount per square foot from the following table multiplied by the square footage of the Phase IB Building as determined pursuant to Section 3.1(d):

Months	Monthly Minimum Rental
001 - 012	$4.0500/sq ft
013 - 024	$4.1715/sq ft
025 - 036	$4.2966/sq ft
037 - 048	$4.4255/sq ft
049 - 060	$4.5583/sq ft
061 - 072	$4.6951/sq ft
073 - 084	$4.8359/sq ft
085 - 096	$4.9810/sq ft
097 - 108	$5.1304/sq ft
109 - 120	$5.2843/sq ft
121 - 132	$5.4429/sq ft
133 - 144	$5.6061/sq ft
145 - 156	$5.7743/sq ft
157 - 168	$5.9476/sq ft
169 - 180	$6.1260/sq ft
181 - 192	$6.3098/sq ft
193 - 204	$6.4991/sq ft
205 - 216 (if applicable)	$6.6940/sq ft
217 and after (if applicable), continued 3.0% annual escalations	

(iii) For the Phase II Building, beginning on the Phase IIA Rent Commencement Date (with each successive phase of Tenant's occupancy of the Phase II Building being brought under the following table as of the applicable Rent Commencement Date for such phase at the rental rate determined under the following table by counting from the Phase IIA Rent Commencement Date), an amount equal to the applicable amount per square foot from the following table multiplied by the aggregate square footage of all then applicable phases of the Phase II Building as determined pursuant to Section 3.1(d):

Months	Monthly Minimum Rental
001 - 012	$4.1715/sq ft
013 - 024	$4.2966/sq ft
025 - 036	$4.4255/sq ft
037 - 048	$4.5583/sq ft
049 - 060	$4.6951/sq ft
061 - 072	$4.8359/sq ft
073 - 084	$4.9810/sq ft
085 - 096	$5.1304/sq ft
097 - 108	$5.2843/sq ft
109 - 120	$5.4429/sq ft
121 - 132	$5.6061/sq ft
133 - 144	$5.7743/sq ft
145 - 156	$5.9476/sq ft
157 - 168	$6.1260/sq ft
169 - 180	$6.3098/sq ft

(iv) If the obligation to pay Minimum Rental or additional rent hereunder commences on other than the first day of a calendar month or if the term of this Lease terminates on other than the last day of a calendar month, the Minimum Rental and any additional rent for such first or last month of the term of this Lease, as the case may be, shall be prorated based on the number of days the term of this Lease is in effect during such month. If an increase in Minimum Rental or additional rent becomes effective on a day other than the first day of a calendar month, the Minimum Rental or additional rent, as applicable, for that month shall be the sum of the two applicable rates, each prorated for the portion of the month during which such rate is in effect.

(b) Rental Amounts During First Extended Term. If Tenant properly exercises its right to extend the term of this Lease pursuant to Section 2.6 hereof, the Minimum Rental for each Building as to which Tenant has elected to extend during the first year of the first extended term shall be equal to the initial fair market rental (as defined below) for the applicable Building, determined as of the commencement of such extended term in accordance with this Section 3.1(b), and as of the beginning of each subsequent year of the first extended term such Minimum Rental shall be increased by an amount equal to the greater of (i) three percent (3%) of the Minimum Rental in effect during the immediately preceding lease year or (ii) the fair market rental escalation percentage (as defined below) for the applicable Building, determined as of the commencement of such extended term in accordance with this Section 3.1(b). Upon Landlord's receipt of a timely notice of Tenant's exercise of its option to extend the term of this Lease, the parties shall have sixty (60) days in which to agree on the initial fair market rental and the applicable rental escalation percentage for the Buildings as of the commencement of the first extended term for the uses permitted hereunder. If the parties agree on such initial fair market rental and rental escalation percentage, they shall execute an amendment to this Lease stating the amount of the Minimum Rental during the first year of the extended term (determined in accordance with this Section 3.1(b)) and the annually increased Minimum Rental for the balance of the first extended term. If the parties are unable to agree on such initial fair market rental and/or applicable rental escalation percentage within such sixty (60) day period, then within fifteen (15) days after the expiration of such period each party, at its cost and by giving notice to the other party, shall appoint a real estate appraiser who is a member of the American Institute of Real Estate Appraisers, or any other similar organization, and has at least five (5) years experience appraising similar commercial properties in northeastern San Mateo County, to determine the initial fair market rental and applicable rental escalation percentage for the Buildings as of the commencement of the first extended term in accordance with the provisions of this Section 3.1(b). If either party fails to appoint an appraiser within the allotted time, the single appraiser appointed by the other party shall be the sole appraiser. If an appraiser is appointed by each party and the two appraisers so appointed are unable to agree upon the initial fair market rental and/or the applicable rental escalation percentage within thirty (30) days after the appointment of the second, the two appraisers shall appoint a third similarly qualified appraiser within ten (10) days after expiration of such 30-day period; if they are unable to agree upon a third appraiser, then either party may, upon not less than five (5) days notice to the other party, apply to the Presiding Judge of the San Mateo County Superior Court for the appointment of a third similarly qualified appraiser. Each party shall bear its own legal fees in connection with appointment of the third appraiser and shall bear one-half of any other costs of appointment of the third appraiser and of such third appraiser's fee. The third appraiser, however selected, shall be a person who has not previously acted for either party in any capacity. Within thirty (30) days after the appointment of the third appraiser, a majority of the three appraisers shall set the initial fair market rental and the applicable rental escalation percentage for the first extended term and shall so notify the parties. If a majority are unable to agree within the allotted time, (i) the three appraised initial fair market rentals shall be added together and divided by three and the resulting quotient shall be the initial fair market rental for the first extended term, and (ii) the three appraised fair market rental escalation percentages shall be added together and divided by three and the resulting quotient shall be the fair market rental escalation percentage used in determining the applicable rental escalation percentage for purposes of clause (ii) of the first sentence of this Section 3.1(b), which determinations shall be binding on the parties and shall be enforceable in any further proceedings relating to this Lease. For purposes of this Section 3.1(b), the "fair market rental" and "fair market rental escalation percentage" for the respective Buildings shall be determined as follows: (x) in the case of a renewal term for any of the Buildings, with reference to the then prevailing market rental rates for properties in northeastern San Mateo County with shell and standard office, research and development improvements and site (common area) improvements comparable to those then existing in the applicable Building and on the Property, provided that no equipment or laboratory improvements shall be taken into account in determining such fair market rental; and (y) in the case of a lease or renewal term for any other building leased by Tenant under terms based on the terms of this Lease (for example, any building leased by Tenant pursuant to any of the provisions of Article 6 hereof, except to the extent any different basis of determination is specified in Landlord's First Refusal Notice or First Offer Notice, if applicable, under such Article 6), with reference to the then prevailing market rental rates and then prevailing market rental escalation provisions for leases of comparable length of properties in the South San Francisco market with shell and office, research and development improvements and site (common area) improvements comparable to those then existing in the applicable building and on the Property, taking into account for such

determination all tenant improvements then existing in the applicable building (including, but not limited to, equipment and laboratory improvements installed as part of the initial construction of tenant improvements in such building).

(c) Rental Amounts During Second Extended Term. If Tenant properly exercises its right to a second extended term of this Lease pursuant to Section 2.6 hereof, the Minimum Rental during such second extended term shall be determined in the same manner provided in the preceding paragraph for the first extended term (initial fair market rental followed by subsequent annual escalations equal to the greater of 3% or fair market rental escalation percentage during the balance of the term), except that the determination shall be made as of the commencement of the second extended term.

(d) Determination of Square Footage for Rent Calculation Purposes. After completion of the Building Shell of each respective Building, Landlord shall cause the square footage of the respective Building (including, in the case of the Phase IB Building, the Connector Bridge if constructed as contemplated in Section 1.1(a) hereof) to be measured by Landlord's architect, and at the commencement of each phase of Tenant's occupancy of the Phase II Building, Landlord shall cause the square footage of the space actually used or occupied by Tenant in the Phase II Building to be measured by Landlord's architect, in each case in accordance with the measurement formula specified in Section 1.1(d) of this Lease, which measurements by Landlord's architect shall be subject to approval (not unreasonably withheld or delayed) by Tenant's architect. Upon mutual approval of such measurement by Landlord's and Tenant's respective architects, the applicable square footages shall be set forth in the applicable Acknowledgment of Rent Commencement Date under Section 2.4 hereof and shall be used for calculation of Minimum Rental under Section 3.1(a), additional rent under Section 3.1(e) and Tenant's Operating Cost Share under Section 9.1 for all applicable periods.

(e) Additional Rent for Tenant Improvement Costs. In consideration of Landlord's willingness to provide the Tenant Improvement Allowance to Tenant in accordance with the provisions of the Workletter, Tenant agrees to pay to Landlord as additional rent hereunder, which additional rent shall be due with respect to each Building or phase thereof on the same dates and in the same manner as Minimum Rental for such Building or phase thereof, beginning on the applicable Rent Commencement Date for the applicable Building or phase thereof, an amount calculated separately for each such Building or phase thereof as follows: (i) for each of the Phase I Buildings, for the first one hundred twenty (120) months after the applicable Rent Commencement Date for the applicable Building, an amount equal to $0.72 per square foot per month multiplied by the applicable square footage for such Building as determined for purposes of Section 3.1(d) above, (ii) for each of the Phase I Buildings, for months one hundred twenty-one (121) through one hundred eighty (180) after the applicable Rent Commencement Date for the applicable Building, an amount equal to $0.33 per square foot per month multiplied by the applicable square footage for such Building as determined for purposes of Section 3.1(d) above, and (iii) for each phase of the Phase II Building, for the first one hundred eighty (180) months after the applicable Rent Commencement Date for such phase, an amount equal to $0.13 per square foot per month multiplied by the applicable square footage for such phase as determined for purposes of Section 3.1(d) above.

3.2 Late Charge. If Tenant fails to pay when due rental or other amounts due Landlord hereunder, such unpaid amounts shall bear interest for the benefit of Landlord at a rate equal to the lesser of fifteen percent (15%) per annum or the maximum rate permitted by law, from the date due to the date of payment. In addition to such interest, Tenant shall pay to Landlord a late charge in an amount equal to six percent (6%) of any installment of minimum rental and any other amounts due Landlord if not paid in full on or before the fifth (5th) day after such rental or other amount is due. Tenant acknowledges that late payment by Tenant to Landlord of rental or other amounts due hereunder will cause Landlord to incur costs not contemplated by this Lease, including, without limitation, processing and accounting charges and late charges which may be imposed on Landlord by the terms of any loan relating to the Property. Tenant further acknowledges that it is extremely difficult and impractical to fix the exact amount of such costs and that the late charge set forth in this Section 3.2 represents a fair and reasonable estimate thereof. Acceptance of any late charge by Landlord shall not constitute a waiver of Tenant's default with respect to overdue rental or other amounts, nor shall such acceptance prevent Landlord from exercising any other rights and remedies available to it. Acceptance of rent or other payments by Landlord shall not constitute a waiver of late charges or interest accrued with respect to such rent or other payments or any prior installments thereof, nor

of any other defaults by Tenant, whether monetary or non-monetary in nature, remaining uncured at the time of such acceptance of rent or other payments.

4. [OMITTED]

5. CONSTRUCTION

5.1 Construction of Improvements.

(a) Landlord shall, at Landlord's cost and expense (except as otherwise provided herein and in the Workletter), construct Landlord's Work as defined in and in accordance with the terms and conditions of the Workletter. Landlord shall use its best efforts to complete such construction promptly, diligently and within the applicable time periods set forth in the estimated construction schedules attached hereto as Exhibit D and incorporated herein by this reference, as such schedules may be modified or revised from time to time in accordance with the Workletter, subject to Tenant Delays and Unavoidable Delays as defined in the Workletter.

(b) Tenant shall, at Tenant's cost and expense (except as otherwise provided herein and in the Workletter), construct Tenant's Work as defined in and in accordance with the terms and conditions of the Workletter.

5.2 Condition of Property. Landlord shall deliver the Building Shell for each Building and the other Improvements constructed by Landlord to Tenant clean and free of debris, promptly upon completion of construction thereof, and Landlord warrants to Tenant that each Building Shell and the other Improvements constructed by Landlord (i) shall be free from material structural defects and (ii) shall be constructed in compliance in all material respects with the plans and specifications developed pursuant to the Workletter and mutually approved (to the extent required thereunder) by Landlord and Tenant, subject to any changes implemented in such plans and specifications in accordance with the procedures set forth in the Workletter. If it is determined that this warranty has been violated in any respect, then it shall be the obligation of Landlord, after receipt of written notice from Tenant setting forth with specificity the nature of the violation, to correct promptly, at Landlord's sole cost, the condition(s) constituting such violation. Tenant's failure to give such written notice to Landlord within ninety (90) days after the Rent Commencement Date for the applicable Building shall give rise to a conclusive presumption that Landlord has complied with all Landlord's obligations under this Section 5.2 with respect to the applicable Building, except with respect to latent defects (as to which such 90-day limit shall not apply). Without limiting the scope of Landlord's obligations under the foregoing provisions of this Section 5.2, Landlord also agrees to either (x) use its best reasonable efforts to enforce when and as necessary, for the benefit of Tenant and the Improvements, any and all contractor's and/or manufacturer's warranties with respect to any of Landlord's Work or, at Tenant's request, (y) assign any or all of such warranties to Tenant for enforcement purposes (provided, however, that Landlord may reserve joint enforcement rights under such warranties to the extent of Landlord's continuing obligations or warranties hereunder), and shall cooperate with Tenant in all reasonable respects in any enforcement of such assigned warranties. TENANT ACKNOWLEDGES THAT THE WARRANTIES CONTAINED IN THIS SECTION ARE IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, WITH RESPECT TO THE PHYSICAL CONDITION OF THE IMPROVEMENTS TO BE CONSTRUCTED BY LANDLORD AND THAT LANDLORD MAKES NO OTHER WARRANTIES EXCEPT AS EXPRESSLY SET FORTH IN THIS LEASE.

5.3 Compliance with Law. Landlord warrants to Tenant that the Building Shells and other Improvements constructed by Landlord (when constructed), as they exist on the respective applicable Rent Commencement Dates, but without regard to the use for which Tenant will occupy the Buildings, shall not violate any covenants or restrictions of record or any applicable law, building code, regulation or ordinance in effect on the applicable Rent Commencement Date. Tenant warrants to Landlord that the Tenant Improvements and any other improvements constructed by Tenant from time to time shall not violate any applicable law, building code, regulation or ordinance in effect on the applicable Rent Commencement Date or at the time such improvements are placed in service. If it is determined that any of these warranties has been violated, then it shall be the obligation of the warranting party, after written notice from the other

party, to correct the condition(s) constituting such violation promptly, at the warranting party's sole cost and expense. Tenant acknowledges that neither Landlord nor any agent of Landlord has made any representation or warranty as to the present or future suitability of the Property for the conduct of Tenant's business or proposed business thereon.

6. EXPANSION RIGHTS

6.1 First Refusal Right to Lease.

(a) The building commonly known as Building C in the Center, also commonly known as 1140 Veterans Boulevard and designated as "First Refusal Building" on the Site Plan (the "First Refusal Building"), is presently leased to Raven Biotechnologies, Inc. pursuant to a Build-to-Suit Lease dated as of May 1, 2001 (the "Existing Raven Lease"). Landlord shall not lease all or any portion of the First Refusal Building at any time during the term of this Lease (as extended, if applicable), except in compliance with this Section 6.1; provided, however, that the foregoing restriction shall not apply during any period in which Tenant is in default under this Lease, beyond any applicable notice and cure periods, and provided further, however, that Tenant's rights pursuant to this Section 6.1 are subordinate to the rights of Raven Biotechnologies, Inc. and its successors in interest (collectively, "Raven") pursuant to the Existing Raven Lease, as the same may be amended from time to time.

(b) If, at any time during the term of this Lease (as extended, if applicable), Landlord receives and wishes to accept a bona fide written offer from a person or entity (an "Offeror," provided , however, that the term "Offeror" shall not include Tenant itself, nor shall it include Raven with respect to any rights or negotiations under the Existing Raven Lease, as the same may be amended from time to time) to lease all or any portion of the First Refusal Building and if Tenant is not then in default under this Lease (beyond any applicable notice and cure periods), then Landlord shall give written notice of such bona fide written offer to Tenant (the "First Refusal Notice"), specifying the material terms on which the Offeror proposes to lease the First Refusal Building or applicable portion thereof (the "First Refusal Space"), and shall offer to Tenant the opportunity to lease the First Refusal Space on the terms specified in the First Refusal Notice. For purposes of this Section 6.1(b), an offer shall be considered bona fide if it is contained in a letter of intent or other writing signed by the Offeror and specifies the material terms of the proposed lease. Tenant shall have ten (10) business days after the date of giving of the First Refusal Notice in which to accept such offer by written notice to Landlord. Upon such acceptance by Tenant, the First Refusal Space shall be leased to Tenant on the terms set forth in the First Refusal Notice and on the additional terms and provisions set forth in this Lease (except to the extent inconsistent with the terms set forth in the First Refusal Notice), excluding Article 6 hereof, and the parties shall promptly (and in all events within ten (10) business days after delivery of Tenant's acceptance) execute a lease amendment or other written agreement containing the terms of the First Refusal Notice and all other terms and provisions of this Lease not inconsistent with the terms of said First Refusal Notice, except Article 6 hereof and except as the parties may otherwise mutually agree. If Tenant does not accept Landlord's offer within the allotted time or if the parties fail to enter into such a lease amendment or other written agreement in a timely manner, Landlord shall thereafter have the right to lease the First Refusal Space to the Offeror, at any time within one hundred eighty (180) days thereafter, at a minimum rental and on other terms and conditions not more favorable to the Offeror than the minimum rental and other terms offered to Tenant in the First Refusal Notice. If Landlord does not lease the First Refusal Space to the Offeror pursuant to the preceding sentence within such one hundred eighty (180) days, or if Landlord desires to lease the First Refusal Space to another third party within such one hundred eighty (180) days, this First Refusal Right shall reattach to the First Refusal Space on all of the same terms set forth above.

6.2 Right of First Offer to Lease.

(a) Landlord has advised Tenant that Buildings F and G in the Center, designated as "First Offer Buildings" on the Site Plan (collectively, the "First Offer Buildings"), are presently leased to Rigel Pharmaceuticals, Inc. pursuant to a Build-to-Suit Lease dated as of May 16, 2001 (the "Existing Rigel Lease"). Landlord shall not lease all or any portion of the First Offer Buildings at any time during the term of this lease (as extended, if applicable), except in compliance with this Section 6.2; provided, however, that the foregoing restriction shall not apply during any period in which Tenant is in default under this Lease, beyond any applicable

notice and cure periods, and provided further, however, that Tenant's rights pursuant to this Section 6.2 are subordinate to the rights of Rigel Pharmaceuticals, Inc. and its successors in interest (collectively, "Rigel") pursuant to the Existing Rigel Lease, as the same may be amended from time to time.

(b) If, at any time during the term of this Lease (as extended, if applicable), any of the First Offer Buildings or any portion thereof becomes available for leasing by Landlord and Landlord intends to pursue the leasing of such First Offer Building(s) or portion thereof (the "First Offer Space," provided, however, that the provisions of this paragraph shall not apply to any negotiations or discussions Landlord may have with Tenant itself, nor to any negotiations or discussions Landlord may have with Rigel, or any exercise of rights by Rigel, under or in connection with the Rigel Lease as the same may be amended from time to time), and if Tenant is not then in default under this Lease (beyond any applicable notice and cure periods), then Landlord shall first give written notice of such intention to Tenant (a "First Offer Notice") identifying the First Offer Space and the rent, improvement allowance and other material terms upon which Landlord proposes to offer such First Offer Space to prospective tenants. Tenant and Landlord shall have ten (10) business days after Tenant's receipt of such First Offer Notice in which to reach agreement on all terms and achieve execution of a written lease amendment or other written agreement regarding Tenant's leasing and occupancy of the First Offer Space. It is generally the intention of the parties that except with respect to the economic and other terms specified in the First Offer Notice, the form of lease for any such leasing of First Offer Space would be similar to this Lease, excluding Article 6 hereof and subject to such other modifications as may be reasonably necessary to reflect differences in the First Offer Space and/or in the economic and other terms applicable to Tenant's leasing of such First Offer Space pursuant to the First Offer Notice. If Landlord and Tenant fail to reach agreement on all terms and achieve execution of a written lease within ten (10) business days after Tenant's receipt of such First Offer Notice, then Landlord shall thereafter have the right to lease the First Offer Space, at any time within two hundred seventy (270) days thereafter, to such persons or entities and on such terms as Landlord in its sole discretion may deem appropriate, without any further limitation or restriction hereunder. If Landlord does not lease the First Offer Space to any such person or entity within such two hundred seventy (270) days, this First Offer Right shall reattach to the First Offer Space on all of the same terms set forth above, except that in connection with any subsequent First Offer Notice delivered by Landlord to Tenant with respect to any First Offer Space that has previously been the subject of a First Offer Notice which did not result in the leasing of such First Offer Space by Tenant, Tenant's time to reach a written agreement with Landlord in response to such subsequent First Offer Notice shall be reduced from ten (10) business days to five (5) business days.

6.3 Expansion Option.

(a) Landlord presently owns the property lying easterly of the Property and commonly known as 333 Oyster Point Boulevard, South San Francisco (the "Expansion Property"). The Expansion Property is presently operated as a commercial warehouse facility, but it is also Landlord's present intention to redevelop the Expansion Property as a biotechnology facility during calendar year 2005, and Landlord agrees to undertake such redevelopment, subject to the conditions set forth in this Section 6.3, in order to accommodate any proper exercise of Tenant's rights under this Section 6.3. Tenant shall have a one-time option (the "Expansion Option"), exercisable only in accordance with this Section 6.3, to lease a minimum amount of at least 100,000 square feet of redeveloped biotechnology space on the Expansion Property; provided, however, that the Expansion Option shall not apply if Tenant is in default under this Lease (beyond any applicable notice and cure periods) on the date the Expansion Option is exercisable. The exact size and location of the space subject to the Expansion Option within the Expansion Property (the "Expansion Space") shall be mutually agreed upon in writing by Landlord and Tenant, subject to the minimum size of 100,000 square feet as specified above, after Landlord has approved a final design and site plan for the redevelopment of the Expansion Property. If Tenant notifies Landlord in writing, at least seventy-five (75) days prior to the date the Expansion Option must be exercised, that Tenant is considering exercise of the Expansion Option (which notice may be given by Tenant in its sole and absolute discretion), then (i) Landlord agrees to adopt and approve a final design and site plan for the redevelopment of the Expansion Property at least forty-five (45) days prior to the date the Expansion Option must be exercised, in order to allow a reasonable time for the parties to reach mutual agreement regarding the size and location of the Expansion Space in a timely manner and (ii) Landlord and Tenant agree to negotiate diligently, reasonably and in good faith

to reach such an agreement regarding the size and location of the Expansion Space at least fifteen (15) days prior to the date the Expansion Option must be exercised.

(b) The Expansion Option shall be exercisable only by written notice from Tenant to Landlord no later than March 1, 2005, and only if Tenant is not then in default under this Lease (beyond any applicable notice and cure periods). Such written notice (the "Exercise Notice") shall state that Tenant is exercising the Expansion Option hereunder and shall state specifically the phasing (if any) pursuant to which Tenant proposes to occupy the Expansion Space, subject to the limitations hereinafter set forth. Upon timely giving of a timely Exercise Notice by Tenant, (i) Landlord shall proceed with reasonable diligence and with commercially reasonable efforts to obtain all governmental approvals required for the construction of the Expansion Space, including, but not limited to, any governmental approvals required for the redevelopment of the Expansion Property to accommodate the construction of the Expansion Space (provided that if Landlord is unable, despite the exercise of reasonable diligence and commercially reasonable efforts, to obtain all such required governmental approvals within six (6) months after delivery of Tenant's Exercise Notice, then upon written notice thereof by either party to the other, Tenant's Exercise Notice shall be deemed to be rescinded and the Expansion Option shall be of no further force or effect) and (ii) subject to the receipt of such required governmental approvals, the Expansion Space shall be leased to Tenant on the following terms (and on the additional terms and provisions set forth in this Lease, except for Article 6 hereof and except to the extent inconsistent with the terms specified in this Section 6.3): The Expansion Space shall, at Tenant's election as set forth in the Exercise Notice, be leased and occupied either all at once, with a single Rent Commencement Date, or in two separate phases, with the first phase having a minimum size of at least fifty percent (50%) of the total Expansion Space and the second phase constituting the balance of the Expansion Space. The Rent Commencement Date for the Expansion Space (or for the first phase thereof, if applicable) shall be determined in the same manner as provided in Section 2.1 hereof (180 days after Landlord's delivery of a Structural Completion Certificate, subject to any adjustments applicable under the Workletter, or on the date Tenant takes occupancy of and commences operation of its business in the applicable space, whichever occurs first), provided that such Rent Commencement Date shall not occur prior to December 1, 2006 unless triggered at an earlier date by Tenant's occupancy of and commencement of operation of its business in the applicable space or unless an earlier date is mutually agreed upon by Landlord and Tenant. If Tenant elects to take down the Expansion Space in two phases as provided above, then the Rent Commencement Date for the second phase of the Expansion Space shall occur on the earlier of December 1, 2007 or the date Tenant actually occupies and commences operation of its business in the second phase of the Expansion Space, unless an earlier date is mutually agreed upon by Landlord and Tenant. Landlord shall perform the equivalent of Landlord's Work (as defined in the Workletter) at its sole cost and expense, for the Expansion Space, subject to such modifications of the scope and definition of Landlord's Work as are consistent with Landlord's design, plans and specifications for the other buildings and facilities to be constructed on the Expansion Property, and Tenant shall be entitled to a Tenant Improvement Allowance of One Hundred Thirty-Five and No/100 Dollars ($135.00) per square foot for the Expansion Space. The minimum monthly rental commencing as of the Rent Commencement Date for the Expansion Space (or for the first phase thereof, if applicable) shall be $4.43 per square foot per month, with annual escalations thereafter on each anniversary of such Rent Commencement Date in an amount equal to three percent (3.0%) of the rental rate in effect immediately prior to the applicable escalation date. If Tenant elects to take down the Expansion Space in two phases as provided above, then the minimum monthly rental applicable to the second phase as of the Rent Commencement Date for such second phase shall be equal to the minimum monthly rental rate then in effect for the first phase, and the minimum monthly rental rate for the second phase shall thereafter at all times be equal to the minimum monthly rental rate in effect for the first phase from time to time, as escalated in accordance with the foregoing provisions. Tenant's Operating Expense obligations with respect to the Expansion Space shall be determined in a manner both similar to and proportional to the Operating Expense obligations of other tenants of the Expansion Property, depending on whether, in Landlord's discretion, the Expansion Property is combined with the Center for Operating Expense purposes or is operated on a stand-alone basis for such purposes, and if operated on a stand-alone basis, whether the Expansion Property is operated on a project-wide basis for Operating Expense purposes or the respective buildings within the Expansion Property are operated in whole or in part on a stand-alone basis for such purposes. Following a timely exercise of the Expansion Option by Tenant, the parties shall promptly (and in all events within ten (10) business days after delivery of Tenant's Exercise Notice) execute a lease amendment or other written agreement

reflecting the terms applicable to the Expansion Space as set forth above and reflecting all other terms and provisions of this Lease not inconsistent with the terms set forth above, except for Article 6 hereof and except as the parties may otherwise mutually agree. If Tenant does not validly and timely exercise the Expansion Option in accordance with this Section 6.3 or if the parties do not timely enter into such a lease amendment or other written agreement with respect to the Expansion Space, then the Expansion Option shall be of no further force or effect and Landlord shall thereafter have the right to lease the Expansion Space and the Expansion Property at any time and from time to time to such persons or entities and on such terms as Landlord in its sole discretion may deem appropriate, without any further limitation or restriction hereunder.

7. [OMITTED]

8. TAXES

8.1 Personal Property. Tenant shall be responsible for and shall pay prior to delinquency all taxes and assessments levied against or by reason of (a) any and all alterations, additions and items installed or placed on, in or about any of the Buildings by Tenant or for Tenant's use and taxed as personal property rather than as real property, and/or (b) all personal property, trade fixtures and other property placed by Tenant on or about the Property. Upon request by Landlord, Tenant shall furnish Landlord with satisfactory evidence of Tenant's payment thereof. If at any time during the term of this Lease any of said alterations, additions or personal property, whether or not belonging to Tenant, shall be taxed or assessed as part of the Property, then such tax or assessment shall be paid by Tenant to Landlord immediately upon presentation by Landlord of copies of the tax bills in which such taxes and assessments are included and shall, for the purposes of this Lease, be deemed to be personal property taxes or assessments under this Section 8.1.

8.2 Real Property. To the extent any real property taxes and assessments on any of the Buildings (including, but not limited to, the Improvements) are assessed directly to Tenant, Tenant shall be responsible for and shall pay prior to delinquency all such taxes and assessments levied against the Buildings. Upon request by Landlord, Tenant shall furnish Landlord with satisfactory evidence of Tenant's payment thereof. To the extent the Buildings, the Property and/or the Improvements are taxed or assessed to Landlord following the applicable Rent Commencement Dates, such real property taxes and assessments shall constitute Operating Expenses (as that term is defined in Section 9.2 of this Lease) and shall be paid in accordance with the provisions of Article 9 of this Lease.

9. OPERATING EXPENSES

9.1 Liability For Operating Expenses.

(a) Tenant shall pay to Landlord, at the time and in the manner hereinafter set forth, as additional rental, Tenant's Operating Cost Share (as hereinafter defined) of the Operating Expenses defined in Section 9.2, subject to adjustment pursuant to Sections 9.1(b) and (c) when applicable. The parties presently anticipate that the percentage amount constituting Tenant's applicable share of Operating Expenses ("Tenant's Operating Cost Share"), except as otherwise provided herein, will be thirty-eight and eighty hundredths percent (38.80%) as of the Phase I Rent Commencement Date, forty-one and twenty-one hundredths percent (41.21%) as of the Phase IIA Rent Commencement Date, forty-three and seventy-eight hundredths percent (43.78%) as of the Phase IIB Rent Commencement Date, forty-six and thirteen hundredths percent (46.13%) as of the Phase IIC Rent Commencement Date and forty-eight and twenty-nine hundredths percent (48.29%) as of the Phase IID Rent Commencement Date. Notwithstanding the foregoing and the provisions of Section 9.1(c), with respect to liability insurance premiums (except to the extent separately and specifically allocable to a Building, in which event Tenant's Operating Cost Share with respect thereto shall be 100% for the Phase IA Building and the

Phase IB Building and 94.91% for the Phase II Building), the land component of real property taxes and assessments, common area lighting and maintenance expenses, and other similar expenses that are incurred or measured on a Center-wide basis (rather than being clearly and reasonably allocable or attributable to a specific Building alone, in which event Tenant's Operating Cost Share with respect thereto shall be 100% for the Phase IA Building and the Phase IB Building and 94.91% for the Phase II Building) or that are incurred with respect to common area facilities, notwithstanding any other provisions of this Article 9, Tenant's Operating Cost Share with respect to such Center-wide and/or common area expenses from and after each respective Rent Commencement Date, regardless of the status of construction and occupancy of the other contemplated buildings in the Center, shall be equal to the percentage amount which is equivalent to a fraction, the numerator of which is the actual square footage of the Building(s) as to which a Rent Commencement Date has then occurred, as determined on the basis of measurement set forth in Section 1.1(c) hereof, and the denominator of which is the sum of the actual square footage of all then completed buildings in the Center plus the proposed square footage (as reflected in Landlord's entitlements for the Property) of all not yet completed buildings that Landlord proposes to construct in the Center (excluding the proposed child care facility and proposed stand-alone restaurant as hereinafter set forth), in each case as determined on the basis of measurement set forth in Section 1.1(c) hereof, consistently applied; provided, however, that the adjusted Tenant's Operating Cost Share determined pursuant to this sentence shall be further adjusted from time to time to reflect (x) any difference between the actual square footage of any additional buildings completed in the Center from time to time and the proposed square footage at which such additional buildings were previously included in the application of the foregoing formula, and (y) any increase or decrease in the aggregate square footage of the buildings that Landlord proposes to construct in the Center as part of the initial phased development of the Center (such as, but not limited to, any decision by Landlord to defer indefinitely, beyond the normal and reasonable phasing of the Center, the construction of any of the planned buildings in the Center and/or any action by governmental authorities to reduce the aggregate square footage of the buildings that Landlord is entitled to construct in the Center pursuant to Landlord's entitlements as amended from time to time), provided that in no event shall Tenant's Operating Share be calculated with a denominator of less than 550,000 square feet (except that such minimum denominator shall be reduced to the extent any square footage of existing or proposed buildings in the Center from time to time is removed from commercial use entirely, other than on a temporary or interim basis, as a result of casualty or condemnation, or to the extent any buildings in the Center from time to time cease to be operated and accounted for on an integrated basis with the rest of the Center for Operating Expense purposes as a result of the sale of a portion of the Property or otherwise).

(b) Tenant's Operating Cost Share as specified in Section 9.1(a) as of the Phase I Rent Commencement Date is based upon an estimated area of 103,000 square feet for the Phase IA Building, an estimated area of 87,000 square feet for the Phase IB Building (not including the Connector Bridge contemplated in Section 1.1(a), but if such Connector Bridge is in fact constructed, the square footage thereof shall be included in the square footage of the Phase IB Building for purposes of all calculations of Tenant's Operating Cost Share under this Article 9) and an aggregate estimated area of 482,000 square feet for all of the buildings that Landlord presently expects to have in fully constructed and occupied condition on the Property at the Phase I Rent Commencement Date; Tenant's Operating Cost Share as specified in Section 9.1(a) as of the Phase IIA Rent Commencement Date is based upon an estimated area of 23,300 square feet for Phase IIA and upon an aggregate estimated area of 510,200 square feet for all of the buildings that Landlord presently expects to have in fully constructed and occupied condition on the Property at the Phase IIA Rent Commencement Date; Tenant's Operating Cost Share as specified in Section 9.1(a) as of the Phase IIB Rent Commencement Date is based upon an estimated area of 23,300 square feet for Phase IIB and upon an aggregate estimated area of 533,600 square feet for all of the buildings that Landlord presently expects to have in fully constructed and occupied condition on the Property at the Phase IIB Rent Commencement Date; Tenant's Operating Cost Share as specified in Section 9.1(a) as of the Phase IIC Rent Commencement Date is based upon an estimated area of 23,300 square feet for Phase IIC and upon an aggregate estimated area of 556,900 square feet for all of the buildings that Landlord presently expects to have in fully constructed and occupied condition on the Property at the Phase IIC Rent Commencement Date; and Tenant's Operating Cost Share as specified in Section 9.1(a) as of the Phase IID Rent Commencement Date is based upon an estimated area of 23,300 square feet for Phase IID and upon an aggregate estimated area of 580,200 square feet for all of the buildings that Landlord presently expects to have in fully constructed and occupied condition on the Property at the Phase IID Rent Commencement Date. If the actual area of the respective Buildings (when completed) or phases thereof (in the case of the Phase II Building) or of the other buildings existing from time to time in the Center, as determined on the basis of measurement set forth in Section 1.1(c) hereof (which basis of measurement shall be applied consistently for all buildings in the Center), differs from the assumed numbers set forth above

(including, but not limited to, any such difference arising from the completion and occupancy of buildings in the Center before or after the respective Rent Commencement Dates hereunder, as contemplated in Section 9.1(c) below, and/or from the construction of the Connector Bridge contemplated in Section 1.1(a), if applicable), then Tenant's Operating Cost Share shall be adjusted to reflect the actual areas so determined as they exist from time to time. In no event, however, shall the square footage of any child care facility or stand-alone restaurant on the Property be included as part of the square footage of buildings on the Property in calculating Tenant's Operating Cost Share, nor shall any costs or expenses relating to the proposed child care facility and proposed stand-alone restaurant on the Property be included in Operating Expenses as hereinafter defined. In the case of expenses that are incurred or measured on a Center-wide basis or that are incurred with respect to Common Area facilities, Landlord shall allocate a reasonable share of such expenses to the proposed child care facility and proposed stand-alone restaurant on the Property and shall exclude such share from Operating Expenses pursuant to the preceding sentence.

(c) As Landlord constructs additional buildings in the Center (other than those described in the first sentence of Section 9.1(b) as already being taken into account in the estimated figures set forth above), Tenant's Operating Cost Share shall be adjusted from time to time to be equal to the percentage determined by dividing the gross square footage of the Building(s) as to which a Rent Commencement Date has occurred hereunder, as they then exist, by the gross square footage of all buildings located in the Center (subject to the exclusion set forth in Section 9.1(b) with respect to the proposed child care facility and proposed restaurant). In determining such percentage, a building shall be taken into account from and after the date on which a tenant first enters into possession of the building or a portion thereof; the determination of the gross square footage of any such building by Landlord's architect in a manner consistent with the manner in which other buildings in the Center are measured shall be final and binding upon the parties; and costs and expenses relating to a new building shall be taken into account as Operating Expenses under this Article 9 only from and after the date on which the square footage of the building is taken into account in determining Tenant's Operating Cost Share under the criteria set forth in this paragraph.

9.2 Definition Of Operating Expenses.

(a) Subject to the exclusions and provisions set forth in this Article 9, the term "Operating Expenses" shall mean the total costs and expenses incurred by or allocable to Landlord for management, operation and maintenance of the Improvements, the Property and the Center, including, without limitation, costs and expenses of (i) insurance (including, but not limited to, earthquake insurance and environmental insurance), property management (provided that Tenant's allocable share of property management fees for any applicable period during the term of this Lease shall not exceed a maximum amount equal to one and one half percent (1.5%) of the Minimum Rental payable hereunder with respect to such period), landscaping, and the operation, repair and maintenance of buildings and Common Areas; (ii) all utilities and services; (iii) real and personal property taxes and assessments or substitutes therefor levied or assessed against the Center or any part thereof, including (but not limited to) any possessory interest, use, business, license or other taxes or fees, any taxes imposed directly on rents or services, any assessments or charges for police or fire protection, housing, transit, open space, street or sidewalk construction or maintenance or other similar services from time to time by any governmental or quasi-governmental entity, and any other new taxes on landlords in addition to taxes now in effect; (iv) supplies, equipment, utilities and tools used in management, operation and maintenance of the Center; (v) capital improvements to the Property, the Improvements or the Center, amortized over their useful lives as determined by Landlord's accountants consistent with generally accepted accounting principles and/or tax accounting principles, (aa) which reduce or will cause future reduction of other items of Operating Expenses for which Tenant is otherwise required to contribute or (bb) which are required by law, ordinance, regulation or order of any governmental authority; and (vi) any other costs (including, but not limited to, any parking or utilities fees or surcharges not otherwise specifically addressed elsewhere in this Lease) allocable to or paid by Landlord, as owner of the Center or Improvements, pursuant to any applicable laws, ordinances, regulations or orders of any governmental or quasi-governmental authority or pursuant to the terms of any declarations of covenants, conditions and restrictions now or hereafter affecting the Center or any other property over which Tenant has non-exclusive usage rights as contemplated in Section 1.1(b) hereof. Operating Expenses shall not include any costs attributable to the work for which Landlord is required to pay under Article 5 or the Workletter, nor any costs attributable to the initial construction of buildings or

Common Area improvements in the Center, nor any costs attributable to buildings the square footage of which is not taken into account in determining Tenant's Operating Cost Share under Section 9.1 for the applicable period. The distinction between items of ordinary operating maintenance and repair and items of a capital nature shall be made in accordance with generally accepted accounting principles applied on a consistent basis or in accordance with tax accounting principles, as determined in good faith by Landlord's accountants.

(b) Notwithstanding any other provisions of this Section 9.2, the following shall not be included within Operating Expenses: (i) rent paid to any ground lessor; (ii) the cost of constructing tenant improvements for any other tenant of a Building or the Center; (iii) the costs of special services, goods or materials provided to any other tenant of a Building or the Center and not offered or made available to Tenant; (iv) repairs covered by proceeds of insurance or from funds provided by Tenant or any other tenant of the Center, or as to which any other tenant of the Center is obligated to make such repairs or to pay the cost thereof; (v) legal fees, advertising costs, commissions or other related expenses incurred by Landlord in connection with the leasing of space to individual tenants of the Center; (vi) repairs, alterations, additions, improvements or replacements needed to rectify or correct any defects in the original design, materials or workmanship of a Building, the Center or the Common Areas; (vii) damage and repairs necessitated by the negligence or willful misconduct of Landlord or of Landlord's employees, contractors or agents; (viii) Landlord's general overhead expenses not related to the Buildings or the Center; (ix) legal fees, accountants' fees and other expenses incurred in connection with disputes with tenants or other occupants of the Center, or in connection with the enforcement of the terms of any leases with tenants or the defense of Landlord's title to or interest in the Center or any part thereof; (x) costs incurred due to a violation by Landlord or any other tenant of the Center of the terms and conditions of any lease; (xi) costs of any service provided to Tenant or to other occupants of a Building or the Center for which Landlord is reimbursed other than through recovery of Operating Expenses; (xii) personal property taxes due and payable by any other tenant of the Center; (xiii) costs incurred by Landlord pursuant to Article 17 of this Lease in connection with an event of casualty or condemnation; (xiv) depreciation on buildings; (xv) interest; (xvi) capital items (other than as expressly provided above); (xvii) payments on debt (principal or interest); (xviii) legal fees; (xix) amounts paid to any affiliates of Landlord (i.e., persons or companies controlling, controlled by or under common control with Landlord) for provision of services, except to the extent that the costs of such services do not exceed a reasonable and competitive rate for such services in the market for provision of comparable commercial services in the San Francisco Bay Area; (xx) any bad debt losses, rent losses or reserves for bad debt; (xxi) any costs relating to the creation, maintenance and operation of and the internal accounting for the legal entity which constitutes the landlord hereunder; and (xxii) any late fees or penalties or similar fees resulting from delinquent payment by Landlord of any taxes, fees or contract amounts. Moreover, Operating Expenses shall not include any expenses of operation and maintenance of the parking structure and parking areas on the Property or of measures undertaken by Landlord pursuant to the TDMP (as defined in Section 21.20(a)), except to the extent such expenses in the aggregate exceed, for the applicable period, aggregate parking revenues received by Landlord with respect to that period from tenants under provisions comparable to Section 21.20(b) hereof and from any other users paying hourly, daily, monthly or other fees for the use of such parking structure and/or parking areas from time to time. Landlord presently estimates that parking-related revenues will generally exceed expenses of operation and maintenance of the parking structure and parking areas on the Property, leaving a portion of such revenues available to support TDMP measures undertaken by Landlord as contemplated in the preceding sentence.

9.3 Determination and Payment of Operating Expenses. On or before the Phase I Rent Commencement Date and during the last month of each calendar year of the term of this Lease ("Lease Year"), or as soon thereafter as practical, Landlord shall provide Tenant notice of Landlord's estimate of the Operating Expenses for the ensuing Lease Year or applicable portion thereof. On or before the first day of each month during the ensuing Lease Year or applicable portion thereof, beginning on the Phase I Rent Commencement Date, Tenant shall pay to Landlord Tenant's Operating Cost Share of the portion of such estimated Operating Expenses allocable (on a prorata basis) to such month; provided, however, that if such notice is not given in the last month of a Lease Year, Tenant shall continue to pay on the basis of the prior year's estimate, if any, until the month after such notice is given. If at any time or times it appears to Landlord that the actual Operating Expenses will vary from Landlord's estimate by more than five percent (5%), Landlord may, by notice to Tenant, revise its estimate for such year and

subsequent payments by Tenant for such year shall be based upon such revised estimate. In the event of any subsequent rebate, refund, adjustment or surcharge with respect to any item of Operating Expenses allocable to any portion of the term of this Lease, the amount of such rebate, refund, adjustment or surcharge shall be for Tenant's benefit or account.

9.4 Final Accounting For Lease Year.

(a) Within ninety (90) days after the close of each Lease Year, or as soon after such 90-day period as practicable, Landlord shall deliver to Tenant a statement of Tenant's Operating Cost Share of the Operating Expenses for such Lease Year prepared by Landlord from Landlord's books and records, which statement shall be final and binding on Landlord and Tenant (except as provided in Section 9.4(b)). If on the basis of such statement Tenant owes an amount that is more or less than the estimated payments for such Lease Year previously made by Tenant, Tenant or Landlord, as the case may be, shall pay the deficiency to the other party within thirty (30) days after delivery of the statement. Failure or inability of Landlord to deliver the annual statement within such ninety (90) day period shall not impair or constitute a waiver of Tenant's obligation to pay Operating Expenses, or cause Landlord to incur any liability for damages.

(b) At any time within four (4) months after receipt of Landlord's annual statement of Operating Expenses as contemplated in Section 9.4(a), Tenant shall be entitled, upon reasonable written notice to Landlord and during normal business hours at Landlord's office or such other places as Landlord shall designate, to inspect and examine those books and records of Landlord relating to the determination and payment of Operating Expenses relating to the immediately preceding Lease Year covered by such annual statement or, if Tenant so elects by written notice to Landlord, to request an independent audit of such books and records. The independent audit of the books and records shall be conducted by a certified public accountant reasonably acceptable to both Landlord and Tenant or, if the parties are unable to agree, by a certified public accountant appointed by the Presiding Judge of the San Mateo County Superior Court upon the application of either Landlord or Tenant (with notice to the other party). In either event, such certified public accountant shall be one who is not then employed in any capacity by Landlord or Tenant or by any of their respective affiliates. The audit shall be limited to the determination of the amount of Operating Expenses for the subject Lease Year, and shall be based on generally accepted accounting principles and tax accounting principles, consistently applied. If it is determined, by mutual agreement of Landlord and Tenant or by independent audit, that the amount of Operating Expenses billed to or paid by Tenant for the applicable Lease Year was incorrect, then the appropriate party shall pay to the other party the deficiency or overpayment, as applicable, within thirty (30) days after the final determination of such deficiency or overpayment. All costs and expenses of the audit shall be paid by Tenant unless the audit shows that Landlord overstated Operating Expenses for the subject Lease Year by more than five percent (5%), in which case Landlord shall pay all costs and expenses of the audit. Each party agrees to maintain the confidentiality of the findings of any audit in accordance with the provisions of this Section 9.4.

9.5 Proration. If a Rent Commencement Date falls on a day other than the first day of a Lease Year or if this Lease terminates on a day other than the last day of a Lease Year, then the amount of Operating Expenses payable by Tenant with respect to such first or last partial Lease Year shall be prorated on the basis which the number of days during such Lease Year in which this Lease is in effect bears to 365. The termination of this Lease shall not affect the obligations of Landlord and Tenant pursuant to Section 9.4 to be performed after such termination.

10. UTILITIES

10.1 Payment. Commencing with the applicable Rent Commencement Date for each Building and thereafter throughout the term of this Lease, Tenant shall pay, before delinquency, all charges for water, gas, heat, light, electricity, power, sewer, telephone, alarm system, janitorial and other services or utilities supplied to or consumed in or with respect to such Building (other than any separately metered costs for water, electricity or other services or utilities furnished with respect to the Common Areas, which costs shall be paid by Landlord and shall constitute Operating Expenses under Section 9.2 hereof), including any taxes on such services and utilities. It is the intention of the parties that all such services and utilities shall be separately metered to each Building and, in the case of the Phase II Building, to Tenant's

premises in such Building. In the event that any of such services or utilities supplied to any Building are not separately metered (or, in the case of the Phase II Building, are not separately metered to Tenant's premises in that Building), then the amount thereof shall be an item of Operating Expenses allocable to the specific Building and shall be allocated to and paid by the tenants of that specific Building as provided in Article 9.

10.2 Interruption. There shall be no abatement of rent or other charges required to be paid hereunder and Landlord shall not be liable in damages or otherwise for interruption or failure of any service or utility furnished to or used with respect to any Building or the Property because of accident, making of repairs, alterations or improvements, severe weather, difficulty or inability in obtaining services or supplies, labor difficulties or any other cause unless the interruption or failure of a service or utility is caused by the negligence or willful misconduct of Landlord, its agents, employees or contractors, in which case all rent hereunder shall be abated for each Building for each day that such service or utility is not available at such Building as a result of such negligence or willful misconduct, beginning on the first business day following the day on which the unavailability of such service or utility at the applicable Building commences, and Landlord shall be liable for Tenant's actual damages (but not lost profits or other consequential damages) as a result of the unavailability of such service or utility caused by such negligence or willful misconduct. Notwithstanding the foregoing, Landlord agrees that except in case of emergency, it will not voluntarily interrupt, shut down, or otherwise interfere with utilities or services to any Building between the hours of 8:00 a.m. and 5:00 p.m. (excluding weekends and holidays) for any reason, including without limitation, development of other buildings and improvements on the Property (but excluding any necessary interruption or shutdown of utilities or services in connection with the construction of any of the Buildings themselves). In the event Landlord violates the foregoing prohibition, all rent hereunder for each Building shall be abated for each day any service or utility is not available at such Building as a result of Landlord's voluntary interruption, shutdown or interference therewith and Tenant shall have the right to exercise all rights and remedies available at law or in equity for such violation, including the right to enjoin Landlord's actions which are the cause of such interruption, shut down or interference. In the event of any interruption or shutdown of utilities or services by Landlord under emergency circumstances, Landlord shall use reasonable efforts to provide Tenant with oral notice of such interruption or shutdown as promptly as the circumstances reasonably permit.

11. ALTERATIONS; SIGNS

11.1 Right To Make Alterations. Tenant shall make no alterations, additions or improvements to the Property without the prior written consent of Landlord, which consent shall not be unreasonably withheld or delayed, except that Tenant shall not be required to obtain such consent for interior non-structural alterations costing less than Fifty Thousand Dollars ($50,000.00) for any single project (i.e., any single item of alterations or set of related alterations in a Building) and less than One Hundred Thousand Dollars ($100,000.00) in the aggregate with respect to the applicable Building, on a Building by Building basis, during any twelve (12) month period. All such alterations, additions and improvements shall be completed with due diligence in a first-class workmanlike manner, in compliance with plans and specifications approved in writing by Landlord and in compliance with all applicable laws, ordinances, rules and regulations, and to the extent Landlord's consent is not otherwise required hereunder for such alterations, additions or improvements, Tenant shall give prompt written notice thereof to Landlord. Tenant shall cause any contractors engaged by Tenant for work on the Property to maintain public liability and property damage insurance, and other customary insurance, with such terms and in such amounts as Landlord may reasonably require, naming as additional insureds Landlord and any of its members, partners, shareholders, property managers, lenders, agents and employees designated by Landlord for this purpose, and shall furnish Landlord with certificates of insurance or other evidence that such coverage is in effect. Notwithstanding any other provisions of this Section 11.1, under no circumstances shall Tenant make any structural alterations or improvements, or any substantial changes to the roof or substantial equipment installations on the roof, or any substantial changes or alterations to building systems, without Landlord's prior written consent.

11.2 Title To Alterations. All alterations, additions and improvements installed in, on or about the Buildings or the Property shall become part of the Improvements and the property of Landlord, unless Landlord elects to require Tenant to remove the same upon the termination of

this Lease; provided, however, that the foregoing shall not apply to (i) any Tenant Improvements, (ii) any other alterations, additions or improvements or (iii) Tenant's movable furniture, equipment and trade fixtures, to the extent Tenant can demonstrate that any such items described in the preceding clauses (i) through (iii) were acquired and installed by Tenant at Tenant's sole expense, without any use of funds from the Tenant Improvement Allowance under the Workletter, and are not an integral part of the applicable Building's structure, interior architectural improvements, HVAC, plumbing or electrical systems or other standard operating systems. All of such items described in clauses (i) through (iii) of the preceding sentence and meeting the requirements set forth following clause (iii) in the preceding sentence (in all events including, but not limited to, lab benches, fume hoods and portable cold rooms, to the extent they meet the requirements set forth following clause (iii) in the preceding sentence) may (and, if duly elected by Landlord hereunder, shall) be removed by Tenant upon termination of this Lease. Tenant shall promptly repair any damage caused by its removal of any such improvements from time to time. Notwithstanding any other provisions of this Article 11, however, under no circumstances shall Tenant have any right to remove from the Buildings or the Property, at the expiration or termination of this Lease, any lab benches, fume hoods, cold rooms or other similar improvements and equipment installed in the Buildings with use of funds from the Tenant Improvement Allowance. Tenant shall also be responsible, to the extent provided in Section 12.2(c) hereof, for the cost of removal of the Connector Bridge at the expiration or termination of this Lease if such Connector Bridge is constructed as contemplated in Section 1.1(a) hereof. Notwithstanding any other provisions of this Article 11, (x) it is the intention of the parties that Landlord shall be entitled to claim all tax attributes associated with alterations, additions, improvements and equipment constructed or installed by Tenant or Landlord with funds provided by Landlord pursuant to the Tenant Improvement Allowance; and (y) it is the intention of the parties that Tenant shall be entitled to claim, during the term of this Lease, all tax attributes associated with alterations, additions, improvements and equipment constructed or installed by Tenant with Tenant's own funds (and without any payment or reimbursement by Landlord pursuant to the Tenant Improvement Allowance), despite the fact that many items described in this clause (y) may be characterized in this Section 11.2 as becoming Landlord's property upon installation, in recognition of the fact that Tenant will have installed and paid for such items, will have the right of possession and use of such items during the term of this Lease and will have the obligation to pay (directly or indirectly) property taxes on such items, carry insurance on such items and bear the risk of loss with respect to such items under Article 17 hereof. If and to the extent it becomes necessary, in implementation of the foregoing intentions, to identify (either specifically or on a percentage basis, as may be required under applicable tax laws) which alterations, additions, improvements and equipment constructed as part of Tenant's Work under the Workletter have been funded through the Tenant Improvement Allowance and which have been constructed or installed with Tenant's own funds, Landlord and Tenant agree to cooperate reasonably and in good faith to make such an identification by mutual agreement.

11.3 Tenant Trade Fixtures. Notwithstanding the provisions of Sections 11.1 and 11.2, but subject to the third sentence of Section 11.2 and to Section 11.5 (which shall be controlling in the case of signs, logos and insignia), Tenant may install, remove and reinstall trade fixtures without Landlord's prior written consent, except that installation and removal of any trade fixtures which are affixed to the Buildings or the Property or which affect the exterior or structural portions of the Buildings or the building systems shall require Landlord's written approval. Tenant shall immediately repair any damage caused by installation and removal of trade fixtures under this Section 11.3.

11.4 No Liens. Tenant shall at all times keep the Buildings and the Property free from all liens and claims of any contractors, subcontractors, materialmen, suppliers or any other parties employed either directly or indirectly by Tenant in construction work on the Buildings or the Property. Tenant may contest any claim of lien, but only if, prior to such contest, Tenant either (i) posts security in the amount of the claim, plus estimated costs and interest, or (ii) records a bond of a responsible corporate surety in such amount as may be required to release the lien from the Buildings and the Property. Tenant shall indemnify, defend and hold Landlord harmless against any and all liability, loss, damage, cost and other expenses, including, without limitation, reasonable attorneys' fees, arising out of claims of any lien for work performed or materials or supplies furnished at the request of Tenant or persons claiming under Tenant.

11.5 Signs. Tenant shall have the right to display its corporate name, logo and/or insignia with lighted signage on the exterior of the Buildings and in front of the entrance to each Building, subject to (a) Landlord's prior approval as to location, size, design and composition (which approval shall not be unreasonably withheld or delayed), (b) the sign criteria established for the Center from time to time and (c) all restrictions and requirements of applicable law and of any covenants, conditions and restrictions or other written agreements now or hereafter applicable to the Property. Tenant shall immediately repair any damage caused by installation and removal of signs under this Section 11.5 from time to time. In the event Landlord installs at the Project any monument sign(s) on which identification signage for any individual tenants is included, Tenant shall be entitled to have identification signage on such monument sign(s) on a basis comparable to that made available to any other tenants.

12. MAINTENANCE AND REPAIRS

12.1 Landlord's Work.

(a) Landlord shall repair and maintain or cause to be repaired and maintained the Common Areas of the Center, the roofs (structural portions only), exterior walls and other structural portions of the Buildings, any demising walls between Tenant's portion of the Phase II Building and the retail portion of the Phase II Building (other than painting, minor surface damage and other cosmetic matters affecting only Tenant's side of any such demising walls), and any building systems that serve, in common, both Tenant's portion of the Phase II Building and the retail portion of the Phase II Building. The cost of all work performed by Landlord under this Section 12.1 shall be an Operating Expense hereunder, except to the extent such work (i) is required due to the negligence of Landlord, (ii) is a capital expense not includible as an Operating Expense under Section 9.2 hereof, or (iii) is required due to the negligence or willful misconduct of Tenant or its agents, employees or invitees (in which event Tenant shall bear the full cost of such work pursuant to the indemnification provided in Section 14.6 hereof, subject to the release set forth in Section 14.4 hereof). Tenant knowingly and voluntarily waives the right to make repairs at Landlord's expense, except to the extent expressly set forth in Section 12.1(b), or to offset the cost thereof against rent, under any law, statute, regulation or ordinance now or hereafter in effect.

(b) If Landlord fails to perform any repairs or maintenance required to be performed by Landlord on any of the Buildings under Section 12.1(a) and such failure continues for thirty (30) days or more after Tenant gives Landlord written notice of such failure (or, if such repairs or maintenance cannot reasonably be performed within such 30-day period, then if Landlord fails to commence performance within such 30-day period and thereafter to pursue such performance diligently to completion), then except as otherwise expressly excluded herein, Tenant shall have the right to perform such repairs or maintenance and Landlord shall reimburse Tenant for the reasonable cost thereof within fifteen (15) days after written notice from Tenant of the completion and cost of such work, accompanied by copies of invoices or other reasonable supporting documentation. Under no circumstances, however, shall Tenant have any right to offset the cost of any such work against rent or other charges falling due from time to time under this Lease. Moreover, under no circumstances shall this Section 12.1(b) authorize Tenant to perform any of Landlord's repairs or maintenance obligations (x) in the Phase II Building, except to the extent the conditions requiring repair or maintenance affect only Tenant's portion of the Phase II Building and not the retail portion of the Phase II Building, or (y) in the Common Areas of the Property.

12.2 Tenant's Obligation For Maintenance.

(a) Good Order, Condition And Repair. Except as provided in Section 12.1 hereof, Tenant at its sole cost and expense shall keep and maintain in good and sanitary order, condition and repair the Buildings (from and after the applicable Rent Commencement Date for each Phase I Building and for each phase of the Phase II Building) and every part thereof, wherever located, including but not limited to the roofs (non-structural portions only), signs, interiors, ceilings, electrical systems, plumbing systems, telephone and communications systems of the Buildings, the HVAC equipment and related mechanical systems serving the Buildings (for which equipment and systems Tenant shall enter into a service contract with a person or entity designated or approved by Landlord), all doors, door checks, windows, plate glass, door fronts, exposed plumbing and sewage and other utility facilities, fixtures, lighting, wall surfaces, floor surfaces and ceiling surfaces of the Buildings and all other interior repairs, foreseen and

unforeseen, with respect to the Buildings, as required; provided, however, that (x) Tenant's ordinary repair obligation with respect to any demising walls between Tenant's portion of the Phase II Building and the retail portion of the Phase II Building shall be limited to painting, minor surface damage and other cosmetic matters affecting only Tenant's side of any such demising walls, and (y) Tenant's ordinary repair obligation with respect to building systems in the Phase II Building shall be limited to building systems or portions thereof that serve only Tenant's portion of the Phase II Building and shall not include building systems or portions thereof which serve, in common, both Tenant's portion of the Phase II Building and the retail portion of the Phase II Building.

(b) Landlord's Remedy. If Tenant, after notice from Landlord, fails to make or perform promptly any repairs or maintenance which are the obligation of Tenant hereunder, Landlord shall have the right, but shall not be required, to enter the applicable Building(s) and make the repairs or perform the maintenance necessary to restore the applicable Building(s) to good and sanitary order, condition and repair. Immediately on demand from Landlord, the cost of such repairs shall be due and payable by Tenant to Landlord.

(c) Condition Upon Surrender; Removal of Connector Bridge. At the expiration or sooner termination of this Lease, Tenant shall surrender the Buildings and the Improvements, including any additions, alterations and improvements thereto, broom clean, in good and sanitary order, condition and repair, ordinary wear and tear and casualty damages (the latter of which shall be governed by the provisions of Article 17 hereof) excepted, first, however, removing all goods and effects of Tenant and all and fixtures and items required or permitted to be removed pursuant to this Lease (including, but not limited to, any such removal required as a result of an election duly made by Landlord to require such removal as contemplated in Section 11.2), and repairing any damage caused by such removal. In addition, notwithstanding any other provisions of this Lease, if the Connector Bridge is constructed as contemplated in Section 1.1(a) hereof and if Landlord notifies Tenant in writing, prior to or within six (6) months after the expiration or sooner termination of this Lease, that Landlord wishes, in its sole discretion, to remove the Connector Bridge following the expiration or sooner termination of this Lease in order to facilitate the re-leasing of the Phase I Buildings, then Tenant shall be responsible for all costs reasonably incurred by Landlord in connection with the removal of the Connector Bridge and the restoration and repair of the areas where the Connector Bridge was attached to the respective Phase I Buildings, and Tenant shall reimburse the amount of such costs to Landlord from time to time within twenty (20) days after receipt of Landlord's written request(s) for reimbursement, accompanied by supporting documentation evidencing, in reasonable detail, the costs for which such reimbursement is requested. Tenant expressly waives any and all interest in any personal property and trade fixtures not removed from the Property by Tenant at the expiration or termination of this Lease, agrees that any such personal property and trade fixtures may, at Landlord's election, be deemed to have been abandoned by Tenant, and authorizes Landlord (at its election and without prejudice to any other remedies under this Lease or under applicable law) to remove and either retain, store or dispose of such property at Tenant's cost and expense, and Tenant waives all claims against Landlord for any damages resulting from any such removal, storage, retention or disposal.

13. USE OF PROPERTY

13.1 Permitted Use. Subject to Sections 13.3 and 13.4 hereof, Tenant shall use the Buildings solely as laboratory and research and development facilities, including (but not limited to) wet chemistry and biology labs, clean rooms, storage and use of toxic and radioactive materials incidental to such laboratory, research and development activities (subject to the provisions of Section 13.6 hereof), storage and use of laboratory animals, administrative offices, and other lawful purposes related to or incidental to such research and development use (subject in each case to receipt of all necessary approvals from the City of South San Francisco and other governmental agencies having jurisdiction over the Buildings), and for no other purpose without Landlord's written consent (not to be unreasonably withheld or delayed).

13.2 [Omitted.]

13.3 No Nuisance. Tenant shall not use the Buildings or the Property for or carry on or permit upon the Property or any part thereof any offensive, noisy or dangerous trade, business, manufacture, occupation, odor or fumes, or any nuisance or anything against public policy, nor

interfere with the rights or business of Landlord in the Buildings or the Property, nor commit or allow to be committed any waste in, on or about the Property. Tenant shall not do or permit anything to be done in or about the Property, nor bring nor keep anything therein, which will in any way cause the Property to be uninsurable with respect to the insurance required by this Lease or with respect to standard fire and extended coverage insurance with vandalism, malicious mischief and riot endorsements.

13.4 Compliance With Laws.

(a) Tenant shall not use the Buildings or the Property, or permit the Buildings or the Property to be used, in whole or in part for any purpose or use that is in violation of any applicable laws, ordinances, regulations or rules of any governmental agency or public authority. Tenant shall keep the Buildings and the Improvements equipped with all safety appliances required by law, ordinance or insurance on the Property, or any order or regulation of any public authority, because of Tenant's particular use of the Property. Tenant shall procure all licenses and permits required for Tenant's use of the Property. Tenant shall use the Property in strict accordance with all applicable ordinances, rules, laws and regulations and shall comply with all requirements of all governmental authorities now in force or which may hereafter be in force pertaining to the use of the Property by Tenant, including, without limitation, regulations applicable to noise, water, soil and air pollution, and making such nonstructural alterations and additions thereto as may be required from time to time by such laws, ordinances, rules, regulations and requirements of governmental authorities or insurers of the Property (collectively, "Requirements") because of Tenant's construction of improvements or other particular use of the Property. Any structural alterations or additions required from time to time by applicable Requirements because of Tenant's construction of improvements in the Buildings or other particular use of the Property shall, at Landlord's election, either (i) be made by Tenant, at Tenant's sole cost and expense, in accordance with the procedures and standards set forth in Section 11.1 for alterations by Tenant, or (ii) be made by Landlord at Tenant's sole cost and expense, in which event Tenant shall pay to Landlord as additional rent, within ten (10) days after demand by Landlord, an amount equal to all reasonable costs incurred by Landlord in connection with such alterations or additions. The judgment of any court, or the admission by Tenant in any proceeding against Tenant, that Tenant has violated any law, statute, ordinance or governmental rule, regulation or requirement shall be conclusive of such violation as between Landlord and Tenant.

(b) In compliance with requirements imposed upon Landlord by an Owner Participation Agreement between Landlord and The Redevelopment Agency of the City of South San Francisco, Tenant hereby agrees to and accepts the following provision:

> "Tenant herein covenants by and for itself and its successors and assigns, and all persons claiming under or through it, and this Lease is made and accepted upon and subject to the conditions that there shall be no discrimination against or segregation of any person or group of persons on account of race, color, religion, creed, sex, marital status, ancestry or national origin in the leasing, subleasing, transferring, use, occupancy, tenure or enjoyment of the property herein leased, nor shall Tenant or any person claiming under or through it establish or permit any such practice or practices of discrimination or segregation with reference to the selection, location, number, use or occupancy of tenants, lessees, sublessees, subtenants or vendees in the property herein leased."

13.5 Liquidation Sales. Tenant shall not conduct or permit to be conducted any auction, bankruptcy sale, liquidation sale, or going out of business sale, in, upon or about the Property, whether said auction or sale be voluntary, involuntary or pursuant to any assignment for the benefit of creditors, or pursuant to any bankruptcy or other insolvency proceeding.

13.6 Environmental Matters.

(a) For purposes of this Section, "hazardous substance" shall mean the substances included within the definitions of the term "hazardous substance" under (i) the Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended, 42 U.S.C. §§ 9601 et seq., and the regulations promulgated thereunder, as amended, (ii) the California Carpenter-Presley-Tanner Hazardous Substance Account Act, California Health & Safety Code §§ 25300 et seq., and regulations promulgated thereunder, as amended, (iii) the

Hazardous Materials Release Response Plans and Inventory Act, California Heath & Safety Code §§ 25500 et seq., and regulations promulgated thereunder, as amended, and (iv) petroleum; "hazardous waste" shall mean (i) any waste listed as or meeting the identified characteristics of a "hazardous waste" under the Resource Conservation and Recovery Act of 1976, 42 U.S.C. §§ 6901 et seq., and regulations promulgated pursuant thereto, as amended (collectively, "RCRA"), (ii) any waste meeting the identified characteristics of "hazardous waste," "extremely hazardous waste" or "restricted hazardous waste" under the California Hazardous Waste Control Law, California Health & Safety Code §§ 25100 et seq., and regulations promulgated pursuant thereto, as amended (collectively, the "CHWCL"), and/or (iii) any waste meeting the identified characteristics of "medical waste" under California Health & Safety Code §§ 25015-25027.8, and regulations promulgated thereunder, as amended; and "hazardous waste facility" shall mean a hazardous waste facility as defined under the CHWCL.

(b) Without limiting the generality of the obligations set forth in Section 13.4 of this Lease:

(i) Tenant shall not cause or permit any hazardous substance or hazardous waste to be brought upon, kept, stored or used in or about the Property without the prior written consent of Landlord, which consent shall not be unreasonably withheld or delayed, except that Tenant, in connection with its permitted use of the Property as provided in Section 13.1, may keep, store and use materials that constitute hazardous substances which are customary for such permitted use, provided such hazardous substances are kept, stored and used in quantities which are customary for such permitted use and are kept, stored and used in full compliance with clauses (ii) and (iii) immediately below.

(ii) Tenant shall comply with all applicable laws, rules, regulations, orders, permits, licenses and operating plans of any governmental authority with respect to the receipt, use, handling, generation, transportation, storage, treatment and/or disposal of hazardous substances or wastes by Tenant or its agents or employees, and Tenant shall provide Landlord with copies of all permits, licenses, registrations and other similar documents that authorize Tenant to conduct any such activities in connection with its authorized use of the Property from time to time.

(iii) Tenant shall not (A) operate on or about the Property any facility required to be permitted or licensed as a hazardous waste facility or for which interim status as such is required, nor (B) store any hazardous wastes on or about the Property for ninety (90) days or more, nor (C) conduct any other activities on or about the Property that could result in the Property being deemed to be a "hazardous waste facility" (including, but not limited to, any storage or treatment of hazardous substances or hazardous wastes which could have such a result), nor (D) store any hazardous wastes on or about the Property in violation of any federal or California laws or in violation of the terms of any federal or California licenses or permits held by Tenant.

(iv) Tenant shall comply with all applicable laws, rules, regulations, orders and permits relating to underground storage tanks installed by Tenant or its agents or employees or at the request of Tenant (including any installation, monitoring, maintenance, closure and/or removal of such tanks) as such tanks are defined in California Health & Safety Code § 25281(x), including, without limitation, complying with California Health & Safety Code §§ 25280-25299.7 and the regulations promulgated thereunder, as amended. Tenant shall furnish to Landlord copies of all registrations and permits issued to or held by Tenant from time to time for any and all underground storage tanks located on or under the Property.

(v) If applicable, Tenant shall provide Landlord in writing the following information and/or documentation at the commencement of this Lease and within sixty (60) days of any change in or addition to the required information and/or documentation (provided, however, that in the case of the materials described in subparagraphs (B), (C) and (E) below, Tenant shall not be required to deliver copies of such materials to Landlord but shall maintain copies of such materials to such extent and for such periods as may be required by applicable law and shall permit Landlord or its representatives to inspect and copy such materials during normal business hours at any time and from time to time upon reasonable notice to Tenant):

(A) A list of all hazardous substances and/or wastes that Tenant receives, uses, handles, generates, transports, stores, treats or disposes of from time to time in connection with its operations on the Property.

(B) All Material Safety Data Sheets ("MSDS's"), if any, required to be completed with respect to operations of Tenant at the Property from time to time in accordance with Title 26, California Code of Regulations § 8-5194 or 42 U.S.C. § 11021, or any amendments thereto, and any Hazardous Materials Inventory Sheets that detail the MSDS's.

(C) All hazardous waste manifests (as defined in Title 26, California Code of Regulations § 22-66481), if any, that Tenant is required to complete from time to time in connection with its operations at the Property.

(D) A copy of any Hazardous Materials Management Plan required from time to time with respect to Tenant's operations at the Property, pursuant to California Health & Safety Code §§ 25500 et seq., and any regulations promulgated thereunder, as amended.

(E) Copies of any Contingency Plans and Emergency Procedures required of Tenant from time to time due to its operations in accordance with Title 26, California Code of Regulations §§ 22-67140 et seq., and any amendments thereto, and copies of any Training Programs and Records required under Title 26, California Code of Regulations, § 22-67105, and any amendments thereto.

(F) Copies of any biennial reports required to be furnished to the California Department of Health Services from time to time relating to hazardous substances or wastes, pursuant to Title 26, California Code of Regulations, § 22-66493, and any amendments thereto.

(G) Copies of all industrial wastewater discharge permits issued to or held by Tenant from time to time in connection with its operations on the Property.

(H) Copies of any other lists or inventories of hazardous substances and/or wastes on or about the Property that Tenant is otherwise required to prepare and file from time to time with any governmental or regulatory authority.

(vi) Tenant shall secure Landlord's prior written approval for any proposed receipt, storage, possession, use, transfer or disposal of "radioactive materials" or "radiation," as such materials are defined in Title 26, California Code of Regulations § 17-30100, and/or any other materials possessing the characteristics of the materials so defined, which approval Landlord may withhold in its sole and absolute discretion; provided, that such approval shall not be required for any radioactive materials (x) for which Tenant has secured prior written approval of the Nuclear Regulatory Commission and delivered to Landlord a copy of such approval (if applicable), or (y) which Tenant is authorized to use pursuant to the terms of a Radioactive Material License (if any) issued by the State of California, provided that Tenant has delivered a copy of such License to Landlord. Tenant, in connection with any such authorized receipt, storage, possession, use, transfer or disposal of radioactive materials or radiation, shall:

(A) Comply with all federal, state and local laws, rules, regulations, orders, licenses and permits issued to or applicable to Tenant with respect to its business operations on the Property;

(B) Maintain, to such extent and for such periods as may be required by applicable law, and permit Landlord or its representatives to inspect during normal business hours at any time and from time to time upon reasonable notice to Tenant, a list of all radioactive materials or radiation received, stored, possessed, used, transferred or disposed of from time to time, to the extent not already disclosed through delivery of a copy of a Nuclear Regulatory Commission approval and/or a California Radioactive Material License with respect thereto as contemplated above; and

(C) Maintain, to such extent and for such periods as may be required by applicable law, and permit Landlord or its representatives to inspect during normal business hours at any time and from time to time upon reasonable notice to Tenant, all licenses,

registration materials, inspection reports, governmental orders and permits in connection with the receipt, storage, possession, use, transfer or disposal of radioactive materials or radiation by Tenant or in connection with the operation of Tenant's business on the Property from time to time.

(vii) Tenant shall comply with any and all applicable laws, rules, regulations and orders of any governmental authority with respect to the release into the environment of any hazardous wastes or substances or radiation or radioactive materials by Tenant or its agents or employees. Tenant shall give Landlord immediate verbal notice of any unauthorized release of any such hazardous wastes or substances or radiation or radioactive materials into the environment, and to follow such verbal notice with written notice to Landlord of such release within twenty-four (24) hours of the time at which Tenant became aware of such release.

(viii) Tenant shall indemnify, defend and hold Landlord harmless from and against any and all claims, losses (including, but not limited to, loss of rental income and loss due to business interruption), damages, liabilities, costs, legal fees and expenses of any sort arising out of or relating to (A) any failure by Tenant to comply with any of its obligations under this Section 13.6(b), or (B) any receipt, use handling, generation, transportation, storage, treatment, release and/or disposal of any hazardous substance or waste or any radioactive material or radiation on or about the Property in connection with Tenant's use or occupancy of the Property or as a result of any intentional or negligent acts or omissions of Tenant or of any agent, employee or invitee of Tenant.

(ix) Tenant shall cooperate with Landlord in furnishing Landlord with complete information regarding Tenant's receipt, handling, use, storage, transportation, generation, treatment and/or disposal of any hazardous substances or wastes or radiation or radioactive materials. Upon request, Tenant agrees to grant Landlord reasonable access at reasonable times to the Property to inspect Tenant's receipt, handling, use, storage, transportation, generation, treatment and/or disposal of hazardous substances or wastes or radiation or radioactive materials, without being deemed guilty of any disturbance of Tenant's use or possession and without being liable to Tenant in any manner.

(x) Notwithstanding Landlord's rights of inspection and review under this Section 13.6(b), Landlord shall have no obligation or duty to so inspect or review, and no third party shall be entitled to rely on Landlord to conduct any sort of inspection or review by reason of the provisions of this Section 13.6(b).

(xi) If Tenant or its employees, agents, contractors, vendors, customers or guests receive, handle, use, store, transport, generate, treat and/or dispose of any hazardous substances or wastes or radiation or radioactive materials on or about the Property at any time during the term of this Lease, then within thirty (30) days after termination or expiration of this Lease, Tenant at its sole cost and expense shall obtain and deliver to Landlord an environmental study, performed by an expert reasonably satisfactory to Landlord, evaluating the presence or absence of hazardous substances and wastes, radiation and radioactive materials on and about the Property. Such study shall be based on a reasonable and prudent level of tests and investigations of the Buildings and other appropriate portions of the Property (if any), which tests shall be conducted no earlier than the date of termination or expiration of this Lease. Liability for any remedial actions required or recommended on the basis of such study shall be allocated in accordance with Sections 13.4, 13.6, 14.6 and other applicable provisions of this Lease.

(c) Landlord shall indemnify, defend and hold Tenant harmless from and against any and all claims, losses, damages, liabilities, costs, legal fees and expenses of any sort arising out of or relating to (i) the presence on the Property of any hazardous substances or wastes or radiation or radioactive materials present on the Property as of the first Rent Commencement Date to occur hereunder (other than as a result of any intentional or negligent acts or omissions of Tenant or of any agent, employee or invitee of Tenant), and/or (ii) any unauthorized release into the environment (including, but not limited to, the Property) of any hazardous substances or wastes or radiation or radioactive materials to the extent such release results from the negligence of or willful misconduct or omission by Landlord or its agents or employees.

(d) In the event of any third-party claims, losses, damages, liabilities, costs, legal fees and expenses of any sort (including, but not limited to, costs incurred with respect to any government-mandated remediation), against either Landlord or Tenant or both, arising out of or relating to (i) the presence on the Property of any hazardous substances or wastes or radiation or radioactive materials not present on the Property as of the first Rent Commencement Date to occur (except to the extent the presence thereof is already covered by an express indemnification obligation under Section 13.6(b)(viii) or Section 13.6(c), as applicable), and/or (ii) any unauthorized release into the environment (including, but not limited to, the Property) of any hazardous substances or wastes or radiation or radioactive materials (except to the extent such release is already covered by an express indemnification obligation under Section 13.6(b)(viii) or Section 13.6(c), as applicable), then (x) Landlord and Tenant shall cooperate reasonably and in good faith in the defense of such third-party claims, liabilities and related matters and (y) Landlord and Tenant shall each bear fifty percent (50%) of the total claims, losses, damages, liabilities, costs, legal fees and expenses incurred by Landlord and/or Tenant in connection with matters covered by this Section 13.6(d). For purposes of the sharing of expenses contemplated in clause (y) of the preceding sentence, the party directly paying or incurring such costs or expenses shall be entitled to invoice the other party from time to time (on a monthly basis or at other appropriate intervals) for such other party's respective share thereof, which invoice shall be accompanied by copies of third-party invoices or other reasonable documentation supporting the invoiced amounts, and the party receiving such invoice shall pay its share as reflected in the applicable invoice within fifteen (15) days after receipt thereof, unless the parties agree otherwise. Within three (3) months after receipt of any such invoice, the party receiving the invoice shall be entitled, upon reasonable written notice and during normal business hours, to inspect and examine the books and records of the party submitting the invoice with respect to the invoiced amounts. Any dispute with respect thereto that the parties are unable to resolve by good faith negotiations shall be resolved by an independent audit using the same procedure set forth in Section 9.3(b).

(e) The provisions of this Section 13.6 shall survive the termination of this Lease.

14. INSURANCE AND INDEMNITY

14.1 Liability and Property Insurance.

(a) Tenant shall procure and maintain in full force and effect at all times during the term of this Lease, at Tenant's cost and expense, commercial general liability insurance to protect against liability arising out of or related to the use of or resulting from any accident occurring in, upon or about the Property, with combined single limit of liability of not less than Five Million Dollars ($5,000,000) per occurrence for bodily injury and property damage. Such insurance shall name Landlord, its Manager, its property manager and any lender holding a deed of trust on the Property from time to time (as designated in writing by Landlord to Tenant from time to time) as additional insureds thereunder. The amount of such insurance shall not be construed to limit any liability or obligation of Tenant under this Lease. Tenant shall also procure and maintain in full force and effect at all times during the term of this Lease, at Tenant's cost and expense, products/completed operations coverage on terms and in amounts satisfactory to Landlord in its reasonable discretion.

(b) Landlord shall procure and maintain in full force and effect at all times during the term of this Lease, at Landlord's cost and expense (but reimbursable as an Operating Expense under Section 9.2 hereof), commercial general liability insurance to protect against liability arising out of or related to the use of or resulting from any accident occurring in, upon or about the Property, with combined single limit of liability of not less than Five Million Dollars ($5,000,000) per occurrence for bodily injury and property damage.

(c) Landlord shall procure and maintain in full force and effect at all times during the term of this Lease, at Landlord's cost and expense (but reimbursable as an Operating Expense under Section 9.2 hereof), policies of property insurance providing protection against "all risk of direct physical loss" (as defined by and detailed in the Insurance Service Office's Commercial Property Program "Cause of Loss-Special Form [CP 1030]" or its equivalent) for the Building Shell (as defined in the Workletter) of each Building and for the improvements in the Common Areas of the Property, on a full replacement cost basis (with no co-insurance or, if

coverage without co-insurance is not reasonably available, then on an "agreed amount" basis). Such insurance shall include earthquake and environmental coverage and shall have such commercially reasonable deductibles and other terms as Landlord in its reasonable discretion determines to be appropriate. Landlord shall, in all events, have no obligation to insure the Tenant Improvements or any other alterations, additions or improvements installed by Tenant in the Buildings or on or about the Property; provided, however, that if Tenant so requests in writing, Landlord agrees to include the Tenant Improvements under Landlord's earthquake coverage, in which event (i) such earthquake coverage with respect to the Tenant Improvements shall be in such amounts and with such commercially reasonable deductibles and other terms as Landlord and Tenant may mutually and reasonably determine to be appropriate, (ii) such earthquake coverage shall, in Landlord's discretion, either name both Landlord and Tenant as insureds as their interests may appear or name Tenant as an additional insured with respect to the portion of the policy that provides earthquake coverage for the Tenant Improvements, (iii) the cost of such earthquake coverage for the Tenant Improvements shall be charged back to Tenant as additional rent under this Lease and shall be reimbursed by Tenant to Landlord within ten (10) business days after Tenant's receipt of a written invoice from Landlord with respect to the premium costs attributable to such coverage, (iv) Tenant shall provide to Landlord from time to time, at or about the Rent Commencement Date for the applicable Building and thereafter annually or at such intervals as Landlord may reasonably request, an updated schedule of values or other appropriate information with respect to the insurable value of the Tenant Improvements, and (v) Landlord shall have no obligation or liability with respect to any underinsurance of the Tenant Improvements that results from Tenant's failure to keep Landlord informed on a current basis of the insurable value of such Tenant Improvements from time to time.

(d) Tenant shall procure and maintain in full force and effect at all times during the term of this Lease, at Tenant's cost and expense, policies of property insurance providing protection against "all risk of direct physical loss" (as defined by and detailed in the Insurance Service Office's Commercial Property Program "Cause of Loss-Special Form [CP1030]" or its equivalent) for the Tenant Improvements constructed by Tenant pursuant to the Workletter and on all other alterations, additions and improvements installed by Tenant from time to time in or about the Building, on a full replacement cost basis (with no co-insurance or, if coverage without co-insurance is not reasonably available, then on an "agreed amount" basis). Such insurance may have such commercially reasonable deductibles and other terms as Tenant in its reasonable discretion determines to be appropriate, and shall name both Tenant and Landlord as insureds as their interests may appear. Without limiting the generality of the foregoing provisions, Tenant's property insurance on the Tenant Improvements in each Building shall in all events include (i) earthquake insurance (except as otherwise provided in paragraph (c) above, if applicable) in an amount at least equal to the amount of the Tenant Improvement Allowance paid by Landlord pursuant to the Workletter in connection with the construction of the Tenant Improvements in such Building, and (ii) business interruption (income) coverage, including extra expense coverage and off-premises utility interruption coverage, in such amounts and on such terms as Tenant in its reasonable discretion determines to be appropriate.

(e) During the course of construction of the improvements being constructed by Landlord and Tenant under Section 5.1 and the Workletter, Landlord shall procure and maintain in full force and effect, at its sole cost and expense, a policy or policies of builder's risk insurance on both the improvements being constructed by it and the improvements being constructed by Tenant, (i) in such amounts and with such commercially reasonable deductibles and other terms as Landlord in its reasonable discretion determines to be appropriate with respect to the insurance on the improvements being constructed by Landlord, and (ii) in such amounts and with such commercially reasonable deductibles and other terms as Landlord and Tenant may mutually and reasonably determine to be appropriate with respect to the insurance on the improvements being constructed by Tenant. Such insurance shall, in Landlord's discretion, either name both Landlord and Tenant as insureds as their interests may appear or name Tenant as an additional insured with respect to the portion of the policy that covers the improvements being constructed by Tenant. Tenant shall provide to Landlord from time to time during the course of construction of improvements by Tenant, at such intervals as Landlord may reasonably request, an updated schedule of values or other appropriate information with respect to the insurable value of the improvements, work in progress and materials located on the Property in connection with Tenant's construction of improvements, and Landlord shall have no obligation or liability with respect to any underinsurance of Tenant's improvements, work in progress and materials that results from Tenant's failure to keep Landlord informed on a current basis, during

the course of construction, of the insurable value of such improvements, work in progress and materials on the Property from time to time.

14.2 Quality Of Policies And Certificates. All policies of insurance required hereunder shall be issued by responsible insurers and, in the case of policies carried or required to be carried by Tenant, shall be written as primary policies not contributing with and not in excess of any coverage that Landlord may carry. The coverage provided by such policies shall include, where applicable, the clause or endorsement referred to in Section 14.4. Each party shall deliver to the other party certificates of insurance showing that the insuring party's required policies are in effect. If either party fails to acquire, maintain or renew any insurance required to be maintained by it under this Article 14 or to pay the premium therefor, then the other party, at its option and in addition to its other remedies, but without obligation so to do, may procure such insurance, and any sums expended by Landlord to procure any such insurance on behalf of or in place of Tenant shall be repaid upon demand, with interest as provided in Section 3.2 hereof. Tenant shall give Landlord at least thirty (30) days prior written notice of any cancellation or nonrenewal of insurance required to be maintained by Tenant under this Article 14, and shall obtain written undertakings from each insurer under policies required to be maintained by Tenant to notify all insureds thereunder at least thirty (30) days prior to cancellation of coverage.

14.3 Workers' Compensation. Tenant shall maintain in full force and effect during the term of this Lease workers' compensation insurance, in at least the minimum amounts required by law, covering all of Tenant's employees working on the Property.

14.4 Waiver Of Subrogation. To the extent permitted by law and without affecting the coverage provided by insurance required to be maintained hereunder, Landlord and Tenant each waive any right to recover against the other with respect to (i) damage to property, (ii) damage to the Property or any part thereof, or (iii) claims arising by reason of any of the foregoing, but only to the extent that any of the foregoing damages and claims under clauses (i)-(iii) hereof are covered, and only to the extent of such coverage, by property insurance actually carried or required to be carried hereunder by either Landlord or Tenant. This provision is intended to waive fully, and for the benefit of each party, any rights and claims which might give rise to a right of subrogation in any insurance carrier. Each party shall procure a clause or endorsement on any property insurance policy denying to the insurer rights of subrogation against the other party to the extent rights have been waived by the insured prior to the occurrence of injury or loss. Coverage provided by insurance maintained by Tenant shall not be limited, reduced or diminished by virtue of the subrogation waiver herein contained.

14.5 Increase In Premiums. Tenant shall do all acts and pay all expenses necessary to insure that the Buildings are not used for purposes prohibited by any applicable fire insurance, and that Tenant's use of the Buildings and the Property complies with all requirements necessary to obtain any such insurance. If Tenant uses or permits the Buildings or the Property to be used in a manner which increases the existing rate of any insurance carried by Landlord on the Center, then Tenant shall pay the amount of the increase in premium caused thereby, and Landlord's costs of obtaining other replacement insurance policies, including any increase in premium, within ten (10) days after demand therefor by Landlord.

14.6 Indemnification.

(a) Except as otherwise expressly provided in this Lease, Tenant shall indemnify, defend and hold Landlord and its members, partners, shareholders, officers, directors, agents, employees and contractors harmless from any and all liability for bodily injury to or death of any person, or loss of or damage to the property of any person, and all actions, claims, demands, costs (including, but not limited to, reasonable attorneys' fees), damages or expenses of any kind arising therefrom which may be brought or made against Landlord or which Landlord may pay or incur by reason of the use, occupancy and enjoyment of the Property by Tenant or any invitees, sublessees, licensees, assignees, agents, employees or contractors of Tenant or holding under Tenant (including, but not limited to, any such matters arising out of or in connection with any early entry upon the Property by Tenant pursuant to Section 2.2 hereof) from any cause whatsoever other than negligence or willful misconduct or omission by Landlord or its agents, employees or contractors. Landlord and its members, partners, shareholders, officers, directors, agents, employees and contractors shall not be liable for, and Tenant hereby waives all claims against such persons for, damages to goods, wares and merchandise in or upon the Property, or for injuries to Tenant, its agents or third persons in or upon the Property, from

any cause whatsoever other than negligence or willful misconduct or omission by Landlord or its agents, employees or contractors. Tenant shall give prompt notice to Landlord of any casualty or accident in, on or about the Property.

(b) Except as otherwise expressly provided in this Lease, Landlord shall indemnify, defend and hold Tenant and its shareholders, officers, directors, agents, employees and contractors harmless from any and all liability for bodily injury to or death of any person, or loss of or damage to the property of any person, and all actions, claims, demands, costs (including, but not limited to, reasonable attorneys' fees), damages or expenses of any kind arising therefrom which may be brought or made against Tenant or which Tenant may pay or incur, to the extent such liabilities or other matters arise in, on or about the Property by reason of any negligence or willful misconduct or omission by Landlord or its agents, employees or contractors.

14.7 Blanket Policy. Any policy required to be maintained hereunder may be maintained under a so-called "blanket policy" insuring other parties and other locations so long as the amount of insurance required to be provided hereunder is not thereby diminished. Without limiting the generality of the requirement set forth at the end of the preceding sentence, property insurance provided under a blanket policy shall provide full replacement cost coverage and liability insurance provided under a blanket policy shall include per location aggregate limits meeting or exceeding the limits required under this Article 14.

15. SUBLEASE AND ASSIGNMENT

15.1 Assignment And Sublease Of Building(s). Except in the case of a Permitted Transfer (as hereinafter defined), Tenant shall not have the right or power to assign its interest in this Lease, or make any sublease of any Building or any portion thereof, nor shall any interest of Tenant under this Lease be assignable involuntarily or by operation of law, without on each occasion obtaining the prior written consent of Landlord, which consent shall not be unreasonably withheld or delayed. Any purported sublease or assignment of Tenant's interest in this Lease requiring but not having received Landlord's consent thereto (to the extent such consent is required hereunder) shall be void. Without limiting the generality of the foregoing provisions, Landlord may withhold consent to any proposed subletting or assignment solely on the ground, if applicable, that the use by the proposed subtenant or assignee is reasonably likely to be incompatible with Landlord's use of the balance of the Property or of any adjacent property owned or operated by Landlord, unless the proposed use is within the permitted uses specified in Section 13.1, in which event it shall not be reasonable for Landlord to object to the proposed use. Except in the case of a Permitted Transfer, any dissolution, consolidation, merger or other reorganization of Tenant, or any sale or transfer of the stock or assets of or other interest in Tenant, in a single transaction or series of related transactions, involving in the aggregate a change of fifty percent (50%) or more in the beneficial ownership of Tenant or its assets shall be deemed to be an assignment hereunder and shall be void without the prior written consent of Landlord as required above. Notwithstanding the foregoing, (i) an initial public offering of the common stock of Tenant shall not be deemed to be an assignment hereunder; and (ii) Tenant shall have the right to assign this Lease or sublet the Buildings, or any portion thereof, without Landlord's consent (but with prior or concurrent written notice by Tenant to Landlord), to any entity which controls, is controlled by, or is under common control with Tenant, or to any entity which results from a merger or consolidation with Tenant, or to any entity engaged in a bona fide joint venture with Tenant, or to any entity which acquires substantially all of the stock or assets of Tenant, as a going concern, with respect to the business that is being conducted on the Property (hereinafter each a "Permitted Transfer"). In addition, a sale or transfer of the capital stock of Tenant shall be deemed a Permitted Transfer (x) if such sale or transfer occurs in connection with any bona fide financing or capitalization for the benefit of Tenant, or (y) if Tenant becomes, and while Tenant is, a publicly traded corporation. Landlord shall have no right to terminate this Lease in connection with, and shall have no right to any sums or other economic consideration resulting from, any Permitted Transfer. Except as expressly set forth in this Section 15.1, however, the provisions of Section 15.2 shall remain applicable to any Permitted Transfer and the transferee under such Permitted Transfer shall be and remain subject to all of the terms and provisions of this Lease.

15.2 Rights Of Landlord. Consent by Landlord to one or more assignments of this Lease, or to one or more sublettings of any Building or any portion thereof, or collection of rent

by Landlord from any assignee or sublessee, shall not operate to exhaust Landlord's rights under this Article 15, nor constitute consent to any subsequent assignment or subletting. No assignment of Tenant's interest in this Lease and no sublease shall relieve Tenant of its obligations hereunder, notwithstanding any waiver or extension of time granted by Landlord to any assignee or sublessee, or the failure of Landlord to assert its rights against any assignee or sublessee, and regardless of whether Landlord's consent thereto is given or required to be given hereunder. In the event of a default by any assignee, sublessee or other successor of Tenant in the performance of any of the terms or obligations of Tenant under this Lease, Landlord may proceed directly against Tenant without the necessity of exhausting remedies against any such assignee, sublessee or other successor. In addition, Tenant immediately and irrevocably assigns to Landlord, as security for Tenant's obligations under this Lease, all rent from any subletting of all or a part of any Building as permitted under this Lease, and Landlord, as Tenant's assignee and as attorney-in-fact for Tenant, or any receiver for Tenant appointed on Landlord's application, may collect such rent and apply it toward Tenant's obligations under this Lease; except that, until the occurrence of an act of default by Tenant, Tenant shall have the right to collect such rent and to retain all sublease profits.

16. RIGHT OF ENTRY AND QUIET ENJOYMENT

16.1 Right Of Entry. Landlord and its authorized representatives shall have the right to enter the Buildings at any time during the term of this Lease during normal business hours and upon not less than twenty-four (24) hours prior notice, except in the case of emergency (in which event no notice shall be required and entry may be made at any time), for the purpose of inspecting and determining the condition of the Buildings or for any other proper purpose including, without limitation, to make repairs, replacements or improvements which Landlord may deem necessary, to show the Buildings to prospective purchasers, to show the Buildings to prospective tenants (but only during the final year of the term of this Lease), and to post notices of nonresponsibility. Landlord shall not be liable for inconvenience, annoyance, disturbance, loss of business, quiet enjoyment or other damage or loss to Tenant by reason of making any repairs or performing any work upon the Buildings or the Property or by reason of erecting or maintaining any protective barricades in connection with any such work, and the obligations of Tenant under this Lease shall not thereby be affected in any manner whatsoever, provided, however, Landlord shall use reasonable efforts to minimize the inconvenience to Tenant's normal business operations caused thereby.

16.2 Quiet Enjoyment. Landlord covenants that Tenant, upon paying the rent and performing its obligations hereunder and subject to all the terms and conditions of this Lease, shall peacefully and quietly have, hold and enjoy the Buildings and the Property throughout the term of this Lease, or until this Lease is terminated as provided by this Lease.

17. CASUALTY AND TAKING

17.1 Damage or Destruction.

(a) If any or all Buildings, or the Common Areas of the Property necessary for Tenant's use and occupancy of any or all Buildings, are damaged or destroyed in whole or in part under circumstances in which (i) repair and restoration is permitted under applicable governmental laws, regulations and building codes then in effect and (ii) repair and restoration reasonably can be completed within a period of one (1) year (or, in the case of an occurrence during the last two (2) years of the term of this Lease, within a period of sixty (60) days) following the date of the occurrence, then Landlord, as to the Common Areas of the Property and the Building Shell of the applicable Building(s), and Tenant, as to the Tenant Improvements constructed by Tenant, shall commence and complete, with all due diligence and as promptly as is reasonably practicable under the conditions then existing, all such repair and restoration as may be required to return the affected portions of the Property to a condition comparable to that existing immediately prior to the occurrence. In the event of damage or destruction the repair of which is not permitted under applicable governmental laws, regulations and building codes then in effect, if such damage or destruction (despite being corrected to the extent then permitted under applicable governmental laws, regulations and building codes) would still materially impair Tenant's ability to conduct its business in the applicable Building(s), then either party may terminate this Lease with respect to the applicable Building(s) as of the date of the

occurrence by giving written notice to the other within thirty (30) days after the date of the occurrence; if neither party timely elects such termination, or if such damage or destruction does not materially impair Tenant's ability to conduct its business in the applicable Building(s), then this Lease shall continue in full force and effect, except that there shall be an equitable adjustment in monthly minimum rental and of Tenant's Operating Cost Share of Operating Expenses, based upon the extent to which Tenant's ability to conduct its business in the applicable Building(s) is impaired, and Landlord and Tenant respectively shall restore the Common Areas and Building Shell and the Tenant Improvements in the applicable Building(s) to a complete architectural whole and to a functional condition. In the event of damage or destruction which cannot reasonably be repaired within one (1) year (or, in the case of an occurrence during the last two (2) years of the term of this Lease, within a period of sixty (60) days) following the date of the occurrence, then either Landlord or Tenant, at its election, may terminate this Lease with respect to the applicable Building(s) as of the date of the occurrence by giving written notice to the other within thirty (30) days after the date of the occurrence; if neither party timely elects such termination, then this Lease shall continue in full force and effect and Landlord and Tenant shall each repair and restore applicable portions of the Property in accordance with the first sentence of this Section 17.1(a).

(b) The respective obligations of Landlord and Tenant pursuant to Section 17.1(a) are subject to the following limitations:

(i) If the occurrence results from a peril which is required to be insured pursuant to Section 14.1(c) and (d) above, the obligations of each party shall not exceed the amount of insurance proceeds received from insurers (or, in the case of any failure to maintain required insurance, proceeds that reasonably would have been available if the required insurance had been maintained) by reason of such occurrence, plus the amount of the party's permitted deductible (provided that each party shall be obligated to use its best efforts to recover any available proceeds from the insurance which it is required to maintain pursuant to the provisions of Section 14.1(c) or (d), as applicable), and, if such proceeds (including, in the case of a failure to maintain required insurance, any proceeds that reasonably would have been available) are insufficient, either party may terminate this Lease with respect to the applicable Building(s) unless the other party promptly elects and agrees, in writing, to contribute the amount of the shortfall; and

(ii) If the occurrence results from a peril which is not required to be insured pursuant to Section 14.1(c) and (d) above and is not actually insured, Landlord shall be required to repair and restore the Common Areas and the Building Shell of the applicable Building(s) to the extent necessary for Tenant's continued use and occupancy of the applicable Building(s), and Tenant shall be required to repair and restore the Tenant Improvements to the extent necessary for Tenant's continued use and occupancy of the applicable Building(s), provided that each party's out of pocket cost (after application of any insurance proceeds) to repair and restore shall not exceed an amount equal to fifteen percent (15%) of the replacement cost of the Building Shell of the applicable Building(s) and the Common Area improvements, as to Landlord, or fifteen percent (15%) of the replacement cost of the Tenant Improvements in the applicable Building(s), as to Tenant; if the out of pocket replacement cost as to either party exceeds such amount, then the party whose limit has been exceeded may terminate this Lease with respect to the applicable Building(s) unless the other party promptly elects and agrees, in writing, to contribute the amount of the shortfall.

(c) If this Lease is terminated with respect to the applicable Building(s) pursuant to the foregoing provisions of this Section 17.1 following an occurrence which is a peril actually insured or required to be insured against pursuant to Section 14.1(c) and (d), Landlord and Tenant agree (and any Lender shall be asked to agree) that such insurance proceeds shall be allocated between Landlord and Tenant in a manner which fairly and reasonably reflects their respective ownership rights under this Lease, as of the termination or expiration of the term of this Lease, with respect to the improvements, fixtures, equipment and other items to which such insurance proceeds are attributable.

(d) From and after the date of an occurrence resulting in damage to or destruction of a Building or of the Common Areas necessary for Tenant's use and occupancy of the Buildings, and continuing until repair and restoration thereof are completed, there shall be an equitable abatement of Minimum Rental and additional rent and of Tenant's Operating Cost

Share of Operating Expenses based upon the degree to which Tenant's ability to conduct its business in the applicable Building(s) is impaired.

17.2 Condemnation.

(a) If during the term of this Lease one or more Buildings, the Property or Improvements, or any substantial part of any of them, is taken by eminent domain or by reason of any public improvement or condemnation proceeding, or in any manner by exercise of the right of eminent domain (including any transfer in avoidance of an exercise of the power of eminent domain), or receives irreparable damage by reason of anything lawfully done under color of public or other authority, then (i) this Lease shall terminate as to the entire applicable Building(s) at Landlord's election by written notice given to Tenant within sixty (60) days after the taking has occurred, and (ii) this Lease shall terminate as to the entire applicable Building(s) at Tenant's election, by written notice given to Landlord within thirty (30) days after the nature and extent of the taking have been finally determined, if the portion of the Property taken is of such extent and nature as substantially to handicap, impede or permanently impair Tenant's use of the balance of the applicable Building(s). If Tenant elects to terminate this Lease, Tenant shall also notify Landlord of the date of termination, which date shall not be earlier than thirty (30) days nor later than ninety (90) days after Tenant has notified Landlord of Tenant's election to terminate, except that this Lease shall terminate on the date of taking if such date falls on any date before the date of termination designated by Tenant. If neither party elects to terminate this Lease as to the applicable Building(s) as hereinabove provided, this Lease shall continue in full force and effect (except that there shall be an equitable abatement of Minimum Rental and additional rent and of Tenant's Operating Cost Share of Operating Expenses based upon the degree to which Tenant's ability to conduct its business in the applicable Building(s) is impaired), Landlord shall restore the Building Shell of the applicable Building(s) and the Common Area improvements to a complete architectural whole and a functional condition and as nearly as reasonably possible to the condition existing before the taking, and Tenant shall restore the Tenant Improvements and Tenant's other alterations, additions and improvements to a complete architectural whole and a functional condition and as nearly as reasonably possible to the condition existing before the taking. In connection with any such restoration, each party shall use its respective best efforts (including, without limitation, any necessary negotiation or intercession with its respective lender, if any) to ensure that any severance damages or other condemnation awards intended to provide compensation for rebuilding or restoration costs are promptly collected and made available to Landlord and Tenant in portions reasonably corresponding to the cost and scope of their respective restoration obligations, subject only to such payment controls as either party or its lender may reasonably require in order to ensure the proper application of such proceeds toward the restoration of the Improvements. Each party waives the provisions of Code of Civil Procedure Section 1265.130, allowing either party to petition the Superior Court to terminate this Lease in the event of a partial condemnation of one or more Buildings or the Property.

(b) The respective obligations of Landlord and Tenant pursuant to Section 17.2(a) are subject to the following limitations:

(i) Each party's obligation to repair and restore shall not exceed, net of any condemnation awards or other proceeds available for and allocable to such restoration as contemplated in Section 17.2(a), an amount equal to five percent (5%) of the replacement cost of the Building Shell of the applicable Building(s) and the Common Area improvements, as to Landlord, or five percent (5%) of the replacement cost of the Tenant Improvements in the applicable Building(s), as to Tenant; if the replacement cost as to either party exceeds such amount, then the party whose limit has been exceeded may terminate this Lease with respect to the applicable Building(s) unless the other party promptly elects and agrees, in writing, to contribute the amount of the shortfall; and

(ii) If this Lease is terminated with respect to the applicable Building(s) pursuant to the foregoing provisions of this Section 17.2, or if this Lease remains in effect but any condemnation awards or other proceeds become available as compensation for the loss or destruction of any of the Improvements, then Landlord and Tenant agree (and any Lender shall be asked to agree) that there shall be paid from such award or proceeds (i) to Landlord, the award or proceeds attributable or allocable to the Building Shell of the applicable Building(s) and/or the Common Area improvements, and (ii) to Landlord and Tenant, respectively, portions of the award or proceeds attributable or allocable to the Tenant Improvements in the applicable

Building(s), in the respective proportions in which Landlord and Tenant would have shared, under Section 17.1(c), the proceeds of any insurance proceeds following loss or destruction of such Tenant Improvements by an insured casualty.

17.3 Reservation Of Compensation. Landlord reserves, and Tenant waives and assigns to Landlord, all rights to any award or compensation for damage to the Improvements, the Property and the leasehold estate created hereby, accruing by reason of any taking in any public improvement, condemnation or eminent domain proceeding or in any other manner by exercise of the right of eminent domain or of anything lawfully done by public authority, except that (a) Tenant shall be entitled to any and all compensation or damages paid for or on account of Tenant's moving expenses, trade fixtures and equipment, and (b) any condemnation awards or proceeds described in Section 17.2(b)(ii) shall be allocated and disbursed in accordance with the provisions of Section 17.2(b)(ii), notwithstanding any contrary provisions of this Section 17.3.

17.4 Restoration Of Improvements. In connection with any repair or restoration of Improvements by either party following a casualty or taking as hereinabove set forth, the party responsible for such repair or restoration shall, to the extent possible, return such Improvements to a condition substantially equal to that which existed immediately prior to the casualty or taking. To the extent such party wishes to make material modifications to such Improvements, such modifications shall be subject to the prior written approval of the other party (not to be unreasonably withheld or delayed), except that no such approval shall be required for modifications that are required by applicable governmental authorities as a condition of the repair or restoration, unless such required modifications would impair or impede Tenant's conduct of its business in the applicable Building(s) (in which case any such modifications in Landlord's work shall require Tenant's consent, not unreasonably withheld or delayed) or would materially and adversely affect the exterior appearance, the structural integrity or the mechanical or other operating systems of the applicable Building(s) (in which case any such modifications in Tenant's work shall require Landlord's consent, not unreasonably withheld or delayed).

18. DEFAULT

18.1 Events Of Default. The occurrence of any of the following shall constitute an event of default on the part of Tenant:

(a) Abandonment. Abandonment of one or more Buildings. "Abandonment" is hereby defined to include, but is not limited to, any absence by Tenant from the applicable Building(s) for fifteen (15) consecutive days or more while Tenant is in default under any other provision of this Lease. Tenant waives any right Tenant may have to notice under Section 1951.3 of the California Civil Code, the terms of this subsection (a) being deemed such notice to Tenant as required by said Section 1951.3;

(b) Nonpayment. Failure to pay, when due, any amount payable to Landlord hereunder, such failure continuing for a period of five (5) days after written notice of such failure; provided, however, that any such notice shall be in lieu of, and not in addition to, any notice required under California Code of Civil Procedure Section 1161 et seq., as amended from time to time;

(c) Other Obligations. Failure to perform any obligation, agreement or covenant under this Lease other than those matters specified in subsection (b) hereof, such failure continuing for fifteen (15) days after written notice of such failure; provided, however, that if such failure is curable in nature but cannot reasonably be cured within such 15-day period, then Tenant shall not be in default if, and so long as, Tenant promptly (and in all events within such 15-day period) commences such cure and thereafter diligently pursues such cure to completion; and provided further, however, that any such notice shall be in lieu of, and not in addition to, any notice required under California Code of Civil Procedure Section 1161 et seq., as amended from time to time;

(d) General Assignment. A general assignment by Tenant for the benefit of creditors;

(e) Bankruptcy. The filing of any voluntary petition in bankruptcy by Tenant, or the filing of an involuntary petition by Tenant's creditors, which involuntary petition remains

undischarged for a period of thirty (30) days. In the event that under applicable law the trustee in bankruptcy or Tenant has the right to affirm this Lease and continue to perform the obligations of Tenant hereunder, such trustee or Tenant shall, in such time period as may be permitted by the bankruptcy court having jurisdiction, cure all defaults of Tenant hereunder outstanding as of the date of the affirmance of this Lease and provide to Landlord such adequate assurances as may be necessary to ensure Landlord of the continued performance of Tenant's obligations under this Lease. Specifically, but without limiting the generality of the foregoing, such adequate assurances must include assurances that the Buildings continue to be operated only for the use permitted hereunder. The provisions hereof are to assure that the basic understandings between Landlord and Tenant with respect to Tenant's use of the Property and the benefits to Landlord therefrom are preserved, consistent with the purpose and intent of applicable bankruptcy laws;

(f) Receivership. The employment of a receiver appointed by court order to take possession of substantially all of Tenant's assets or Tenant's interest in one or more of the Buildings, if such receivership remains undissolved for a period of thirty (30) days;

(g) Attachment. The attachment, execution or other judicial seizure of all or substantially all of Tenant's assets or Tenant's interest in one or more of the Buildings, if such attachment or other seizure remains undismissed or undischarged for a period of thirty (30) days after the levy thereof; or

(h) Insolvency. The admission by Tenant in writing of its inability to pay its debts as they become due, the filing by Tenant of a petition seeking any reorganization or arrangement, composition, readjustment, liquidation, dissolution or similar relief under any present or future statute, law or regulation, the filing by Tenant of an answer admitting or failing timely to contest a material allegation of a petition filed against Tenant in any such proceeding or, if within thirty (30) days after the commencement of any proceeding against Tenant seeking any reorganization or arrangement, composition, readjustment, liquidation, dissolution or similar relief under any present or future statute, law or regulation, such proceeding shall not have been dismissed.

18.2 Remedies Upon Tenant's Default.

(a) Upon the occurrence of any event of default described in Section 18.1 hereof, Landlord, in addition to and without prejudice to any other rights or remedies it may have, shall have the immediate right to re-enter the Buildings or any part thereof and repossess the same, expelling and removing therefrom all persons and property (which property may be stored in a public warehouse or elsewhere at the cost and risk of and for the account of Tenant), using such force as may be necessary to do so (as to which Tenant hereby waives any claim for loss or damage that may thereby occur). In addition to or in lieu of such re-entry, and without prejudice to any other rights or remedies it may have, Landlord shall have the right either (i) to terminate this Lease and recover from Tenant all damages incurred by Landlord as a result of Tenant's default, as hereinafter provided, or (ii) to continue this Lease in effect and recover rent and other charges and amounts as they become due.

(b) Even if Tenant has breached this Lease and abandoned one or more Building(s), this Lease shall continue in effect for so long as Landlord does not terminate Tenant's right to possession under subsection (a) hereof and Landlord may enforce all of its rights and remedies under this Lease, including the right to recover rent as it becomes due, and Landlord, without terminating this Lease, may exercise all of the rights and remedies of a lessor under California Civil Code Section 1951.4 (lessor may continue lease in effect after lessee's breach and abandonment and recover rent as it becomes due, if lessee has right to sublet or assign, subject only to reasonable limitations), or any successor Code section. Acts of maintenance, preservation or efforts to relet the Building(s) or the appointment of a receiver upon application of Landlord to protect Landlord's interests under this Lease shall not constitute a termination of Tenant's right to possession.

(c) If Landlord terminates this Lease pursuant to this Section 18.2, Landlord shall have all of the rights and remedies of a landlord provided by Section 1951.2 of the Civil Code of the State of California, or any successor Code section, which remedies include Landlord's right to recover from Tenant (i) the worth at the time of award of the unpaid rent and additional rent which had been earned at the time of termination, (ii) the worth at the time of award of the amount by which the unpaid rent and additional rent which would have been earned

after termination until the time of award exceeds the amount of such rental loss that Tenant proves could have been reasonably avoided, (iii) the worth at the time of award of the amount by which the unpaid rent and additional rent for the balance of the term after the time of award exceeds the amount of such rental loss that Tenant proves could be reasonably avoided, and (iv) any other amount necessary to compensate Landlord for all the detriment proximately caused by Tenant's failure to perform its obligations under this Lease or which in the ordinary course of things would be likely to result therefrom, including, but not limited to, the cost of recovering possession of the Buildings, expenses of reletting, including necessary repair, renovation and alteration of the Buildings, reasonable attorneys' fees, and other reasonable costs. The "worth at the time of award" of the amounts referred to in clauses (i) and (ii) above shall be computed by allowing interest at ten percent (10%) per annum from the date such amounts accrued to Landlord. The "worth at the time of award" of the amounts referred to in clause (iii) above shall be computed by discounting such amounts at one percentage point above the discount rate of the Federal Reserve Bank of San Francisco at the time of award.

18.3 Remedies Cumulative. All rights, privileges and elections or remedies of Landlord contained in this Article 18 are cumulative and not alternative to the extent permitted by law and except as otherwise provided herein.

19. SUBORDINATION, ATTORNMENT AND SALE

19.1 Subordination To Mortgage. This Lease, and any sublease entered into by Tenant under the provisions of this Lease, shall be subject and subordinate to any ground lease, mortgage, deed of trust, sale/leaseback transaction or any other hypothecation for security now or hereafter placed upon the Buildings, the Property, the Center, or any of them, and the rights of any assignee of Landlord or of any ground lessor, mortgagee, trustee, beneficiary or leaseback lessor under any of the foregoing, and to any and all advances made on the security thereof and to all renewals, modifications, consolidations, replacements and extensions thereof; provided, however, that such subordination in the case of any future ground lease, mortgage, deed of trust, sale/leaseback transaction or any other hypothecation for security placed upon the Buildings, the Property, the Center or any of them shall be conditioned on Tenant's receipt from the ground lessor, mortgagee, trustee, beneficiary or leaseback lessor of a Non-Disturbance Agreement in a form reasonably acceptable to Tenant confirming that so long as Tenant is not in default hereunder, Tenant's rights hereunder shall not be disturbed by such person or entity. Moreover, Tenant's obligations under this Lease shall be conditioned on Tenant's receipt within thirty (30) days after mutual execution of this Lease, from any ground lessor, mortgagee, trustee, beneficiary or leaseback lessor currently owning or holding a security interest in the Property, of a Non-Disturbance Agreement in a form reasonably acceptable to Tenant confirming that so long as Tenant is not in default hereunder, Tenant's rights hereunder shall not be disturbed by such person or entity. (Landlord hereby advises Tenant, however, that in fact there is no mortgagee, trustee, beneficiary, ground lessor or leaseback lessor holding an interest in the Property on the date of this Lease.) If any mortgagee, trustee, beneficiary, ground lessor, sale/leaseback lessor or assignee elects to have this Lease be an encumbrance upon the Property prior to the lien of its mortgage, deed of trust, ground lease or leaseback lease or other security arrangement and gives notice thereof to Tenant, this Lease shall be deemed prior thereto, whether this Lease is dated prior or subsequent to the date thereof or the date of recording thereof. Tenant, and any sublessee, shall execute such documents as may reasonably be requested by any mortgagee, trustee, beneficiary, ground lessor, sale/leaseback lessor or assignee to evidence the subordination herein set forth, subject to the conditions set forth above, or to make this Lease prior to the lien of any mortgage, deed of trust, ground lease, leaseback lease or other security arrangement, as the case may be, and if Tenant fails to do so within ten (10) days after demand from Landlord, Tenant constitutes and appoints Landlord as Tenant's attorney-in-fact and in Tenant's name, place and stead to do so. Upon any default by Landlord in the performance of its obligations under any mortgage, deed of trust, ground lease, leaseback lease or assignment, Tenant (and any sublessee) shall, notwithstanding any subordination hereunder, attorn to the mortgagee, trustee, beneficiary, ground lessor, leaseback lessor or assignee thereunder upon demand and become the tenant of the successor in interest to Landlord, at the option of such successor in interest, and shall execute and deliver any instrument or instruments confirming the attornment herein provided for.

19.2 Sale Of Landlord's Interest. Upon sale, transfer or assignment of Landlord's entire interest in the Buildings and the Property, Landlord shall be relieved of its obligations

hereunder with respect to liabilities accruing from and after the date of such sale, transfer or assignment, except as otherwise expressly provided in Section 21.2 hereof.

19.3 Estoppel Certificates. Either Tenant or Landlord (the "certifying party") shall at any time and from time to time, within ten (10) days after written request by the other party (the "requesting party"), execute, acknowledge and deliver to the requesting party a certificate in writing stating: (i) that this Lease is unmodified and in full force and effect, or if there have been any modifications, that this Lease is in full force and effect as modified and stating the date and the nature of each modification; (ii) the date to which rental and all other sums payable hereunder have been paid; (iii) that the requesting party is not in default in the performance of any of its obligations under this Lease, that the certifying party has given no notice of default to the requesting party and that no event has occurred which, but for the expiration of the applicable time period, would constitute an event of default hereunder, or if the certifying party alleges that any such default, notice or event has occurred, specifying the same in reasonable detail; and (iv) such other matters as may reasonably be requested by the requesting party or by any institutional lender, mortgagee, trustee, beneficiary, ground lessor, sale/leaseback lessor or prospective purchaser of the Property or of Tenant's leasehold interest therein. Any such certificate provided under this Section 19.3 may be relied upon by any lender, mortgagee, trustee, beneficiary, assignee or successor in interest to the requesting party, by any prospective purchaser, by any purchaser on foreclosure or sale, by any grantee under a deed in lieu of foreclosure of any mortgage or deed of trust on the Property, or by any other third party. Failure to execute and return within the required time any estoppel certificate requested hereunder shall be deemed to be an admission of the truth of the matters set forth in the form of certificate submitted to the certifying party for execution.

19.4 Subordination to CC&R's. This Lease, and any permitted sublease entered into by Tenant under the provisions of this Lease, and the interests in real property conveyed hereby and thereby, shall be subject and subordinate (a) to any declarations of covenants, conditions and restrictions or other recorded restrictions affecting the Property or the Center from time to time, which may include easements, access rights and similar non-exclusive use rights and privileges in favor of appropriate third parties; provided that the terms of such declarations or restrictions are reasonable (or, to the extent they are not reasonable, are mandated by applicable law), do not materially impair Tenant's ability to conduct the uses permitted hereunder on the Property, and do not discriminate against Tenant relative to other similarly situated tenants occupying portions of the Center, and provided further that except with Tenant's prior written consent, Landlord shall not enter into any such future declarations of covenants, conditions and restrictions or other recorded restrictions that are applicable, by their terms, solely to one or more of the buildings occupied by or leased to Tenant under this Lease (including any buildings occupied by or leased to Tenant pursuant to Tenant's exercise of any of the rights contained in Article 6 of this Lease) and not to any buildings occupied by or leased to other tenants in the Center or, if Tenant exercises its rights under Section 6.3 of this Lease, on the Expansion Property; (b) to the Declaration of Covenants, Conditions and Restrictions and Reciprocal Easements for Shearwater Project dated January 21, 1998 and recorded on January 22, 1998 as Instrument No. 98-008277, Official Records of San Mateo County, as amended from time to time (the "Shearwater Declaration"), the provisions of which Shearwater Declaration are an integral part of this Lease; and (c) to the Covenant and Environmental Restriction dated as of January 26, 1998 and recorded on February 3, 1998 as Instrument No. 98-013813, Official Records of San Mateo County, as amended from time to time (the "Environmental Restriction"), the provisions of which Environmental Restriction are incorporated herein by this reference. Tenant agrees to execute, upon request by Landlord, any documents reasonably required from time to time to evidence the foregoing subordination.

19.5 Mortgagee Protection.

(a) If, in connection with any future ground lease, mortgage, deed of trust, sale/leaseback transaction or any other hypothecation for security placed upon the Buildings, the Property, the Center, or any of them, the ground lessor, mortgagee, trustee, beneficiary or leaseback lessor requests any changes in this Lease as a condition to its willingness to enter into or accept the ground lease, mortgage, deed of trust, sale/leaseback transaction or other hypothecation for security, then Tenant shall not unreasonably withhold or delay its consent to any such requested changes and shall execute, at the request of Landlord, an amendment to this Lease incorporating the changes thus reasonably consented to by Tenant. It shall be deemed reasonable for Tenant to withhold consent to any requested change which imposes a substantial

new monetary obligation on Tenant or which otherwise substantially impairs Tenant's rights under this Lease. Tenant's obligations under this Section 19.5(a) shall be conditioned on Tenant's concurrent receipt, from the ground lessor, mortgagee, trustee, beneficiary or leaseback lessor, of a Non-Disturbance Agreement in a form reasonably acceptable to Tenant confirming that so long as Tenant is not in default hereunder, Tenant's rights hereunder shall not be disturbed by such person or entity.

(b) If, following a default by Landlord under any mortgage, deed of trust, ground lease, leaseback lease or other security arrangement covering the Buildings, the Property, the Center or any of them, the Buildings, the Property and/or the Center, as applicable, is acquired by the mortgagee, beneficiary, master lessor or other secured party, or by any other successor owner, pursuant to a foreclosure, trustee's sale, sheriff's sale, lease termination or other similar procedure (or deed in lieu thereof), then any such person or entity so acquiring the Buildings, the Property and/or the Center shall not be:

(i) liable for any act or omission of a prior landlord or owner of the Property and/or the Center (including, but not limited to, Landlord);

(ii) subject to any offsets or defenses that Tenant may have against any prior landlord or owner of the Property and/or the Center (including, but not limited to, Landlord);

(iii) bound by any rent or additional rent that Tenant may have paid in advance to any prior landlord or owner of the Property and/or the Center (including, but not limited to, Landlord) for a period in excess of one month, or by any security deposit, cleaning deposit or other prepaid charge that Tenant may have paid in advance to any prior landlord or owner (including, but not limited to, Landlord) except to the extent such deposit or prepaid amount has been expressly turned over to or credited to the successor owner thus acquiring the Property and/or the Center, as applicable;

(iv) liable for any warranties or representations of any nature whatsoever, whether pursuant to this Lease or otherwise, by any prior landlord or owner of the Property and/or the Center (including, but not limited to, Landlord) with respect to the use, construction, zoning, compliance with laws, title, habitability, fitness for purpose or possession, or physical condition (including, without limitation, environmental matters) of the Property, the Buildings or the Center; or

(v) liable to Tenant in any amount beyond the interest of such mortgagee, beneficiary, master lessor or other secured party or successor owner in the Property and the Center as they exist from time to time, it being the intent of this provision that Tenant shall look solely to the interest of any such mortgagee, beneficiary, master lessor or other secured party or successor owner in the Property and Center for the payment and discharge of the landlord's obligations under this Lease and that such mortgagee, beneficiary, master lessor or other secured party or successor owner shall have no separate personal liability for any such obligations.

20. SECURITY

20.1 Deposit.

(a) Concurrently with Tenant's execution of this Lease, Tenant shall deposit with Landlord the sum of Two Million Two Hundred Seventy Thousand Four Hundred Thirty and No/100 Dollars ($2,270,430.00), which sum (the "Security Deposit") shall be held by Landlord as security for the faithful performance of all of the terms, covenants, and conditions of this Lease to be kept and performed by Tenant during the term hereof. If Tenant defaults with respect to any provision of this Lease, including, without limitation, the provisions relating to the payment of rental and other sums due hereunder, Landlord shall have the right, but shall not be required, to use, apply or retain all or any part of the Security Deposit for the payment of rental or any other amount which Landlord may spend or become obligated to spend by reason of Tenant's default or to compensate Landlord for any other loss or damage which Landlord may suffer by reason of Tenant's default. If any portion of the Security Deposit is so used or applied, Tenant shall, within ten (10) days after written demand therefor, deposit cash with Landlord in

an amount sufficient to restore the Security Deposit to its original amount and Tenant's failure to do so shall be a material breach of this Lease. Landlord shall not be required to keep any deposit under this Section separate from Landlord's general funds, and Tenant shall not be entitled to interest thereon. If Tenant fully and faithfully performs every provision of this Lease to be performed by it, the Security Deposit, or any balance thereof, shall be returned to Tenant or, at Landlord's option, to the last assignee of Tenant's interest hereunder, at the expiration of the term of this Lease and after Tenant has vacated the Property. In the event of termination of Landlord's interest in this Lease, Landlord shall transfer all deposits then held by Landlord under this Section to Landlord's successor in interest, whereupon Tenant agrees to release Landlord from all liability for the return of such deposit or the accounting thereof.

(b) As an alternative to the cash Security Deposit described in Section 20.1(a), Tenant may instead deliver to Landlord, within ten (10) days after mutual execution of this Lease, an irrevocable standby letter of credit (the "Letter of Credit") issued in favor of Landlord by a federally insured commercial bank or trust company approved in writing by Landlord (which approval shall not be unreasonably withheld), in form and substance reasonably satisfactory to Landlord, to be held by Landlord as security for the faithful performance of all the obligations of Tenant under this Lease, subject to the following terms and conditions:

(i) The amount of the Letter of Credit shall be at least Two Million Two Hundred Seventy Thousand Four Hundred Thirty and No/100 Dollars ($2,270,430.00), and Tenant shall maintain the Letter of Credit in that amount in full force and effect throughout the term of this Lease (including any extensions thereof) and until thirty (30) days after the expiration of the term of this Lease, unless Tenant elects at any time to replace the Letter of Credit with a full cash Security Deposit in compliance with Section 20.1(a). The Letter of Credit may be for an initial one-year term, with automatic renewal provisions, provided that Landlord shall be given at least thirty (30) days prior written notice if the Letter of Credit will not be renewed as of any otherwise applicable renewal date and shall be entitled to draw against the expiring Letter of Credit if a replacement Letter of Credit is not furnished to Landlord at least twenty (20) days prior to the scheduled expiration date, as provided in Section 20.1(b)(iii)(A) below.

(ii) Landlord shall be entitled (but shall not be required) to draw against the Letter of Credit and receive and retain the proceeds thereof upon any default by Tenant in the payment of any rent or other amounts required to be paid by Tenant under this Lease, or upon the occurrence of any other Event of Default under this Lease. The amount of the draw shall not exceed the amount of the payments (if any) as to which Tenant is then in default and/or the amount reasonably necessary to cure any non-monetary Events of Default by Tenant, and shall be applied by Landlord to the cure of the applicable default(s). Following any partial draw under this paragraph (ii), if Tenant fully cures all outstanding defaults and provides Landlord with a new Letter of Credit in the full required amount under this Section 20.1(b), Landlord shall surrender and return to Tenant, within ten (10) days after Tenant's satisfaction of the foregoing conditions, the Letter of Credit under which the partial draw was made, and any unapplied cash drawn under such Letter of Credit.

(iii) Landlord shall also be entitled (but shall not be required) to draw against the Letter of Credit in full and to receive the entire proceeds thereof under either of the following circumstances:

(A) If the Letter of Credit will expire as of a date prior to the date thirty (30) days after the expiration of the term of this Lease and Tenant fails to provide to Landlord an extension or replacement of such Letter of Credit, in at least the minimum amount required under this Section 20.1(b), at least twenty (20) days prior to the scheduled expiration date of the Letter of Credit; or

(B) If, as a result of a draw against the Letter of Credit by Landlord or for any other reason, the amount of the Letter of Credit falls below the minimum amount required to be maintained from time to time pursuant to this Section 20.1(b) and Tenant has failed to cause the Letter of Credit to be restored to at least the minimum required amount within ten (10) days after written demand by Landlord. Landlord shall return any unapplied cash to Tenant upon receipt a new Letter of Credit in the full amount required by the terms of the Lease.

(iv) If Landlord draws against the Letter of Credit in any of the circumstances described in subparagraph (iii) above, Landlord shall use, apply and/or retain all or any part of the amount drawn for the cure of any then existing defaults under this Lease. Any amount drawn that is not immediately so used or applied by Landlord shall be retained by Landlord as a cash security deposit, subject to and in accordance with the provisions of Section 20.1(a).

(v) Any actual or purported withdrawal, rescission, termination or revocation of the Letter of Credit by the issuer thereof prior to the expiration of the term of this Lease (except when replaced prior to the effectiveness of such withdrawal, rescission, termination or revocation by a replacement Letter of Credit as contemplated in Section 20.1(b)(iii)(A) hereof) shall be a material breach of this Lease.

21. MISCELLANEOUS

21.1 Notices. All notices, consents, waivers and other communications which this Lease requires or permits either party to give to the other shall be in writing and shall be deemed given when delivered personally (including delivery by private same-day or overnight courier or express delivery service) or by telecopier with mechanical confirmation of transmission, effective upon personal delivery to or refusal of delivery by the recipient (in the case of personal delivery by any of the means described above) or upon telecopier transmission during normal business hours at the recipient's office (in the case of telecopier transmission, with any transmission outside of normal business hours being effective as of the beginning of the first business day commencing after the time of actual transmission) to the parties at their respective addresses as follows:

To Tenant:

(until Phase I Rent Commencement Date)
Tularik Inc.
Two Corporate Drive
South San Francisco, CA 94080
Attn: Luis Bayol
Telecopier: (650) 825-7554

(after Phase I Rent Commencement Date)
Tularik Inc.
_____ Veterans Boulevard
South San Francisco, CA 94080
Attn: _____
Telecopier: (650) _____
[as specified by Tenant in written notice at or about the Phase I Rent Commencement Date]

with a copy to:

Cooley Godward LLP
4401 Eastgate Mall
San Diego, CA 92121-1909
Attn: Elizabeth A. Willes, Esq.
Telecopier: (858) 550-6420

To Landlord:

Slough BTC, LLC
33 West Monroe Street, Suite 2000
Chicago, IL 60603
Attn: William Rogalla
Telecopier: (312) 558-9041

444 North Michigan Av.
Suite 3230
Chicago, IL 60611

with a copy to:

Folger Levin & Kahn LLP
Embarcadero Center West
275 Battery Street, 23rd Floor
San Francisco, CA 94111
Attn: Donald E. Kelley, Jr., Esq.
Telecopier: (415) 986-2827

and a copy to:

Britannia Management Services, Inc.

1939 Harrison Street, Suite 715
Oakland, CA 94612
Telecopier: (510) 763-6262

or to such other address as may be contained in a notice at least fifteen (15) days prior to the address change from either party to the other given pursuant to this Section. Rental payments and other sums required by this Lease to be paid by Tenant shall be delivered to Landlord in care of Britannia Management Services, Inc. at the address provided above in this Section, or to such other address as Landlord may from time to time specify in writing to Tenant, and shall be deemed to be paid only upon actual receipt.

21.2 Successors And Assigns. The obligations of this Lease shall run with the land, and this Lease shall be binding upon and inure to the benefit of the parties hereto and their respective successors and assigns, except that the original Landlord named herein and each successive Landlord under this Lease shall be liable only for obligations accruing during the period of its ownership of the Property, said liability terminating upon termination of such ownership and passing to the successor lessor.

21.3 No Waiver. The failure of Landlord to seek redress for violation, or to insist upon the strict performance, of any covenant or condition of this Lease shall not be deemed a waiver of such violation, or prevent a subsequent act which would originally have constituted a violation from having all the force and effect of an original violation.

21.4 Severability. If any provision of this Lease or the application thereof is held to be invalid or unenforceable, the remainder of this Lease or the application of such provision to persons or circumstances other than those as to which it is invalid or unenforceable shall not be affected thereby, and each of the provisions of this Lease shall be valid and enforceable, unless enforcement of this Lease as so invalidated would be unreasonable or grossly inequitable under all the circumstances or would materially frustrate the purposes of this Lease.

21.5 Litigation Between Parties. In the event of any litigation or other dispute resolution proceedings between the parties hereto arising out of or in connection with this Lease, the prevailing party shall be reimbursed for all reasonable costs, including, but not limited to, reasonable accountants' fees and attorneys' fees, incurred in connection with such proceedings (including, but not limited to, any appellate proceedings relating thereto) or in connection with the enforcement of any judgment or award rendered in such proceedings. "Prevailing party" within the meaning of this Section shall include, without limitation, a party who dismisses an action for recovery hereunder in exchange for payment of the sums allegedly due, performance of covenants allegedly breached or consideration substantially equal to the relief sought in the action.

21.6 Surrender. A voluntary or other surrender of this Lease by Tenant, or a mutual termination thereof between Landlord and Tenant, shall not result in a merger but shall, at the option of Landlord, operate either as an assignment to Landlord of any and all existing subleases and subtenancies, or a termination of all or any existing subleases and subtenancies. This provision shall be contained in any and all assignments or subleases made pursuant to this Lease.

21.7 Interpretation. The provisions of this Lease shall be construed as a whole, according to their common meaning, and not strictly for or against Landlord or Tenant. The captions preceding the text of each Section and subsection hereof are included only for convenience of reference and shall be disregarded in the construction or interpretation of this Lease.

21.8 Entire Agreement. This written Lease, together with the exhibits hereto, contains all the representations and the entire understanding between the parties hereto with respect to the subject matter hereof. Any prior correspondence, memoranda or agreements are replaced in total by this Lease and the exhibits hereto. This Lease may be modified only by an agreement in writing signed by each of the parties.

21.9 Governing Law. This Lease and all exhibits hereto shall be construed and interpreted in accordance with and be governed by all the provisions of the laws of the State of California.

21.10 No Partnership. The relationship between Landlord and Tenant is solely that of a lessor and lessee. Nothing contained in this Lease shall be construed as creating any type or manner of partnership, joint venture or joint enterprise with or between Landlord and Tenant.

21.11 Financial Information. From time to time Tenant shall promptly provide directly to prospective lenders and purchasers of the Property and/or Center designated by Landlord such financial information pertaining to the financial status of Tenant as Landlord may reasonably request; provided, Tenant shall be permitted to provide such financial information in a manner which Tenant deems reasonably necessary to protect the confidentiality of such information. In addition, from time to time, Tenant shall provide Landlord with such financial information pertaining to the financial status of Tenant as Landlord may reasonably request. Landlord agrees that all financial information supplied to Landlord by Tenant shall be treated as confidential material, and shall not be disseminated to any party or entity (including any entity affiliated with Landlord) without Tenant's prior written consent, except that Landlord shall be entitled to provide such information, subject to reasonable precautions to protect the confidential nature thereof, (i) to Landlord's partners and professional advisors, solely to use in connection with Landlord's execution and enforcement of this Lease, and (ii) to prospective lenders and/or purchasers of the Property and/or Center, solely for use in connection with their bona fide consideration of a proposed financing or purchase of the Property and/or Center. For purposes of this Section, without limiting the generality of the obligations provided herein, it shall be deemed reasonable for Landlord to request copies of Tenant's most recent audited annual financial statements, or, if audited statements have not been prepared, unaudited financial statements for Tenant's most recent fiscal year, accompanied by a certificate of Tenant's chief financial officer that such financial statements fairly present Tenant's financial condition as of the date(s) indicated. Notwithstanding any other provisions of this Section 21.11, during any period in which Tenant has outstanding a class of publicly traded securities and is filing with the Securities and Exchange Commission, on a regular basis, Forms 10Q and 10K and any other periodic filings required under the Securities Exchange Act of 1934, as amended, it shall constitute sufficient compliance under this Section 21.11 for Tenant to furnish Landlord with copies of such periodic filings substantially concurrently with the filing thereof with the Securities and Exchange Commission.

Landlord and Tenant recognize the need of Tenant to maintain the confidentiality of information regarding its financial status and the need of Landlord to be informed of, and to provide to prospective lenders and purchasers of the Property and/or Center financial information pertaining to, Tenant's financial status. Landlord and Tenant agree to cooperate with each other in achieving these needs within the context of the obligations set forth in this Section. Landlord also acknowledges and agrees that Tenant's obligations to furnish information to Landlord under this Section are in all events subject to Tenant's compliance with, and may therefore be limited by, applicable securities laws.

21.12 Costs. If Tenant requests the consent of Landlord under any provision of this Lease for any act that Tenant proposes to do hereunder, including, without limitation, assignment of this Lease or subletting of any one or more of the Buildings or any part thereof, Tenant shall, as a condition to doing any such act and the receipt of such consent, reimburse Landlord promptly for any and all reasonable costs and expenses incurred by Landlord in connection therewith, including, without limitation, reasonable attorneys' fees.

21.13 Time. Time is of the essence of this Lease, and of every term and condition hereof.

21.14 Rules And Regulations. Tenant shall observe, comply with and obey, and shall cause its employees, agents and, to the best of Tenant's ability, invitees to observe, comply with and obey such rules and regulations as Landlord may promulgate from time to time for the safety, care, cleanliness, order and use of the Improvements, the Property and the Center.

21.15 Brokers. Landlord agrees to pay a brokerage commission to CRESA Partners ("Tenant's Broker"), in connection with the consummation of this Lease in the amount of $6.50 per rentable square foot, payable 50% upon mutual execution of this Lease and 50%, as to each Building, upon the Rent Commencement Date for such Building or, in the case of the Phase II Building, upon the Rent Commencement Date for each phase of the Phase II Building (in proportion to the ratio between the square footage covered by such phase and the total square footage of the Phase II Building). In addition, in the event Tenant exercises the Expansion

Option, Landlord shall pay to Tenant's Broker a commission on the same terms as set forth in the first sentence of this Section 21.15. Tenant shall be solely responsible for any claims for brokerage commissions or similar compensation by Tenant's Broker and/or Mark Pearson in excess of the amount described in the preceding two sentences. Each party represents and warrants that no other broker participated in the consummation of this Lease and agrees to indemnify, defend and hold the other party harmless against any liability, cost or expense, including, without limitation, reasonable attorneys' fees, arising out of any claims for brokerage commissions or other similar compensation in connection with any conversations, prior negotiations or other dealings by the indemnifying party with any other broker.

21.16 Memorandum Of Lease. At any time during the term of this Lease, either party, at its sole expense, shall be entitled to record a memorandum of this Lease and, if either party so elects, both parties agree to cooperate in the preparation, execution, acknowledgement and recordation of such document in reasonable form.

21.17 Corporate Authority. The person signing this Lease on behalf of Tenant warrants that he or she is fully authorized to do so and, by so doing, to bind Tenant.

21.18 Execution and Delivery. This Lease may be executed in one or more counterparts and by separate parties on separate counterparts, but each such counterpart shall constitute an original and all such counterparts together shall constitute one and the same instrument.

21.19 Survival. Without limiting survival provisions which would otherwise be implied or construed under applicable law, the provisions of Sections 2.5, 9.4, 11.2, 11.3, 11.4, 13.6, 14.6, 21.5 and 21.20 hereof shall survive the termination of this Lease with respect to matters occurring prior to the expiration of this Lease.

21.20 Parking and Traffic.

(a) Landlord has advised Tenant that the approval of the Britannia Oyster Point project by the City of South San Francisco was conditioned upon, among other things, Landlord's development and implementation of a Transportation Demand Management Plan (the "TDMP") pursuant to which Landlord is required to undertake various measures to try to reduce the volume of traffic generated by the Center. Landlord covenants with Tenant that Landlord will use reasonable efforts to try to reduce the volume of traffic generated by the Center, as contemplated by the TDMP, including (but not limited to) substantially complying with any specific measures required by the City of South San Francisco or its Redevelopment Agency. Tenant hereby agrees (i) to designate one of its employees to act as a liaison with Landlord's designated transportation coordinator in facilitating and coordinating such programs as may be required from time to time by governmental agencies and/or by the terms of the TDMP to reduce the traffic generated by the Center (as required by the City of South San Francisco as part of the conditions of approval of this project) and to facilitate and encourage the use of public transportation, (ii) to make reasonable efforts to encourage cooperation and participation by Tenant's employees in the programs implemented from time to time pursuant to the TDMP, including (but not limited to) programs described in this Section 21.20, and (iii) to cooperate with Landlord's designated transportation coordinator in identifying an appropriate area within each Building where an information kiosk can be maintained for the dissemination of transportation-related information, to be updated from time to time by Landlord's designated transportation coordinator.

(b) The Center is presently intended to contain a maximum of approximately 2.9 parking spaces per 1,000 square feet of rentable area in the buildings to be constructed on the Property, subject to approval by appropriate agencies of the City of South San Francisco. Consistent with the TDMP, a specified percentage (presently anticipated to be ten percent (10%)) of these spaces will be designated for carpool, vanpool and clean fuel vehicles. Among other things, the City of South San Francisco requires that Landlord charge a monthly parking fee for each parking space allocated to tenants and their employees. The monthly fee per parking space shall be $20 per parking space for each Building for the first five (5) years after the Rent Commencement Date for such Building, and shall increase to $30 per parking space for each Building immediately after the fifth (5^{th}) anniversary of the Rent Commencement Date for such Building. In accordance with the policies and requirements of the City of South San Francisco, Landlord recommends that Tenant pass through these parking charges to Tenant's employees using the spaces. (Thus, for example, in years one (1) through five (5) of the Lease term,

assuming an aggregate of 280,200 square feet in the Buildings and 2.9 spaces of parking per 1,000 square feet in the Center, Tenant would have 813 allocable parking spaces at $20 per space per month, for a total monthly parking fee of $16,260.)

(c) On or about the date Tenant commences business in the respective Buildings, Landlord intends to provide Tenant, through Landlord's designated transportation coordinator, with an appropriate number of packets of employee transportation information, presently expected to include (but not be limited to) information about carpool parking; schedules and maps for SamTrans, Caltrain, BART and shuttle services operating to and from the Property; and a bicycle map. Landlord shall thereafter cause its designated transportation coordinator to provide updated copies of the employee transportation information packet to Tenant from time to time, as appropriate, and to make additional copies of the packet available to Tenant from time to time, upon request by Tenant, for new employees. Tenant shall distribute copies of the employee transportation information packet to all employees commuting to the Property at the time Tenant commences business in the respective Buildings, shall thereafter distribute copies of the packet to new employees from time to time and shall distribute updated packets to all employees from time to time when and as such updated packets are furnished to Tenant by Landlord's designated transportation coordinator.

(d) Landlord is required to conduct, pursuant to the TDMP, annual surveys of its tenants and their employees regarding both quantitative and qualitative aspects of commuting and transportation patterns at the Center. Landlord anticipates that these surveys will be prepared, administered and analyzed by an independent transportation consultant retained by the City of South San Francisco, and will be summarized by that consultant in an annual report to be submitted by that consultant to the City of South San Francisco and its Redevelopment Agency with respect to the Center. Tenant shall cooperate with Landlord, with Landlord's designated transportation coordinator and with any independent transportation consultant retained by the City, and shall use reasonable efforts to cause Tenant's employees to so cooperate, in the completion and return of such surveys from time to time, when and as requested by Landlord or its designated transportation coordinator or the independent consultant. Tenant acknowledges and understands that employees who fail to respond to such surveys will be counted as drive-alone commuters.

(e) Landlord has advised Tenant that pursuant to conditions imposed by the City of South San Francisco and its Redevelopment Agency, Landlord may incur financial penalties if implementation of the TDMP at the Center fails to achieve a target rate of at least thirty-five percent (35%) alternative mode transportation usage (the "Alternative Mode Standard") by employees working at the Center, as reflected in the surveys conducted pursuant to Section 21.20(d) above. Any such financial penalties shall be imposed by the City of South San Francisco Redevelopment Agency (the "Redevelopment Agency"), in its sole discretion, based on its review of the annual reports submitted from time to time pursuant to Section 21.20(d) above. The amount of such financial penalties is presently set at $15,000 per year for each percentage point (if any) by which, after a phase-in period (two (2) years after the granting of a certificate of occupancy) for each building, the aggregate rate of alternative mode transportation usage by employees throughout the Center falls short of the Alternative Mode Standard. If any such financial penalties are imposed on Landlord for failure to meet the Alternative Mode Standard on a Center-wide basis for any applicable survey period, then Landlord shall be entitled to pass such financial penalties through to all tenants of the Center whose employees have failed to demonstrate (pursuant to the applicable surveys) compliance with the Alternative Mode Standard for the applicable period (each such tenant being hereinafter referred to as a "Noncomplying Tenant" for that period), in which event the actual penalty amount shall be allocated among the Noncomplying Tenants for the applicable period in the following manner: Each Noncomplying Tenant shall bear a portion of the applicable penalty amount equal to a fraction, the numerator of which is the number of employees by which such Noncomplying Tenant fell short of meeting the Alternative Mode Standard for the applicable period and the denominator of which is the sum of the respective numbers of employees by which all Noncomplying Tenants, in the aggregate, fell short of meeting the Alternative Mode Standard for the applicable period. Each such Noncomplying Tenant shall pay its share of the applicable penalty amount to Landlord within thirty (30) days after receipt of written demand from Landlord, accompanied by supporting documentation evidencing the applicable penalty amount, as provided by the Redevelopment Agency or its consultant, and demonstrating in reasonable detail the calculation of such Noncomplying Tenant's share of that penalty amount. Under no circumstances shall Tenant be required to bear any portion of any penalties

contemplated in this paragraph with respect to any period as to which Tenant can demonstrate that its employees, as evidenced by the applicable survey(s) for that period, met the Alternative Mode Standard. If Tenant subleases any portion(s) of any of the Buildings from time to time, then for purposes of this Section 21.20, as between Tenant and Landlord, Tenant shall be fully and solely responsible for compliance by its subtenant(s) and their employees with the requirements of this Section 21.20, and all surveys and reports submitted by Tenant to Landlord or its designated transportation coordinator or to the independent consultant pursuant to this Section 21.20 shall cover the entire Buildings (other than the retail space in the Phase III Building) and shall report figures for Tenant and its subtenant(s) on an aggregate basis. Nothing in the preceding sentence, however, shall preclude Tenant, as between itself and its subtenant(s), from allocating to such subtenant(s) in the applicable sublease agreement any compliance obligations and/or penalty reimbursement obligations under this Section 21.20(e), but no such allocation shall be binding on Landlord or require Landlord, its designated transportation

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coordinator or the independent consultant to deal directly with any such subtenant(s) regarding the matters addressed in this Section 21.20. If Tenant believes, reasonably and in good faith, that there are circumstances particular to the nature of Tenant's business operations that would justify a mitigation of penalties and/or a modification of the implementation of the TDMP as applied to Tenant's business, and requests in writing (with supporting information describing, in reasonable detail, the circumstances on which Tenant is relying) that Landlord present such mitigation or modification arguments to the Redevelopment Agency, then Landlord shall use reasonable and good faith efforts to present or cause its designated transportation coordinator to present such mitigation and/or modification arguments, but Tenant acknowledges and understands that any decision with respect to such mitigation and/or modification arguments will be in the sole discretion of the Redevelopment Agency and agrees that Landlord shall have no liability to Tenant if such mitigation and/or modification arguments are not accepted by the Redevelopment Agency.

IN WITNESS WHEREOF, the parties hereto have executed this Lease as of the day and year first set forth above.

"Landlord"	"Tenant"
SLOUGH BTC, LLC, a Delaware limited liability company	TULARIK INC., a Delaware corporation
By: Slough Estates USA Inc., a Delaware corporation, Its Manager	By: /s/ David V. Goeddel Its: CEO
By: /s/ William Rogalla Its: VP	By: /s/ William J. Rieflin Its: EVP

EXHIBITS

EXHIBIT A	Real Property Description (Center)
EXHIBIT B	Site Plan
EXHIBIT C	Workletter
EXHIBIT D	Estimated Construction Schedules
EXHIBIT E	Acknowledgment of Rent Commencement Date

EXHIBIT A

REAL PROPERTY DESCRIPTION (CENTER)

All that certain real property in the City of South San Francisco, County of San Mateo, State of California, more particularly described as follows:

Parcels 2, 3, 5 and 6 as shown on the Bay West Cove Final Subdivision Map, Parcel Map No. 97-027, recorded January 22, 1998 in Book 70, at pages 33-40, File No. 98-008274, Official Records of San Mateo County, California.

EXHIBIT B

BRITANNIA OYSTER POINT

SITE PLAN

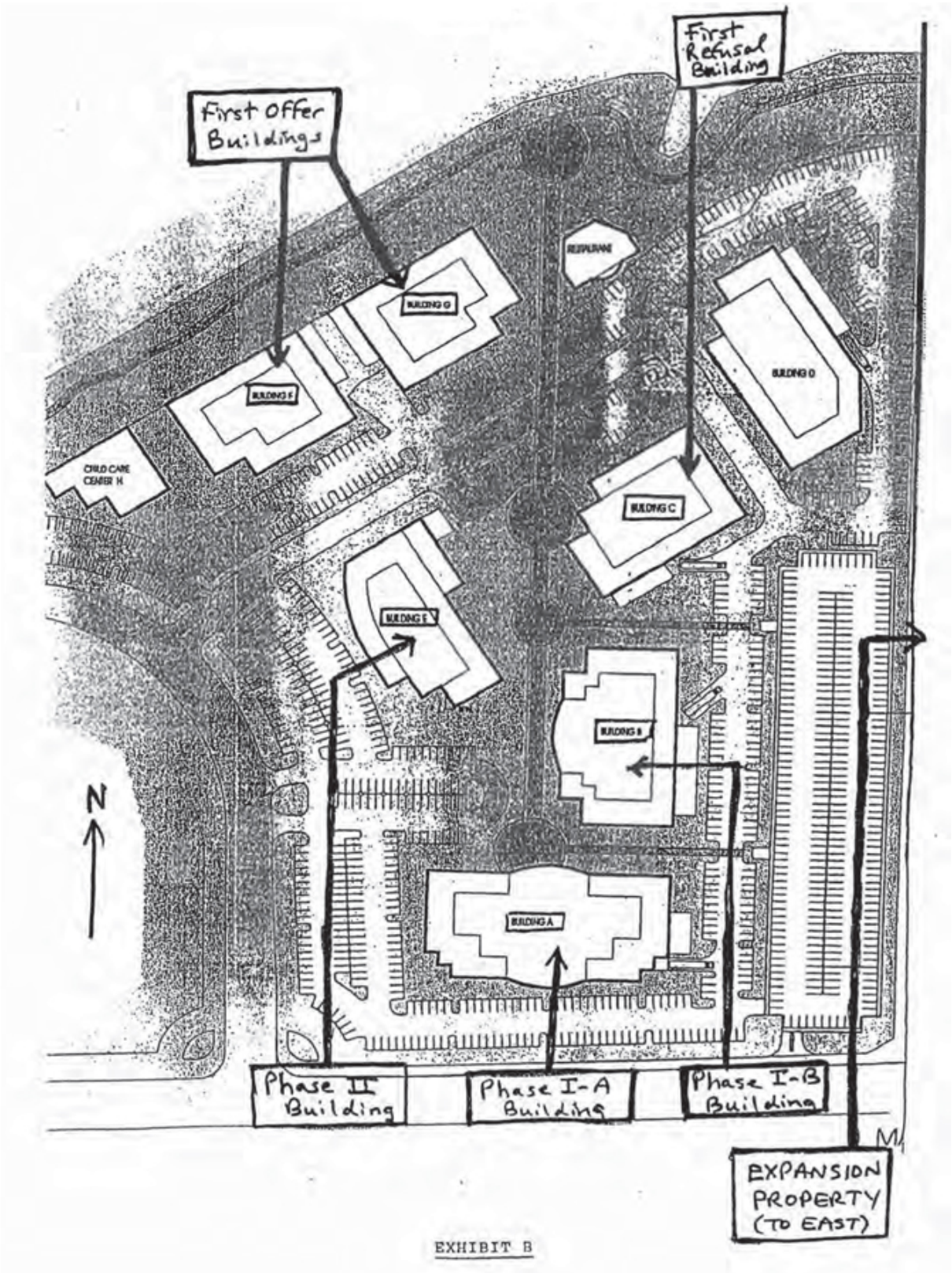


EXHIBIT B

EXHIBIT C

WORKLETTER

This Workletter ("Workletter") constitutes part of the Build-to-Suit Lease dated as of December 20, 2001 (the "Lease") between SLOUGH BTC, LLC, a Delaware limited liability company ("Landlord"), and TULARIK INC., a Delaware corporation ("Tenant"). The terms of this Workletter are incorporated in the Lease for all purposes.

1. Defined Terms. As used in this Workletter, the following capitalized terms have the following meanings:

(a) Approved Plans: Plans and specifications prepared by the applicable Architect for the respective Improvements and approved by Landlord and, to the extent applicable, Tenant in accordance with Paragraph 2 of this Workletter, subject to further modification from time to time to the extent provided in and in accordance with such Paragraph 2.

(b) Architect: Chamorro Design Group, or any other architect selected by Landlord in its sole discretion, with respect to the respective Building Shells, the Site Improvements and any other Improvements which Landlord is to design pursuant to this Workletter; any architect selected by Tenant with the written approval of Landlord (which shall not be unreasonably withheld or delayed) with respect to the Tenant Improvements and any other Improvements which Tenant is to design pursuant to the this Workletter.

(c) Building Shells: The shells of the respective Buildings, as more fully described in Schedule C-1 attached to this Workletter, including the shell of the Connector Bridge (as described in Section 1.1(a) of the Lease).

(d) Change Order Request: See definition in Paragraph 2(e)(ii) hereof.

(e) Cost of Improvement: See definition in Paragraph 2(c) hereof.

(f) Final Completion Certificate: See definition in Paragraph 3(b) hereof.

(g) Final Working Drawings: See definition in Paragraph 2(a) hereof.

(h) General Contractor: Hathaway Dinwiddie Construction Company, or any other general contractor selected by Landlord in its sole discretion, with respect to Landlord's Work. The General Contractor with respect to Tenant's Work shall be selected by Tenant, subject to Landlord's approval (not to be unreasonably withheld or delayed), as contemplated in Paragraph 5(a) hereof.

(i) Improvements: The Building Shells, Site Improvements, Tenant Improvements and other improvements shown on the Approved Plans from time to time and to be constructed on the Property pursuant to the Lease and this Workletter.

(j) Landlord Delay: See definition in Paragraph 10 hereof.

(k) Landlord's Work: The Building Shells and Site Improvements, and any other Improvements which Landlord is to construct or install pursuant to this Workletter (including, but not limited to, any Tenant Improvements identified in Schedule C-2 to this Workletter as being Landlord's responsibility to construct) or by mutual agreement of Landlord and Tenant from time to time.

(l) Punch List Work: Minor corrections of construction or decoration details, and minor mechanical adjustments, that are required in order to cause any applicable portion of the Improvements as constructed to conform to the Approved Plans in all material respects and that do not materially interfere with Tenant's use or occupancy of the applicable Building and the Property.

(m) Site Improvements: The parking areas, driveways, landscaping and other improvements to the Common Areas of the Property that are depicted on Exhibit B to the Lease

(as the same may be modified by Landlord from time to time pursuant to the process of development and approval of the Approved Plans).

(n) Structural Completion Certificate: See definition in Paragraph 3(a) hereof.

(o) Tenant Delay: Any of the following types of delay in the completion of construction of the Building Shell(s):

(i) Any delay resulting from Tenant's failure to furnish, within the time frames required in the Estimated Construction Schedules attached as Exhibit D to the Lease (or, in the case of any requests for which no specific time frame is specified in such Estimated Construction Schedules, within the time frame reasonably specified in writing by Landlord or its project manager in making such request), information reasonably requested by Landlord or by Landlord's project manager (Project Management Advisors, Inc. or such other person or entity as Landlord may designate from time to time) in connection with the design or construction of the respective Building Shells, or from Tenant's failure to approve within the time frames required in the Estimated Construction Schedules attached as Exhibit D to the Lease (or, in the case of any requests for which no specific time frame is specified in such Estimated Construction Schedules, within the time frame reasonably specified in writing by Landlord or its project manager in requesting such approval) any matters requiring approval by Tenant;

(ii) Any delay resulting from changes in Landlord's Final Working Drawings and/or Landlord's Approved Plans with respect to the Phase IA Building and/or the Phase IB Building in order to accommodate the construction of the Connector Bridge, under the circumstances and to the extent provided in Paragraph 2(e)(iii) of this Workletter;

(iii) Any delay resulting from Change Order Requests initiated by Tenant, including any delay resulting from the need to revise any drawings or obtain further governmental approvals as a result of any such Change Order Request; or

(iv) Any delay of any other kind or nature caused by Tenant (or Tenant's contractors, agents or employees) or resulting from the performance of Tenant's Work.

(p) Tenant Improvements: The improvements to or within the respective Buildings, other than improvements constituting part of the respective Building Shells, shown on the Approved Plans from time to time and to be constructed by Tenant (except as otherwise provided herein) pursuant to the Lease and this Workletter, including (but not limited to) the improvements described in Schedule C-2 attached to this Workletter.

(q) Tenant's Work: All of the Improvements other than those constituting Landlord's Work, and such other materials and improvements as Tenant deems necessary or appropriate for Tenant's use and occupancy of the respective Buildings.

(r) Unavoidable Delays: Delays due to acts of God, action or inaction of public agencies, labor disputes, strikes, fires, freight embargoes, rainy or stormy weather (but only to the extent such weather prevents the affected party from conducting any substantial element of its construction work for a period of at least one full work day), inability to obtain supplies, materials, fuels or permits, delays of contractors or subcontractors, or other causes or contingencies beyond the reasonable control of Landlord or Tenant, as applicable.

(s) Work Deadlines: The target dates for performance by the applicable party of the steps listed in the Estimated Construction Schedules for the respective Buildings attached as Exhibit D to the Lease.

(t) Capitalized terms not otherwise defined in this Workletter shall have the definitions set forth in the Lease.

2. Plans, Cost of Improvements and Construction. Landlord and Tenant shall comply with the procedures set forth in this Paragraph 2 in preparing, delivering and approving matters relating to the Improvements.

(a) Approved Plans and Working Drawings for Landlord's Work. Landlord shall promptly and diligently (and in all events prior to any applicable Work Deadlines, subject to Tenant Delays and Unavoidable Delays) prepare or cause to be prepared plans and specifications

for the Improvements constituting Landlord's Work and for all other Improvements (if any) for which Landlord is expressly assigned design responsibility under Schedule C-2 to this Workletter. Such plans and specifications shall not be subject to Tenant's approval, except to the extent (and only to the extent) that Landlord's Work includes, pursuant to this Workletter or by other mutual agreement of Landlord and Tenant, any portion of the Tenant Improvements. Landlord shall deliver copies of such plans and specifications to Tenant for Tenant's approval (but only to the extent provided in the preceding sentence) and information, to assist Tenant in providing any information and making any decisions necessary to be provided or made by Tenant in order to permit preparation of Landlord's Final Working Drawings as hereinafter defined, and to assist Tenant in preparing plans, specifications and drawings for Tenant's Work as hereinafter set forth. Following approval of such plans and specifications by Landlord and, if applicable, by Tenant (as so approved, the "Landlord's Approved Plans"), Landlord shall then prepare or cause to be prepared, on or before the applicable Work Deadline (assuming timely delivery by Tenant of all information and decisions required to be furnished or made by Tenant in order to permit complete preparation of Landlord's Final Working Drawings), final detailed working drawings and specifications for the Improvements constituting Landlord's Work, including structural, fire protection, life safety, mechanical and electrical working drawings and final architectural drawings (collectively, "Landlord's Final Working Drawings"). Landlord's Final Working Drawings shall substantially conform to the Landlord's Approved Plans. Landlord's Final Working Drawings shall not be subject to Tenant's approval, except to the extent (and only to the extent), as noted above, that Landlord's Work includes, pursuant to this Workletter or by other mutual agreement of Landlord and Tenant, any portion of the Tenant Improvements. Landlord shall deliver copies of Landlord's Final Working Drawings to Tenant for Tenant's approval (but only to the extent provided in the preceding sentence) and information, and to assist Tenant in preparing plans, specifications and drawings for Tenant's Work as hereinafter set forth. Landlord's obligation to deliver Landlord's Final Working Drawings to Tenant within the time period set forth above shall be extended for any delay encountered by Landlord as a result of a request by Tenant for changes in accordance with the procedure set forth below, any other Tenant Delays, or any Unavoidable Delays. To the extent Tenant has any right of approval over Landlord's proposed plans and specifications or Landlord's proposed Final Working Drawings pursuant to the foregoing provisions, no later than the applicable Work Deadline (assuming timely delivery of plans and drawings by Landlord), Tenant shall either approve (to the extent of Tenant's approval right) Landlord's proposed plans and specifications or Landlord's proposed Final Working Drawings, as applicable, or set forth in writing with particularity any changes necessary to bring the aspects of such proposed plans and specifications or proposed Landlord's Final Working Drawings over which Tenant has a right of approval into a form which will be acceptable to Tenant or, in the case of Landlord's Final Working Drawings, into substantial conformity with the Landlord's Approved Plans. Notwithstanding any other provisions of this paragraph (other than the final sentence thereof), in no event shall Tenant have the right to object to any aspect of the Landlord's proposed plans and specifications or proposed Landlord's Final Working Drawings (including, but not limited to, any subsequently proposed changes therein from time to time) that is necessitated by applicable law or as a condition of any governmental or other third-party approvals that are required to be obtained in connection with Landlord's Work, or that is required as a result of unanticipated conditions encountered in the course of construction of Landlord's Work. Failure of Tenant to deliver to Landlord written notice of disapproval and specification of required changes (to the extent Tenant has a right of approval or objection under this paragraph) on or before the applicable Work Deadline shall constitute and be deemed to be approval of Landlord's proposed plans and specifications or proposed Landlord's Final Working Drawings, as applicable. Upon approval, actual or deemed, of Landlord's Final Working Drawings by Landlord and Tenant (to the extent Tenant has such a right of approval under this paragraph), Landlord's Final Working Drawings shall be deemed to be incorporated in and considered part of the Landlord's Approved Plans, superseding (to the extent of any inconsistencies) any inconsistent features of the previously existing Landlord's Approved Plans. Notwithstanding the foregoing provisions of this paragraph, the parties acknowledge and agree as follows: (i) as to the Building Shells for the Phase IA and Phase IB Buildings (excluding the Connector Bridge, which has not yet been designed), the plans and specifications for which building permits have already been issued by the City of South San Francisco constitute Landlord's Approved Plans for such Building Shells, subject to any changes

that may be required in connection with the design and construction of the Connector Bridge; (ii) as to the Building Shell for the Phase II Building, the plans and specifications filed with Landlord's pending permit application with the City of South San Francisco constitute Landlord's Approved Plans for such Building Shell, subject to any changes that may be required by the City of South San Francisco in connection with the issuance of a building permit for such Building Shell; and (iii) Tenant shall have a right of approval over the plans and specifications to be prepared by Landlord for the shell of the Connector Bridge, which approval shall not be unreasonably withheld and which right of approval shall be exercised within any applicable Work Deadlines or, to the extent there is no specifically applicable Work Deadline, within five (5) business days after delivery of plans and specifications for review by Tenant.

(b) Approved Plans and Working Drawings for Tenant's Work. Tenant shall promptly and diligently cause to be prepared and delivered to Landlord, for approval, a space plan and detailed plans and specifications for the Improvements constituting Tenant's Work (as so approved, the "Tenant's Approved Plans"). Landlord shall approve or disapprove of Tenant's Plans, following receipt thereof from Tenant, within the applicable number of days specified on the applicable Estimated Construction Schedule(s) attached as Exhibit D to the Lease. Following mutual approval of the Tenant's Approved Plans, Tenant shall then cause to be prepared and delivered to Landlord, for approval, final working drawings and specifications for the Improvements constituting Tenant's Work, including any applicable life safety, mechanical and electrical working drawings and final architectural drawings (collectively, "Tenant's Final Working Drawings"). Tenant's Final Working Drawings shall substantially conform to the Tenant's Approved Plans. Landlord shall, within the applicable number of days specified on the applicable Estimated Construction Schedule(s) attached as Exhibit D to the Lease, either approve Tenant's Final Working Drawings or set forth in writing with particularity any changes necessary to bring Tenant's Final Working Drawings into substantial conformity with Tenant's Approved Plans or into a form which will be acceptable to Landlord. Upon approval of Tenant's Final Working Drawings by Landlord and Tenant, Tenant's Final Working Drawings shall be deemed to be incorporated in and considered part of the Tenant's Approved Plans, superseding (to the extent of any inconsistencies) any inconsistent features of the previously existing Tenant's Approved Plans.

(c) Cost of Improvements. "Cost of Improvement" shall mean, with respect to any item or component for which a cost must be determined in order to allocate such cost, or an increase in such cost, to Landlord and/or Tenant pursuant to this Workletter, the sum of the following (unless otherwise agreed in writing by Landlord and Tenant with respect to any specific item or component or any category of items or components): (i) all sums paid to contractors or subcontractors for labor and materials furnished in connection with construction of such item or component; (ii) all costs, expenses, payments, fees and charges (other than penalties) paid or incurred to or at the direction of any city, county or other governmental or quasi-governmental authority or agency which are required to be paid in order to obtain all necessary governmental permits, licenses, inspections and approvals relating to construction of such item or component; (iii) engineering and architectural fees for services rendered in connection with the design and construction of such item or component (including, but not limited to, the applicable Architect for such item or component and an electrical engineer, mechanical engineer and civil engineer); (iv) sales and use taxes; (v) testing and inspection costs; (vi) the cost of power, water and other utility facilities and the cost of collection and removal of debris required in connection with construction of such item or component; (vii) all other "hard" costs incurred in the construction of such item or component in accordance with the applicable Approved Plans and this Workletter; and (viii) as to the Tenant Improvements, all costs and items specifically described as being at Tenant's cost in Schedules C-1 and C-2 attached hereto. Notwithstanding the foregoing provisions, however, Cost of Improvement shall not include any project management fee relating to the construction of the applicable item or component, except to the extent of any project management fees expressly set forth in Schedules C-1 and C-2 attached hereto.

(d) Construction of Landlord's Work. Promptly following approval of Landlord's Final Working Drawings, Landlord shall apply for and use reasonable efforts to obtain the necessary permits and approvals to allow construction of all Improvements constituting Landlord's Work. Upon receipt of such permits and approvals, Landlord shall, at Landlord's sole expense (except as otherwise provided in the Lease or in this Workletter), diligently construct and complete the Improvements constituting Landlord's Work substantially in accordance with the Landlord's Approved Plans, subject to Unavoidable Delays and Tenant Delays (if any). Such construction shall be performed in a neat and workmanlike manner and shall conform to all applicable governmental codes, laws and regulations in force at the time such work is completed. Without limiting the generality of the foregoing, Landlord shall be

responsible for compliance of all Improvements designed and constructed by Landlord with the requirements of the Americans with Disabilities Act and all similar or related requirements pertaining to access by persons with disabilities. Landlord shall have the right, in its sole discretion, to decide whether and to what extent to use union labor on or in connection with Landlord's Work and shall use the General Contractor designated or selected pursuant to Paragraph 1(h) to construct all Improvements constituting Landlord's Work.

(e) Changes.

(i) If Landlord determines at any time that changes in Landlord's Final Working Drawings or in any other aspect of the Landlord's Approved Plans relating to any item of Landlord's Work are required as a result of applicable law or governmental requirements, or at the insistence of any other third party whose approval may be required with respect to the Improvements, or are required as a result of unanticipated conditions encountered in the course of construction, then Landlord shall promptly (A) advise Tenant of such circumstances and (B) cause revised Landlord's Approved Plans and/or Landlord's Final Working Drawings, as applicable, reflecting such changes to be prepared by Architect and submitted to Tenant, for Tenant's information (and to assist Tenant in determining the need for any related changes in Tenant's Approved Plans) and, to the extent such changes relate to any Tenant Improvements being constructed by Landlord pursuant to mutual agreement of Landlord and Tenant or are subject to Tenant's approval pursuant to the final sentence of this paragraph, for approval by Tenant in accordance with the procedure contemplated in Paragraph 2(a) hereof. Upon final approval of such revised drawings by Landlord and Tenant (if applicable), Landlord's Final Working Drawings and/or the Landlord's Approved Plans shall be deemed to be modified accordingly. In the case of any such changes in Landlord's Final Working Drawings and/or Landlord's Approved Plans that are required as a result of applicable law or governmental requirements, or are required at the insistence of any other third party whose approval is required with respect to the Improvements, or are required as a result of unanticipated conditions encountered in the course of construction, Tenant shall have no approval right and Landlord shall have no liability or responsibility for any costs or cost increases incurred by Tenant as a result of any such required changes. However, in the case of any changes in Landlord's Final Working Drawings and/or Landlord's Approved Plans that are merely deemed desirable by Landlord without being required by any of the circumstances described in the preceding sentence, (A) Landlord shall not make any such change without Tenant's written approval, which approval shall not be unreasonably withheld and which right of approval shall be exercised within five (5) business days after Tenant's receipt of Landlord's request for approval of the proposed change, and (B) Landlord shall be responsible for all actual costs or cost increases reasonably incurred by Tenant as a result of such changes and shall reimburse Tenant for any such actual costs or cost increases promptly following receipt of Tenant's written request for such reimbursement, accompanied by documentation reasonably supporting Tenant's claimed costs or cost increases and their relationship to the changes made by Landlord.

(ii) If Tenant at any time desires any changes, alterations or additions to the Landlord's Approved Plans or Landlord's Final Working Drawings with respect to any of Landlord's Work, Tenant shall submit a detailed written request to Landlord specifying such changes, alterations or additions (a "Change Order Request"). Upon receipt of any such request, Landlord shall promptly notify Tenant of (A) whether the matters proposed in the Change Order Request are approved by Landlord (which approval shall not be unreasonably withheld as to any matters relating to Tenant Improvements which are being constructed by Landlord pursuant to mutual agreement of Landlord and Tenant, but may be granted or withheld by Landlord in its sole discretion as to any other aspects of Landlord's Work), (B) Landlord's estimate of the number of days of delay, if any, which shall be caused by such Change Order Request if implemented (including, without limitation, delays due to the need to obtain any revised plans or drawings and any governmental approvals), and (C) Landlord's estimate of the increase, if any, which shall occur in the Cost of Improvement for the items or components affected by such Change Order Request if such Change Order Request is implemented (including, but not limited to, any costs of compliance with laws or governmental regulations that become applicable because of the implementation of the Change Order Request). If Landlord approves the Change Order Request and Tenant notifies Landlord in writing, within five (5) business days after receipt of such notice from Landlord, of Tenant's approval of the Change Order Request (including the estimated delays and cost increases, if any, described in Landlord's notice), then Landlord shall cause such Change Order Request to be implemented and Tenant shall be responsible for all costs or cost increases resulting from or attributable to the implementation of the Change Order

Request, subject to the provisions of Paragraph 4 hereof. If Tenant fails to notify Landlord in writing of Tenant's approval of such Change Order Request within said five (5) business day period, then such Change Order Request shall be deemed to be withdrawn and shall be of no further effect.

(iii) If Landlord determines at any time in the course of design and construction of the Connector Bridge that changes in Landlord's Final Working Drawings or in any other aspect of the Landlord's Approved Plans for the Phase IA Building and/or the Phase IB Building are required in order to accommodate the construction of the Connector Bridge, then Landlord shall promptly (A) advise Tenant of such circumstances and (B) notify Tenant of Landlord's estimate of the number of days of delay, if any, which shall be caused in Landlord's achievement of structural completion for the Phase IA Building and/or the Phase IB Building as a result of such changes if implemented (including, without limitation, delays due to the need to obtain any revised plans or drawings and any governmental approvals) (the "Estimated Delay"). If Tenant notifies Landlord in writing, within five (5) business days after receipt of such notice from Landlord, of Tenant's approval of the Connector Bridge design which requires such changes and of Tenant's desire to have Landlord proceed with the construction of the Connector Bridge notwithstanding the Estimated Delay (if any), then Landlord shall cause such changes to be implemented and the amount of the Estimated Delay (if any) as specified in Landlord's notice shall constitute a Tenant Delay; provided, however, that notwithstanding the characterization of such changes as a Tenant Delay and notwithstanding any contrary provisions of the Lease or of this Workletter, under no circumstances shall Tenant be responsible for any costs or cost increases resulting from or attributable to the implementation of the changes described in this subparagraph (iii). If Tenant fails to notify Landlord in writing, within said five (5) business day period, of Tenant's approval of the Connector Bridge design which requires such changes and of Tenant's desire to have Landlord proceed with the construction of the Connector Bridge notwithstanding the estimated delays (if any), then such design changes shall be deemed to be disapproved and Landlord shall be under no further obligation to construct the Connector Bridge.

(iv) If Tenant at any time desires to make any changes, alterations or additions to the Tenant's Approved Plans, such changes, alterations or additions shall be subject to approval by Landlord in the same manner as the original Tenant's Approved Plans as provided above.

3. Completion.

(a) When Landlord receives written certification from Architect that construction of the foundation, structural slab on grade (except to the extent delayed at Tenant's request to accommodate Tenant's design requirements and/or any underslab aspects of Tenant's Work), Landlord's underslab plumbing work, structural steel framework, decking and concrete on second, third and fourth (if applicable) floors, roof structure, roof membrane and installation of main fire sprinkler risers in a Building have been substantially completed in accordance with the Landlord's Approved Plans, Landlord shall prepare and deliver to Tenant a certificate signed by both Landlord and Architect (the "Structural Completion Certificate") certifying that the construction of such portions of the applicable Building has been substantially completed in accordance with the Landlord's Approved Plans in all material respects and specifying the date of that completion. The delivery of such Structural Completion Certificate shall commence the running of the 180-day time period (which period shall be extended day for day by any Landlord Delay, as hereinafter defined, occurring after the date of delivery of such Structural Completion Certificate) until the Rent Commencement Date for the applicable Building (or in the case of the Phase II Building, until the Phase IIA Rent Commencement Date) under Section 2.1 of the Lease. Notwithstanding any other provisions of this Workletter or of the Lease, Landlord's right to issue a Structural Completion Certificate with respect to the respective Phase I Buildings shall be determined without reference to the degree of completion of the Connector Bridge, and any delay in the construction or structural completion of the shell for the Connector Bridge shall not delay the determination of structural completion or the Rent Commencement Date for either of the Phase I Buildings, treating each of such Buildings (without the Connector Bridge) as a stand-alone building and ignoring, for this purpose, any lack of completion of Landlord's Work at and in the immediate vicinity of the point of attachment of the Connector Bridge to the applicable Building.

(b) When Landlord receives written certification from Architect that construction of the remaining Improvements constituting Landlord's Work with respect to a Building has been

substantially completed in accordance with the Landlord's Approved Plans (except for Punch List Work), Landlord shall prepare and deliver to Tenant a certificate signed by both Landlord and Architect (the "Final Completion Certificate") certifying that the construction of the remaining Improvements constituting Landlord's Work with respect to such Building has been substantially completed in accordance with the Landlord's Approved Plans in all material respects, subject only to completion of Punch List Work, and specifying the date of that completion. Upon receipt by Tenant of the Final Completion Certificate, the Improvements constituting Landlord's Work will be deemed delivered to Tenant for all purposes of the Lease (subject to Landlord's continuing obligations with respect to the Punch List Work). Notwithstanding any other provisions of this Workletter or of the Lease, Landlord's right to issue a Final Completion Certificate with respect to the respective Phase I Buildings shall be determined without reference to the degree of completion of the Connector Bridge, and any delay in the construction or final completion of the shell for the Connector Bridge shall not delay the determination of final completion or the Rent Commencement Date for either of the Phase I Buildings, treating each of such Buildings (without the Connector Bridge) as a stand-alone building and ignoring, for this purpose, any lack of completion of Landlord's Work at and in the immediate vicinity of the point of attachment of the Connector Bridge to the applicable Building.

(c) Notwithstanding any other provisions of this Workletter or of the Lease, Rent Commencement Dates for the applicable Buildings shall be subject to adjustment under the following circumstances:

(i) If Landlord is delayed in substantially completing any of Landlord's Work necessary for issuance of the Structural Completion Certificate with respect to a Building as a result of any Tenant Delay, then the 180-day period between the delivery of the Structural Completion Certificate and the Rent Commencement Date for such Building pursuant to Section 2.1 of the Lease shall be reduced, day for day, by the number of days by which such Tenant Delay delayed completion of the portions of Landlord's Work necessary for issuance of the Structural Completion Certificate for such Building, and Tenant shall reimburse Landlord in cash, within fifteen (15) days after written demand by Landlord (accompanied by reasonable documentation of the items claimed), for any increased construction-related costs and expenses incurred by Landlord as a result of the Tenant Delay (except to the extent otherwise expressly provided in Paragraph 2(e)(iii) of this Workletter).

(ii) If Tenant is delayed in substantially completing any of Tenant's Work necessary for Tenant's occupancy of and commencement of business in a Building as a result of any Landlord Delay, then the 180-day period between the delivery of the Structural Completion Certificate and the Rent Commencement Date for such Building pursuant to Section 2.1 of the Lease shall be extended, day for day, by the number of days by which such Landlord Delay delayed completion of the portions of Tenant's Work necessary for Tenant's occupancy of and commencement of business in such Building.

(iii) Rent Commencement Dates shall also be subject to adjustment under the circumstances and to the extent provided in Section 2.1(c) of the Lease, if applicable.

(d) At any time within thirty (30) days after delivery of the Structural Completion Certificate or the Final Completion Certificate, as applicable, for a Building, Tenant shall be entitled to submit one or more lists to Landlord specifying Punch List Work to be performed on the applicable Improvements constituting Landlord's Work with respect to such Building, and upon receipt of such list(s), Landlord shall diligently complete such Punch List Work at Landlord's sole expense. Promptly after Landlord provides Tenant with the Final Completion Certificate for a Building, Landlord shall cause the recordation of a Notice of Completion (as defined in Section 3093 of the California Civil Code) with respect to Landlord's Work for such Building.

4. Payment of Costs.

(a) Landlord's Work. Except as otherwise expressly provided in this Workletter (including, but not limited to, the cost allocations set forth in Schedules C-1 and C-2 attached hereto) or by mutual written agreement of Landlord and Tenant, the cost of construction of Landlord's Work shall be borne by Landlord at its sole cost and expense, including any costs or cost increases incurred as a result of Unavoidable Delays, governmental requirements or unanticipated conditions; provided, however, that notwithstanding any other provisions of this

Paragraph 4(a), to the extent the Cost of Improvement relating to the construction of any item or component of Landlord's Work is increased as a result of any implemented Change Order Request or any Tenant Delay, or as a result of any other plan changes or compliance costs attributable to Tenant's particular use requirements or to the contemplated Tenant's Work, the amount of the increase in the Cost of Improvement with respect to such item or component, as well as the Cost of Improvement with respect to any matters listed on Schedule C-1 or C-2 as being installed by Landlord but as having the cost thereof borne by Tenant, shall be reimbursed by Tenant to Landlord in cash or, by mutual agreement of Landlord and Tenant, may be deducted from Landlord's maximum obligation under Paragraph 4(b) with respect to the cost of Tenant's Work.

(b) Tenant's Work. Except as otherwise expressly provided in this Workletter (including, but not limited to, the cost allocations set forth in Schedules C-1 and C-2 attached hereto) or by mutual written agreement of Landlord and Tenant, the cost of construction of Tenant's Work shall be borne by Tenant at its sole cost and expense, including any costs or cost increases incurred as a result of Unavoidable Delays, governmental requirements or unanticipated conditions. Notwithstanding the foregoing sentence, the Cost of Improvements with respect to the construction of the Tenant Improvements in each Building shall be borne by Landlord up to a maximum contribution by Landlord equal to One Hundred Ninety and No/100 Dollars ($190.00) per square foot, in the case of each of the Phase I Buildings (including the Connector Bridge), and One Hundred Forty-Five and No/100 Dollars ($145.00) per square foot, in the case of each phase of the Phase II Building, times the square footage of the applicable Building, as and when constructed (measured in accordance with Sections 1.1(c) and 3.1(d) of the Lease), toward the Cost of Improvements for the Tenant Improvements in the respective Buildings (the "Tenant Improvement Allowance"), less any reduction in such sum pursuant to Paragraph 4(a) or any other applicable provision of this Workletter. Tenant shall be entitled to utilize the entire Tenant Improvement Allowance for each respective Building or phase prior to being required to expend any of Tenant's own funds on an unreimbursed basis for Tenant Improvements in such Building or phase. In all other respects, the timing, conditions and other procedures for Landlord's disbursement of the Tenant Improvement Allowance for each Building or phase shall be as reasonably prescribed by Landlord, subject to approval by Tenant (which approval shall not be unreasonably withheld or delayed by Tenant); provided, however, that progress payments of the Tenant Improvement Allowance shall be made not less often than monthly, subject to Tenant's timely compliance with all applicable conditions and procedures established pursuant to this sentence. To the extent the Cost of Improvement with respect to the Tenant Improvements for any Building or Phase exceeds the Tenant Improvement Allowance (as reduced, if applicable), whether as a result of implemented Change Order Requests, Tenant Delays and/or Unavoidable Delays or otherwise, the amount of such excess shall in all events be Tenant's sole responsibility and expense. The rental amounts set forth in Section 3.1 of the Lease are not subject to adjustment based on the Cost of Improvements of the Tenant Improvements, regardless of whether the final Cost of Improvements for the Tenant Improvements in any Building or Phase uses the entire Tenant Improvement Allowance or not. The foregoing Tenant Improvement Allowance assumes that each Phase I Building will be composed of a minimum of 65% laboratory space and a maximum of 35% office space, and that the Phase II Building will be composed of a minimum of 50% laboratory space and a maximum of 50% office space, and such Tenant Improvement Allowance shall be subject to reduction (and/or to disapproval by Landlord of Tenant's proposed plans and specifications for the Tenant Improvements in the applicable Building) if the proposed laboratory space in a Building is less than the minimum percentage specified in this sentence. The square footage attributable to the Connector Bridge shall be disregarded for purposes of applying the ratios set forth in the preceding sentence to the Phase I Buildings.

(c) Tenant Funding of Tenant Improvement Allowance. If Landlord fails to timely fulfill its obligation to fund any portion of the Tenant Improvement Allowance pursuant to Paragraph 4(b) above, Tenant shall be entitled to deliver written notice thereof (a "Payment Notice") to Landlord. If Landlord still fails to fulfill any such payment obligation within seventy-five (75) days after Landlord's receipt of the Payment Notice from Tenant and fails to deliver written notice to Tenant within such 75-day period explaining the reasons for which Landlord believes that the amounts described in Tenant's Payment Notice are not in fact due and payable by Landlord, then Tenant shall be entitled to fund the portion of the Tenant Improvement Allowance described in the Payment Notice and to offset the amount so funded,

together with interest at the prime rate plus two percentage points (2%) from the date of funding until the date of offset, against Tenant's next obligations to pay Rent under the Lease.

5. Tenant's Work. Tenant shall construct and install in each Building or Phase the Tenant's Work, substantially in accordance with the Tenant's Approved Plans or, with respect to Tenant's Work not otherwise shown on the Tenant's Approved Plans, substantially in accordance with plans and specifications prepared by Tenant and approved in writing by Landlord (which approval shall not be unreasonably withheld or delayed). Tenant's Work shall be performed in accordance with, and shall in all respects be subject to, the terms and conditions of the Lease (to the extent not inconsistent with this Workletter), and shall also be subject to the following conditions:

(a) Contractor Requirements. The contractor engaged by Tenant for Tenant's Work, and any subcontractors, shall be duly licensed in California and shall be subject to Landlord's prior written approval, which approval shall not be unreasonably withheld or delayed. Tenant shall engage only union contractors for the construction of Tenant's Work and for the installation of Tenant's fixtures and equipment in the Buildings, and shall require all such contractors engaged by Tenant, and all of their subcontractors, to use only union labor on or in connection with such work, except to the extent Landlord determines, in its reasonable discretion, that the use of non-union labor would not create a material risk of labor disputes, picketing or work interruptions at the Property, in which event Landlord shall, to that extent, waive such union labor requirement.

(b) Costs and Expenses of Tenant's Work. Subject to Landlord's payment or reimbursement obligations under Paragraph 4(b) hereof with respect to the Tenant Improvement Allowance, Tenant shall promptly pay all costs and expenses arising out of the performance of Tenant's Work (including the costs of permits) and shall furnish Landlord with evidence of payment on request. Tenant shall provide Landlord with ten (10) days' prior written notice before commencing any Tenant's Work. On completion of Tenant's Work (assuming Landlord has complied with its payment or reimbursement obligations under Paragraph 4(b) hereof), Tenant shall deliver to Landlord a release and unconditional lien waiver executed by each contractor, subcontractor and materialman involved in the performance of Tenant's Work. If any lien is filed against the Property or against Tenant's leasehold interest, Tenant shall obtain, within ten (10) days after the filing, the release or discharge of that lien. If Tenant fails to do so, Landlord shall have the right (but not the obligation) to obtain the release or discharge of the lien and Tenant shall, within fifteen (15) days after written demand by Landlord (accompanied by reasonable documentation of the items claimed), reimburse Landlord for all costs, including (but not limited to) reasonable attorneys' fees, incurred by Landlord in obtaining the release or discharge of such lien, together with interest from the date of demand at the interest rate set forth in Section 3.2 of the Lease.

(c) Indemnification. Tenant shall indemnify, defend (with counsel satisfactory to Landlord) and hold Landlord and its agents and employees harmless from all suits, claims, actions, losses, costs and expenses (including, but not limited to, claims for workers' compensation, attorneys' fees and costs) based on personal injury or property damage or contract claims (including, but not limited to, claims for breach of warranty) arising from the performance of Tenant's Work, including (but not limited to) from any early access to the Property by Tenant and its contractors in preparation for Tenant's Work as contemplated in Section 2.2 of the Lease and in this Workletter. Tenant shall repair or replace (or, at Landlord's election, reimburse Landlord for the cost of repairing or replacing) any portion of the Improvements and/or any of Landlord's real or personal property or equipment that is damaged, lost or destroyed in the course of or in connection with the performance of Tenant's Work.

(d) Insurance. Tenant's contractors shall obtain and provide to Landlord certificates evidencing workers' compensation, public liability, and property damage insurance in amounts and forms and with companies reasonably satisfactory to Landlord.

(e) Rules and Regulations. Tenant and Tenant's contractors shall comply with any other reasonable rules, regulations and requirements that Landlord or Landlord's General Contractor or project manager may impose from time to time with respect to the performance of Tenant's Work. Tenant's agreement with Tenant's contractors shall require each contractor to provide daily cleanup of the construction area to the extent that such cleanup is necessitated by the performance of Tenant's Work.

(f) Early Entry. Landlord shall permit entry of contractors into the Buildings for the purposes of performing Tenant's Work, upon delivery of the Structural Completion Certificate and, to the extent provided in Section 2.2 of the Lease, prior to such delivery, subject to satisfaction of the conditions set forth in the Lease and in this Workletter. This license to enter is expressly conditioned on the contractor(s) retained by Tenant working in harmony with, and not interfering with, the workers, mechanics and contractors of Landlord. If at any time the entry or work by Tenant's contractor(s) causes any material interference with the workers, mechanics or contractors of Landlord, permission to enter may be withdrawn by Landlord immediately on written notice to Tenant. Landlord agrees to use reasonable efforts to cause its workers, mechanics and contractors to work in harmony with Tenant's contractors. Any unreasonable exclusion of Tenant's contractors from the Buildings shall be a Landlord Delay to the extent provided in the definition of that term.

(g) Risk of Loss. All materials, work, installations and decorations of any nature brought onto or installed in the Buildings, by or at the direction of Tenant or in connection with the performance of Tenant's Work, before the applicable Rent Commencement Date shall be at Tenant's risk, and neither Landlord nor any party acting on Landlord's behalf shall be responsible for any damage, loss or destruction thereof.

(h) Condition of Tenant's Work. All work performed by Tenant shall be performed in a good and workmanlike manner, shall be free from defects in design, materials and workmanship, and shall be completed in compliance with the plans approved by Landlord for such Tenant's Work in all material respects and in compliance with all applicable governmental laws, ordinances, codes and regulations in force at the time such work is completed. Without limiting the generality of the foregoing, Tenant shall be responsible for compliance of all Improvements designed and constructed by Tenant with the requirements of the Americans with Disabilities Act and all similar or related requirements pertaining to access by persons with disabilities.

6. [Omitted.]

7. No Agency. Nothing contained in this Workletter shall make or constitute Tenant as the agent of Landlord.

8. Survival. Without limiting survival provisions which would otherwise be implied or construed under applicable law, the provisions of Paragraph 5(c) of this Workletter shall survive the termination of the Lease with respect to matters occurring prior to expiration of the Lease.

9. Miscellaneous. All references in this Workletter to a number of days shall be construed to refer to calendar days, unless otherwise specified herein. In all instances where Tenant's approval is required, if no written notice of disapproval is given within the applicable time period, at the end of that period Tenant shall be deemed to have given approval (unless the provision requiring Tenant's approval expressly states that non-response is deemed to be a disapproval or withdrawal of the pending action or request, in which event such express statement shall be controlling over the general statement set forth in this sentence) and the next succeeding time period shall commence. If any item requiring approval is disapproved by Tenant in a timely manner, the procedure for preparation of that item and approval shall be repeated.

10. Landlord Delay. As used in this Workletter and the Lease, "Landlord Delay" shall mean any of the following types of delay in the completion of construction of the Tenant Improvements necessary for Tenant's occupancy of and commencement of business in the respective Buildings or phases, but only to the extent of the actual delay reasonably attributable to the causes or circumstances described herein and directly or proximately caused by such causes or circumstances after the delivery of Landlord's Structural Completion Certificate for the applicable Building or phase:

(a) Any delay resulting from Landlord's failure to approve within the time frames required in the Estimated Construction Schedules attached as Exhibit D to the Lease (or, in the case of any requests for which no specific time frame is specified in such Estimated Construction Schedules, within the time frame reasonably specified in writing by Tenant or its construction manager in requesting such approval) any matters requiring approval by Landlord;

(b) Any delay resulting from any unreasonable or wrongful denial by Landlord or its agents or contractors to Tenant or its agents or contractors of access to the applicable Building or phase, or from any negligent or willful acts or omissions of Landlord or its agents or contractors that interfere materially and unreasonably (beyond reasonable and customary accommodations and coordination issues necessarily involved in the conduct of concurrent work in the applicable premises by Landlord and Tenant) with the actual construction of Tenant's Work; or

(c) Any delay resulting from changes by Landlord in Landlord's approved Final Working Drawings and/or Landlord's Approved Plans that are merely deemed desirable by Landlord without being required by any of the circumstances described in the next to last sentence of Paragraph 2(e)(i) of this Workletter.

11. Financial Information. In August 2002, upon written request by Tenant, Landlord agrees to provide to Tenant, for Tenant's review, copies of the most recently available financial statements for Landlord and for Landlord's manager and sole member, Slough Estates USA Inc. Tenant agrees that such financial statements shall be treated as confidential material, and shall not be disseminated to any person or entity (including, but not limited to, any prospective subtenants of Tenant's existing premises in South San Francisco) without Landlord's prior written consent, except that Tenant shall be entitled to provide such information, subject to reasonable precautions to protect the confidential nature thereof, to Tenant's officers, directors and professional advisors, solely to use in connection with Tenant's analysis and enforcement of its rights under the Lease and this Workletter.

IN WITNESS WHEREOF, the parties have executed this Workletter concurrently with and as of the date of the Lease.

"Landlord"	"Tenant"
SLOUGH BTC, LLC, a Delaware limited liability company	TULARIK INC., a Delaware corporation
By: Slough Estates USA Inc., a Delaware corporation, Its Manager	By: /s/ David V. Goeddel Its: CEO
By: /s/ William Rogalla Its: VP	By: /s/ William J. Rieflin Its: EVP

Schedule C-1 to Workletter

BUILDING SHELL

The **"Building Shell"** as defined in the Workletter to which this **Schedule C-1** is attached shall consist of the following:

Building envelope and waterproofing (the Building "shell"), except as specifically indicated as being included in Tenant Improvements under **Schedule C-2,** including: reinforced grade beam foundation on prestressed concrete piles; ground floor to be reinforced concrete slab supported by concrete piles; second, third and fourth (where applicable) floors to have metal decking with concrete topping slab; roof structure to be metal deck with concrete for mass dampening in areas to receive mechanical equipment and to include a mechanical penthouse; roof membrane to be built-up system, four-ply including mineral fiber cap sheet, with flashing and sealants; building structural framing to consist of steel beams, girders, columns with a non-bearing exterior curtain wall; seismic system utilizing steel braced frames; floor system designed with live load capacity of 100 psf; roof live load to be 20 psf with minimum of 50 psf (more if required) in all areas within the roofscreen and mechanical penthouse; floor to floor heights of 17 feet, all three (or four) floors.

All other structural work except that driven specifically by Tenant Improvements programming (e.g., interior masonry walls)

Main Building entrances plus 14' 6" rollup door

Building code required primary structure fireproofing, 1 hour deck at elevated floors

Building code required stairs

Pit and jack for elevator; framed openings at 2nd and 3rd floors (and 4th floors where applicable); pits/openings sized for 5' 8" × 8' 5" deep inside clear dimension if Tenant provides elevator selection information prior to design completion by Landlord.

Exterior hardscape and landscape, except as specifically included in Tenant Improvements under **Schedule C-2**

Polyethylene vapor barrier under slab on grade

Site underground water, fire, storm and sanitary service to 5' outside Building line; sanitary to include monitoring manhole if required by City (but not including any connection, capacity or service fees associated with or imposed in connection with the construction of such manhole)

Building storm and overflow drainage systems

Site underground conduits for "normal" electrical and communications, terminated within the Building, including at least two 4" Pac Bell conduits into Building.

Electrical utility pad and transformer, and primary and secondary service conduits terminated at building switchgear location for TI-provided electrical service. Sizing for Building shall be a 3000A service, unless not approved by PG&E based on Tenant loads and demands.

Gas service to exterior meter at Building.

Wet fire protection (risers, loops, branches and heads), evenly distributed for "ordinary hazard-group 2" occupancy, including plug T's to accommodate three branch lines per bay, .20/3000 sf.

Shell design and permitting fees, except as specifically included in Tenant Improvements under **Schedule C-2**

Vented deck at 2nd and 3rd floors

Temporary project fencing

Construction lift for contractor access and stocking of materials (split with TI-50%)

Underslab plumbing and main trunk line for sanitary waste and lab waste (lab waste cost split 50 / 50 between shell and TI)

Rigid roof insulation

Site directional signage program: a) "Tularik Main Lobby ->"; b) "Tularik shipping/receiving ->"; c) "Tularik Building A->" d) "Tularik Building B->"; e) "Tularik Building E ->". $5,000 allowance by Landlord; balance chargeable to Tenant under TI

Schedule C-2 to Workletter

TENANT IMPROVEMENTS

The **"Tenant Improvements"** as defined in the Workletter to which this **Schedule C-2** is attached may include, but shall not necessarily be limited to, the following:

All tenant construction, design fees, fixtures, furnishings, etc. to support tenant operations, including use space, offices, lobbies, circulation, restrooms and all other features not indicated as part of the Building Shell in **Schedule C-1**

Service Yard foundations, structure, enclosure and waterproofing

Shipping/receiving/dock equipment and bollards

Exterior Building skin modifications to support TI systems (e.g., louvers for HVAC accommodation)

Outdoor lounge and eating area

Topical emission barriers at slab on grade, if moisture test exceeds 3 lbs. Vapor barrier to be @ VCT, sheet vinyl and epoxy floor areas only. (cost split 50/50 with Shell)

Slab depressions for special finishes or special uses

Enhancement of structure for live loading above 100 PSF or vibration control criteria

Modification of structure for openings at floors and roof

Modification or repair of structure fireproofing required by TI construction

All minor support structures for ducts, conduits, pipes, etc.

Stair enclosures

Stair penthouse, if required

Exterior wall insulation

Firesafing at floor decks, exterior wall and interior openings

Custom doors

Security or other upgrades to exterior doors

Wallboard capture trim at exterior window wall

Visual screens for rooftop equipment

Supports, sleepers, etc. for all rooftop equipment, ducts, plumbing, electrical, etc.

Roof patching for all penetrations relating to Tenant Improvements

Skylights, if used, including curbs, roof patching, etc.

Elevator cab and equipment, except for pit and jack

Shaft walls or other fire separations required for vertical openings (stairs, elevators) or control zones

Distribution/laterals from Building main trunk line for sanitary waste

All underground plumbing (distribution/laterals) and related systems and fixtures for lab waste. Cost of main trunk line for lab waste split 50-50 with shell.

Modifications/enhancements to wet fire protection systems required by TI design

Fire alarm and signal systems

All secondary electrical service for Tenant demand loads, including 3000A main service disconnect, Tenant meter section and distribution panels

Standby electrical generator, if required

All electrical communications wire and service not included in Building Shell

All TI design fees and reimbursables

All other “soft” costs, including TI permit fees, utility capacity or connection charges

All testing and inspection of TI construction

Construction lift for contractor access and stocking of materials (split with shell – 50%)

EXHIBIT D

ESTIMATED CONSTRUCTION SCHEDULES

[attached]

Hathaway Dinwiddie

Britannia Oyster Point

Oyster Point, South San Francisco

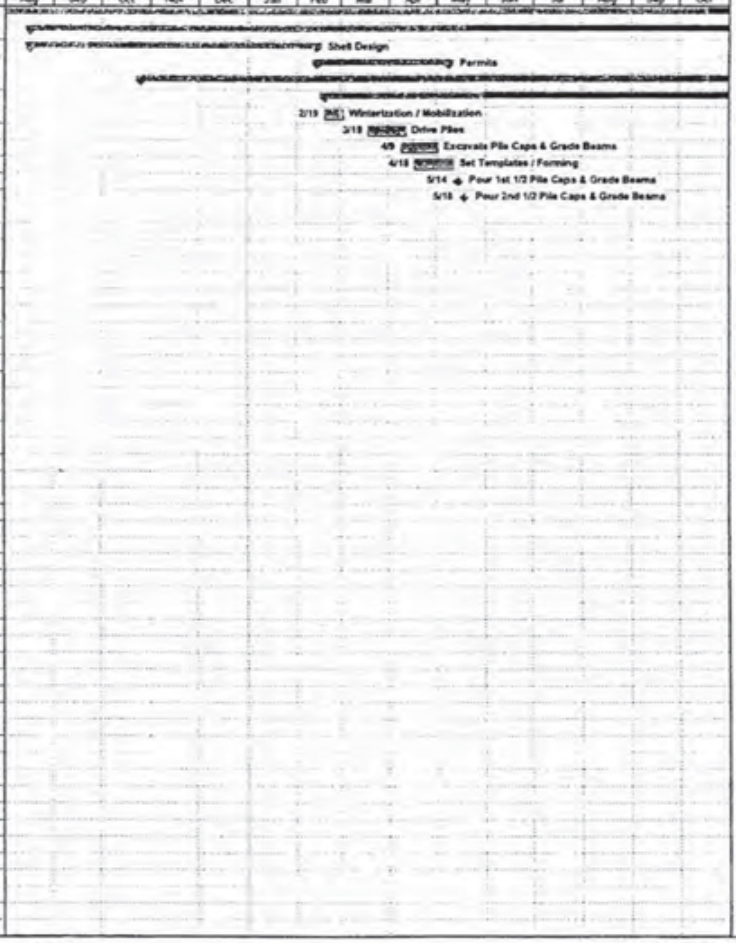
Buildings A, B & E

Lease Exhibit D

November 9, 2001

Slough Estates USA Inc.
Project Management Advisors, Inc.
Chamorro Design Group
Revised - 11/09/01

ID	Task Name	Dur	Start	Finish
1	Britannia Oyster Point	191.2w	Wed 6/7/00	Sat 3/6/04
160	Building A	130.2w	Thu 8/17/00	Sat 3/6/03
161	Shell Design	25w	Thu 8/17/00	Tue 2/13/01
167	Permits	12w	Wed 2/14/01	Tue 5/8/01
170	Submittals / Procurement	76.2w	Thu 10/26/00	Fri 4/26/02
175	Shell Construction	83.4w	Mon 2/19/01	Tue 12/17/02
176	Winterization / Mobilization	2w	Mon 2/19/01	Fri 3/2/01
177	Drive Piles	3.8w	Mon 3/19/01	Wed 4/11/01
178	Excavate Pile Caps & Grade Beams	3.4w	Mon 4/9/01	Tue 5/1/01
179	Set Templates / Forming	3.6w	Wed 4/18/01	Fri 5/11/01
180	Pour 1st 1/2 Pile Caps & Grade Beams	1d	Mon 5/14/01	Mon 5/14/01
181	Pour 2nd 1/2 Pile Caps & Grade Beams	1d	Fri 5/18/01	Fri 5/18/01
182	T.I. U'slab, decks & Roof Required	0w	Wed 3/27/02	Wed 3/27/02
183	Underslab Utilities	5w	Thu 3/28/02	Wed 5/1/02
184	SOG	6.8w	Mon 6/17/02	Thu 8/1/02
185	Install Drain Rock & Vapor Barrier 1st Half	1w	Mon 6/17/02	Fri 6/21/02
186	Edge Forms 1st half SOG	10d	Mon 6/24/02	Fri 7/5/02
187	Rebar 1st Half SOG	10d	Mon 7/1/02	Mon 7/15/02
188	Pour 1st Half SOG	1d	Tue 7/16/02	Tue 7/16/02
189	Install Drain Rock & Vapor Barrier 2nd Half	1w	Mon 6/24/02	Fri 6/28/02
190	Edge Forms 2nd Half SOG	10d	Mon 7/8/02	Fri 7/19/02
191	Rebar 2nd Half SOG	10d	Wed 7/17/02	Tue 7/30/02
192	Pour 2nd Half SOG	1d	Thu 8/1/02	Thu 8/1/02
193	Structural Construction	16.8w	Mon 5/13/02	Fri 8/9/02
194	Start Steel Erection	0w	Mon 5/13/02	Mon 5/13/02
195	Erect, Bolt & Weld Structural Steel	2w	Mon 5/13/02	Fri 5/24/02
196	Metal Decking	3w	Wed 5/15/02	Tue 6/4/02
197	Prep 2nd Deck	1w	Wed 5/15/02	Tue 5/21/02
198	Pour 2nd Deck	1d	Wed 5/22/02	Wed 5/22/02
199	Prep 3rd Deck	1w	Fri 6/7/02	Thu 6/13/02
200	Pour 3rd Deck	1d	Fri 6/14/02	Fri 6/14/02
201	Prep Roof	10d	Fri 6/14/02	Thu 6/27/02
202	Install Roof Drains & Overflow Systems	9d	Fri 6/21/02	Tue 7/2/02
203	Pour Roof	1d	Wed 7/3/02	Wed 7/3/02
204	Pour stair #1 (1 thru Roof)	1d	Mon 6/17/02	Mon 6/17/02
205	Pour Stair #2 (1 thru 3)	1d	Tue 6/25/02	Tue 6/25/02
206	Fireproofing	6w	Fri 7/5/02	Thu 8/15/02
207	Roofing	3w	Fri 7/26/02	Thu 8/15/02
208	Fill Risers	2w	Fri 8/2/02	Fri 8/9/02
209	Curtain Wall	21w	Fri 7/19/02	Tue 12/17/02
210	Start Curtain Wall	0w	Fri 7/19/02	Fri 7/19/02
211	Install Curtain Wall	21w	Fri 7/19/02	Tue 12/17/02
212	Structural Completion	0w	Sun 8/9/02	Sun 8/9/02
213	Complete Construction	13.8w	Mon 8/9/02	Mon 12/16/02
214	Shell Complete	0w	Tue 12/17/02	Tue 12/17/02
215	Tenant Design (Target)	38.2w	Tue 12/4/01	Sun 8/4/02
216	TI Programming	6w	Tue 12/4/01	Wed 1/16/02
217	Schematic Design	10w	Thu 1/3/02	Wed 3/13/02
218	Tenant Submit Details of U'grd Utilities & Struct. Const. Changes	0w	Thu 3/7/02	Thu 3/7/02
219	Owner / Tenant Approval of Schematic Package	3w	Thu 3/14/02	Wed 4/3/02
220	Owner review Tenant U'grd Util. & Struct. Const. Changes	3w	Thu 3/7/02	Wed 3/27/02
221	TI Design Development / Construction Documents	14w	Thu 3/14/02	Wed 6/19/02
222	TI Permit	12.8w	Mon 6/10/02	Sun 8/4/02
223	Tenant Construction (Target)	25w	Mon 8/5/02	Sat 3/6/03
224	Tenant Construction	180d	Mon 8/5/02	Sat 3/6/03
225	Building A Move-in (Target)	0d	Sat 3/6/03	Sat 3/6/03

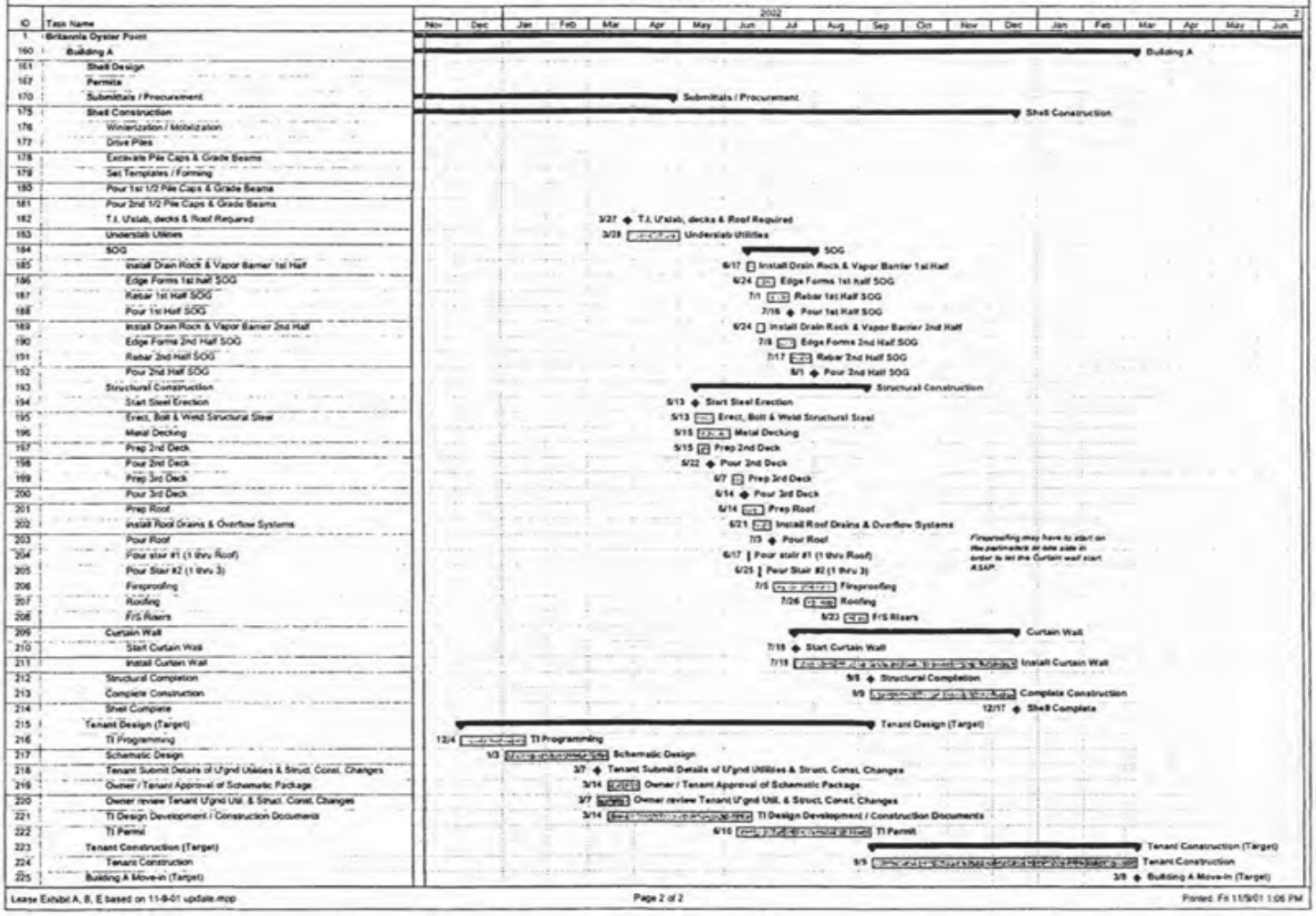


Hathaway Dinwiddie

Britannia Oyster Point

Oyster Point, South San Francisco
Buildings A, B & E
Lease Exhibit D
November 9, 2001

Slough Estates USA Inc.
Project Management Advisors, Inc.
Chamorro Design Group
Revised - 11/09/01



Hathaway Dinwiddie

Britannia Oyster Point

Oyster Point, South San Francisco

Buildings A, B & E

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November 9, 2001

Slough Estates USA Inc.
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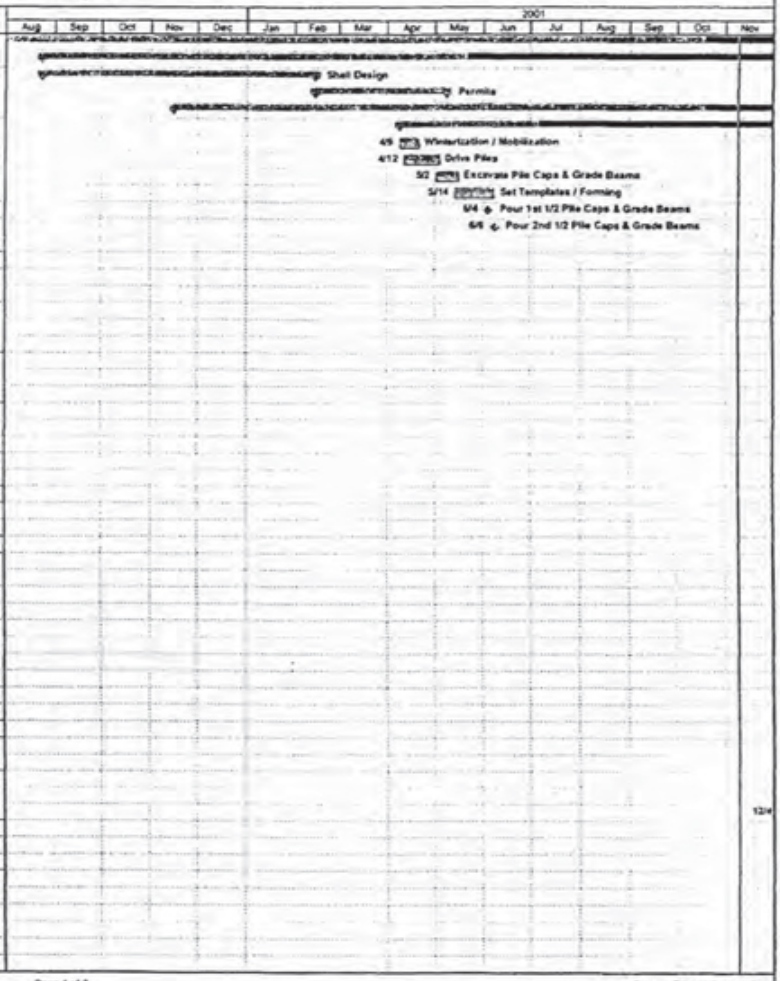
Revised - 11/09/01

ID	Task Name	Dur	Start	Finish
1	Britannia Oyster Point	191.2w	Wed 6/7/00	Sat 3/6/04
228	Building B	132.2w	Thu 8/24/00	Sat 3/29/03
229	Shell Design	24w	Thu 8/24/00	Tue 2/13/01
235	Permits	12w	Wed 2/14/01	Tue 5/8/01
236	Submittals / Procurement	75w	Thu 11/16/00	Thu 5/9/02
243	Shell Construction	83w	Mon 4/9/01	Tue 5/7/03
244	Winterization / Mobilization	2w	Mon 4/9/01	Fri 4/20/01
245	Drive Piles	3.2w	Thu 4/12/01	Thu 5/3/01
246	Excavate Pile Caps & Grade Beams	2w	Wed 5/2/01	Tue 5/15/01
247	Set Templates / Forming	3.6w	Mon 5/14/01	Thu 6/7/01
248	Pour 1st 1/2 Pile Caps & Grade Beams	1d	Mon 6/4/01	Mon 6/4/01
249	Pour 2nd 1/2 Pile Caps & Grade Beams	1d	Fri 6/8/01	Fri 6/8/01
250	T.I. Utils, decks & Roof Required	0w	Wed 4/10/02	Wed 4/10/02
251	Underslab Utilities	5w	Thu 4/11/02	Wed 5/15/02
252	SOG	6.8w	Fri 7/5/02	Tue 8/20/02
253	Install Drain Rock & Vapor Barrier 1st Half	1w	Fri 7/5/02	Thu 7/11/02
254	Edge Forms 1st half SOG	10d	Fri 7/12/02	Thu 7/25/02
255	Rebar 1st Half SOG	10d	Wed 7/17/02	Tue 7/30/02
256	Pour 1st Half SOG	1d	Wed 7/31/02	Wed 7/31/02
257	Install Drain Rock & Vapor Barrier 2nd Half	1w	Fri 7/12/02	Thu 7/18/02
258	Edge Forms 2nd Half SOG	10d	Fri 7/26/02	Thu 8/8/02
259	Rebar 2nd Half SOG	10d	Wed 7/31/02	Tue 8/13/02
260	Pour 2nd Half SOG	1d	Tue 8/20/02	Tue 8/20/02
261	Structural Construction	37.8w	Wed 5/15/02	Wed 8/28/02
262	Start Steel Erection	0w	Wed 5/15/02	Wed 5/15/02
263	Erect, Bolt & Weld Structural Steel	2w	Thu 5/16/02	Wed 5/29/02
264	Metal Decking	3w	Mon 5/20/02	Fri 6/7/02
265	Prep 2nd Deck	1w	Tue 6/4/02	Mon 6/10/02
266	Pour 2nd Deck	1d	Tue 6/11/02	Tue 6/11/02
267	Prep 3rd Deck	1w	Wed 6/12/02	Tue 6/18/02
268	Pour 3rd Deck	1d	Wed 6/19/02	Wed 6/19/02
269	Prep Roof	10d	Wed 6/26/02	Tue 7/9/02
270	Install Roof Drains & Overflow Systems	10d	Tue 7/2/02	Tue 7/16/02
271	Pour Roof	1d	Wed 7/17/02	Wed 7/17/02
272	Pour stair #1 (1 thru Roof)	1d	Thu 6/20/02	Thu 6/20/02
273	Pour Stair #2 (1 thru 3)	1d	Fri 6/28/02	Fri 6/28/02
274	Fireproofing	6w	Wed 7/24/02	Wed 9/4/02
275	Roofing	3w	Wed 7/24/02	Tue 8/13/02
276	Fit Risers	2w	Thu 8/8/02	Wed 8/18/02
277	Curtain Wall	18.4w	Tue 8/13/02	Mon 12/23/02
278	Start Curtain Wall	0w	Tue 8/13/02	Tue 8/13/02
279	Install Curtain Wall	18.4w	Tue 8/13/02	Mon 12/23/02
280	Structural Completion	0w	Fri 9/27/02	Fri 9/27/02
281	Complete Construction	12.6w	Fri 9/27/02	Mon 12/30/02
282	Shell Complete	0w	Tue 1/7/03	Tue 1/7/03
283	Tenant Design (Target)	42w	Tue 12/4/01	Fri 9/27/02
284	TI Programming	9w	Tue 12/4/01	Wed 2/6/02
285	Schematic Design	12w	Thu 1/24/02	Wed 4/17/02
286	Tenant Submit Details of U/grd Utilities & Struct. Const. Changes	0w	Wed 3/20/02	Wed 3/20/02
287	Owner / Tenant Approval of Schematic Pckage	3w	Thu 4/18/02	Wed 5/8/02
288	Owner review Tenant U/grd Util. & Struct. Const. Changes	3w	Thu 3/21/02	Wed 4/10/02
289	TI Design Development / Construction Documents	14w	Thu 4/18/02	Wed 7/24/02
290	TI Permit	12w	Wed 7/3/02	Fri 9/27/02
291	Tenant Construction (Target)	25w	Mon 9/30/02	Sat 3/29/03
292	Tenant Construction	150ed	Mon 9/30/02	Sat 3/29/03
293	Building B Move-in (Target)	0w	Sat 3/29/03	Sat 3/29/03



Hathaway Dinwiddie

Britannia Oyster Point

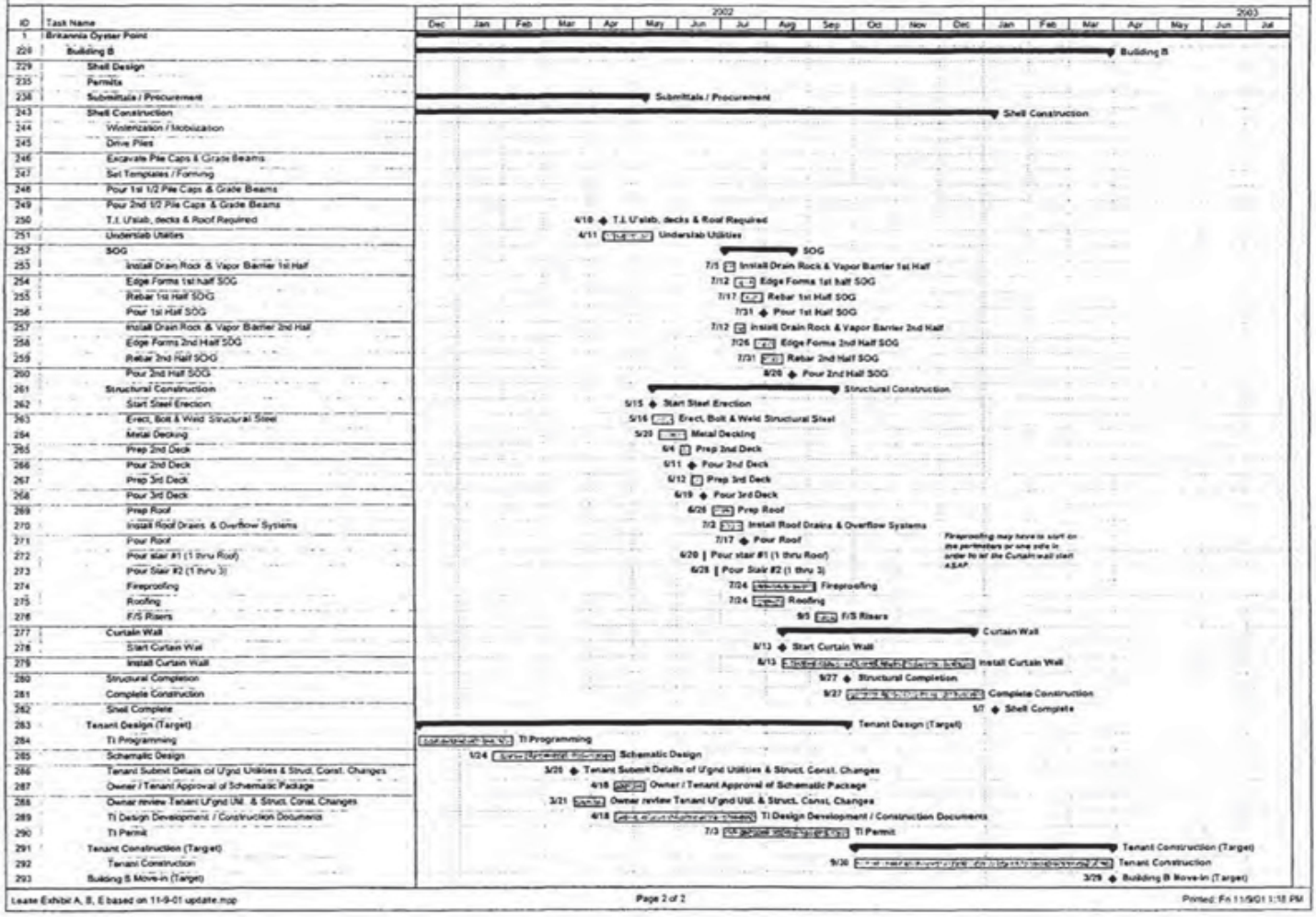
Oyster Point, South San Francisco

Buildings A, B & E

Lease Exhibit D

November 9, 2001

Slough Estates USA Inc.
Project Management Advisors, Inc.
Chamorro Design Group
Revised - 11/09/01



Hathaway Dinwiddie

Britannia Oyster Point

Oyster Point, South San Francisco

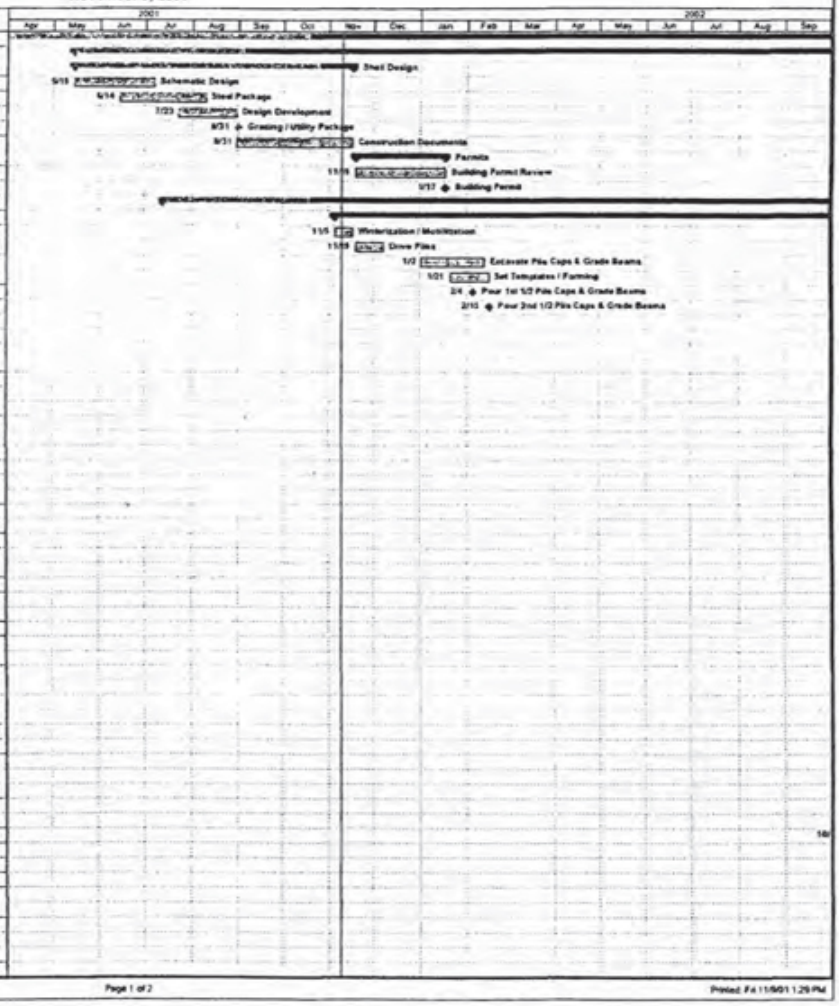
Buildings A, B & E

Lease Exhibit D

November 9, 2001

Slough Estates USA Inc.
Project Management Advisors, Inc.
Chamorro Design Group
Revised - 11/09/01

ID	Task Name	Dur	Start	Finish
1	Britannia Oyster Point	191.2w	Wed 6/7/00	Sat 3/6/04
428	Building E	143.2w	Tue 5/15/01	Sat 3/6/04
429	Shell Design	26.2w	Tue 5/15/01	Fri 11/16/01
430	Schematic Design	7.4w	Tue 5/15/01	Fri 7/6/01
431	Steel Package	8w	Thu 6/14/01	Thu 8/9/01
432	Design Development	5.8w	Mon 7/2/01	Thu 8/30/01
433	Grading / Utility Package	0w	Fri 8/31/01	Fri 8/31/01
434	Construction Documents	11w	Fri 8/31/01	Fri 11/16/01
435	Permits	8w	Mon 11/19/01	Thu 1/10/02
436	Building Permit Review	8w	Mon 11/19/01	Thu 1/17/02
437	Building Permit	0w	Thu 1/17/02	Thu 1/17/02
438	Submittals / Procurement	81w	Fri 2/1/01	Thu 6/24/03
442	Shell Construction	108.5w	Mon 11/5/01	Tue 12/9/03
443	Winterization / Mobilization	2w	Mon 11/5/01	Fri 11/16/01
444	Drive Piles	2.6w	Mon 11/19/01	Fri 12/7/01
445	Excavate Pile Caps & Grade Beams	8w	Wed 1/2/02	Tue 2/12/02
446	Set Templates / Forming	4w	Mon 1/21/02	Fri 2/15/02
447	Pour 1st 1/2 Pile Caps & Grade Beams	1d	Mon 2/4/02	Mon 2/4/02
448	Pour 2nd 1/2 Pile Caps & Grade Beams	1d	Fri 2/15/02	Fri 2/15/02
449	T.I. Loads, decks & Roof Required	0w	Mon 3/3/03	Mon 3/3/03
450	Underslab Utilities	5w	Tue 3/4/03	Mon 4/7/03
451	SOG	7w	Tue 5/27/03	Tue 7/15/03
452	Install Drain Rock & Vapor Barrier 1st Half	1w	Tue 5/27/03	Mon 6/2/03
453	Edge Forms 1st half SOG	11d	Tue 6/3/03	Tue 6/17/03
454	Rebar 1st Half SOG	10d	Tue 6/10/03	Mon 6/23/03
455	Pour 1st Half SOG	1d	Tue 6/24/03	Tue 6/24/03
456	Install Drain Rock & Vapor Barrier 2nd Half	1w	Tue 6/3/03	Mon 6/9/03
457	Edge Forms 2nd Half SOG	11d	Wed 6/18/03	Wed 7/2/03
458	Rebar 2nd Half SOG	10d	Thu 6/26/03	Thu 7/10/03
459	Pour 2nd Half SOG	1d	Tue 7/15/03	Tue 7/15/03
460	Structural Construction	18.6w	Mon 4/14/03	Mon 8/25/03
461	Erect, Bolt & Weld Structural Steel	3w	Mon 4/14/03	Fri 5/2/03
462	Metal Decking	4w	Wed 4/16/03	Tue 5/13/03
463	Prep 2nd Deck	5d	Tue 4/29/03	Mon 5/19/03
464	Pour 2nd Deck	1d	Tue 5/20/03	Tue 5/20/03
465	Prep 3rd Deck	3w	Wed 5/21/03	Wed 6/11/03
466	Pour 3rd Deck	1d	Thu 6/12/03	Thu 6/12/03
467	Prep 4th Deck	8d	Fri 6/13/03	Wed 6/25/03
468	Pour 4th Deck	1d	Thu 6/26/03	Thu 6/26/03
469	Prep Roof	13d	Fri 6/27/03	Wed 7/16/03
470	Install Roof Drains & Overflow Systems	8d	Tue 7/8/03	Fri 7/18/03
471	Pour Roof	1d	Mon 7/21/03	Mon 7/21/03
472	Pour Star #1 (1 thru Roof)	1d	Fri 6/20/03	Fri 6/20/03
473	Pour Star #2 (1 thru 3)	1d	Mon 6/30/03	Mon 6/30/03
474	Fireproofing	6w	Tue 6/17/03	Tue 7/29/03
475	Roofing	4w	Tue 7/29/03	Mon 8/25/03
476	F/S Risers	3w	Thu 7/24/03	Wed 8/13/03
477	Curtain Wall	18.2w	Tue 7/15/03	Thu 11/20/03
478	Start Curtain Wall	0w	Tue 7/15/03	Tue 7/15/03
479	Install Curtain Wall	18.2w	Wed 7/16/03	Thu 11/20/03
480	Structural Completion	0w	Mon 9/8/03	Mon 9/8/03
481	Complete Construction	12.7w	Tue 9/9/03	Tue 12/9/03
482	Shell Complete	0w	Tue 12/9/03	Tue 12/9/03
483	Tenant Design (Target)	46.8w	Mon 10/7/02	Mon 9/8/03
484	TI Programming	3.4w	Mon 10/7/02	Thu 12/12/02
485	Schematic Design	13w	Fri 12/6/02	Mon 3/3/03
486	Tenant submit details of all U/Grnd Utilities & Struct. Const. Changes	0w	Tue 2/11/03	Tue 2/11/03
487	Owner / Tenant Approval of Schematic Package	3w	Tue 3/4/03	Mon 3/24/03
488	Owner review Tenant U/grnd Util. & Struct. Const. Changes	3w	Tue 2/11/03	Mon 3/3/03
489	TI Design Development / Construction Documents	14w	Tue 3/4/03	Tue 6/10/03
490	TI Permit	12w	Fri 6/13/03	Mon 9/8/03
491	Tenant Construction (Target)	25.4w	Mon 9/8/03	Sat 3/6/04
492	Tenant Construction	180d	Mon 9/8/03	Sat 3/6/04
493	Building E Move-in (Target)	0w	Sat 3/6/04	Sat 3/6/04



Hathaway Dinwiddie

Britannia Oyster Point

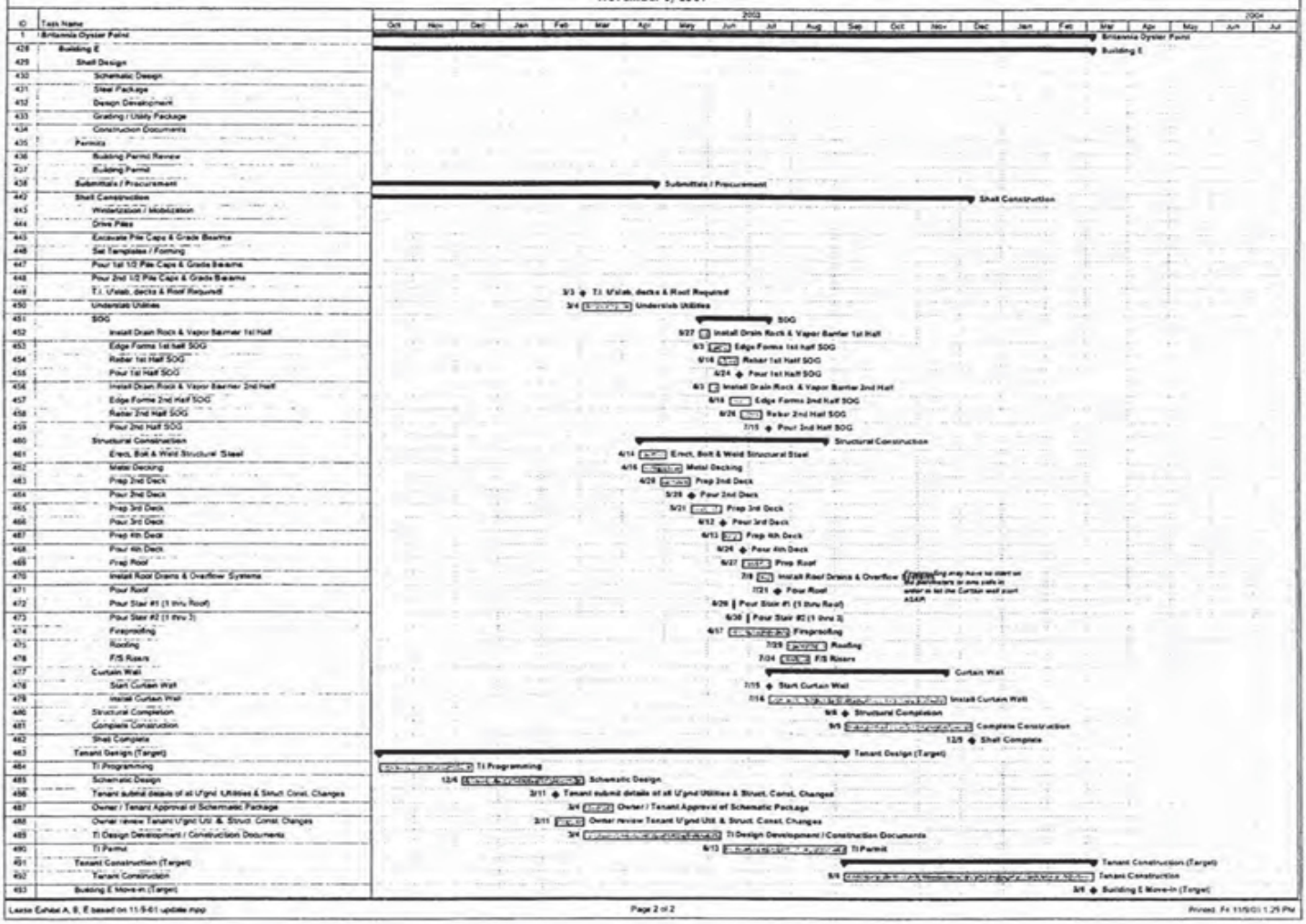
Oyster Point, South San Francisco

Buildings A, B & E

Lease Exhibit D

November 9, 2001

Slough Estates USA Inc.
Project Management Advisors, Inc.
Chamorro Design Group
Revised - 11/08/01



ID	Task Name
1	Britannia Oyster Point
428	Building E
429	Shell Design
430	Schematic Design
431	Steel Package
432	Design Development
433	Grading / Utility Package
434	Construction Documents
435	Permits
436	Building Permit Review
437	Building Permit
438	Submittals / Procurement
442	Shell Construction
443	Winterization / Mobilization
444	Drive Piles
445	Excavate Pile Caps & Grade Beams
446	Set Templates / Forming
447	Pour 1st 1/2 Pile Caps & Grade Beams
448	Pour 2nd 1/2 Pile Caps & Grade Beams
449	T.I. Work, decks & Roof Required
450	Underslab Utilities
451	SOG
452	Install Drain Rock & Vapor Barrier 1st Half
453	Edge Forms 1st half SOG
454	Rebar 1st Half SOG
455	Pour 1st Half SOG
456	Install Drain Rock & Vapor Barrier 2nd Half
457	Edge Forms 2nd Half SOG
458	Rebar 2nd Half SOG
459	Pour 2nd Half SOG
460	Structural Construction
461	Erect, Bolt & Weld Structural Steel
462	Metal Decking
463	Prep 2nd Deck
464	Pour 2nd Deck
465	Prep 3rd Deck
466	Pour 3rd Deck
467	Prep 4th Deck
468	Pour 4th Deck
469	Prep Roof
470	Install Roof Drains & Overflow Systems
471	Pour Roof
472	Pour Stair #1 (1 thru Roof)
473	Pour Stair #2 (1 thru 3)
474	Fireproofing
475	Roofing
476	F/S Risers
477	Curtain Wall
478	Start Curtain Wall
479	Install Curtain Wall
480	Structural Completion
481	Complete Construction
482	Shell Complete
483	Tenant Design (Target)
484	TI Programming
485	Schematic Design
486	Tenant submit details of all U/grnd Utilities & Struct. Const. Changes
487	Owner / Tenant Approval of Schematic Package
488	Owner review Tenant U/grnd Util. & Struct. Const. Changes
489	TI Design Development / Construction Documents
490	TI Permit
491	Tenant Construction (Target)
492	Tenant Construction
493	Building E Move-in (Target)

EXHIBIT E

ACKNOWLEDGMENT OF RENT COMMENCEMENT DATE

This Acknowledgment is executed as of _____, 200_____, by SLOUGH BTC, LLC, a Delaware limited liability company ("Landlord"), and TULARIK INC., a Delaware corporation ("Tenant"), pursuant to Section 2.4 of the Build-to-Suit Lease dated December _____, 2001 between Landlord and Tenant (the "Lease") covering premises located at _____ Veterans Boulevard, South San Francisco, CA 94080 (the Phase ____ Building, hereinafter referred to as the "Building"). [In the case of the Phase II Building: This Acknowledgment covers Phase II____ of Tenant's occupancy of the Building.]

Landlord and Tenant hereby acknowledge and agree as follows:

1. The Rent Commencement Date for [Phase II_____ of] the Building under the Lease is _____, 200_____.

2. The termination date under the Lease (if determinable at this time) shall be _____, 201___, subject to any applicable provisions of the Lease for extension or early termination thereof.

3. The square footage of the Building, as finally designed and built, measured in accordance with Sections 1.1(c) and 3.1(d) of the Lease, is _____square feet. [The square footage of Phase II ____ of the Phase II Building is _____ square feet.]

4. Tenant accepts [Phase II_____ of] the Building and acknowledges the satisfactory completion of all Improvements thereon required to be made by Landlord, subject only to any applicable "punch list" or similar procedures specifically provided under the Lease or under the Workletter governing such work.

EXECUTED as of the date first set forth above.

"Landlord"	"Tenant"
SLOUGH BTC, LLC, a Delaware limited liability company	TULARIK INC., a Delaware corporation
By: Slough Estates USA Inc., a Delaware corporation, Its Manager	By: _____ Its: _____
By: _____ Its: _____	By: _____ Its: _____

FIFTH AMENDMENT TO BUILD-TO-SUIT LEASE
AND SECOND AMENDMENT TO WORKLETTER

THIS FIFTH AMENDMENT TO BUILD-TO-SUIT LEASE AND SECOND AMENDMENT TO WORKLETTER ("Amendment") is dated as of June 19**,** 2006 (the "Phase II Lease Commencement Date") and is entered into by and between SLOUGH BTC, LLC, a Delaware limited liability company ("Landlord") and AMGEN INC., a Delaware corporation ("Tenant"), with reference to the following facts:

Recitals

A. Landlord and Tenant (as successor to Tularik Inc.) are parties to (1) a Build-to-Suit Lease dated as of December 20, 2001, as amended by that certain First Amendment to Build-to-Suit Lease dated as of January 22, 2003, that certain Second Amendment to Build-to-Suit Lease dated as of March 26, 2004, that certain Third Amendment to Build-to-Suit Lease dated as of August 12, 2004, and that certain Fourth Amendment to Build-to-Suit Lease and First Amendment to Workletter dated as of June, 19, 2006 (collectively, as amended, the "Lease"), covering the [redacted] buildings in Phase I of the Britannia Oyster Point research and development center in South San Francisco, California (the "Center") [redacted] (collectively, the "Phase I Buildings"), and (2) a Workletter dated as of December 20, 2001, as amended by that certain Fourth Amendment to Build-to-Suit Lease and First Amendment to Workletter dated as of June 19, 2006 (collectively, as amended, the "Workletter"), covering various aspects of the construction of the respective Building Shells for the Phase I Buildings and of the construction of Tenant Improvements in the respective Phase I Buildings. Tenant is already occupying Phase I Buildings A and B; Phase I Building E is under construction for projected occupancy by Tenant on or about January 1, 2007; the shell of Phase I Building D has been constructed, and the interior improvements therein will be constructed by Tenant for projected occupancy on or after November 1, 2006.

B. Landlord is in the process of developing the site adjacent to the easterly side of Phase I of the Center as a second phase ("Phase II") consisting of three additional buildings and related site improvements. A site plan for Phase II is attached to this Amendment as Exhibit A and incorporated herein by this reference (the "Phase II Site Plan"). As used herein, the phrase "Phase II Buildings" refers to Building A (a four-story steel frame building totaling approximately 115,000 square feet) and Building B (a four-story steel frame building totaling approximately 122,000 square feet), to be constructed as part of Phase II in approximately the locations designated for them on the Site Plan. Landlord and Tenant wish to add the Phase II Buildings to the Buildings covered by the Lease and to add the Phase II site to the Property covered by the Lease, and in connection therewith to modify certain provisions of the Lease and Workletter and certain of the parties' respective rights and obligations thereunder, all subject to and as more particularly set forth in this Amendment. This Amendment modifies and amends both the Lease and Workletter, and shall be controlling over any inconsistent provisions of the Lease and Workletter, with respect to the matters, specifically addressed in this Amendment.

C. Capitalized terms used in this Amendment as defined terms but not specifically defined in this Amendment shall have the meanings assigned to such terms in the Lease or in the Workletter, as applicable. Notwithstanding the foregoing, the parties note that the phrase "Phase II Building" and related phrases (such as "Phase II Rent Commencement Date") were used in the Lease as it existed prior to this Amendment to refer to Phase I Building E (1130 Veterans Blvd.) as described above, and that there is some risk of confusion in using the terms "Phase II," "Phase II Buildings" and similar terms under this Amendment in the manner described in Recital B above. Nevertheless, the parties believe that it is important, for clarity and consistency with the terminology Landlord has used generally in connection with its development of the expansion property described in Recital B above, to adopt the terminology and definitions set forth in Recital B above. Accordingly, the parties hereby confirm and agree, for purposes of clarification, that (1) in connection with the construction and occupancy of Phase I Building E (1130 Veterans Blvd.) as part of the Phase I Buildings as defined above, the Lease and all references therein to "the Phase II Building," the "Phase II Rent Commencement Date" and similar phrases shall be construed to continue to apply to such Building E in the same manner as they applied prior to adoption of this Amendment, without regard to the provisions of this Amendment, and (2) in connection with the construction and occupancy of Phase II Buildings A and B as the Phase II Buildings as defined above, references in this Amendment and in the Lease as amended hereby to "the Phase II Building(s)," the "Phase II Rent Commencement Date" and similar phrases shall be construed to apply to such Phase II Buildings A and B in accordance with the provisions of this Amendment.

Agreement

NOW, THEREFORE, in consideration of the mutual agreements contained in this Amendment and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Landlord and Tenant agree as follows:

1. Leasing of Phase II Buildings and Amendment of Lease. The two Phase II Buildings (as defined above) are hereby designated as additional Buildings under the Lease and the real property constituting Phase II of the Center, as depicted on the Phase II Site Plan, is hereby added to the Property as defined in the Lease, subject to all of the terms and conditions set forth in this Amendment, and Landlord leases the Phase II Buildings to Tenant and Tenant leases the Phase II Buildings from Landlord on the terms, covenants and conditions set forth in the Lease, as modified by this Amendment and subject to all of the terms and conditions set forth in this Amendment. Effective upon mutual execution of this Amendment (the date of which mutual execution shall be inserted at the beginning of this Amendment as the Phase II Lease Commencement Date), the Lease shall be deemed to be, and is hereby, amended to reflect and incorporate all of the terms and conditions set forth in this Amendment. In the event of any inconsistency between provisions of the Lease and provisions of this Amendment, the provisions of this Amendment shall be controlling with respect to the matters specifically addressed in this Amendment.

(a) Except as otherwise expressly provided herein, Tenant's Minimum Rental and Operating Expense obligations with respect to the Phase II Buildings shall commence on the earlier to occur of (i) the date which is three hundred sixty (360) days after the date Landlord delivers to Tenant a Structural Completion Certificate for the Phase II Buildings pursuant to the

Workletter, subject to any adjustments in such time period to the extent authorized or required under the provisions of the Workletter, or (ii) the date Tenant takes occupancy of and commences operation of its business in any material portion of the Phase II Buildings (the "Phase II Rent Commencement Date"); provided, however, that if Landlord delivers (or is deemed to deliver) the Structural Completion Certificates for the respective Phase II Buildings on different dates, or if Tenant commences operation of its business in the respective Phase II Buildings on different dates, then the Phase II Rent Commencement Date shall be determined separately for each of the respective Phase II Buildings pursuant to the provisions of clauses (i) and (ii) above, applied separately and independently with respect to each Phase II Building. Based on the milestone construction schedule and the draft detailed Master Schedule (6/1/06) collectively attached hereto as Exhibit B (the "Milestone Construction Schedule"), the parties presently estimate that the Phase II Rent Commencement Date will occur on or about November 1, 2008. The Termination Date for Tenant's leasing of the Phase II Buildings shall be the day immediately preceding the fifteenth (15^{th}) anniversary of the Phase II Rent Commencement Date (or, if there are different Rent Commencement Dates for the respective Phase II Buildings, the day immediately preceding the fifteenth (15^{th}) anniversary of the later of such Phase II Rent Commencement Dates to occur), unless sooner terminated or extended as hereinafter provided. Consistent with Recital C above, the provisions of Section 2.1(b) of the Lease (regarding phased occupancy of and phased rent commencement for the "Phase II Building" as defined in the original Lease) shall be construed to apply solely to Phase 1 Building E (1130 Veterans Blvd.) as described above, and shall be inapplicable to the Phase II Buildings as defined in this Amendment.

(b) The Milestone Construction Schedule is predicated on execution of this Amendment and release of project teams by Landlord on June 1, 2006. To the extent that such execution and release are delayed materially beyond June 1, 2006, the dates set forth in the Milestone Construction Schedule may be affected by such delay. In any event, the Milestone Construction Schedule as attached hereto is merely preliminary and non-binding in nature. A draft of a detailed master construction schedule (similar to the schedules attached as Exhibit D to the original Lease) for the Phase II Buildings as of June 1, 2006, including milestone dates outlining specific Landlord and Tenant responsibilities, is attached hereto as the second page of the Milestone Construction Schedule. Following the Phase II Lease Commencement Date, Landlord and Tenant shall cooperate reasonably, diligently and in good faith to achieve mutual approval of such detailed construction schedule (which shall then be referred to as the "Approved Construction Schedule"), including any mutually agreeable modifications to such draft schedule. Thereafter, references in the Lease and Workletter (as amended hereby) to the Estimated Construction Schedule shall, with respect to the Phase II Buildings, be construed to refer to such Approved Construction Schedule. Notwithstanding anything to the contrary in Section 10.1 of the Lease, Tenant's obligation under Section 10.1 for payment of all charges for services and utilities supplied to or consumed in or with respect to the respective Phase ll Buildings, including any taxes on such services and utilities, shall commence on the date Landlord delivers the Structural Completion Certificate for the applicable Phase II Building to Tenant.

(c) Beginning on the Phase II Rent Commencement Date for the applicable Phase II Building and continuing through the Termination Date for the initial Term of the Lease with respect to the Phase II Buildings, Tenant's monthly Minimum Rental obligation for each

Phase II Building pursuant to Section 3.1(a) of the Lease shall be equal to the applicable amount per square foot from the following table multiplied by the square footage of the applicable Phase II Building as determined pursuant to Section 3.1(d) of the Lease:

Months	Monthly Minimum Rental
[redacted]	[redacted]

[redacted]

(d) Notwithstanding any provisions of Section 3.1(b), (c) and/or (e) of the Lease to the contrary:

(i) If Tenant properly exercises its right under Section 2.6 of the Lease to one or both extended terms with respect to the Phase II Buildings, the Minimum Rental for each Phase II Building during the first year of each applicable extended term shall be one hundred four percent (104%) of the Minimum Rental payable for such Phase II Building during the last full month of the lease year immediately preceding the commencement of the applicable extended term, and such Minimum Rental shall be further increased on each anniversary of the commencement of the applicable extended term to one hundred four percent (104%) of the Minimum Rental payable for such Phase II Building during the last full month of the immediately preceding lease year of the applicable extended term.

(ii) The entire Tenant Improvement Allowance for the Phase II Buildings as described in Section 2(c) of this Amendment has already been taken into account in

establishing the Minimum Rental rates set forth above. Accordingly, the "additional rent" provisions set forth in Section 3.1(e) of the Lease are inapplicable to the Phase II Buildings and Tenant shall have no liability for any additional rent under Section 3.1 (e) of the Lease with respect to the Phase II Buildings.

(e) Landlord's intention is to calculate and allocate Operating Expenses for Phase II of the Center separately from and independently of the calculation and allocation of Operating Expenses for Phase I of the Center. Tenant's Operating Cost Share (as such term is used in the Lease) with respect to each Phase II Building shall be 100% for Operating Expenses which are allocable solely to such Phase II Building, and (subject to the assumption set forth in the preceding sentence) for Operating Expenses which are allocated on a Phase II-wide basis, shall for each Phase II Building be equal to the percentage share calculated by dividing the square footage of such Phase II Building (determined on the basis of measurement set forth in Section 1.1(c) of the Lease) by the aggregate square footage of all three (3) Buildings in Phase II of the Center (similarly and consistently determined on the basis of measurement set forth in Section 1.1(c) of the Lease). The foregoing shares do not include the Operating Cost Shares attributable to any of the Phase I Buildings, which shall continue to be calculated under the Lease in a manner consistent with prior practice, and Tenant's payment obligations arising from the Operating Cost Shares for the Phase II Buildings as described above shall simply be added to the payment obligations arising from the Operating Cost Shares for the Phase I Buildings in determining Tenant's total payment obligations for Operating Expenses under the Lease. All such Operating Cost Shares with respect to the Phase II Buildings shall remain subject to adjustment under the circumstances and to the extent set forth in the Lease, and shall be subject to the following additional provisions, notwithstanding anything to the contrary contained in the Lease or elsewhere in this Amendment:

(i) For purposes of calculating Tenant's Operating Cost Share of Operating Expenses which are allocated on a Phase II-wide basis, the aggregate square footage of all three (3) Buildings constructed or to be constructed in Phase II of the Center shall be included as if all three (3) such Buildings (including, but not limited to, Building C as designated on the Phase II Site Plan) were fully built-out at the time Tenant's obligation with respect to Operating Expenses for the Phase II Buildings commences.

(ii) Solely during the first two (2) years following the date on which Tenant's obligation for payment of Operating Expenses with respect to the Phase II Buildings commences, Tenant's Operating Cost Share for each Phase II Building shall be based solely on the square footage actually used or occupied by Tenant in that Phase II Building, so that Tenant's Operating Cost Share for Operating Expenses allocated solely to that Phase II Building shall be equal to the square footage actually used or occupied by Tenant in that Phase II Building divided by the total square footage of that Phase II Building, and Tenant's Operating Cost Share for Operating Expenses allocated on a Phase II-wide basis shall be equal to the square footage actually used or occupied by Tenant in that Phase II Building divided by the total square footage of all three (3) Buildings constructed or to be constructed in Phase II of the Center, as provided in subparagraph (i) above.

(f) To the extent (if any) that Landlord already holds a security deposit or deposits under the Lease with respect to the Phase I Buildings, such existing deposit(s), whether

in the form of a cash deposit or a Letter of Credit, shall also be deemed to be useable by Landlord, under the provisions of the Lease, in connection with any defaults by Tenant relative to its leasing and occupancy of the Phase II Buildings pursuant to the Lease as amended hereby, but no additional or increased security deposit shall be required from Tenant with respect to the addition of the Phase II Buildings to the Buildings pursuant to this Amendment.

(g) Notwithstanding the provisions of Section 21.20(b) of the Lease, (i) Phase II of the Center is presently intended to contain approximately 2.8 parking spaces per 1,000 square feet of rentable area in the buildings to be constructed in Phase II of the Center, which ratio shall be used in allocating nonexclusive parking spaces to Tenant under Section 21.20 of the Lease with respect to the Phase II Buildings, and (ii) the monthly fee per parking space allocable to each Phase II Building shall be [redacted] per parking space for the first five (5) years after the Phase II Rent Commencement Date for such Building, [redacted] per parking space for years six (6) through ten (10) after the Phase II Rent Commencement Date for such Building, and [redacted] per parking space thereafter.

(h) Solely as applied to the Phase II Buildings, the first sentence of Section 11.1 of the Lease is amended to read as follows:

"Tenant shall make no alterations, additions or improvements to any Phase II Building without the prior written consent of Landlord, which consent shall not be unreasonably withheld, conditioned or delayed, except that (i) subject to the final sentence of this Section 11.1 (regarding structural or roof alterations, substantial equipment installations on the roof, or alterations to building systems), Tenant shall not be required to obtain such consent for interior alterations costing less than One Hundred Thousand Dollars ($100,000.00) for any single project (i.e., any single item of alterations or set of related alterations in a Phase II Building), and (ii) regardless of whether Landlord's consent would otherwise be required under this Lease, Tenant shall provide Landlord with prior written notice of any proposed alterations, additions or improvements having a cumulative estimated cost of more than Four Hundred Thousand Dollars ($400,000.00) in any twelve (12) month period."

(i) Supplementing the provisions of Article 15 of the Lease with respect to assignment and subleasing, Landlord and Tenant agree that with respect to the Phase II Buildings, in the case of any assignment or subleasing other than a Permitted Transfer as defined in Section 15.1 of the Lease, the following provisions shall apply:

(i) Upon any assignment of Tenant's interest in the Lease for which Landlord's consent is required under Section 15.1 of the Lease, Tenant shall pay to Landlord, within ten (10) days after receipt thereof by Tenant from time to time, one-half **(**1/2**)** of all cash sums and other economic considerations received by Tenant in connection with or as a result of such assignment, after first deducting therefrom (i) any costs incurred by Tenant for leasehold improvements (including, but not limited to, third-party architectural and space planning costs) in the Premises in connection with such assignment, amortized over the remaining term of this Lease, and (ii) any reasonable real estate commissions and/or reasonable attorneys' fees actually incurred by Tenant in connection with such assignment.

(ii) Upon any sublease of all or any portion of a Phase II Building for which Landlord's consent is required under Section 15.1 of the Lease, Tenant shall pay to Landlord, within ten (10) days after receipt thereof by Tenant from time to time, one-half (**1/2**) of all cash sums and other economic considerations received by Tenant in connection with or as a result of such sublease, after first deducting therefrom (i) the minimum rental due under the Lease for the applicable Phase II Building for the corresponding period, prorated (on the basis of the average per-square-foot cost paid by Tenant for such Phase II Building for the applicable period under the Lease) to reflect the size of the subleased portion of such Phase II Building, (ii) any costs incurred by Tenant for leasehold improvements in the subleased portion of such Phase II Building (including, but not limited to, third-party architectural and space planning costs) for the specific benefit of the sublessee in connection with such sublease, amortized over the remaining term of the Lease, and (iii) any reasonable real estate commissions and/or reasonable attorneys' fees actually incurred by Tenant in connection with such sublease, amortized over the term of such sublease.

2. Construction; Amendment of Workletter. The parties intend and agree that the construction of the Phase II Buildings and of the Tenant Improvements necessary for Tenant's occupancy and use thereof shall be governed by and performed in accordance with the provisions of the Workletter, subject to all of the terms and conditions set forth in this Amendment. Effective upon the Phase II Lease Commencement Date, the Workletter shall be deemed to be, and is hereby, amended to reflect and incorporate all of the terms and conditions set forth in this Amendment. In the event of any inconsistency between provisions of the Workletter and provisions of this Amendment, the provisions of this Amendment shall be controlling with respect to the matters specifically addressed in this Amendment. Without limiting the generality of the foregoing, **Schedule C-l** and **Schedule C-2** attached hereto shall supersede, with respect to the Phase II Buildings, the comparable schedules attached to the Workletter.

(a) The Building Shell for each Phase II Building shall be constructed by Landlord in accordance with (i) Article 5 of the Lease, (ii) the Workletter (as amended hereby), and (iii) the shell definition set forth in **Schedule C-l** attached hereto and incorporated herein by this reference. Landlord acknowledges that pursuant to the foregoing provisions, (i) Landlord and Landlord's Architect shall be responsible for code compliance (including, but not limited to, compliance with any applicable requirements of the Americans with Disabilities Act and any applicable similar or related requirements pertaining to access by persons with disabilities) with respect to the Building Shell and any other improvements designed by Landlord, and (ii) all Phase II Building improvements and site improvements constructed by Landlord in Phase II of the Center shall be constructed (A) free of hazardous substances (as defined in Section 13.6(a) of the Lease), asbestos, asbestos-containing materials and presumed asbestos-containing materials, and (B) in compliance in all material respects with all applicable federal and state laws and requirements relating to hazardous substances.

(b) The Tenant Improvements for each Phase II Building shall be constructed by Tenant (and/or by Landlord, if applicable) in accordance with (i) Article 5 of the Lease, (ii) the Workletter (as amended hereby), and (iii) the tenant improvements definition set forth in **Schedule C-2** attached hereto and incorporated herein by this reference, subject to any alternative arrangements mutually approved in writing by Landlord and Tenant from time to time. Tenant acknowledges that pursuant to the foregoing provisions, Tenant and Tenant's

Architect shall be responsible for code compliance (including, but not limited to, compliance with any applicable requirements of the Americans with Disabilities Act and any applicable similar or related requirements pertaining to access by persons with disabilities) with respect to any and all improvements designed by Tenant or Tenant's Architect. Without limiting the breadth of the approval rights otherwise reserved to Landlord under the Workletter, Landlord reserves the right, in reviewing Tenant's proposed drawings and specifications at any stage, to require specific modifications to the proposed Tenant Improvements, at no material additional cost to Tenant, in order to maintain or enhance flexibility with respect to other potential future uses of the Phase II Buildings. Tenant shall have the right to provide, install and maintain, at its sole cost and expense, a security system (including, without limitation, automatic door latches, card-key systems, cameras, etc) in the Phase II Buildings, which security system shall be surrendered to Landlord upon expiration or termination of the Lease with respect to such Phase II Buildings and Tenant shall have no obligation to restore or remove such security system. Tenant shall provide Landlord and its property manager with copies of any card-keys or other required access devices in order to facilitate emergency entry by Landlord or its agents during the term of the Lease, subject to the provisions of Section 16.1 of the Lease.

(c) [redacted] Under no circumstances shall the Tenant Improvement Allowance or any portion thereof be used or useable for any moving or relocation expenses of Tenant, or for any Cost of Improvement (or any other cost or expense) associated with any moveable furniture, trade fixtures, personal property or any other item or element which, under the applicable provisions of the Lease, will not become Landlord's property and remain with the applicable Phase II Building upon expiration or termination of the Lease. The provisions in Paragraph 4(b) of the Workletter regarding relative proportions of laboratory space and office space in the Buildings shall be inapplicable to the Phase II Buildings, and without limiting the generality of the foregoing, Landlord specifically agrees that the relative proportions of office space (if any) and/or laboratory space (if any) in the respective Phase II Buildings shall have no adverse effect on the amount of the Tenant Improvement Allowance for the Phase II Buildings as described above.

(d) Unless and until revoked by Landlord by written notice delivered to Tenant, Landlord hereby (i) delegates to Project Management Advisors, Inc., or any other project manager designated by Landlord in its sole discretion from time to time by written notice to Tenant ("Project Manager"), the authority to exercise all approval rights and other rights and powers of Landlord under the Workletter with respect to the design and construction of the Building Shell and Tenant Improvements for the Phase II Buildings, and (ii) requests that Tenant work with Project Manager with respect to any logistical or other coordination matters arising in the course of construction of the respective Building Shells and Tenant Improvements, including

(but not limited to) reviewing and processing Tenant's requests for disbursement of the Tenant Improvement Allowance, monitoring Tenant's and Landlord's compliance with their respective obligations under the Workletter and under the Lease (as amended hereby) with respect to the design and construction of the Building Shell and the Tenant Improvements, and addressing any coordination issues that may arise in the course of construction of the Building Shell and Tenant Improvements. Tenant acknowledges the foregoing delegation and request, and agrees to cooperate reasonably with Project Manager as Landlord's representative pursuant to such delegation and request. As between Landlord and Tenant, however, Landlord shall be bound by and be fully responsible for all acts and omissions of Project Manager and for the performance of all of Landlord's obligations under the Lease (as amended hereby) and the Workletter, notwithstanding such delegation of authority to Project Manager. Notwithstanding the preceding sentence, neither Landlord's delegation of authority to Project Manager nor Project Manager's performance of the functions and responsibilities contemplated in this paragraph shall cause Landlord or Project Manager to incur any obligations or responsibilities for the design, construction or delivery of the Tenant Improvements, except to the extent of the specific obligations and responsibilities of Landlord expressly set forth in the Lease (as amended hereby) and in the workletter. [redacted]

(e) Notwithstanding anything to the contrary contained in Section 14.1 (e) of the Lease or in the Workletter, the builder's risk insurance contemplated in such Section 14.1 (e) for the Tenant Improvements constructed by Tenant in the Phase II Buildings pursuant to this Amendment and the Workletter shall be maintained by Tenant, at Tenant's sole expense, and shall otherwise comply with all applicable requirements under such Section 14.1(e).

[redacted]

[redacted]

[redacted]

4. Brokers. Each party respectively (i) represents and warrants that no broker participated in the consummation of this Amendment or of the transactions contemplated herein, and (ii) agrees to indemnify, defend and hold the other party harmless against any liability, cost or expense, including (but not limited to) reasonable attorneys' fees, arising out of any claims for brokerage commissions or other similar compensation by any broker or agent alleging to have acted on behalf of the indemnifying party in connection with this Amendment and the transactions contemplated herein. The provisions of Section 21.15 of the Lease (Brokers) do not apply to this Amendment or the transactions contemplated herein.

5. Publicity. Neither party will make any press release or other media, promotional or advertising disclosure regarding this Amendment or the transactions contemplated hereby without the other party's express prior written consent, except as required under applicable law or by any governmental agency. Without limiting the generality of the foregoing, each party agrees that the other party will have no less than five (5) business days to review and provide comment regarding any such proposed press release or publicity regarding this Amendment or the transactions contemplated hereby, unless a shorter review time is agreed to by both parties. In the event that one party reasonably concludes that a given disclosure is required by law and the other party would prefer not to make such disclosure, then the party seeking such disclosure shall either (i) limit said disclosure to address the concerns of the other party, or (ii) provide a written opinion from counsel stating that such disclosure is indeed required by law. With respect to complying with the disclosure requirements of the SEC or other securities regulatory bodies in other nations, in connection with any required securities filing of this Amendment, the filing, party shall seek confidential treatment of this Amendment to the maximum extent permitted by such regulatory body and shall provide the other party with the opportunity, for at least fifteen (15) days, to review any such proposed filing. Each party agrees that it will obtain its own legal advice with regard to its compliance with securities laws and regulations, and will not rely on any statements made by the other party relating to such securities laws and regulations. Further, Landlord shall not use the name of Tenant, its affiliates or products or any signs, markings, or symbols from which a connection to Tenant, in Tenant's sole judgment, may be reasonably inferred or implied, in any manner whatsoever, including, without limitation, press releases, marketing materials, and advertisements, without Tenant's prior written approval. Tenant may withhold approval at Tenant's sole discretion. Nothing in this paragraph, however, is intended or shall be construed to prohibit, or to require Tenant's approval for, Landlord's inclusion of Tenant's name and of pertinent business terms of the Lease (as amended hereby) on any rent rolls, tenant lists or other similar documents that Landlord may submit from time to time to any lender or prospective lender, purchaser or prospective purchaser, or governmental or quasi-

governmental authority in connection with Landlord's ownership and operation of the Center, but only to the extent that Landlord determines in its sole discretion that such disclosure is reasonably necessary in order to advance Landlord's dealings with the applicable lender, purchaser and/or governmental or quasi-governmental authority, and then only to the extent that disclosure of comparable information is concurrently being made with respect to other tenants of the Center.

6. Entire Agreement. This Amendment constitutes the entire agreement between Landlord and Tenant regarding the subject matter hereof and supersedes all prior negotiations, discussions, terms sheets, letters, understandings and agreements, whether oral or written, between the parties with respect to such subject matter (other than the Lease itself, as expressly amended hereby).

7. Execution and Delivery. This Amendment may be executed in one or more counterparts and by separate parties on separate counterparts, effective when each party has executed at least one such counterpart or separate counterpart, but each such counterpart shall constitute an original and all such counterparts together shall constitute one and the same instrument.

8. Full Force and Effect. Except as expressly set forth herein, the Lease has not been modified or amended and remains in full force and effect.

[rest of page intentionally left blank]

IN WITNESS WHEREOF, Landlord and Tenant have executed this Amendment as of the date first set forth above.

"Landlord"	"Tenant"
SLOUGH BTC, LLC, a Delaware limited	AMGEN INC., a Delaware corporation liability company
By: Slough Estates USA Inc., a Delaware corporation, Its Manager	By: /s/ Michael A.Kelly
By: /s/ Jonathan M. Bergschneider	Name: Michael A.Kelly
Name: Jonathan M. Bergschneider	Title: VP Corporate Planning & Control, CA
Title: Vice President	

Attachments:

Exhibit A	Phase II Site Plan
Exhibit B	Milestone Construction Schedule [including draft Master Schedule as of (6/1/06)]
Schedule C-l	Phase II Buildings Shell Description
Schedule C-2	Phase II Buildings Tenant Improvements Description

EXHIBIT A

PHASE II SITE PLAN

[See attached page.]

EXHIBIT A to Fifth Amendment

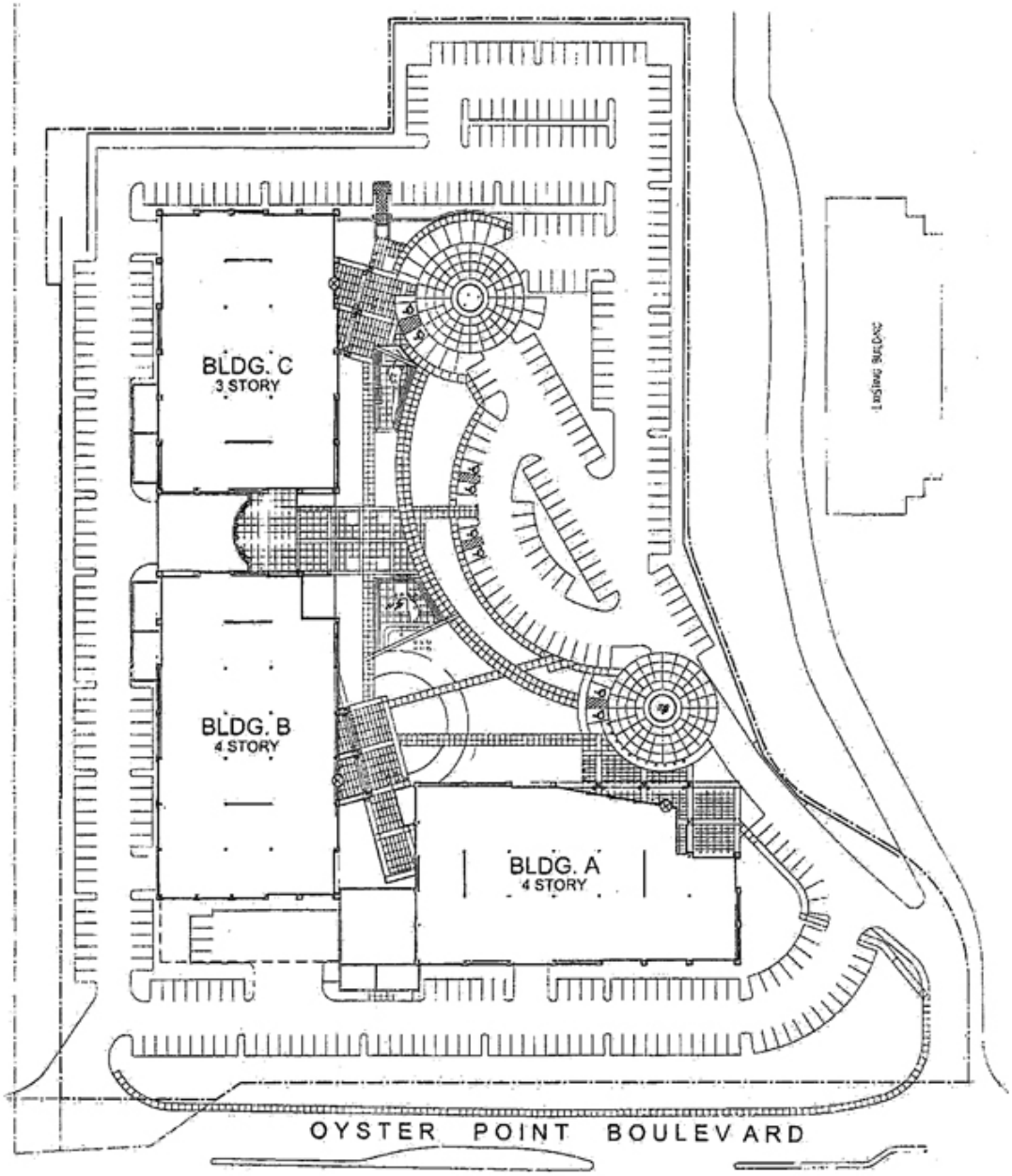
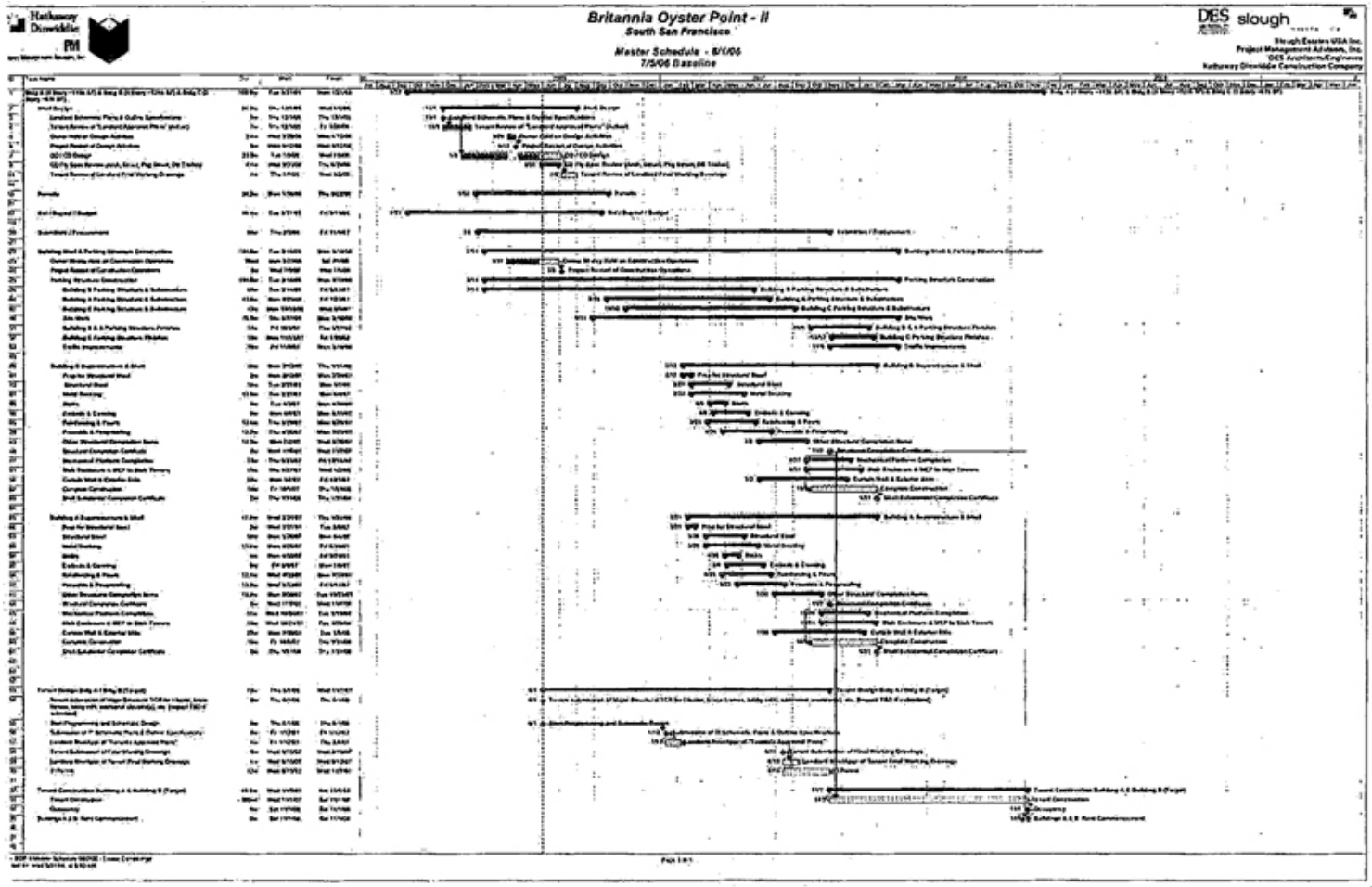

BLDG. C
3 STORY
BLDG. B
4 STORY
BLDG. A
4 STORY
EXISTING BUILDING
OYSTER POINT BOULEVARD

EXHIBIT B

MILESTONE CONSTRUCTION SCHEDULE

Milestone construction schedule for Britannia Oyster Point Phase II (333 Oyster Point Blvd.), Buildings A and B, assuming a June 1, 2006 release date, and subject to review and mutual approval of the detailed master construction schedule attached as the following page hereof (including any mutually agreed modifications thereto) as provided in the Lease, as amended:

Activity	Building A	Building B
Schematic Design	12/01/2005	12/01/2005
DD/Construction Documents Complete	07/05/2006	07/05/2006
Steel Mill Order	07/12/2006	07/12/2006
Skin Materials Order - Glass/Aluminum	09/21/2006	09/21/2006
Skin Materials Order - GFRC	09/07/2006	09/07/2006
Permit Application Review Completion	09/28/2006	09/28/2006
Begin Excavation	07/05/2006	07/05/2006
Begin: Steel Erection	03/26/2007	02/27/2007
Shell. Structural Completion	11/07/2007	11/07/2007
Shell Substantial Completion	01/31/2008	01/31/2008
Tenant Major Structural TCR (Importance Factor, brace frames and lobby infill, additional elevators, etc.)	ASAP	ASAP
TI Schematic Design Submission to Landlord	01/12/2007	01/12/2007
TI Final Working Drawing Submission to Landlord and for Permit	08/15/2007	08/15/2007
Start TI Construction	11/07/2007	11/07/2007
Tenant Occupancy/Rent Commencement	11/01/2008	11/01/2008


Britannia Oyster Point - II
South San Francisco
Master Schedule - 8/1/05
7/5/06 Baseline
DES slough
Slough Estates USA Inc.
Project Management Advisors, Inc.
DES Architects/Engineers
Hathaway Dinwiddie Construction Company

Schedule C-l

PHASE II BUILDINGS SHELL DESCRIPTION

The **"Building Shell"** as used in the Amendment to which this **Schedule C-l** is attached and in the Workletter described therein shall consist of the following:

Building envelope and waterproofing (the Building "shell"), except as specifically indicated as being included in Tenant Improvements under **Schedule C-2,** including: two levels of below "street level" parking supported on reinforced concrete shallow foundations and constructed of steel and concrete structural elements; elevated floors of metal decking with concrete fill; roof structure of metal deck with concrete fill; roof membrane to be a built-up system, with rigid insulation, flashing and sealants; building structural framing to consist of steel beams, girders, columns with a non-load-bearing exterior curtain wall; seismic system utilizing steel braced frames and concrete shear walls; roof live load to be 20 PSF with 75 PSF in all areas within the roof screen (roofscreen loading is non-reducible); floor to floor heights within the Shell Buildings (superstructure) of 17 feet, all floors

All other structural work except that driven specifically by Tenant Improvements programming (e.g., interior masonry walls)

Floor designed for 100 PSF uniform live load capacity (reducible as allowed by code)

Main Building entrance(s)

Building code required primary structure fireproofing

Building code required stairs. Stair enclosures & handrails at lower level parking only

Pit and floor openings for one elevator

Exterior hardscape and landscape, except as specifically indicated as included in Tenant Improvements under **Schedule C-2**

Two-level steel and concrete parking structure beneath the Shell (superstructure) Buildings

Site underground water, fire, storm and sanitary service to 5 feet outside Building line

Building storm and overflow drainage systems

Site underground conduits for "normal" electrical and communications, terminated within the parking structure beneath each Shell Building

Electrical utility pad and transformer, primary service conduits terminated at Shell building switchgear location (within the parking structure beneath each Shell Building) TI-provided electrical service

Gas service up to exterior meter location at each Building (but not including meter)

Wet fire protection (risers, loops, branches and heads), evenly distributed for "ordinary hazard, group 2" occupancy

Shipping/receiving dock and services room and foundation within garage envelope

Shell design and permitting fees, except as specifically included in Tenant Improvements under **Schedule C-2**

Vented deck at upper floors

Temporary project fencing

Construction lift for contractor safety, access and stocking of materials (split with TI – 50%)

Underslab sanitary waste main trunk line (split with TI – 50%; branch distribution by TI)

Schedule C-2

PHASE II BUILDINGS TENANT IMPROVEMENTS DESCRIPTION

The **"Tenant Improvements"** as defined in the Amendment to which this **Schedule C-2** is attached and in the Workletter described therein shall include, but not necessarily be limited to, the following, to be constructed from Tenant Improvement Allowance funds or otherwise at Tenant's expense:

All tenant construction, design fees, fixtures, furnishings, etc. to support tenant operations, including use space, offices, lobbies, circulation, restrooms and all other features not specifically indicated as part of the Building Shell in **Schedule C-l**

Foundations, structure, enclosure and waterproofing for emergency generator and trash enclosure.
Any service area that is included in the area (square footage) calculation for the applicable Building, and upon which rent is therefore paid by Tenant, will not fall under this definition for purposes of this schedule. **[1]**

Exterior building skin modifications to support TI systems (e.g., louvers for HVAC accommodation) [2]

Outdoor lounge and eating area [2]

Topical emission barriers on slabs, if required

Slab depressions for special finishes or special uses [2]

Enhancement of structure for live loading above 100 PSF or vibration control criteria [2]

Modification of structure for openings at floors and roof [2]

Modification or repair of structure fireproofing required by TI construction

All minor support structures for ducts, conduits, pipes, etc.

Stair enclosures, vestibule doors, dedicated mechanical shafts & ducts for stair pressurization, handrails and guardrails (except at parking levels, per Schedule C-l) [1]

Mechanical equipment, controls & monitoring, ductwork and penetrations required to pressurize stairs in advance of occupancy, per South San Francisco code. [1]

Stair penthouse, if required [1]

Exterior wall insulation

Firesafing at floor decks, exterior walls and interior openings **[performed under Method 1 only if required during shell construction by City of SSF, otherwise performed by TI contractor] [1]**

Custom doors

Security or other upgrades to exterior doors

Wallboard capture trim at exterior window wall

Visual screens and supporting structures/platforms/sleepers. etc, for rooftop equipment, ducts, plumbing, electrical, etc. [l]

Roof patching for all penetrations relating to Tenant Improvements

Skylights, if used, including curbs, roof patching, etc.

Elevator cab and equipment, except for one pit and floor openings. Additional elevators by Tenant.

Shaft walls or other fire separations in buildings required for vertical openings (stairs, elevators) or control zones

Distribution/laterals from sanitary waste main trunk line (main trunk line split with Shell 50%)

All lab waste plumbing and related systems and fixtures, if required

Gas meter and piping from gas meter to Building

Modifications/enhancements to wet fire protection systems required by TI design

Fire alarm, signal and security systems (some of which may need to be installed as part of the Shell due to code requirements [Method 1 below], in which event they will be charged against the TI Allowance).

All secondary electrical service for Tenant demand loads, including main service disconnect, Tenant meter section and distribution panels

Standby electrical generator, if required

All electrical communications wire and service not specifically included in Building Shell

All TI design fees and reimbursables

All other “soft” costs, including TI permit/development fees, utility capacity or connection charges, etc.

Landlord-provided oversight of TI activities as specified in Amendment and Workletter

All testing and inspection of TI construction.

Builders risk insurance for TI construction including earthquake coverage

All general contractor preconstruction services costs related to TI construction

Construction lift for contractor safety, access and slocking of materials (split with shell - 50%)

“Tenant Improvements” shall not include the design and/or construction, of infrastructure, landscaping or other site improvements unless specifically requested by Tenant or as a result of Tenant Improvements or Tenant’s requested modifications to existing plans

Elements shown in bold and underlined will be implemented in accordance with Page 3 of this Schedule C-2 and charged against the Tenant Improvement Allowance.

IMPLEMENTATION METHODS FOR WORK CONSTRUCTED BY LANDLORD ON BEHALF OF TENANT AT TENANT'S EXPENSE

Method No.	Programming and/or Preliminary Design Requirements	Architect/Engineer of Record	Contractor of Record/Contract Relationship	Coordination Responsibility	Examples
1	Landlord design included as part of shell documents and construction	Landlord design team	Landlord Contractor under main Shell contract or change order to main Shell contract	Landlord team	Service yard, loading dock area, roof screens, stair pressurization, etc.
2	Tenant provides program or design requirements and/or schematic design information:	Landlord design team takes info provided by Tenant team and incorporates it into the shell documents	Landlord Contractor via change order to main Shell contract	Tenant team responsible for coordination of work with Landlord Contractor	TI required slab depressions

EXHIBIT A-2

SUBLEASE

(to be attached)

SUBLEASE

THIS SUBLEASE (this "***Sublease***") is made and entered into this 22nd day of March, 2016, by and between **AMGEN INC,** a Delaware Corporation ("***Sublandlord***"), and **PROTHENA BIOSCIENCES INC,** a Delaware corporation ("***Subtenant***").

RECITALS

A. Sublandlord's predecessor-in-imerest, Tularik Inc. ("***Original Tenant***"), entered into that certain Build-to-Suit Lease dated as of December 20, 2001 (the "***Original Master Lease***") with HCP BTC, LLC ("***Master Landlord"),*** a Delaware limited liability company, formerly known as Slough BTC, LLC, for the initial lease of three (3) buildings in the Oyster Point center in South San Francisco, California (the "***Center***") and rights to lease additional buildings to be constructed in the Center. The Original Master Lease was subsequently amended on numerous occasions to, among other things, lease additional space and buildings located in the Center to Original Tenant or Sublandlord.

B. Sublandlord and Master Landlord entered into that certain Fifth Amendment to Build-to-Suit Lease and Second Amendment to Workletter dated as of June 19, 2006 (the "***Master Amendment***"), pursuant to which Master Landlord leased to Sublandlord and Sublandlord leased from Master Landlord those certain two (2) buildings in the Center with the addresses of 331 Oyster Point Boulevard, as depicted on Exhibit B attached hereto (such building, the "***Premises"*** or the "***331 Building"),*** and 333 Oyster Point Boulevard, consisting of (such building, the "***333 Building***"). The 331 Building consists of 128,751 rentable square feet and the 333 Building consists of 121,706 rentable square feet. The 331 Building and the 333 Building are collectively referred to herein as the "***Buildings".*** As used herein, the Original Master Lease, as amended by the Master Amendment only shall be referred to as the "***Master Lease",*** a copy of which is attached as Exhibit A hereto.

C. Sublandlord and Subtenant now desire to provide for a sublease of the Premises, subject to and conditioned upon the terms and conditions set forth herein.

AGREEMENT

NOW, THEREFORE, in consideration of the recitals set forth above, the agreements set forth below and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Sublandlord and Subtenant hereby agree as follows:

1. **Sublease of Premises; Access** 24/7. Subject and pursuant to the provisions hereof, Sublandlord subleases to Subtenant, and Subtenant subleases from Sublandlord, the Premises. Sublandlord shall deliver the entire Premises to Subtenant with the Premises (including all of the current warm shell improvements identified on Exhibit C attached hereto) in good working condition and repair and the systems included therein in good working condition (the "***Delivery Condition***") on the date (the "***Delivery Date***") that all of the following have been satisfied: (i) this Sublease has been executed and delivered by Sublandlord and Subtenant, (ii) all consents necessary for the effectiveness of this Sublease have been executed and delivered,

including, without limitation, any consents required pursuant to the Master Lease, including the Consent, (iii) Subtenant has delivered to Sublandlord the first month's Base Rent and Operating Expenses, as more particularly set forth in Sections 3.1 and 3.3.1 below, (iv) Subtenant has delivered to Sublandlord the Letter of Credit issued by the Bank (as defined in Section 12.1 below) and meeting the criteria set forth in Section 12; (v) Guarantor (as defined in Section 14.16) has executed and delivered to Sublandlord the Guaranty (as defined in Section 14.16), and (vi) Subtenant has delivered to Sublandlord written evidence that Subtenant carries the insurance Subtenant is required to carry as set forth in Section 9.15 of this Sublease.

Subject to the terms of the Master Lease incorporated into this Sublease, Subtenant shall have access to the Premises 24 hours per day, seven days a week, 52 weeks per year.

2. Term; Rent Commencement Date; Early Access.

2.1 Term; Measurement. The term (the "***Term***") of this Sublease shall commence upon the date (the "***Commencement Date***") that this Sublease has been executed and delivered by Sublandlord and Subtenant, all consents necessary for the effectiveness of this Sublease have been executed and delivered, including, without limitation, any consents required pursuant to the Master Lease, including the Consent (as defined in Section 14.11), and shall continue until December 31, 2023 (the "***Expiration Date***"), unless sooner terminated pursuant to the provisions of this Sublease. The obligations to pay Rent (as defined in Section 3.3.5 below), subject to the rent abatements described in Section 3.2, shall commence upon the Rent Commencement Date as described in Section 2.2 below, and shall continue throughout the Term. The measurement of the Premises were made by Master Landlord's architect pursuant to Section 1.1(d) of the Original Master Lease, which Section 1.1(d) is incorporated herein by reference solely for purposes of acknowledging how the Premises were measured. Sublandlord and Subtenant hereby agree that the Premises consist of 128,751 rentable square feet.

2.2 Rent Commencement.

2.2.1 Rent Commencement Date. Subtenant's obligation to pay Base Rent and Operating Expenses under this Sublease shall commence on the earlier to occur of (a) the date Subtenant completes Subtenant's Improvements (as defined in Section 10.4.1) and commences conducting business (other than Subtenant's activities in the Premises to prepare it for Subtenant's occupancy) in the Premises, or (b) August 1, 2016 (such earlier date, the "***Rent Commencement Date***").

2.2.2 Confirmation of Dates. Following the request of either party, the parties agree to promptly execute and deliver a factually-correct written confirmation documenting the Commencement Date, the Rent Commencement Date, and the Expiration Date.

2.3 Utilities and Maintenance. From and after the Delivery Date, Subtenant shall be solely responsible to obtain and pay for all utilities provided to the Premises. In addition, Subtenant shall be solely responsible for maintenance and repair of the building

systems serving the Premises commencing on the Delivery Date (other than any repair and maintenance obligations of Master Landlord under the Master Lease), provided, that, Subtenant shall not be obligated to pay its share of Operating Expenses with respect to the Premises until the Rent Commencement Date. Subject to Master Landlord's written consent (in the Consent or other written agreement with Master Landlord) and any terms and conditions related thereto, Sublandlord hereby consents to Subtenant working directly with Master Landlord on issues related to the maintenance obligations of Master Landlord (including providing notice to Master Landlord with respect to Master Landlord's obligations under the Master Lease) without Sublandlord's further consent, consultation or approval.

3. Rent.

3.1 Base Rent. Commencing on the Rent Commencement Date, which shall be deemed to be the first day of Month 1 in the table below, Subtenant shall pay as monthly base rent for the Premises ("***Base Rent***") those amounts set forth in the following table:

Months	Monthly Base Rent
1-12*	$450,628.50*
13-24*	$464,791.11*
25-36	$477,666.21
37-48	$491,828.82
49-60	$507,278.94
61-72	$522,729.06
73-84	$538,179.18
85-Expiration Date	$553,629.30

* Subject to and in accordance with the terms and conditions of Section 3.2 of this Sublease, Base Rent for the first two years of the Term shall be abated as follows: (i) Base Rent for the first four (4) full calendar months after the Rent Commencement Date shall be abated in its entirety, (ii) Base Rent for the fifth (5^{th}) through twelfth (12^{th}) full calendar months after the Rent Commencement Date shall be abated by $240,628.50 per month; and (iii) Base Rent for the thirteenth (13^{th}) through twenty-fourth (24^{th}) full calendar months after the Term shall be abated by $103,791.11 per month.

Base Rent and additional rent shall be paid to Sublandlord without demand, deduction, set-off or counterclaim, in each case except as expressly provided to the contrary herein, in advance on the first day of each calendar month during the Term of this Sublease, except Subtenant shall pay the Base Rent payable for the fifth (5^{th}) full calendar month after the Rent Commencement Date concurrently with Subtenant's execution and delivery of this Sublease. In the event of a partial rental month, Base Rent shall be prorated on the basis of the number of actual days in such month. All payments due to Sublandlord shall be paid to Sublandlord c/o Amgen Inc., Accounts Payable, PO Box 100909, Pasadena, CA, 91189-0909 or such other address as Sublandlord may specify in a written notice delivered pursuant to Section 10.1, below.

3.2 Base Rent Abatement. Notwithstanding anything to the contrary contained herein and provided that Subtenant faithfully performs all of the terms and conditions of this Sublease, and no default by Subtenant has occurred and is continuing hereunder, Sublandlord hereby agrees that Base Rent hereunder shall be abated as follows during the first two (2) years after the Rent Commencement Date as follows: (i) Base Rent for the first four (4) full calendar months after the Rent Commencement Date shall be abated in its entirety, (ii) Base Rent for the fifth (5^{th}) through twelfth (12^{th}) full calendar months after the Rent Commencement Date shall be abated by $240,628.50 per month; and (iii) Base Rent for the thirteenth (13^{th}) through twenty-fourth (24^{th}) full calendar months after the Term shall be abated by $103,791.11 per month. During such periods of full or partial abatement, Subtenant shall still be responsible for the payment of all of its other monetary obligations under this Lease, including without limitation, any unabated portions of Base Rent and all Operating Expenses. In the event of a default by Subtenant under the terms of this Sublease that results in termination of this Sublease in accordance with the terms hereof, Sublandlord shall be entitled to the recovery of the Base Rent that was abated under the provisions of this Section 3.2.

3.3 Operating Costs And Expenses.

3.3.1 Payment; Annual Statement of Operating Expenses. Commencing on the Rent Commencement Date, Subtenant shall pay to Sublandlord, as additional rent hereunder, all of the Operating Expenses allocated to the Premises under the Master Lease (as amended by the Master Amendment). All Operating Expenses shall be payable in advance on the first day of each calendar month during the Term of this Sublease in accordance with Section 9.3 of the Original Master Lease, except Subtenant shall pay the estimated Operating Expenses payable for the first (1^{st}) full calendar month after the Rent Commencement Date (currently estimated to be $67,406.97, subject to adjustment and reconciliation in accordance with the terms hereof) concurrently with Subtenant's execution and delivery of this Sublease. Promptly following Sublandlord's receipt thereof, Sublandlord shall provide Subtenant with copies of (i) Master Landlord's estimated statement of Operating Expenses (as applicable to the Premises) provided to Sublandlord pursuant to Section 9.3 of the Master Lease, as may be adjusted from time to time pursuant to the terms of the Master Lease, and (ii) Master Landlord's annual statement of Operating Expenses (as applicable to the Premises) provided to Sublandlord pursuant to Section 9.4 of the Master Lease. Sublandlord agrees that Subtenant shall be entitled to audit rights with respect to Sublandlord's books and records relating to the determination and payment of Operating Expenses related to the Premises for the immediately preceding Lease Year. Subject to the Incorporation Provisions (defined below), the provisions of Article 9 of the Master Lease are incorporated herein only to the extent specifically referenced in this Sublease. Further, Subtenant acknowledges and agrees that, although Article 9 of the Original Master Lease is not otherwise specifically incorporated into this Sublease, Article 9 of the Master Lease governs and controls for all purposes the determination of Operating Expenses payable by Sublandlord that Sublandlord is passing through to Subtenant in accordance with the terms of this Section 3.3. Notwithstanding anything in this Sublease to the contrary, Subtenant shall not be required to pay any Operating Expenses attributable to or arising from the Phase I Buildings (as defined in the Original Master Lease), it being agreed that Subtenant shall only be obligated to pay Operating Expenses that Sublandlord

is obligated to pay under the Master Lease that are allocated by Master Landlord to the Premises, subject to Subtenant's audit rights set forth in Section 3.3.3.

3.3.2 Pro-ration. If the Term shall commence on any day other than January 1 or expire or earlier terminate on any date other than December 31, Subtenant's obligations under Section 3.3.1 for such first or last partial calendar year shall be prorated on the basis of (a) the number of days elapsed during such calendar year during which this Sublease is in effect bears to (b) 365. In the event that the Term shall expire or earlier terminate on any date other than December 31, for purposes of Section 3.3.1, Sublandlord may either reasonably project, as of the date of such expiration or termination, the Operating Expenses for such calendar year and bill Subtenant for Subtenant's share thereof at any time thereafter or wait until receipt of Master Landlord's calculation thereof for the entire calendar year in question and bill Subtenant for Subtenant's share of Subtenant's share thereof at any time thereafter; provided, however, if Sublandlord reasonably projects the amount of such Operating Expenses, Sublandlord shall reconcile such projection with the actual Operating Expenses due following the receipt of the actual annual statement of Operating Expenses for such calendar year and shall follow the terms of Section 9.4(a) of the Original Master Lease with respect to the amounts owed or to be reimbursed.

If the obligation to pay any component of Rent under this Sublease commences on a day other than the first day of a calendar month, or if the Term of this Sublease terminates on a day other than the last day of a calendar month, the Rent for such first or last month of the Term shall be prorated based on the number of days the Term of this Sublease is in effect during such month. If an increase in Rent becomes effective on a day other than the first day of a calendar month, the calculation of Rent for such month shall be the sum of the two applicable rates, each prorated for the portion of the month during which such rate is in effect.

3.3.3 Annual Reconciliation; Accounting; Audit Rights. Because the Master Lease provides for the payment by Sublandlord of Operating Expenses on the basis of an estimate thereof, as and when adjustments between estimated and actual Operating Expenses are made under the Master Lease, as applicable, the obligations of Sublandlord and Subtenant hereunder shall be adjusted in a like manner; and if any such adjustment shall occur after the expiration or earlier termination of the Term, then the obligations of Sublandlord and Subtenant under this Section 3 shall survive such expiration or termination. Subtenant shall pay those Operating Expenses allocated to the Premises based on Master Landlord's estimate thereof (as it may be adjusted from time to time in accordance with the Master Lease) provided to Subtenant pursuant to Section 3.3.1 above. Within thirty (30) days after Sublandlord receives from the Master Landlord the annual statement of actual Operating Expenses incurred by Master Landlord (the "***Accounting***"), Sublandlord shall provide Subtenant an accounting of the actual Operating Expenses payable with respect to the Premises as reflected in the Accounting. In the event that the Accounting shows that Subtenant paid more or less than the actual Operating Expenses payable by Subtenant hereunder, then Subtenant shall either promptly receive a credit against future Rent (or such amount shall be promptly paid to Subtenant if the Term has expired or been terminated) or shall be required to pay to Sublandlord the deficient amount within thirty (30) days after Subtenant's receipt of such Accounting. Sublandlord shall use commercially reasonable efforts to include in the Consent Master

Landlord's agreement that Subtenant may exercise directly Sublandlord's rights as Tenant under Section 9.4(b) of the Original Master Lease to examine Master Landlord's books and records, provided, that, (i) Sublandlord's rights to audit Operating Expenses under the Master Lease are not affected or limited thereby, and (ii) in no event will Subtenant be entitled to a reduction of Operating Expenses with respect to the Premises if Sublandlord is obligated to pay such Operating Expenses. If Master Landlord does not so agree, then Sublandlord shall, upon the written request of Subtenant and at Subtenant's sole cost and expense, exercise such rights in a commercially reasonable manner (subject to, and in accordance with, the terms of the Master Lease), to confirm the accuracy of the Operating Expenses identified in the annual statement provided by Master Landlord as payable with respect to the Premises. In such event, Sublandlord shall promptly deliver the results of such examination to Subtenant, and shall reasonably cooperate with Subtenant and Master Landlord to resolve any outstanding issues or concerns in accordance with the terms of the Master Lease. Subject to the foregoing, any and all amounts paid by Sublandlord under the Master Lease for Operating Expenses, real estate taxes or assessments, and other charges with respect to the Premises accrued during the Term (or otherwise due to the actions of Subtenant, or its agents, employees or contractors) shall be conclusively deemed to be accurate and binding upon Subtenant for purposes of interpretation of this Section 3.

3.3.4 Payment of Extra Charges. In addition to the amounts payable under Section 3.3.1, Subtenant shall pay to Sublandlord within ten (10) days of Subtenant's receipt of Sublandlord's written invoice therefor: (i) any charges, costs, fees or expenses for which Sublandlord is separately charged under the Master Lease (and which are not part of Operating Expenses) and which are attributable to the Premises and accrued during the Term, including, without limitation, personal property taxes and excess electrical consumption charges (if any); (ii) any and all other sums of money (other than those attributable to Operating Expenses and the charges, costs, fees or expenses covered by clause (i) above) which are or may become payable by Sublandlord to Master Landlord relating to the Premises and that have accrued during the Term; (iii) any real property taxes and assessments related to the Premises that are separately billed to Sublandlord and that have accrued during the Term; and (iv) any and all charges of Master Landlord or other amounts payable to Master Landlord under the Master Lease caused by Subtenant's failure to perform its obligations under this Sublease.

3.3.5 "Rent" Definition. All forms of additional rent and any other amounts payable by Subtenant to Sublandlord shall be payable by Subtenant without notice, demand, deduction, offset or abatement, in each case except as expressly provided to the contrary herein, in lawful money of the United States to Sublandlord at such places and to such persons as Sublandlord may direct. All such amounts, together with Base Rent, are collectively referred to herein as "***Rent.***"

3.3.6 Interest and Late Charges. Subject to the Incorporation Provisions (defined below), Section 3.2 of the Original Master Lease is hereby incorporated by reference. Any interest and late charges accrued under this Section shall be deemed to be additional rent payable hereunder. Notwithstanding anything in this Sublease to the contrary, Subtenant shall be entitled to a grace period of five (5) business days for the first delinquent payment of Base Rent without the payment of interest or late charges, provided,

however, that such late charge and payment of interest shall accrue from and after expiration of such 5-business day grace period.

3.4 Build Out Period. As set forth above, Subtenant shall have no obligation to pay Base Rent or Operating Expenses during the period from the Commencement Date to the Rent Commencement Date (the "***Build Out Period***"). However, Subtenant shall pay all of the utilities provided to the Premises (power, water/sewer service, and gas service, if applicable) from and after the Delivery Date in accordance with Article 10 of the Original Master Lease (incorporated herein as set forth below) and, except as specifically set forth in this Section 3.4, all other terms and conditions of this Sublease shall apply and Subtenant shall remain responsible for the payment of all other monetary obligations under this Sublease during the Build Out Period.

4. Use. Subtenant shall use and occupy the Premises only for the purposes set forth in Section 13.1 of the Original Master Lease, and for no other purpose.

5. Parking.

5.1 Spaces. Subject to the provisions of this Section 5, Subtenant shall have the same parking rights as Sublandlord has with respect to the Premises under the Master Lease (the "***Parking Spaces***") during the Term, including, without limitation, as set forth in Section 21.20 of the Original Master Lease and Section 1(g) of the Master Amendment. Sublandlord shall not take any action to cause Master Landlord to reduce Sublandlord's parking rights with respect to the Premises under the Master Lease. All Parking Spaces are unassigned and nonexclusive spaces, and notwithstanding any provision herein or in the Master Lease to the contrary, shall be provided to Subtenant at no cost or expense, except for expenses included in Operating Expenses pursuant to (i) Section 9.2(a)(vi) of the Master Lease or (ii) the second to last sentence of Section 9.2(b) of the Master Lease.

5.2 Compliance. Subtenant shall comply (and cause each of its employees, contractors, representatives, and invitees using such privileges to comply) with all rules, regulations and requirements of Master Landlord with respect to use of the Parking Spaces, the Transportation Demand Management Plan (TDMP) and other matters relating thereto.

6. Additional Rights.

6.1 Signage. Subtenant shall have all of the right to signage as set forth in Section 11.5 of the Original Master Lease on, or otherwise specifically allocated to, the 331 Building (including without limitation rights to any monument signage as set forth in Section 11.5 of the Original Master Lease, which is attributable or otherwise allocated to the Premises). Accordingly, subject to the Incorporation Provisions, Section 11.5 of the Original Master Lease is hereby incorporated by reference. All signage of Subtenant shall (i) be subject to the terms of the Master Lease, Sublandlord's reasonable approval and Master Landlord's approval as to design, composition, size and location (as and to the extent set forth in the Master Lease or the Consent), and (ii) be undertaken at Subtenant's sole cost and expense, including, without limitation, all costs of installation, maintenance, repair, restoration and removal.

6.2 Generator. Subtenant has informed Sublandlord that Subtenant wishes to use the existing 1 megawatt emergency backup generator (the "***Generator")*** which is currently in place on a pad adjacent to the 331 Building (the "***Generator Area***"). Sublandlord agrees that Subtenant shall be entitled to use and operate the Generator to provide emergency backup power to the Premises, so long as Subtenant obtains its own permits to use and operate the Generator (releasing Sublandlord from any liability with respect to the Generator) and complies with the terms of this Section 6.2. Subject to Section 8, the Generator will be delivered to Subtenant in good working condition and from and after such delivery, Sublandlord shall have no right to use and operate the Generator. Subtenant and its authorized personnel shall further have the right to access the Generator Area for purposes of testing, maintaining, refueling, replacing, repairing and operating the Generator, subject to force majeure and in compliance with any applicable Master Landlord rules and regulations. Subtenant shall maintain and operate the Generator in compliance with all applicable federal, state and local laws, rules and regulations, including, without limitation, applicable zoning restrictions, City and County requirements and regulations of any governing air quality or environmental management district, and obtaining and maintaining at Subtenant's sole cost and expense all permits, certificates or other authorizations required for operation of the Generator. Subtenant shall be solely responsible to ensure that the Generator is operated in compliance with applicable laws, rules and regulations and the terms of the Master Lease and any governing CC&Rs, and to ensure that the Generator does not interfere with the business operations or quiet enjoyment of other tenants or occupants of the Center. Without limiting the indemnity set forth in Section 11.2 below, Subtenant hereby indemnifies, defends and holds Sublandlord harmless from and against any claims, suits, judgments, losses, costs, obligations, damages, expenses, interest, liabilities or harms (collectively, "***Claims***") caused by or resulting from Subtenant's use and operation of the Generator, provided, that, Subtenant shall not be obligated to indemnify Sublandlord for Claims to the extent caused by or resulting from the negligence or willful misconduct of Sublandlord. Immediately prior to the Expiration Date, promptly following Subtenant's request, Sublandlord agrees to execute a quit claim bill of sale in form and substance reasonably acceptable to Sublandlord transferring any ownership interest Sublandlord has in the Generator to Subtenant, without warranty. Other than pursuant to such bill of sale, or as may be requested by Master Landlord with respect to Master Landlord's interest therein under the Master Lease (including, without limitation, Section 11.2 thereof), Sublandlord shall not transfer, sell or convey the Generator to any party or permit any lien or encumbrance on the Generator. Unless otherwise required by the Master Landlord in accordance with the Master Lease, Subtenant shall remove the Generator upon expiration or earlier termination of this Sublease and repair any damage caused by such removal. If required by the terms of applicable laws, rules or regulations, Subtenant will obtain at its cost and deliver to Sublandlord a copy of any closure or similar report issued by any governmental authority with respect to Subtenant's cessation of use and removal of the Generator.

6.3 Other Permits. Subtenant will be responsible for obtaining its own permits with respect to any new or existing building systems which require permits for operation or occupancy, including without limitation, elevator permits, certificates of occupancy, and fire protection system permits, except for any such permits that may have already been obtained by Sublandlord and which are freely transferable to Subtenant without the payment of

any transfer fee and without any requirement to obtain the consent of any regulatory, governmental, or quasi-governmental agency with respect to such transfer.

6.4 **Food Trucks.** Notwithstanding anything in this Sublease to the contrary, but subject to Master Landlord's written consent (in the Consent or other written agreement with Master Landlord) and any terms and conditions related thereto, and subject to compliance with all applicable laws, rules and regulations, Subtenant may engage mobile food service vendors ("***Food Vendors***") to provide food services for the Premises provided that (i) each Food Vendor shall be reasonably acceptable to Sublandlord and Master Landlord, (ii) the location within the parking areas of the Center where the Food Vendors may park ("***Food Vendor Area***") and the hours during which the Food Vendors may be present at the Project shall be subject to Sublandlord's and Master Landlord's reasonable approval, (iii) Subtenant shall be responsible, at Subtenant's sole cost, for ensuring that the Food Vendor Area remains free of debris and trash while, and immediately following, any time any Food Vendor is in the Food Vendor Area, and (iv) the Food Vendors shall not interfere with the use of the Center by any other tenants of the Center. In the event of any such interference or if any Food Vendor causes any damage to the Center, Sublandlord and Master Landlord shall each have the right to immediately remove such Food Vendor from the Center or prohibit such Food Vendor from entering the Center.

7. **Broker Commissions.** Each party represents and warrants that it has dealt with no broker in connection with this Sublease and the transactions contemplated herein, except that Sublandlord has been represented by Kidder Mathews (in such capacity, "***KM-Sublandlord Broker***") and Binswanger ("***Binswanger",*** and together with KM-Sublandlord Broker, the "***Primary Brokers***") and Subtenant has been represented by Kidder Mathews (in such capacity, "***KM-Subtenant Broker")*** and Cassidy Turley Commercial Real Estate Services, Inc., dba Cushman & Wakefield ("***C&W",*** and together with KM-Subtenant Broker, the "***Secondary Brokers***"). Following full execution and delivery of this Sublease and the Consent, Sublandlord shall pay the commission payable to KM-Sublandlord Broker as a result of or in connection with this Sublease (the "***Commission***") pursuant to, and in accordance with, the terms of a separate agreement between KM-Sublandlord Broker and Sublandlord. It is Sublandlord's and Subtenant's understanding that KM-Sublandlord Broker will share the Commission with Binswanger, and the Secondary Brokers pursuant to separate arrangements amongst KM-Sublandlord Broker, Binswanger and the Secondary Brokers, as applicable. Each party shall indemnify, defend and hold the other party free and harmless from and against any claim, loss, damage, liability, obligation, cost or expense, including reasonable attorneys' fees suffered, incurred or asserted arising from the breach of the indemnifying party's representations and warranties set forth in this Section 7. Under no circumstances will the Primary Brokers, the Secondary Brokers or any other broker or agent be deemed to be a third party beneficiary of this Sublease.

8. **Condition Of Premises.**

8.1 **AS IS.** Subject to Sublandlord's obligation to deliver the Premises to Tenant in the Delivery Condition as set forth above in Section 1, Subtenant has inspected the Premises and all improvements located therein, and has agreed to accept the Premises in their

"***AS-IS***" condition, existing as of the date of this Sublease, and subject to all applicable municipal, county, state and federal laws, ordinances and regulations governing and regulating the use and occupancy of the Premises. Without limiting the generality of the foregoing, it is expressly understood that the Premises and Common Areas surrounding the Premises were constructed some time ago. Accordingly, the Delivery Condition does not include any representations by Sublandlord that the Premises, the building systems serving the Premises, or the Common Areas in and around the Premises comply with current code for Subtenant's intended use or are sufficient for obtaining certificates of occupancy upon completion of the Subtenant Improvements and Sublandlord shall have no obligations hereunder with respect thereto. Specifically (and without limiting the generality of the foregoing), Sublandlord advises Subtenant that Sublandlord has been advised that the sidewalks around the Premises and the building fire sprinkler system may not comply with current code for Subtenant's intended use and any necessary upgrades or modifications to the sidewalks or the sprinkler system shall be at Subtenant's sole cost and expense.

8.2 **Premises not in Delivery Condition.** If it is determined that the Premises or any part thereof, including, without limitation, any building systems or equipment located therein or providing services thereto, were not in the Delivery Condition on the Delivery Date, Sublandlord shall, as Subtenant's sole remedy hereunder, promptly take such steps as are necessary to cause the Premises to be in the Delivery Condition as soon as reasonably possible after receiving notice thereof from Subtenant at no cost to Subtenant (through Operating Expenses or otherwise), *provided*, *that*, (i) Subtenant delivers written notice to Sublandlord detailing such deficiency by no later than the date that is three (3) months after the Delivery Date (time being of the essence), and (ii) the failure of the Premises to be in the Delivery Condition was not directly caused by work performed or modifications made by Subtenant or its agents, employees or contractors to the Premises. Notwithstanding the foregoing or anything to the contrary herein, if the failure of the Premises to be in the Delivery Condition identified in Subtenant's written notice is due to a failure by Master Landlord to perform any obligations of Master Landlord under the Master Lease (a "***Master Landlord Failure***"), Sublandlord shall first use commercially reasonable efforts to cause Master Landlord to perform such obligations in accordance with Section 9.1.1. However, if Master Landlord fails to correct the Master Landlord Failure within thirty (30) days after receiving Sublandlord's written request therefor (or, if more than 30 days is necessary to complete such correction, Master Landlord has not commenced correction within such 30-day period or Master Landlord has commenced correction within such 30-day period but has not thereafter diligently pursued such correction to completion), or the time period for causing Master Landlord to correct the Master Landlord Failure under the Master Lease has expired, Sublandlord shall promptly at Sublandlord's election, in Sublandlord's sole and absolute discretion, either (i) take such steps as are necessary to correct the Master Landlord Failure at Sublandlord's sole cost and expense, or (ii)notify Subtenant in writing that Sublandlord will not correct the Master Landlord Failure. If Sublandlord notifies Subtenant that Sublandlord will not correct the Master Landlord Failure, Subtenant shall be entitled to terminate this Sublease by delivering written notice to Sublandlord of such election within ten (10) business days after receipt of Sublandlord's notice. If Subtenant elects to terminate this Sublease pursuant to its right in the foregoing sentence, then Sublandlord shall have the right (but not the obligation) to nullify such termination by delivering written notice to Subtenant within three (3) business days after receipt of Subtenant's termination notice by delivering written notice to

Subtenant stating that Sublandlord intends to correct the Master Landlord Failure at Sublandlord's sole cost and expense (a "***Sublandlord Nullification Notice").*** If Sublandlord delivers a Sublandlord Nullification Notice, then Sublandlord shall promptly take such steps as are necessary to correct the Master Landlord Failure at Sublandlord's sole cost and expense. The Premises have not undergone inspection by a Certified Access Specialist (CASp).

9. Master Lease.

9.1 Compliance With The Master Lease. The terms of this Section 9.1 (including, without limitation, subsections 9.1.1, and 9.1.2 below) shall govern incorporation of any provisions into this Sublease and such provisions are collectively referred to herein as the "***Incorporation Provisions."*** Subtenant shall not cause a breach of the Master Lease, as more particularly set forth in Section 9.1.3 below. Except as otherwise expressly provided hereunder, or as the context of this Sublease directly indicates otherwise, all of the rights and obligations granted to or imposed on the "Tenant" under the Master Lease with respect to the Premises are hereby granted to or imposed on Subtenant and all of the rights and granted to the "Landlord" under the Master Lease with respect to the Premises are hereby granted to Sublandlord. All of the terms and conditions contained in the Master Lease are incorporated herein, except as specifically provided below, and shall together with the terms and conditions specifically set forth in this Sublease constitute the complete terms and conditions of this Sublease. Subject to the following sentence, capitalized terms used but not defined herein have the meanings given thereto in the Master Lease. To the extent the Master Lease terms are incorporated herein, the following defined terms in the Master Lease shall be deemed to have the respective meanings set forth below for purposes of this Sublease:

Defined Term in Master Lease	**Definition Under This Sublease**
Amendment	Sublease (as defined herein)
Building(s)	331 Building (as defined herein), provided, that, if it is clear from the context of the applicable use that references to the "Buildings" should refer to more than just the 331 Building (such as for purposes of calculating the allocation of costs or responsibilities among the 331 Building and other buildings), the reference shall be adjusted as appropriate to equitably allocate such costs or responsibilities to the 331 Building.
Landlord	Sublandlord (as defined herein)
Lease	Sublease (as defined herein)
Minimum Rental	Base Rent (as defined herein)
Phase II Building(s)	331 Building (as defined herein), provided, that, if it is clear from the context of the applicable use that references to the "Phase II Buildings" should refer to more than just the 331 Building (such as for purposes of calculating the allocation of costs or responsibilities among the 331 Building and other buildings), the reference shall be adjusted as

Defined Term in Master Lease	Definition Under This Sublease
	appropriate to equitably allocate such costs or responsibilities to the 331 Building.
Phase II Rent Commencement Date	Rent Commencement Date (as defined herein)
Property	The Phase II site shown on the Phase II Site Plan attached to the Master Amendment as Exhibit A.
Rent Commencement Date	Rent Commencement Date (as defined herein)
Tenant	Subtenant (as defined herein)
Tenant Improvement Allowance	Allowances (as defined herein)
Tenant Improvements	Subtenant Improvements
Workletter	Subtenant Work Letter

Subtenant acknowledges that it has read the attached copy of the Master Lease and agrees that this Sublease is in all respects subject and subordinate to any mortgage, deed, deed of trust, ground lease or other instrument now or hereafter encumbering the Premises or the land on which it is located to the terms and conditions of the Master Lease and to the matters to which the Master Lease, including any amendments thereto, is or shall be subordinate. Sublandlord agrees that Sublandlord shall not subordinate its interest in the Master Lease to any future ground Lessor, mortgagee, trustee, beneficiary or leaseback lessor without first receiving a Non-Disturbance Agreement in accordance with Section 19.1 of the Master Lease. Sublandlord represents and warrants to Subtenant that (i) the copy of the Original Master Lease and Master Amendment attached hereto as Exhibit A are each true and correct copies, (ii) the Master Lease is in full force and effect, and, to Sublandlord's knowledge, there does not exist any uncured default or event or circumstance which, with the passage of time, would become a default thereunder by either Sublandlord or Master Landlord, and (iii) the expiration date of the Master Lease with respect to the Premises is December 31, 2023. As used herein, the phrase "***to Sublandlord's knowledge"*** or similar phrases will be deemed to refer exclusively to matters (i) of which Sublandlord has received written notice pursuant to the requirements of Section 21.1 of the Master Lease, or (ii) within the current actual (as opposed to constructive or imputed) knowledge of Charles Barry ("***Sublandlord's Representative***"). No duty of inquiry or investigation on the part of Sublandlord or Sublandlord's Representative will be required or implied and in no event shall Sublandlord's Representative have any personal liability therefor.

Notwithstanding anything to the contrary set forth herein:

9.1.1 Sublandlord Has No Duty to Perform Master Landlord's Obligations. Sublandlord shall have no duty to perform any obligations of Master Landlord which are, by their nature, the obligation of an owner or manager of real property, except to the extent that Sublandlord elects to do so pursuant to Section 8 hereof and except for the provision of the Allowances in accordance with Section 10.4.2 hereof. For example, Sublandlord shall not be required to (i) provide services, utilities, repairs, maintenance or other tasks which the Master Landlord is required to provide under the Master Lease, (ii) construct any improvements, (iii) procure or maintain the insurance which the Master Landlord is required to procure and maintain under the Master Lease, (iii) develop or implement the Transportation Demand Management Plan (as defined in the Master Lease) or perform its related obligations and activities, or (iv) provide any non-disturbance protection in connection with any mortgage,

deed, deed of trust, ground lease or other instrument now or hereafter encumbering the Premises. The parties contemplate that Master Landlord will perform such obligations under the Master Lease to the extent required therein and in the event of any default or failure of such performance by Master Landlord, Sublandlord agrees that it will, upon written request from Subtenant detailing the nature of such failure, use good faith, commercially reasonable efforts to cause Master Landlord to perform its obligations under the Master Lease for the benefit of Subtenant, and such good faith, commercially reasonable efforts shall include, without limitation, efforts (i) to cause Master Landlord to perform its obligations under the Master Lease for the benefit of Subtenant, (ii) to obtain, at Subtenant's sole cost and expense, the consent of Master Landlord whenever the consent of Master Landlord is required under the Master Lease, (iii) to make any permitted claims for rent abatement from Master Landlord under the terms of the Master Lease, and (iv) upon Subtenant's written request, to promptly notify Master Landlord of its nonperformance under the Master Lease and request that Master Landlord perform its obligations under the Master Lease. Except as specifically provided in Sections 10.4.2(a) and 13 below, under no circumstances shall Subtenant be entitled to any free rent period, construction allowance, tenant improvements, or any other such economic incentives provided to Sublandlord as set forth in the Master Lease.

9.1.2 Time Periods for Performance; Approvals by Both Master Landlord and Sublandlord. Whenever any provision of the Master Lease specifies a time period in connection with the performance of any liability or obligation by Subtenant or any notice period or other time condition to the exercise of any right or remedy by Sublandlord hereunder, such time period shall be shortened in each instance by three (3) business days for the purposes of incorporation into this Sublease, but in no case shall such period be less than three (3) days or the actual time period for performance set forth in the Master Lease, if shorter. Any default notice or other notice of any obligations (including any billing or invoice for any rent or any other expense or charge due under the Master Lease) from Master Landlord which is received by Subtenant (whether directly or as a result of being forwarded by Sublandlord) shall constitute such notice from Sublandlord to Subtenant under this Sublease without the need for any additional notice from Sublandlord. Whenever any provision of the Master Lease requires Subtenant to pay the costs and expenses of "Landlord," Subtenant shall pay the costs and expenses of both Master Landlord and the costs and expenses of Sublandlord to the extent arising out of this Sublease (other than costs incurred in connection with obtaining Master Landlord's consent hereto, which shall be Sublandlord's responsibility) or Subtenant's use or occupancy of the Premises. Whenever any provision of the Master Lease requires Subtenant to submit evidence, certificates or other documents or materials, Subtenant shall submit such items to both Sublandlord and Master Landlord, and whenever any provision of the Master Lease requires Subtenant to obtain the approval or consent of "Landlord," Subtenant shall be required to obtain the approval or consent of both Sublandlord and Master Landlord; provided however, that if Master Landlord provides such consent, Sublandlord shall not unreasonably withhold, condition or delay consent. In the event of a conflict between the express provisions of this Sublease and the incorporated provisions of the Master Lease, as between Sublandlord and Subtenant, the express provisions of this Sublease shall control.

9.1.3 Subtenant Shall Not Cause a Breach of Master Lease. Subtenant shall not do, permit or suffer any act, occurrence or omission which if done,

permitted or suffered by Sublandlord would be (with notice, the passage of time or both) in violation of or a default by the "Tenant" under the Master Lease or could lead in any respect to the termination of the Master Lease. If Subtenant shall default in the performance of any of its obligations under this Sublease, other than its obligation to pay rent to Sublandlord, Sublandlord, without being under any obligation to do so and without thereby waiving such default, may remedy such default for the account and at the expense of Subtenant, without notice in a case of emergency and, in all other cases, if the default continues after five (5) business days from the date of written notice thereof from Sublandlord. Subtenant shall defend, indemnify and hold Sublandlord harmless from all Claims, including reasonable attorneys' fees and costs, arising out of or in connection with any acts or failures to act by Subtenant, or its agents, employees or contractors that causes Sublandlord to be in a default under the Master Lease or otherwise increases Sublandlord's liability or responsibilities under the Master Lease, provided, that, Subtenant shall not be required to indemnify or defend Sublandlord for any Claims to the extent resulting from the negligence or willful misconduct of Sublandlord.

9.1.4 Sublandlord Shall Not Cause a Breach of the Master Lease, and Shall Not Extend. So long as Subtenant is not in default under this Sublease beyond the expiration of any applicable notice and cure periods, Sublandlord shall fully perform all Sublandlord's covenants, obligations and agreements set forth in the Amended Master Lease (as defined in Section 9.3) (except to the extent they are the corresponding covenants, obligations or agreements of Subtenant hereunder that Subtenant has failed to comply with pursuant to the terms hereof), including without limitation, the payment of rent and all other sums payable by Sublandlord thereunder. Sublandlord further agrees that Sublandlord will not exercise any extension options it may have to extend the term of the Amended Master Lease with respect to the 331 Building only and hereby relinquishes any such right. Master Landlord shall be a third party beneficiary of the previous sentence. In the event (i) Sublandlord defaults in the performance of any of its obligations under this Sublease beyond all applicable notice and cure periods (provided such Sublandlord default under this Sublease is not the result of or caused by Master Landlord's failure to perform Master Landlord's stated obligations under the Master Lease, Master Landlord's default under the Master Lease, or Subtenant's default under the Sublease), and (ii) such default by Sublandlord adversely impacts Subtenant's ability to conduct business in the Premises, then Subtenant shall be entitled to "self-help" as set forth below. In such event, after expiration of the initial notice and cure period, if the default is thereafter continuing and Sublandlord has not commenced to cure such default (within the initial cure period) and is not thereafter diligently prosecuting such cure to completion, Subtenant shall be entitled to deliver a second notice to Sublandlord expressly stating in bold and capitalized text that Subtenant intends to cure such default on Sublandlord's behalf. If Sublandlord fails to commence such repairs within 10 business days after Sublandlord's receipt of Subtenant's second notice and fails thereafter to diligently pursue such repairs to completion, Subtenant shall be entitled to proceed to take such steps as are necessary to cure such Sublandlord default and charge Sublandlord Subtenant's reasonable third party expenses in so doing (including, without limitation, reasonable attorneys' fees and costs), provided, that, Subtenant provides Sublandlord with invoices and evidence of payment for such costs. Notwithstanding the foregoing or anything to the contrary herein, under no circumstances will Subtenant be entitled to perform obligations of Master Landlord under the Master Lease as part of Subtenant's "self-help" rights hereunder, unless otherwise expressly agreed to in writing by Master Landlord (in the Consent or

other written document) and Master Landlord agrees to release Sublandlord from any liability in connection therewith.

9.2 Excluded Provisions. Notwithstanding any provision of this Sublease to the contrary, the following provisions of the Master Lease shall not be incorporated into this Sublease:

Provisions in the Original Master Lease

- Section 1.1(a), except for the definitions of "Improvements" and "Common Areas"
- Section 1.1(c)
- Section 1.2, except as referenced in Section 9.8 of this Sublease.
- Sections 2.1 through 2.6
- Section 3.1(a) through (e)
- Section 5.1
- Section 5.2
- Section 5.3
- Article 6
- Section 9.1 through 9.5, except as referenced in Section 3.3 above
- Unless otherwise agreed by Master Landlord in the Consent, the last portion of the first sentence in Section 11.1 beginning with "except that Tenant shall not be required..."
- The fifth sentence of Section 11.2, beginning with "Tenant shall also be responsible..."
- Section 12.1(b)
- The second sentence of Section 12.2(c)
- Section 14.6
- The second sentence and parenthetical third sentence of Section 19.1
- Article 20
- Section 21.1, except as referenced in Section 10.1 of this Sublease.
- Section21.2
- Section21.3
- Section21.5
- Section21.8
- Section21.9
- Section21.15
- Section21.16
- Section21.17
- Section21.18
- Section21.19
- The fourth sentence (which begins with "The monthly fee") and the last parenthetical sentence of Section 21.20(b)
- Exhibits A, B, C, D and E (in each case except to the extent expressly referenced in any portion of the Master Lease affirmatively incorporated herein)

Provisions in the Master Amendment

- Recitals
- Sections 1(a) through (d), including the paragraph that precedes (a)
- Section 1(e), except as referenced in Section 3.3 of this Sublease.
- Section 1(f)
- Clause (ii) of Section 1(g)
- Section 1(h)
- The second, third and fourth sentences of Section 2
- The first sentence of Section 2(b)
- Section 2(a)
- The first two (2) sentences of Section 2(c)
- Section 2(d)
- Sections 3 through 4
- The last sentence of Section 5
- Sections 6 through 8
- Exhibit B
- Schedule C-l
- Schedule C-2

9.3 Inapplicable Amendments. In addition to the foregoing, Sublandlord confirms that, except for provisions of this Sublease that refer to the Amended Master Lease, the following amendments to the Original Master Lease are inapplicable to the Premises and are not part of the Master Lease for purposes of this Sublease:

(a) First Amendment to Build-to-Suit Lease dated January 22, 2003;

(b) Second Amendment to Build-to-Suit Lease dated March 26, 2004;

(c) Third Amendment to Build-to-Suit Lease dated August 12, 2004;

(d) Fourth Amendment to Build-to-Suit Lease and First Amendment to Workletter dated June 19, 2006;

(e) Sixth Amendment to Build-to-Suit Lease and Third Amendment to Workletter dated November 21, 2006; and

(f) Seventh Amendment to Build-to-Suit Lease and Fourth Amendment to Workletter dated February 21, 2008.

As used in this Sublease, the term "Amended Master Lease" shall mean the Original Master Lease as amended by all amendments thereto (whether on, before or after the date hereof), including the aforementioned inapplicable amendments.

9.4 **Termination Of Master Lease.** If for any reason the term of the Master Lease is terminated prior to the Expiration Date of this Sublease, this Sublease shall thereupon terminate and Sublandlord shall not be liable to Subtenant by reason thereof for damages or otherwise unless and to the extent such termination is due to Sublandlord's default under this Sublease (including, without limitation, a default under Section 9.1.4). In the event of any such early termination, Sublandlord shall return to Subtenant that portion of any rent paid in advance by Subtenant, if any, which is applicable to the period following the date of such termination. Notwithstanding the foregoing, so long as Subtenant is not in default after the expiration of applicable notice and cure periods hereunder, Sublandlord agrees that, except in the event of a casualty or condemnation where Sublandlord is entitled under this Sublease to terminate the Master Lease with respect to the Premises, Sublandlord shall not voluntarily terminate the Master Lease with respect to the Premises without Subtenant's consent, in its sole discretion, unless Master Landlord agrees to recognize this Sublease as a direct agreement with Subtenant upon substantially the same terms set forth in this Sublease, or Subtenant otherwise has the right to continue to occupy the Premises pursuant to a direct agreement with Master Landlord upon terms satisfactory to Subtenant, in its sole discretion. Nothing herein shall prevent Sublandlord from terminating the Master Lease with respect to spaces other than the Premises leased by Sublandlord thereunder. Sublandlord agrees not to modify the Master Lease in any manner that affects the Premises or Subtenant's rights or obligations under the Master Lease, without obtaining Subtenant's prior written consent, to be provided in Subtenant's sole discretion.

9.5 **Holding Over.** If Subtenant holds possession of the Premises or any portion thereof after the expiration or earlier termination of this Sublease, then Subtenant shall become a tenant at sufferance only, at a sublease base rental rate equal to one hundred fifty percent (150%) of the Base Rent in effect upon the date of such expiration or termination, plus all additional rent payable by Subtenant hereunder (pro-rated on a daily basis) (such amounts, collectively, the "***Holdover Rent Payments").*** Acceptance by Sublandlord of rent after such expiration or termination date shall not result in a renewal of this Sublease and shall not waive or modify Sublandlord's rights to pursue any and all legal remedies available to Sublandlord under applicable law with respect to such holding over by Subtenant. It is acknowledged that if Subtenant holds over after the expiration or earlier termination of this Sublease, Sublandlord may be subject to holdover rent with respect to the Premises under the Master Lease. Accordingly, (i) Sublandlord expressly reserves the right to require Subtenant to surrender possession of the Premises upon the expiration of the Term or upon the earlier termination hereof and the right to assert any remedy at law or in equity to evict Subtenant and/or collect damages in connection with any such holding over, and (ii) Subtenant shall indemnify, defend and hold Sublandlord harmless from and against any and all Claims, including, without limitation, attorneys' fees incurred or suffered by Sublandlord by reason of Subtenant's failure to surrender the Premises on the expiration or earlier termination of this Sublease in accordance with the provisions of this Sublease (including, without limitation, the cost of all rent payable by Sublandlord with respect to the Premises under the Master Lease caused by or resulting from Subtenant's holdover) to the extent greater than the Holdover Rent Payments, unless Subtenant has vacated the Premises in accordance with the terms hereof and such holdover rent with respect to the Premises is due to the negligence or willful misconduct of Sublandlord. Notwithstanding the foregoing, Subtenant shall be entitled to make separate arrangements with Master Landlord permitting Subtenant to

remain in the Premises after expiration of the Term, provided, that, (a) Sublandlord is released from its obligation to surrender the Premises to Master Landlord under the terms of the Master Lease, and (b) the Master Lease terminates with respect to the Premises for all purposes on the Expiration Date.

9.6 Compliance with Law. Subtenant warrants to Sublandlord that the Subtenant Improvements (as defined below) and any other improvements constructed by Subtenant on the Premises from time to time shall not violate any applicable law, building code, regulations or ordinance in effect on the Rent Commencement Date or at the time such improvements are placed in service. If it is determined that such warranty has been violated, then Subtenant shall, upon written notice from Sublandlord, promptly correct such violation, at Subtenant's sole cost and expense. Subtenant acknowledges that neither Sublandlord nor any agent of Sublandlord has made any representation or warranty as to the present of future suitability of the Premises for the conduct of Subtenant's business or proposed business therein.

9.7 Definitions. Subject to the Incorporation Provisions, the definitions of "***Improvements"*** and "***Common Areas"*** set forth in Section 1.1(a) of the Original Master Lease are hereby incorporated by reference; provided however, that the phrase "in the Center" of the definition of "***Common Areas"*** is hereby deleted and replaced with "on the Property".

9.8 Use of Common Areas. Subject to the Incorporation Provisions, Section 1.1(b) of the Original Master Lease is hereby incorporated by reference; provided however, that the phrase "pursuant to Section 1.1(a)" is hereby deleted therefrom. Subtenant acknowledges Master Landlord's reserved rights set forth in Section 1.2 of the Original Master Lease.

9.9 Personal Property. Subject to the Incorporation Provisions, Section 8.1 of the Original Master Lease is hereby incorporated by reference.

9.10 Real Property. Subject to the Incorporation Provisions, Section 8.2 of the Original Master Lease is hereby incorporated by reference.

9.11 Utilities. Subject to the Incorporation Provisions, Section 10.1 of the Original Master Lease are hereby incorporated by reference; provided however, that the phrases "and, in the case of the Phase II Building, to Tenant's premises in such Building" and "(or, in the case of the Phase II Building, are not separately metered to Tenant's premises in that Building)" are hereby deleted in their entirety.

9.12 Alterations; Surrender Obligations. Subject to the Incorporation Provisions, Sections 11.1 through 11.4 of the Original Master Lease are hereby incorporated by reference, except for (i) the last portion of the first sentence in Section 11.1, as amended by Section 1(h) of the Master Amendment (beginning with "except that (i) subject to the final sentence...") and (ii) the fifth sentence of Section 11.2 (which begins with "Tenant shall also be responsible"). Notwithstanding the foregoing, the language excluded by clause (i) above shall not be excluded and shall be deemed to be incorporated into this Sublease, if Master Landlord

consents to Subtenant having the rights to perform certain alterations, additions or improvements without consent as set forth therein. Further, notwithstanding anything to the contrary herein, Subtenant's removal and restoration obligations hereunder shall include any removal and restoration obligations of Sublandlord under the Master Lease with respect to the Premise (including, without limitation, removal and restoration obligations with respect to improvements installed by Sublandlord prior to this Sublease if so required), provided, that, if Subtenant enters into a direct lease of the Premises with the Master Landlord commencing immediately upon termination of the Master Lease and Sublandlord is fully released from any obligations with respect to the surrender condition of the Premises under the Master Lease, Sublandlord agrees that Subtenant shall not be obligated under this Sublease to complete any removal or restoration as required under the Master Lease. Further, Sublandlord agrees to cooperate with Subtenant's efforts to obtain a confirmation from Master Landlord in the Consent that neither Subtenant nor Sublandlord will be required to remove Subtenant's Improvements upon expiration or earlier termination of the Master Lease. Subtenant shall not be required to remove any alterations or improvements made by or for the account of Sublandlord unless the Master Landlord requires the removal of the same. Sublandlord shall not require Subtenant to perform Subtenant Improvements on all floors of the Premises if a corresponding obligation is not otherwise required of Sublandlord under the Master Lease.

9.13 Maintenance and Repairs. Subject to the Incorporation Provisions, Section 12.1(a) and Section 12.2 of the Original Master Lease are hereby incorporated by reference, except for (i) the phrase "pursuant to the indemnification provided in Section 14.6 hereof of Section 12.1(a), (ii) the phrase ", except to the extent expressly set forth in Section 12.1(b)," of Section 12.1(a), (iii) the phrase "(from and after the applicable Rent Commencement Date for each Phase I Building and for each phase of the Phase II Building)" of Section 12.2(a), (iv) the last proviso of Section 12.2(a) beginning with "provided, however, that (x) Tenant's ordinary repair obligation...", and (v) the second sentence of Section 12.2(c).

9.14 Use; No Nuisance, Compliance with Laws, Liquidation Sales, & Environmental Matters. Subject to the Incorporation Provisions, Sections 13.1 through 13.6 of the Original Master Lease are hereby incorporated by reference; provided however, that notwithstanding anything to the contrary contained in this Sublease, under no circumstances shall Subtenant ever have any responsibility for any breach or default of these provisions existing on or prior to the date of this Sublease or first arising after the expiration of the Term (unless actually caused by Subtenant); further provided, that (i) the reference to "Landlord" in the first line of Section 13.4(b) hereby refers to Master Landlord, (ii) the reference to "14.6" in the last line of Section 13.6(b)(xi) is hereby deleted, and (iii) Section 13.6(d) is hereby deleted in its entirety.

9.15 Insurance. Subject to the Incorporation Provisions, Sections 14.1 through 14.5 of the Original Master Lease and Section 14.7 of the Original Master Lease are hereby incorporated by reference, except the phrase "by Landlord and Tenant under Section 5.1 of the Workletter" in the first sentence shall be deemed to be replaced by the phrase "by Subtenant under the Subtenant Work Letter." Without limiting the generality of the foregoing, Subtenant acknowledges and agrees that Subtenant shall carry the same insurance that Sublandlord is obligated to carry under the Original Master Lease, provided however, that

Subtenant shall name Subtenant, Sublandlord and Master Landlord (and any other third parties identified by Sublandlord or Master Landlord in accordance with the terms of the Master Lease) as insureds or additional insureds under such insurance policies as their interests may appear.

9.16 Sublease and Assignment. Subject to the Incorporation Provisions, Article 15, as amended by Section l(i) of the Master Amendment, is hereby incorporated by reference and shall govern any such assignment or subletting, except as set forth in this Section 9.16. Subtenant shall not voluntarily or involuntarily, by operation of law or otherwise, assign, sublet, mortgage or otherwise encumber all or any portion of its interest in this Sublease or in the Premises without obtaining the prior written consent of Sublandlord and Master Landlord with respect thereto. So long as Master Landlord's consent is obtained, Sublandlord shall not unreasonably withhold, condition, or delay its consent to any proposed assignment or sublease; provided, however, that Sublandlord or Master Landlord, as the case may be, may require as a condition of granting any such consent that (i) the proposed transferee demonstrate that its financial resources and tangible net worth are at least equal to Subtenant's financial resources and tangible net worth as of the Effective Date, (ii) the nature of the transferee's proposed use of the Premises and the transferee's reputation shall be reasonably satisfactory to Sublandlord and (ii) Subtenant reaffirms, in form satisfactory to Sublandlord, its continuing liability under this Sublease. Notwithstanding the foregoing, Sublandlord confirms that Subtenant is entitled to complete a Permitted Transfer (as defined in Section 15.1 of the Original Master Lease) without Sublandlord's consent, but with prior or concurrent notice by Subtenant to Sublandlord (a "***Subtenant Permitted Transfer***"). It is acknowledged, however, that, unless and to the extent agreed otherwise in the Consent or other separate agreement between Subtenant and Master Landlord, Subtenant shall be required to obtain Master Landlord's consent to any Subtenant Permitted Transfer. Any assignment, subletting, mortgage or other encumbrance attempted by Subtenant to which Sublandlord and/or Master Landlord has not consented in writing pursuant to the provisions hereof (unless such consent is not required) shall be null and void and of no effect. Sublandlord hereby agrees to reimburse Master Landlord at its own expense for any fees due to Master Landlord under the Master Lease in connection with the subletting of the Premises to Subtenant.

9.17 Right of Entry and Quiet Enjoyment. Subject to the Incorporation Provisions, Article 16 of the Original Master Lease is hereby incorporated by reference.

9.18 Casualty and Taking. Subject to the Incorporation Provisions, Article 17 of the Original Master Lease is hereby incorporated by reference, provided, that, Sublandlord shall have no right to terminate this Sublease as a result of damage, destruction or taking, unless (i) such damage, destruction or taking affects the 331 Building, and is of such a magnitude that the Sublandlord has the right to terminate the Master Lease with respect to the 331 Building as a result, provided, that, Sublandlord shall not exercise such termination right with respect to the 331 Building (subject to clause (ii) below) if Subtenant certifies to Sublandlord in writing that Subtenant will fully perform and indemnify Sublandlord for all restoration obligations of Sublandlord under the Master Lease with respect to the 331 Building and can reasonably demonstrate to Sublandlord that Subtenant has the financial ability to perform such restoration; or (ii) the damage, destruction or taking (A) affects spaces other than

the 331 Building which are leased by Sublandlord under the Master Lease, (B)is of such magnitude that Sublandlord has the right to terminate the Master Lease, and (C) Sublandlord is not entitled to terminate the Master Lease with respect to the affected spaces without also terminating the Lease with respect to the331 Building.

9.19 Default. Subject to the Incorporation Provisions, Article 18 of the Original Master Lease is hereby incorporated by reference.

9.20 Subordination. Subject to the Incorporation Provisions (except as provided below), Section 19.1 of the Original Master Lease is hereby incorporated by reference, except for the second and parenthetical third sentence. Notwithstanding anything to the contrary in the Incorporation Provisions, it is acknowledged and agreed that references in Section 19.1 of the Original Master Lease to any assignee, ground lessor, mortgagee, trustee, beneficiary or sale/leaseback lessor or other party with an interest in the Buildings, the Property, the Center or any of them, are deemed to be references to Master Landlord's (as opposed to Sublandlord's) assignee, ground lessor, mortgagee, trustee, beneficiary or sale/leaseback lessor.

9.21 Sale of Sublandlord's Interest. Subject to the Incorporation Provisions, Section 19.2 of the Original Master Lease is hereby incorporated by reference, provided however, that, (i) references to "interest in the Buildings and the Property" are hereby deemed to be references to "interest in the Master Lease," and (ii) the phrase ", except as otherwise expressly provided in Section 21.2 hereof is hereby deleted.

9.22 Estoppel Certificate. Subject to the Incorporation Provisions, Section 19.3 of the Original Master Lease is hereby incorporated by reference, provided however, that, notwithstanding anything to the contrary in the Incorporation Provisions, references therein to the term "Landlord" shall be deemed to refer to both Master Landlord and Sublandlord.

9.23 Subordination to CC&Rs. Subject to the Incorporation Provisions, Section 19.4 of the Original Master Lease is hereby incorporated by reference, provided however that (i) references to "sublease" therein are hereby replaced with "sub-sublease", (ii) the phrase "(including any buildings occupied by or leased to Tenant pursuant to Tenant's exercise of any of the rights contained in Article 6 of this Lease)" therein is hereby deleted, and (iii) the phrase "or, if Tenant exercises its rights under Section 6.3 of this Lease, on the Expansion Property" therein is hereby deleted.

9.24 Mortgagee Protection. Subject to the Incorporation Provisions, Section 19.5 of the Original Master Lease is hereby incorporated by reference, provided that, notwithstanding anything to the contrary in the Incorporation Provisions, references therein to the term "Landlord" are hereby deemed to refer to Master Landlord.

9.25 Severability. Subject to the Incorporation Provisions, Section 21.4 of the Original Master Lease is hereby incorporated by reference.

9.26 Surrender; No Merger. Subject to the Incorporation Provisions, Section 21.6 of the Original Master Lease is hereby incorporated by reference.

9.27 Interpretation. Subject to the Incorporation Provisions, Section 21.7 of the Original Master Lease is hereby incorporated by reference.

9.28 No Partnership. Subject to the Incorporation Provisions, Section 21.10 of the Original Master Lease is hereby incorporated by reference.

9.29 Financial Information. Subject to the Incorporation Provisions, Section 21.11 of the Original Master Lease is hereby incorporated by reference. Notwithstanding the foregoing, Subtenant confirms that, as of the date hereof, Sublandlord may access true, correct and complete, consolidated financial statements for Guarantor at www.prothena.com. Notwithstanding anything to the contrary contained herein or in the Master Lease, Sublandlord agrees that, so long as Guarantor's financial statements are consolidated and that Guarantor's consolidated group for accounting purposes includes Subtenant, then for purposes of this Sublease: (i) Subtenant shall not be obligated to deliver financial statements to Sublandlord pursuant to the terms of this Section 9.29 if Guarantor's consolidated financial statements continue to be publicly available on the website referenced above or are otherwise publicly available and fully accessible on the Securities and Exchange Commission website, and (ii) if such consolidated financial statements are no longer publicly available, as referenced in clause (i) above, Subtenant may satisfy the requirements of this Section 9.29 (and Section 21.11 of the Original Master Lease as incorporated herein) by delivering, or causing Guarantor to deliver, consolidated financial statements for Guarantor.

9.30 Costs. Subject to the Incorporation Provisions, Section 21.12 of the Original Master Lease is hereby incorporated by reference.

9.31 Time. Subject to the Incorporation Provisions, Section 21.13 of the Original Master Lease is hereby incorporated by reference.

9.32 Rules and Regulations. Subject to the Incorporation Provisions, Section 21.14 of the Original Master Lease is hereby incorporated by reference.

9.33 Parking and Traffic. Subject to the Incorporation Provisions, Section 21.20 of the Original Master Lease (as amended by Section 1(g) of the Master Amendment) is hereby incorporated by reference, except for the following provisions which require payment of a monthly fee for parking: (A) the fourth sentence of Section 21.20(b) of the Original Master Lease, which begins with the phrase "The monthly fee", (B) the last parenthetical sentence of Section 21.20(b) of the Original Master Lease, and (C) clause (ii) of Section 1(g) of the Master Amendment. Without limiting the generality of the Incorporation Provisions, it is acknowledged that the TDMP program and the administration and management thereof are obligations of the Master Landlord and Sublandlord shall have no responsibility with respect thereto.

9.34 Site Plan. Subject to the Incorporation Provisions, the Site Plan attached to the Master Amendment as Exhibit A is hereby incorporated by reference.

10. Additional Provisions.

10.1 Notices. In the event that (i) Sublandlord or Subtenant shall receive any notice or documentation from Master Landlord for any reason pertaining to the Premises or this Sublease (it being agreed that Sublandlord has no obligation to deliver to Subtenant notices under the Master Lease that relate solely to spaces other than the Premises leased by Sublandlord under the Master Lease, unless such notice could adversely impact Subtenant's rights or obligations hereunder [such as a notice of Sublandlord's breach or default under the Amended Master Lease]), or (ii) Sublandlord or Subtenant send any notice or documentation to Master Landlord for any reason pertaining to the Premises or this Sublease (it being agreed that Sublandlord has no obligation to deliver to Subtenant notices to Master Landlord under the Master Lease that relate solely to spaces other than the Premises leased by Sublandlord under the Master Lease, unless such notice could adversely impact Subtenant's rights or obligations hereunder [such as a notice of Master Landlord's breach or default under the Amended Master Lease]), then, within three (3) business days from the date of such receipt or delivery (as applicable), such party shall send a copy of such notice or document to the other party. All notices, demands, consents and approvals which may or are required to be given by either party to the other hereunder shall be given in the manner provided in Section 21.1 of the Original Master Lease at the addresses shown below (or such other addresses as the parties may designate in writing and delivered in compliance with this Section 10.1). Subject to the Consent, notices to the Master Landlord shall be given in accordance with Section 21.1 of the Master Lease.

Notices To Sublandlord:	Amgen Inc. One Amgen Center Drive Mail Stop: 28-1-A Thousand Oaks, CA 91320-1799 Attention: Corporate Real Estate
With a copy to:	Amgen Inc. One Amgen Center Drive Mail Stop: 35-2-A Thousand Oaks, CA 91320-1799 Attention: Operations Law Group
Notices to Subtenant:	Prothena Biosciences Inc 650 Gateway Boulevard South San Francisco, CA 94080 Attention: Chief Financial Officer
With a Copy to:	Prothena Biosciences Inc 650 Gateway Boulevard South San Francisco, CA 94080 Attention: Chief Legal Officer

10.2 [Intentionally Omitted]

10.3 [Intentionally Omitted]

10.4 **Subtenant Improvements.**

10.4.1 **Alterations and Improvements By Subtenant.**

(a) **Subtenant Improvements.** Subtenant shall be entitled to construct tenant improvements in the Premises (the "***Subtenant Improvements***"), including reasonable security measures for the Premises, subject to and in accordance with the terms of that certain Subtenant Work Letter to be attached to the Consent (which is expressly incorporated herein by this reference) (the "***Subtenant Work Letter***") and the terms of the Master Lease and this Sublease. All approval rights of Master Landlord and Sublandlord with respect to the Subtenant Improvements shall be governed by the terms of the Subtenant Work Letter. Subtenant shall be solely responsible for paying any management or supervisory fee or reimbursement requests charged by Master Landlord in connection with the Subtenant Improvements (collectively, the "***Master Landlord Fees***") in accordance with the terms of the Master Lease and the Subtenant Work Letter. Sublandlord confirms that Sublandlord shall not charge Subtenant any construction management fee or supervisory fees (other than passing through the Master Landlord Fees). However, Subtenant shall be obligated to reimburse Sublandlord for any actual and reasonable third party out-of-pocket costs incurred by Sublandlord in connection with reviewing and approving Subtenant's plans and specifications promptly upon request. Subject to the terms of the Master Lease, the Subtenant Work Letter, and Sublandlord's prior written approval, which shall not be unreasonably withheld, conditioned or delayed, Subtenant shall be entitled to use its own architects and contractors for the purpose of completing the Subtenant Improvements.

(b) **No Liens.** Should a lien be made or filed against the Premises or real property on which the Premises are situated as a result of the construction of any Subtenant Improvements (or any other alterations or actions by Subtenant or its agents, employees or contractors), Subtenant at its sole cost, shall bond against or discharge said lien within ten (10) business days after Sublandlord's or Master Landlord's request to do so. If Subtenant fails to do so, Master Landlord and Sublandlord shall each have the right (but not the obligation) to obtain the release or discharge of the lien and Subtenant shall, within fifteen (15) days after written demand by Master Landlord or Sublandlord (as applicable, and accompanied by reasonable documentation of the items claimed), reimburse Master Landlord or Sublandlord for all costs, including (but not limited to) reasonable attorneys' fees, incurred by Master Landlord or Sublandlord (as the case may be) in obtaining the release or discharge of such lien, together with interest from the date of demand at the interest rate set forth in Section 3.2 of the Original Lease.

(c) **Incorporation of Master Amendment Provisions**. Subject to the Subtenant Work Letter and the Incorporation Provisions, Section 2 of the Master Amendment is hereby incorporated by reference, but expressly excluding (i) the second, third and fourth sentences of Section 2 of the Master Amendment, (ii) Section 2(a) of the Master

Amendment, (iii) the first sentence of Section 2(b) of the Master Amendment, (iv) the first two sentences of Section 2(c) of the Master Amendment, and (v) Section 2(d) of the Master Amendment.

10.4.2 Allowances. Subtenant shall construct the Subtenant Improvements in accordance with the terms hereof and the Subtenant Work Letter, at Subtenant's cost, provided, that, Subtenant shall be entitled to apply the Master Lease Allowance (as defined below) and the Sublandlord Allowance (defined below and, collectively with the Master Lease Allowance, the "***Allowances***") to Subtenant's costs and expenses to construct the Subtenant Improvements, as more particularly set forth in this Section 10.4.2.

(a) **Master Lease Allowance.** Sublandlord confirms and represents that it has not used approximately Two Million Two Hundred Four Thousand Eight Hundred Thirty and No/100 Dollars ($2,204,830.00) of the allowance funds available to Sublandlord under the Master Lease with respect to the Premises (the "***Master Lease Allowance***") from Master Landlord. Subject to the terms of the Master Lease, and the terms of the Subtenant Work Letter, Sublandlord agrees to provide Subtenant with the benefit of the Master Lease Allowance to apply towards Subtenant's costs of completing the Subtenant Improvements as permitted under the terms of the Master Lease. Sublandlord shall disburse the Master Lease Allowance in accordance with the Disbursement Procedures set forth in Section 10.4.3(a) below.

(b) **Sublandlord Allowance.** In addition to the Master Lease Allowance, Sublandlord shall provide Subtenant with an improvement allowance equal to Eleven Million Nine Hundred Fifty-Eight Thousand Three Hundred Ninety Two and 88/100 Dollars ($11,958,392.88) (the "***SublandlordAttowance***").

(c) **Use of Allowances.** Subtenant shall be entitled to apply the Master Lease Allowance (subject to the terms of the Master Lease) and the Sublandlord Allowance to hard and soft costs incurred by Subtenant to construct the Subtenant Improvements and to prepare for Subtenant's occupancy to the Premises, including, without limitation, all architectural and engineering services, project management, design supervision and construction management fees, moving expenses, costs and expenses to acquire and install security systems, furniture, fixtures and equipment, permitting fees, signage, and data/telephone cabling. Sublandlord shall disburse the Allowances in accordance with the Disbursement Procedures set forth in Section 10.4.3 below.

10.4.3 Disbursement Procedures. Subtenant acknowledges and agrees that its requests for disbursements of the Allowances in connection with the Subtenant Improvements will, to the extent possible, be allocated first to the Master Lease Allowance and then to the Sublandlord Allowance.

(a) Disbursement of Master Lease Allowance. With respect to distribution of the Master Lease Allowance, Sublandlord shall disburse such payment to Subtenant not more than once per month, within forty-five (45) days after receipt by Sublandlord from Subtenant of the Disbursement Documentation (as defined below), as well as any other

information required by Master Landlord for disbursement of the Master Lease Allowance. Sublandlord shall be entitled to rely on the accuracy of any and all invoices, fee statements and lien waivers for labor and materials performed on or furnished to the Premises in connection with the Subtenant Improvements and to rely, to the extent submitted, on any and all certifications as to the cost of the improvement submitted by Subtenant's general contractor or architect. In addition, Sublandlord shall have the option and right to inspect all Subtenant Improvements prior to any disbursement of the Master Lease Allowance, provided that such inspections shall be completed expeditiously. Subtenant acknowledges that, although Sublandlord is disbursing the Master Lease Allowance directly to Subtenant in accordance with the terms hereof, Sublandlord is doing so with the intent of seeking reimbursement of the disbursed amounts from Master Landlord out of the Master Lease Allowance in accordance with the terms of the Master Lease and the Subtenant Work Letter. Accordingly, Subtenant agrees to cooperate fully with Sublandlord's efforts to receive such reimbursement from Master Landlord, including, without, limitation, by providing Sublandlord with such documentation or other information related to the Subtenant Improvements as may be requested by Master Landlord with respect thereto promptly upon request.

(b) Disbursement of Sublandlord Allowance. With respect to Sublandlord's contribution obligations for the Sublandlord Allowance, Sublandlord shall disburse such payment to Subtenant not more than once per month, within forty-five (45) days after receipt by Sublandlord from Subtenant of: (i) an invoice from Subtenant for such costs; (ii) copies of all underlying invoices showing such costs; (iii) executed contract waivers and/or mechanic's lien releases with respect to any portion of the Subtenant Improvements then constructed or completed; and (iv) such other information reasonably requested by Sublandlord (the "***Disbursement Documentation***"). Sublandlord shall be entitled to rely on the accuracy of any and all invoices, fee statements and lien waivers for labor and materials performed on or furnished to the Premises in connection with the Subtenant Improvements and to rely, to the extent submitted, on any and all certifications as to the cost of the improvement submitted by Subtenant's general contractor or architect. In addition, Sublandlord shall have the option and right to inspect all Subtenant Improvements prior to any disbursement of the Sublandlord Allowance, provided that such inspections shall be completed expeditiously.

(c) **No Default.** Sublandlord shall have no obligation to disburse the Allowances to Subtenant during any periods in which Subtenant is in default under this Sublease beyond any applicable notice and cure periods.

10.5 Removal of Personal Property. All articles of personal property, and all business and trade fixtures, machinery and equipment (installed by Subtenant and that can be removed without damage to the 331 Building or negatively impacting building systems unless Subtenant repairs any such damage or mitigates any negative impact), cabinet work, furniture and movable partitions (collectively, the "***Subtenant's Property***"), if any, owned or installed by Subtenant at its expense in the Premises shall be and remain the property of Subtenant and may be removed by Subtenant at any time, provided that Subtenant, at its expense, shall repair any damage to the Premises caused by such removal or by the original installation. Notwithstanding the foregoing, Subtenant acknowledges and agrees that, pursuant to Section 11.3 of the Original Master Lease, removal of any trade fixtures which are affixed to the 331

Building or the property or which affect the exterior or structural portions of the 331 Building shall require Master Landlord's prior written approval as and to the extent set forth in the Original Master Lease. Notwithstanding the foregoing, (i) if Master Landlord approves removal of any such trade fixtures, Sublandlord shall not unreasonably withhold, condition or delay Sublandlord's approval, and (ii) should the Consent include a list of a trade fixtures which Subtenant shall be allowed to remove from the Premises, then (A) Sublandlord agrees that, subject to the terms of the Consent (and so long as Sublandlord is released by Master Landlord from any obligation or responsibility with respect thereto), it will not have any approval rights in connection therewith, and (B) Sublandlord shall be deemed to have to consented to the removal of any trade fixtures approved by Master Landlord in accordance with the terms of the Consent. Subtenant shall remove all or any part of the aforementioned property at the expiration or sooner termination of this Sublease and repair any damage caused by such removal and/or installation, all at Subtenant's expense, and shall otherwise leave the Premises in broom-clean condition in compliance with the terms of Section 12.2(c) of the Master Lease (as incorporated herein). Any articles of personal property, or all business and trade fixtures, machinery and equipment, cabinet work, furniture and movable partitions provided by Sublandlord shall remain the property of Sublandlord, and Subtenant shall not remove any of them from the Premises without the prior written consent of Sublandlord.

10.6 Waiver. The waiver of either party of any agreement, condition or provision contained herein or any provision incorporated herein by reference shall not be deemed to be a waiver of any subsequent breach of the same or any other agreement, condition or provision, nor shall any custom or practice which may evolve between the parties in the administration of the terms hereof be construed to waive or to lessen the right of a party to insist upon the performance by the other party in strict accordance with said terms. The subsequent acceptance of Rent hereunder by Sublandlord shall not be deemed to be a waiver of any preceding breach by Subtenant of any agreement or condition of this Sublease or the same incorporated herein by reference, other than the failure of Subtenant to pay the particular Rent so accepted, regardless of Sublandlord's knowledge of such preceding breach at the time of acceptance of such Rent.

10.7 Complete Agreement. Except for the Consent and that certain Confidential Disclosure Agreement by and between Subtenant and Sublandlord dated as of October 16, 2015 (the "***Confidentiality Agreement***"), this written Sublease, together with all exhibits hereto, contains all the representations and the entire understanding between the parties hereto with respect to the subject matter hereof. There are no oral agreements between Sublandlord and Subtenant affecting this Sublease, and this Sublease supersedes and cancels any and all previous negotiations, arrangements, brochures, agreements and understandings, if any, between Sublandlord and Subtenant or displayed by Sublandlord, its agents or real estate brokers to Subtenant with respect to the subject matter of this Sublease, the Premises or the 331 Building. There are no representations between Sublandlord and Subtenant other than those contained in or incorporated by reference into this Sublease.

11. Indemnification; Exculpation

11.1 Non-Liability Of Sublandlord. Sublandlord shall not be liable to Subtenant, and Subtenant hereby waives and releases all Claims against Sublandlord and its partners, officers, directors, employees, trustees, successors, assigns, agents, servants, affiliates, representatives, and contractors (collectively, herein "***Sublandlord Affiliates***") for injury or damage to any person or property occurring or incurred in connection with the use of the Premises by Subtenant or any invitees, sub-sublessees, licensees, assignees, agents, employees or contractors of Subtenant. Without limiting the foregoing, neither Sublandlord nor any of the Sublandlord Affiliates shall be liable for and there shall be no abatement of Rent for (i) any damage to Subtenant's property stored with or entrusted to Sublandlord or Sublandlord Affiliates, or (ii) loss of or damage to any property by theft or any other wrongful or illegal act, or (iii) any injury or damage to persons or property resulting from fire, explosion, falling plaster, steam, gas, electricity, water or rain which may leak from any part of the Premises or from the pipes, appliances, appurtenances or plumbing works therein or from the roof, street or sub- surface or from any other place or resulting from dampness or any other cause whatsoever or from the acts or omissions of other sublessees, occupants or other visitors to the Premises or from any other cause whatsoever, or (iv) any latent or other defect in the Premises. Notwithstanding anything to the contrary set forth herein or in the Master Lease, (i) the waivers of liability contained in this Section 11.1 shall not apply to Claims for bodily injury or death or damage to property to the extent resulting from the negligence or willful misconduct of Sublandlord or its agents, employees or contractors; and (ii) in no event shall Sublandlord ever be liable to Subtenant for (and Subtenant hereby waives any right to recover from Sublandlord for) any lost profits, business interruption or any form of consequential, special or punitive damages.

11.2 Non-Liability of Subtenant. Subtenant shall not be liable to Sublandlord, and Sublandlord hereby waives and releases all Claims against Subtenant and its partners, officers, directors, employees, trustees, successors, assigns, agents, servants, affiliates, representatives, and contractors (collectively, herein "***Subtenant Affiliates***") for injury or damage to any person or property to the extent resulting from negligence or willful misconduct or negligent omission by Sublandlord or its agents, employees or contractors (exclusive of that resulting from the negligence or willful misconduct or negligent omission by Subtenant or its agents, employees or contractors). Notwithstanding anything to the contrary set forth herein or in the Master Lease, in no event shall Subtenant ever be liable to Sublandlord for (and Sublandlord hereby waives any right to recover from Subtenant for) any lost profits, business interruption or any form of consequential, special or punitive damages, except arising out of a holdover by Subtenant after expiration or earlier termination of the Sublease, as described in Section 9.5 hereof.

11.3 Indemnification of Sublandlord; Indemnification of Master Landlord. Subtenant shall indemnify, defend, protect and hold Sublandlord, Master Landlord's managing agent, Master Landlord and their respective members, partners, shareholders, officers, directors, agents, employees and contractors (collectively, the "***Indemnified Parties***"), harmless from and against any and all liability for all Claims, including, without limitation, reasonable attorneys' fees and costs, incurred by Sublandlord or asserted against Sublandlord and occurring

within the Premises or arising in connection with (i) the use of, or activities in or about, the Premises (including, without limitation, the use, occupancy and enjoyment of the Property) by Subtenant or any invitees, sublessees, licensees, assignees, agents, employees or contractors of Subtenant or holding under Subtenant, (ii) the act, negligence, fault or omission of Subtenant, its agents, servants, contractors, employees, representatives, licensees or invitees, or (iii) Subtenant's actions under this Sublease, including, without limitation, Claims arising out of Subtenant bringing Food Vendors on the Property or Subtenant's direct communications with Master Landlord. Notwithstanding any provision of this Section 11.3 to the contrary, the indemnification contained in this Section 11.3 shall not apply to Claims to the extent resulting from the negligence or willful misconduct or negligent omission of the party claiming indemnification or its agents, employees or contractors. Subtenant will give Sublandlord prompt notice of any casualty or accident in, on or about the Premises. The provisions of this Section 11.3 shall survive the expiration or earlier termination of this Sublease.

11.4 Indemnification of Subtenant. Sublandlord shall indemnify, defend and hold Subtenant and its members, partners, shareholders, officers, directors, agents, employees and contractors harmless from and against any and all liability for all Claims, including, without limitation, reasonable attorneys' fees and costs, incurred by Subtenant or asserted against Subtenant to the extent arising out of the negligence or willful misconduct or negligent omission by Sublandlord or its agents, employees or contractors. Notwithstanding any provision of this Section 11.4 to the contrary, the indemnification contained in this Section 11.4 shall not apply to Claims to the extent resulting from the negligence or willful misconduct or negligent omission of the party claiming indemnification or its agents, employees or contractors. The provisions of this Section 11.4 shall survive the expiration or earlier termination of this Sublease.

11.5 Master Landlord Default; Refusal of Consents. Notwithstanding any provision of this Sublease to the contrary, but subject to Sections 9.1.1. 9.1.3 and 9.1.4 above, (a) Sublandlord shall not be liable or responsible in any way for any loss, damage, cost, expense, obligation or liability suffered by Subtenant by reason or as the result of any breach, default or failure to perform by the Master Landlord under the Master Lease (provided the same do not arise from the failure of Sublandlord to perform Sublandlord's covenants, agreements, terms, provisions or conditions set forth in the Master Lease or Subtenant's failure to perform Subtenant's covenants, agreements, terms, provisions or conditions set forth in this Sublease), including without limitation, in any case where services, utilities, repairs, maintenance or other performance is to be rendered by Master Landlord with respect to the Premises under the Master Lease and Master Landlord either fails to do so or does so in an improper, negligent, inadequate or otherwise defective manner, and (b) if Master Landlord refuses to grant Subtenant its consent or approval for any action or circumstances requiring Master Landlord's approval, Sublandlord shall be released from any obligation to grant its consent or approval with respect thereto.

12. Letter of Credit.

12.1 Letter of Credit Issuance; Amount. Within ten (10) business days after the execution and delivery of this Sublease and the Consent, Subtenant shall deliver to

Sublandlord, as collateral for the full and faithful performance by Subtenant of all of its obligations under this Sublease, an irrevocable and unconditional negotiable standby letter of credit (the "***Letter of Credit***"), in the form attached hereto as Exhibit D (or in such other form meeting similar criteria as Sublandlord may approve in Sublandlord's reasonable discretion) and containing the terms required herein, payable at a location that is in San Mateo County or San Francisco County, State of California (or other location as Sublandlord may approve in Sublandlord's reasonable discretion), running in favor of Sublandlord issued by a solvent, nationally recognized commercial bank (the "***Bank***") that is (1) is chartered under the laws of the United States, any State thereof or the District of Columbia, and which is insured by the Federal Deposit Insurance Corporation; and (2) has a long term rating of BBB or higher as rated by Moody's Investors Service and/or A- or higher as rated by Standard & Poor's, and/or Fitch Ratings Ltd. (collectively, the "***Letter of Credit Issuer Requirements***"), in the amount of Four Million Fifty-Five Thousand Six Hundred Fifty-Six and 50/100 Dollars ($4,055,656.50) (as may be reduced from time to time pursuant to the terms of this Sublease, the "***Letter of Credit Amount***"). Subject to the terms of Section 12.8 below, Subtenant shall have the right to reduce the Letter of Credit Amount by One Million Three Hundred Fifty-One Thousand Eight Hundred Eighty-Five and 50/100 Dollars ($1,351,885.50) on the third (3rd) anniversary of the Rent Commencement Date (for a new Letter of Credit Amount of Two Million Seven Hundred Three Thousand Seven Hundred Seventy-One and No/100 Dollars ($2,703,771.00)), and by another One Million Three Hundred Fifty-One Thousand Eight Hundred Eight Five and 50/100 Dollars ($1,351,885.50) on the fifth (5^{th}) anniversary of the Rent Commencement Date (for a new Letter of Credit Amount of One Million Three Hundred Fifty-One Thousand Eight Hundred Eight Five and 50/100 Dollars ($1,351,885.50)).

12.2 Letter of Credit Requirements. The Letter of Credit shall be (i) at sight, irrevocable and unconditional, (ii) maintained in effect, whether through replacement, renewal or extension, for the period from the Commencement Date and continuing until the date (the "***LC Expiration Date***") which is one hundred (100) days after the Expiration Date, and Subtenant shall deliver a new Letter of Credit or certificate of renewal or extension to Sublandlord at least thirty (30) days prior to the expiration of the Letter of Credit then held by Sublandlord, without any action whatsoever on the part of Sublandlord, (iii) subject to "***International Standby Practices 98***" International Chamber Of Commerce Publication No. 590, (iv) fully assignable by Sublandlord, and (v) permit partial draws. In addition to the foregoing, the form and terms of the Letter of Credit shall provide, among other things, in effect that: (A) Sublandlord shall have the right to draw down an amount up to the face amount of the Letter of Credit (1) upon the presentation to the Bank of Sublandlord's written statement that Sublandlord is entitled to draw down on the Letter of Credit in the amount of such draw pursuant to the terms and conditions of this Sublease, and no other document or certification from Sublandlord shall be required other than its written statement to this effect (a "***Default Draw***"), (2) Subtenant, as applicant, shall have failed to provide to Sublandlord a new or renewal Letter of Credit satisfying the terms of this Section 12 at least thirty (30) days prior to the expiration of the Letter of Credit then held by Sublandlord, (3) if Subtenant has filed a voluntary petition under the Federal Bankruptcy Code or (4) if an involuntary petition has been filed against Subtenant under the Federal Bankruptcy Code, and Subtenant has failed to have such involuntary petition discharged within sixty (60) days of such filing; and (B) the Letter of Credit will be honored by the Bank without inquiry as to the accuracy thereof and regardless of whether Subtenant disputes the

content of such statement. Sublandlord confirms and agrees that Sublandlord shall only be entitled to make a Default Draw when permitted under Section 12.5 and Sublandlord shall only make draws from the Letter of Credit in the amounts of damages that Sublandlord reasonably believes Sublandlord will suffer in connection with the event giving rise to the draw. Notwithstanding the foregoing, in the event of any failure by Subtenant to provide a substitution or replacement Letter of Credit when required under this Section 12. Sublandlord shall be entitled to draw down upon the entire amount of the Letter of Credit.

12.3 Transfer Rights. The Letter of Credit shall also provide that Sublandlord may, at any time and without notice to Subtenant and without first obtaining Subtenant's consent thereto, transfer all or any portion of its interest in and to the Letter of Credit to another party, person or entity, but only if such transfer is to an assignee of Sublandlord's interest in this Sublease. In the event of a transfer of Sublandlord's interest in the 331 Building, Sublandlord shall transfer the Letter of Credit, in whole or in part (or Subtenant shall, upon Sublandlord's request, cause a substitute letter of credit to be delivered, as applicable, in which case any Letter of Credit previously provided by Subtenant to Sublandlord hereunder shall be returned to Subtenant) to the transferee and thereupon Sublandlord shall, without any further agreement between the parties, be released by Subtenant from all liability therefor, and it is agreed that the provisions hereof shall apply to every transfer or assignment of the whole or any portion of said Letter of Credit to a new Sublandlord. Any transfer fee required to be paid in connection with the first transfer of the Letter of Credit by the beneficiary thereof during any calendar year shall be at Subtenant's sole cost and expense. All transfer fees required to be paid in connection with all other transfers of the Letter of Credit shall be at Sublandlord's sole cost and expense. Subtenant shall reasonably cooperate with Sublandlord in executing and submitting to the Bank any applications, documents and instruments as may be necessary to effectuate such transfers.

12.4 Replenishment; Renewal. If, as result of any application or use by Sublandlord of all or any part of the Letter of Credit, the amount of the Letter of Credit shall be less than the Letter of Credit Amount, Subtenant shall, within ten (10) business days after Subtenant receives written notice thereof or otherwise learns of such reduction, provide Sublandlord with additional letter(s) of credit in an amount equal to the deficiency (or a replacement letter of credit in the total Letter of Credit Amount), and any such additional (or replacement) letter of credit shall comply with all of the provisions of this Section 12. and if Subtenant fails to comply with the foregoing, notwithstanding anything to the contrary contained in this Sublease, the same shall constitute an incurable default by Subtenant. Subtenant further covenants and warrants that it will neither assign nor encumber the Letter of Credit or any part thereof and that neither Sublandlord nor its successors or assigns will be bound by any such assignment, encumbrance, attempted assignment or attempted encumbrance. Without limiting the generality of the foregoing, if the Letter of Credit expires earlier than the LC Expiration Date, a renewal thereof or substitute letter of credit, as applicable, shall be delivered to Sublandlord not later than thirty (30) days prior to the expiration of the Letter of Credit, which shall be irrevocable and automatically renewable as above provided through the LC Expiration Date upon the same terms as the expiring Letter of Credit or such other terms as may be acceptable to Sublandlord in its reasonable discretion. However, if the Letter of Credit is not timely renewed or a substitute letter of credit is not timely received, or if Subtenant fails to maintain the Letter of

Credit in the amount and in accordance with the terms set forth in this Section 12. Sublandlord shall have the right to present the Letter of Credit to the Bank in accordance with the terms of this Section 12. and the proceeds of the Letter of Credit may be applied by Sublandlord for Subtenant's failure to fully and faithfully perform all of Subtenant's obligations under this Sublease and against any Rent payable by Subtenant under this Sublease that is not paid when due and/or to pay for all losses and damages that Sublandlord has suffered or that Sublandlord reasonably estimates that it will suffer as a result of any default by Subtenant under this Sublease. Any unused proceeds shall constitute the property of Sublandlord and need not be segregated from Sublandlord's other assets. However, Sublandlord agrees to pay to Subtenant within thirty (30) days after the LC Expiration Date the amount of any proceeds of the Letter of Credit received by Sublandlord and not applied against any Rent payable by Subtenant under this Sublease that was not paid when due or used to pay for any losses and/or damages suffered by Sublandlord (or reasonably estimated by Sublandlord that it will suffer; provided that to the extent any estimated expenses are not actually expensed within 90 days after the LC Expiration Date, such amounts shall be returned to Subtenant) as a result of any default by Subtenant under this Sublease; provided, however, that if prior to the LC Expiration Date a voluntary petition is filed by Subtenant, or an involuntary petition is filed against Subtenant by any of Subtenant's creditors, under the Federal Bankruptcy Code, then Sublandlord shall not be obligated to make such payment in the amount of the unused Letter of Credit proceeds until either all preference issues relating to payments under this Sublease have been resolved in such bankruptcy or reorganization case or such bankruptcy or reorganization case has been dismissed.

12.5 Security for Subtenant's Performance. Subtenant hereby acknowledges and agrees that Sublandlord is entering into this Sublease in material reliance upon the ability of Sublandlord to draw upon the Letter of Credit in the event Subtenant fails to fully and faithfully perform all of Subtenant's obligations under this Sublease and to compensate Sublandlord for all losses and damages Sublandlord may suffer as a result of the occurrence of any default on the part of Subtenant not cured within the applicable cure period under this Sublease. Sublandlord may make a Default Draw (without obligation to do so, and without notice), in part or in whole, only following the occurrence of any default on the part of Subtenant which is not cured within the applicable cure period under this Sublease, and only in the amount of the damages that Sublandlord reasonably believes Sublandlord will suffer as a result of such default. Notwithstanding the foregoing, if Sublandlord is prohibited by law from sending Subtenant a default notice, such as due to a bankruptcy stay, Sublandlord shall be entitled to make a Default Draw upon a default by Subtenant with no notice or cure period being required. Subtenant agrees not to interfere in any way with payment to Sublandlord of the proceeds of the Letter of Credit, either prior to or following a **"draw"** by Sublandlord of any portion of the Letter of Credit, regardless of whether any dispute exists between Subtenant and Sublandlord as to Sublandlord's right to draw from the Letter of Credit. No condition or term of this Sublease shall be deemed to render the Letter of Credit conditional to justify the issuer of the Letter of Credit in failing to honor a drawing upon such Letter of Credit in a timely manner. Subtenant agrees and acknowledges that Subtenant has no property interest whatsoever in the Letter of Credit or the proceeds thereof and that, in the event Subtenant becomes a debtor under any chapter of the Federal Bankruptcy Code, neither Subtenant, any trustee, nor Subtenant's bankruptcy estate shall have any right to restrict or limit Sublandlord's claim and/or rights to the

Letter of Credit and/or the proceeds thereof by application of Section 502(b)(6) of the Federal Bankruptcy Code.

12.6 Failure of Letter of Credit Issuer Requirements. Notwithstanding anything to the contrary herein, if at any time the Letter of Credit Issuer Requirements are not met, then Subtenant shall within five (5) business days after Subtenant's receipt of written notice from Sublandlord, deliver to Sublandlord a replacement Letter of Credit which otherwise meets the requirements of this Sublease, including without limitation, the Letter of Credit Issuer Requirements. Notwithstanding anything in this Sublease to the contrary, Subtenant's failure to replace the Letter of Credit and satisfy the Letter of Credit Issuer Requirements within such five (5) business day period shall constitute a material default for which there shall be no notice or grace or cure periods being applicable thereto. In addition and without limiting the generality of the foregoing, if the issuer of any letter of credit held by Sublandlord is insolvent or is placed in receivership or conservatorship by the Federal Deposit Insurance Corporation, or any successor or similar entity, or if a trustee, receiver or liquidator is appointed for the issuer, then, effective as of the date of such occurrence, said Letter of Credit shall be deemed to not meet the requirements of this Section 12. and Subtenant shall within five (5) business days of written notice from Sublandlord deliver to Sublandlord a replacement Letter of Credit which otherwise meets the requirements of this Section 12 and that meets the Letter of Credit Issuer Requirements (and Subtenant's failure to do so shall, notwithstanding anything in this Section 12 or this Sublease to the contrary, constitute a material default for which there shall be no notice or grace or cure periods being applicable thereto other than the aforesaid five (5) business day period).

12.7 Not a Security Deposit. Sublandlord and Subtenant acknowledge and agree that in no event or circumstance shall the Letter of Credit or any renewal thereof or substitute therefor be (i) deemed to be or treated as a "***security deposit***" within the meaning of California Civil Code Section 1950.7, (ii) subject to the terms of such Section 1950.7, or (iii) intended to serve as a "***security deposit***" within the meaning of such Section 1950.7. The parties hereto (A) recite that the Letter of Credit is not intended to serve as a security deposit and such Section 1950.7 and any and all other laws, rules and regulations applicable to security deposits in the commercial context ("***Security Deposit Laws***") shall have no applicability or relevancy thereto and (B) waive any and all rights, duties and obligations either party may now or, in the future, will have relating to or arising from the Security Deposit Laws.

12.8 Reduction of Letter of Credit Amount. Subject to the terms of this Section 12.8. Subtenant shall be entitled to a reduction of the face amount of the Letter of Credit by One Million Three Hundred Fifty-One Thousand Eight Hundred Eighty-Five and 50/100 Dollars ($1,351,885.50) on the third (3rd) anniversary of the Rent Commencement Date (for a new Letter of Credit Amount of Two Million Seven Hundred Three Thousand Seven Hundred Seventy-One and No/100 Dollars ($2,703,771.00)), and by another One Million Three Hundred Fifty-One Thousand Eight Hundred Eight Five and 50/100 Dollars ($1,351,885.50) on the fifth (5^{th}) anniversary of the Rent Commencement Date (for a new Letter of Credit Amount of One Million Three Hundred Fifty-One Thousand Eight Hundred Eight Five and 50/100 Dollars ($1,351,885.50)). As a condition to the reduction of the Letter of Credit amount, no uncured default by Subtenant shall then be existing under this Sublease. Provided that such

condition to reduction is satisfied, Subtenant may cause the Bank to issue a new Letter or Credit or an amendment to the Letter of Credit reflecting the reduced amount, and Sublandlord shall cooperate with such reduction.

13. Abatement for Failure of Services. If and to the extent that Sublandlord receives abatement of the rent or other charges required to be paid by Sublandlord under the Master Lease with respect to the Premises in accordance with the Master Lease, Sublandlord will abate the same proportion of Subtenant's Rent hereunder. This provision shall not reduce or mitigate the obligation of Sublandlord to make good faith, commercially reasonable efforts to cause Master Landlord to comply with its obligations under the Master Lease as set forth in Section 9.1.1 hereof.

14. Miscellaneous.

14.1 Counterparts. This Sublease may be executed in one or more counterparts by the parties hereto. All counterparts shall be construed together and shall constitute one agreement and delivery of PDF or other electronic versions thereof shall have the same force and effect as delivery of originals. However, notwithstanding any such exchange of electronic signatures, each of Sublandlord and Subtenant agree promptly to deliver original hard copies of this Sublease and the Consent to the other party or Master Landlord upon request.

14.2 Modification. This Sublease may not be modified in any respect except by a document in writing executed by both parties hereto or their respective successors or assigns.

14.3 Attorneys' Fees. If either party hereto brings an action or other proceeding against the other to enforce, protect, or establish any right or remedy created under or arising out of this Sublease, the prevailing party shall be entitled to recover from the other party, all costs, fees and expenses, including, without limitation, reasonable attorneys' fees, accounting fees, expenses, and disbursements, incurred or sustained by such prevailing party in connection with such action or proceeding (including, but not limited to, any appellate proceedings relating thereto) or in connection with the enforcement of any judgment or award rendered in such proceeds. The prevailing party's rights to recover its costs, fees and expenses, and any award thereof, shall be separate from, shall survive, and shall not be merged with any judgment.

14.4 Binding Effect. The obligations of this Sublease shall be binding on and inure to the benefit of the parties and their respective heirs, successors and assigns.

14.5 Time Is Of Essence. Time is of essence in respect of each and every term, covenant and condition of this Sublease.

14.6 Governing Law. This Sublease shall be governed by, and construed in accordance with, the laws of the State of California (without giving effect to any choice or conflict of law provision or rule (whether of the State of California or any other jurisdiction) that would cause the application of laws of any jurisdiction other than those of the State of California).

14.7 Representations And Warranties Regarding Authority. Subtenant and Sublandlord hereby represent and warrant to the other party that (i) each person signing this Sublease on their behalf is duly authorized to execute and deliver this Sublease on their behalf, (ii) the execution, delivery and performance of this Sublease has been duly and validly authorized in accordance with the articles of incorporation, bylaws and other organizational documents of such party, (iii) such party is duly organized and in good standing under the laws of their State of incorporation and (iv) upon the execution and delivery of this Sublease, this Sublease shall be binding and enforceable against such party in accordance with its terms.

14.8 Confidentiality. Sublandlord and Subtenant hereby agree that the information contained in this Sublease shall be held in strict confidence and none of the terms or conditions contained herein shall be disclosed to any person or entity, other than Master Landlord and Sublandlord's and Subtenant's respective current or prospective attorneys, accountants, consultants, brokers, lenders, investors, acquirers, assignees and subtenants, all of whom (except the Master Landlord) shall agree to the confidentiality of this Sublease. Subtenant and its agents shall avoid discussing with, or disclosing to, any third parties (except those specifically listed above) any of the terms, conditions or particulars contained herein. This provision shall not be deemed breached if disclosure is required by applicable law or otherwise consented to in writing by the non-disclosing party.

14.9 Securities Filings. Notwithstanding anything to the contrary in this Sublease or the Confidentiality Agreement (but expressly subject to Master Landlord's prior written acknowledgment and consent), in the event either party or any of its affiliates (such party, a "Filing Party") proposes to file with the Securities and Exchange Commission or the securities regulators of any state or other jurisdiction a registration statement or any other disclosure document which describes or refers to this Sublease under the Securities Act of 1933, as amended, the Securities Exchange Act, of 1934, as amended, any other applicable securities law or the rules of any national securities exchange, the Filing Party shall be entitled to file an unredacted copy of the Original Master Lease and a copy of the Master Amendment with those redactions of the Master Amendment reflected on Exhibit A attached hereto.

14.10 Publicity. Subject to the Incorporation Provisions, Section 5 of the Master Amendment is hereby incorporated herein by reference, except for the sixth (6^{th}) and seventh (7^{th}) sentences thereof. In addition, Subtenant and Sublandlord each hereby acknowledges and agrees that, except as may be necessary to implement or otherwise effectuate the terms of this Sublease, (i) Subtenant shall not use, without Sublandlord's prior written approval, which may be withheld in Sublandlord's sole discretion, the name of Sublandlord, its affiliates, trade names, trademarks or trade dress, products, or any signs, markings, or symbols from which a connection to Sublandlord, in Sublandlord's absolute and sole discretion, may be reasonably inferred or implied, in any manner whatsoever, including, without limitation, press releases, marketing materials, or advertisements; and (ii) Sublandlord shall not use, without Subtenant's prior written approval, which may be withheld in Subtenant's sole discretion, the name of Subtenant, its affiliates, trade names, trademarks or trade dress, products, or any signs, markings, or symbols from which a connection to Subtenant, in Subtenant's absolute and sole

discretion, may be reasonably inferred or implied, in any manner whatsoever, including, without limitation, press releases, marketing materials, or advertisements.

14.11 **Consent of Master Landlord.** This Sublease is conditioned upon, and shall not take effect until, receipt of the written consent of the Master Landlord hereto (the "***Consent***"). Subtenant hereby agrees for the benefit of Sublandlord and Master Landlord (as an express intended third party beneficiary) that (a) other than as expressly and specifically agreed to in writing by Master Landlord (in the Consent or other written agreement), no act, consent, approval or omission of Master Landlord pursuant to this Sublease shall (i) constitute any form of recognition of Subtenant as the direct tenant of Master Landlord, (ii) create any form of contractual duty or obligation on the part of Master Landlord in favor of Subtenant or (iii) waive, affect or prejudice in any way Master Landlord's right to treat this Sublease and Subtenant's rights to the Premises as being terminated upon any termination of the Master Lease, (b) Master Landlord shall have the absolute right to evict Subtenant, and all parties holding under Subtenant, from the Premises upon any termination of the Master Lease, and (c) without limiting the generality of (a) and (b) above (or Sublandlord's obligations to maintain the Master Lease pursuant to this Sublease), a voluntary or other surrender of the Master Lease or a termination of the Master Lease shall not result in a merger but shall, at the option of Master Landlord, operate either as an assignment to Master Landlord of this Sublease, or a termination of this Sublease. Notwithstanding the foregoing, Sublandlord agrees to request recognition and non-disturbance protection for Subtenant's benefit from Master Landlord. Further, it is acknowledged that Subtenant may wish to obtain certain additional rights directly from Master Landlord with respect to Subtenant's use and occupancy of the Premises. Any such agreement with Master Landlord that would bind Sublandlord or otherwise modify or affect Sublandlord's rights under the Master Lease or this Sublease shall be subject to Sublandlord's prior written consent. Notwithstanding anything to the contrary in this Sublease, Subtenant shall have the right to terminate this Sublease if the Consent is not executed and delivered by the date that is forty-five (45) days after the date of full execution and delivery of this Sublease. Sublandlord shall make commercially reasonable efforts to obtain the Consent from Master Landlord.

14.12 **Cooperation.** Each party shall reasonably cooperate with the other party with respect to seeking any necessary approvals from the Master Landlord, including without limitation approval of this Sublease and the Subtenant Improvements. Subtenant and Sublandlord each agree to complete and return any and all forms requested by Master Landlord or Sublandlord, as applicable, from time to time for administrative purposes related to this Sublease within five (5) business days of such party's written request.

14.13 [Intentionally Omitted]

14.14 **Nonresidential Building Energy Use Disclosure Requirement Compliance.** Subtenant hereby acknowledges that Sublandlord may be required to obtain from utility providers and disclose certain information concerning the energy performance of the Premises' recent historical energy use data pursuant to California Public Resources Code Section 25402.10 and the regulations adopted pursuant thereto (collectively, the "***Energy Disclosure Requirements***"). Sublandlord shall not be liable to Subtenant for the accuracy or content of the information provided by utility providers pursuant to the Energy Disclosure Requirements.

Without limiting the generality of the foregoing, based on information provided by the California Energy Commission, Sublandlord and Subtenant have agreed that Sublandlord is not required to deliver Subtenant a Data Verification Checklist (the "***Energy Disclosure Information***"), as defined in the Energy Disclosure Requirements with respect to the Premises, because the Premises have never been fully built out or occupied and will therefore be treated as a brand new building. Under no circumstances shall Subtenant have any claim against Sublandlord nor any right to terminate this Sublease in connection with such determination. Subtenant acknowledges and agrees that (i) Sublandlord makes no representation or warranty regarding the energy performance of the Premises, and (ii) the energy performance of the Premises may vary depending on future condition, occupancy and/or use of the Premises. If and to the extent not prohibited by applicable law, Subtenant hereby waives any right Subtenant may have to receive the Energy Disclosure Information, including, without limitation, any right Subtenant may have to terminate this Sublease as a result of Sublandlord's failure to disclose such information. Further, Subtenant hereby releases Sublandlord from any and all losses, costs, damages, expenses and/or liabilities relating to, arising out of and/or resulting from the Energy Disclosure Requirements, including, without limitation, any liabilities arising as a result of Sublandlord's failure to disclose the Energy Disclosure Information to Subtenant prior to the execution of this Sublease. Subtenant further acknowledges that pursuant to the Energy Disclosure Requirements, Sublandlord may be required in the future to disclose information concerning Subtenant's energy usage to certain third parties, including, without limitation, Master Landlord, prospective purchasers, lenders and tenants of the Premises (the "***Subtenant Energy Use Disclosure***"). Subtenant hereby (A) consents to all such Subtenant Energy Use Disclosures, (B) acknowledges that Sublandlord shall not be required to notify Subtenant of any Subtenant Energy Use Disclosure, and (C) agrees that upon request from Sublandlord, Subtenant shall provide Sublandlord with any energy usage data for the Premises, including, without limitation, copies of utility bills for the Premises. Further, Subtenant hereby releases Sublandlord from any and all losses, costs, damages, expenses and liabilities relating to, arising out of and/or resulting from any Subtenant Energy Use Disclosure.

14.15 **Survival.** Without limiting survival provisions which would otherwise be implied or construed under applicable law, the provisions of Sections 3.3.3, 6.2. 7, 9.1.3, 9.5, 9.12, 9.14, 9.33, 11.1, 11.2, 11.3, 11.4 and 14.14 hereof shall survive the expiration or earlier termination of this Sublease with respect to matters occurring or liabilities accruing prior to the expiration or earlier termination of this Sublease.

14.16 **Guaranty.** Notwithstanding anything herein to the contrary, Subtenant shall, as a condition precedent to the effectiveness of this Sublease, cause Prothena Corporation plc, an Ireland public limited company ("**Guarantor**") to execute and deliver to Sublandlord a guaranty (the "**Guaranty**") of all the obligations of Subtenant under this Sublease in the form attached hereto as Exhibit E (along with the associated legal opinion described therein) simultaneously with Subtenant's execution and delivery of this Sublease.

[remainder of page intentionally left blank; signatures on next page]

IN WITNESS WHEREOF, the parties hereto have hereunto set their hand on the date first above written.

SUBLANDLORD:

AMGEN INC.,
a Delaware corporation

By: /s/ David Meline

Name: David Meline

Its: Executive Vice President and Chief Financial Officer

SUBTENANT:

PROTHENA BIOSCIENCES INC,
a Delaware corporation

By: /s/ Tran Nguyen

Name Tran Nguyen

Its: CFO

By: /s/ A. W. Homan

Name: A. W. Homan

Its: CLO & Secretary

EXHIBIT A

MASTER LEASE

(to be attached)

EXHIBIT B

PREMISES

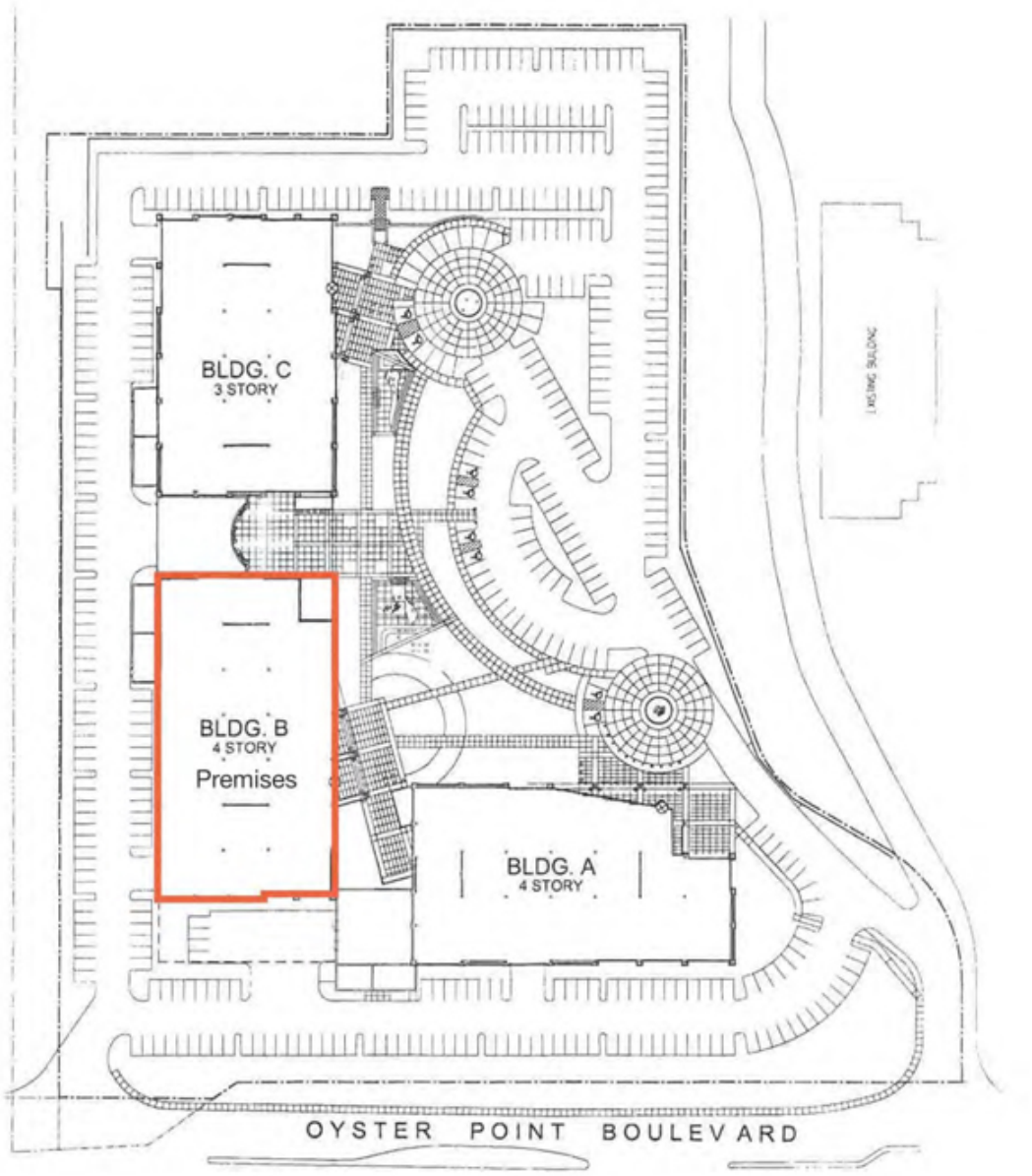


EXHIBIT C

WARM SHELL CONDITION

Britannia Oyster Point Sublease
Summary Scope of Warm Shell

Lobby

Ground Floor Lobby approximately 500 s/f
Ground Floor Fire Control Room

Stairways

Smoke Control
Pressure control
Finished on the interior, inc: flooring and lighting

Elevators

Service Elevators (1 per building) 5,000 lbs @ 350 fpm
Passenger Elevators (2 per building) 3,500 lbs @350 fpm

Restrooms and Showers

Central Restroom on each floor (inc janitor's closet)
Shared Shower off Ground floor lobby

Mechanical/Electrical Design Criteria

On each floor 35% laboratory, 30% laboratory support, 35% office space
Utilities shall be sized for Chemistry laboratories on the ground floor and biology laboratories on the upper floors

HVAC Units

Five HVAC units located on the roof
Main ducts are sized for present and future loads as defined in the Basis of Design
Main ducts terminate at each floor just outside of riser shaft

Exhaust Fans

Five exhaust fans located on the roof

Hot Water

Two high efficiency heating hot water boilers and recirculation pumps and controls per building
Heating hot water will serve preheat coils for HVAC units and reheat coils at variable air volume terminal units.
Main pipes are sized for present and future loads as defined in the Basis of Design.
Main pipes terminate at each floor just outside of riser shaft with isolation valve/cap.

Industrial Cold Water

System sized to serve all future laboratory fixtures, lab sinks, cup sinks, and devices that require industrial water.
Pipe risers terminate at each floor with isolation valves
Gas fired heater provides hot water

Potable Hot and Cold Water

Are provided to all restrooms, showers, indicated above, and other fixtures and devices that may require potable water.
Piping shall be sized for future needs
Piping terminates at each floor with isolation valves
Gas fired heater provides Hot water

Building Automation System

DDC System has 25% excess capacity to the BOD requirements, in addition has the ability to be expanded to cover future tenant's requirements

Natural Gas

Provided to the necessary mechanical equipment

Sanitary Waste

A sanitary waste and vent system is provided for potable waste producing fixtures and equipment, with all fixtures trapped and vented to atmosphere.

Laboratory Waste

Risers and drains as shown in the CAD files provided by Sublandlord to Subtenant.

Electrical

4,000 amp, 480/277 volt Main Switch Board located on the G-l level below each building
Normal power distribution rooms are located on each floor with 100 amp 480/277 volt lighting panels and 45KVA transformers along with 150 amp 120/208 volt convenience power panels.
Emergency power distribution rooms are located on each floor with 100 amp 480/277 volt lighting panels and 45KVA transformers along with 150 amp 120/208 volt convenience power panels
Life Safety Power are located on each floor with 50 amp 480/277 volt lighting panels and 50 amp 120/208 volt panels
Motor Control Center for roof top equipment are located on the roof
Power metering is provided on each floor to measure power consumption floor by floor.
The Premises is provided with a 1,000 KW Generator with two, bypass isolation type, transfer switches. One for life safety functions while the other serves tenant loads.

Life Safety System

A new fire alarm system, with code compliant smoke control in each building, a control panel located on the ground floor within the new fire control room.

Telecommunications

Two 4” raceways from the main telephone room in the parking structure near the center quadrant of each floor is provided.

EXHIBIT D

FORM OF LETTER OF CREDIT

Wells Fargo Bank, N.A.
U.S. Trade Services
Standby Letters of Credit
794 Davis Street, 2nd Floor
MAC A0283-023,
San Leandro, CA 94577-6922
Phone: 1(800) 798-2815 Option 1
E-Mail: sftrade@wellsfargo.com

This sample wording is presented without any responsibility on our part. This draft is provided to you as a suggestion only at your request
Please note that the draft remains unissued and is not an enforceable instrument.

Wording Reviewed and Approved:

By: _____
Applicant Signature

This form is an integral part of the application and agreement for the issuance of your Standby Letter of Credit. The Letter of Credit cannot be issued until this draft is returned to us with the Applicant's Signature above.

Irrevocable Standby Letter Of Credit

Number: IS0394885U
Issue Date: March 11, 2016

BENEFICIARY	APPLICANT
AMGEN INC. ATTN: CORPORATE REAL ESTATE ONE AMGEN CENTER DRIVE THOUSAND OAKS, CALIFORNIA 91320-1799	PROTHENA BIOSCIENCES, INC 650 GATEWAY BLVD SOUTH SAN FRANCISCO, CALIFORNIA 94080

LETTER OF CREDIT ISSUE AMOUNT	USD 4,055,656.50	EXPIRY DATE	APRIL 9, 2017

LADIES AND GENTLEMEN:

AT THE REQUEST AND FOR THE ACCOUNT OF THE ABOVE REFERENCED APPLICANT, WE HEREBY ISSUE OUR IRREVOCABLE STANDBY LETTER OF CREDIT IN YOUR FAVOR IN THE AMOUNT OF FOUR MILLION FIFTY FIVE THOUSAND SIX HUNDRED FIFTY-SIX AND 50/100 UNITED STATES DOLLARS (US$4,055,656.50) AVAILABLE WITH US AT OUR ABOVE OFFICE BY PAYMENT AGAINST PRESENTATION OF THE FOLLOWING DOCUMENTS:

1. A DRAFT DRAWN ON US AT SIGHT MARKED "DRAWN UNDER WELLS FARGO BANK, N.A. STANDBY LETTER OF CREDIT NO. IS0394885U."

2. THE ORIGINAL OF THIS STANDBY LETTER OF CREDIT AND ANY AMENDMENTS THERETO.

3. BENEFICIARY'S SIGNED AND DATED STATEMENT WORDED IN ONE OR MORE OF THE FOLLOWING CONDITIONS (WITH THE INSTRUCTIONS IN BRACKETS THEREIN COMPLIED WITH):

"BENEFICIARY CERTIFIES THAT BENEFICIARY IS ENTITLED TO DRAW ON WELLS FARGO BANK, N.A. LETTER OF CREDIT NO. IS0394885U PURSUANT TO AND IN CONNECTION WITH THAT CERTAIN SUBLEASE DATED [INSERT DATE] FOR PREMISES LOCATED AT 331 OYSTER POINT BOULEVARD, SOUTH SAN FRANCISCO, CALIFORNIA ORIGINALLY BETWEEN AMGEN INC. AND PROTHENA BIOSCIENCES INC (AS SUCH SUBLEASE MAY HAVE BEEN AMENDED OR RESTATED)."

OR

"BENEFICIARY CERTIFIES THAT BENEFICIARY HAS RECEIVED NOTIFICATION FROM WELLS FARGO BANK, N.A. THAT THIS LITTER OF CREDIT NO. IS0394885U WILL NOT BE EXTENDED PAST ITS CURRENT EXPIRATION DATE. AS OF THE DATE OF THIS STATEMENT, THIS LETTER OF CREDIT'S EXPIRATION DATE WILL OCCUR WITHIN FIFTEEN (15) DAYS AFTER TODAY'S DATE AND BENEFICIARY HAS NOT RECEIVED A LETTER OF CREDIT OR OTHER INSTRUMENT ACCEPTABLE TO BENEFICIARY AS A REPLACEMENT AND SUBTENANT HAS NOT BEEN RELEASED FROM ITS OBLIGATIONS UNDER THE SUBLEASE. "SUBTENANT" MEANS THE SUBTENANT UNDER THE SUBLEASE. "SUBLEASE" MEANS THAT CERTAIN SUBLEASE DATED [INSERT DATE] FOR PREMISES LOCATED AT 331 OYSTER POINT BOULEVARD, SOUTH SAN FRANCISCO, CALIFORNIA ORIGINALLY BETWEEN AMGEN INC. AND PROTHENA BIOSCIENCES INC (AS SUCH SUBLEASE MAY HAVE BEEN AMENDED OR RESTATED)."

OR

"BENEFICIARY CERTIFIES THAT SUBTENANT HAS FILED A VOLUNTARY PETITION UNDER THE FEDERAL BANKRUPTCY CODE. "SUBTENANT" MEANS THE SUBTENANT UNDER THE SUBLEASE. "SUBLEASE" MEANS THAT CERTAIN SUBLEASE DATED [INSERT DATE] FOR PREMISES LOCATED AT 331 OYSTER POINT BOULEVARD, SOUTH SAN FRANCISCO, CALIFORNIA ORIGINALLY BETWEEN AMGEN INC. AND PROTHENA BIOSCIENCES INC (AS SUCH SUBLEASE MAY HAVE BEEN AMENDED OR RESTATED)"

OR

"BENEFICIARY CERTIFIES THAT AN INVOLUNTARY PETITION HAS BEEN FILED AGAINST SUBTENANT UNDER THE FEDERAL BANKRUPTCY CODE AND SUBTENANT HAS FAILED TO HAVE SUCH INVOLUNTARY PETITION DISCHARGED WITHIN SIXTY (60) DAYS OF SUCH FILING. "SUBTENANT" MEANS THE SUBTENANT UNDER THE SUBLEASE. "SUBLEASE" MEANS THAT CERTAIN SUBLEASE DATED [INSERT DATE] FOR PREMISES LOCATED AT 331 OYSTER POINT BOULEVARD, SOUTH SAN FRANCISCO, CALIFORNIA ORIGINALLY BETWEEN AMGEN INC. AND PROTHENA BIOSCIENCES INC (AS SUCH SUBLEASE MAY HAVE BEEN AMENDED OR RESTATED)."

THIS LETTER OF CREDIT EXPIRES AT OUR ABOVE OFFICE ON APRIL 9, 2017. IT IS A CONDITION OF THIS LETTER OF CREDIT THAT SUCH EXPIRATION DATE SHALL BE DEEMED AUTOMATICALLY EXTENDED, WITHOUT WRITTEN AMENDMENT, FOR ONE YEAR PERIODS TO APRIL 9 IN EACH SUCCEEDING CALENDAR YEAR, UNLESS AT LEAST THIRTY (30) DAYS PRIOR TO SUCH EXPIRATION DATE WE SEND WRITTEN NOTICE TO YOU AT YOUR ADDRESS ABOVE BY OVERNIGHT COURIER OR REGISTERED MAIL THAT WE ELECT NOT TO EXTEND THE EXPIRATION DATE OF THIS LETTER OF CREDIT BEYOND THE DATE SPECIFIED IN SUCH NOTICE. IN NO EVENT SHALL THIS LETTER OF CREDIT BE EXTENDED BEYOND APRIL 9, 2024 WHICH WILL BE CONSIDERED THE FINAL EXPIRATION DATE. ANY REFERENCE TO A FINAL EXPIRATION DATE DOES NOT IMPLY THAT WE ARE OBLIGATED TO EXTEND THE EXPIRATION DATE BEYOND THE INITIAL OR ANY EXTENDED DATE THEREOF.

UPON OUR SENDING YOU SUCH NOTICE OF THE NON-EXTENSION OF THE EXPIRATION DATE OF THIS LETTER OF CREDIT, YOU MAY ALSO DRAW UNDER THIS LETTER OF CREDIT, ON OR BEFORE

THE EXPIRATION DATE SPECIFIED IN SUCH NOTICE, BY PRESENTATION OF THE ABOVE-MENTIONED DOCUMENTS TO US AT OUR ABOVE ADDRESS.

PARTIAL DRAWING(S) ARE PERMITTED UNDER THIS LETTER OF CREDIT; PROVIDED, HOWEVER, THAT THE TOTAL AMOUNT OF ANY PAYMENT(S) MADE UNDER THIS LETTER OF CREDIT WILL NOT EXCEED THE TOTAL AMOUNT AVAILABLE UNDER THIS LETTER OF CREDIT.

IN THE EVENT OF PARTIAL DRAWINGS, WELLS FARGO BANK, N.A. SHALL ENDORSE THE ORIGINAL OF THIS LETTER OF CREDIT AND RETURN IT TO THE BENEFICIARY.

DRAWINGS MAY ALSO BE PRESENTED TO US BY FACSIMILE TRANSMISSION TO FACSIMILE NUMBER 336-735-0952 (EACH SUCH DRAWING, A “FAX DRAWING”); PROVIDED, HOWEVER, THAT A FAX DRAWING WILL NOT BE EFFECTIVELY PRESENTED UNTIL YOU CONFIRM BY TELEPHONE OUR RECEIPT OF SUCH FAX DRAWING BY CALLING US AT TELEPHONE NUMBER 1-800-798-2815 OPTION 1. IF YOU PRESENT A FAX DRAWING UNDER THIS LETTER OF CREDIT YOU DO NOT NEED TO PRESENT THE ORIGINAL OF ANY DRAWING DOCUMENTS, AND IF WE RECEIVE ANY SUCH ORIGINAL DRAWING DOCUMENTS THEY WILL NOT BE EXAMINED BY US. IN THE EVENT OF A FULL OR FINAL DRAWING THE ORIGINAL STANDBY LETTER OF CREDIT MUST BE RETURNED TO US BY OVERNIGHT COURIER.

THIS LETTER OF CREDIT IS TRANSFERABLE ONE OR MORE TIMES, BUT IN EACH INSTANCE ONLY TO A SINGLE TRANSFEREE AND ONLY IN THE FULL AMOUNT AVAILABLE TO BE DRAWN UNDER THE LETTER OF CREDIT AT THE TIME OF SUCH TRANSFER. ANY SUCH TRANSFER MAY BE EFFECTED ONLY THROUGH WELLS FARGO BANK, N.A. AND ONLY UPON PRESENTATION TO US AT OUR PRESENTATION OFFICE SPECIFIED HEREIN OF A DULY EXECUTED TRANSFER REQUEST IN THE FORM ATTACHED HERETO AS EXHIBIT A, WITH INSTRUCTIONS THEREIN IN BRACKETS COMPLIED WITH, TOGETHER WITH THE ORIGINAL OF THIS LETTER OF CREDIT AND ANY AMENDMENTS THERETO. EACH TRANSFER SHALL BE EVIDENCED BY OUR ENDORSEMENT ON THE REVERSE OF THE ORIGINAL OF THIS LETTER OF CREDIT, AND WE SHALL DELIVER SUCH ORIGINAL TO THE TRANSFEREE. ALL CHARGES IN CONNECTION WITH ANY TRANSFER OF THIS LETTER OF CREDIT ARE FOR THE APPLICANT’S ACCOUNT.

WE ARE SUBJECT TO VARIOUS LAWS, REGULATIONS AND EXECUTIVE AND JUDICIAL ORDERS (INCLUDING ECONOMIC SANCTIONS, EMBARGOES, ANTI-BOYCOTT, ANTI-MONEY LAUNDERING, ANTI-TERRORISM, AND ANTI-DRUG TRAFFICKING LAWS AND REGULATIONS) OF THE U.S. AND OTHER COUNTRIES THAT ARE ENFORCEABLE UNDER APPLICABLE LAW. WE WILL NOT BE LIABLE FOR OUR FAILURE TO MAKE, OR OUR DELAY IN MAKING, PAYMENT UNDER THIS LETTER OF CREDIT OR FOR ANY OTHER ACTION WE TAKE OR DO NOT TAKE, OR ANY DISCLOSURE WE MAKE, UNDER OR IN CONNECTION WITH THIS LETTER OF CREDIT (INCLUDING, WITHOUT LIMITATION, ANY REFUSAL TO TRANSFER THIS LETTER OF CREDIT) IF SUCH FAILURE, DELAY, ACTION OR DISCLOSURE IS REQUIRED BY SUCH LAWS, REGULATIONS, OR ORDERS.

WE HEREBY ENGAGE WITH YOU THAT EACH DRAFT DRAWN UNDER AND IN COMPLIANCE WITH THE TERMS AND CONDITIONS OF THIS LETTER OF CREDIT WILL BE DULY HONORED IF PRESENTED TOGETHER WITH THE DOCUMENTS SPECIFIED IN THIS LETTER OF CREDIT AT OUR OFFICE LOCATED AT 794 DAVIS STREET, 2ND FLOOR, SAN LEANDRO, CA 94577-6922, ATTENTION: US TRADE SERVICES - STANDBY LETTERS OF CREDIT (OR BY FAX AS REFERENCED ABOVE) ON OR BEFORE THE ABOVE STATED EXPIRY DATE, OR ANY EXTENDED EXPIRY DATE IF APPLICABLE.

THIS IRREVOCABLE STANDBY LETTER OF CREDIT SETS FORTH IN FULL THE TERMS OF OUR UNDERTAKING. THIS UNDERTAKING IS INDEPENDENT OF AND SHALL NOT IN ANY WAY BE MODIFIED, AMENDED, AMPLIFIED OR INCORPORATED BY REFERENCE TO ANY DOCUMENT, CONTRACT OR AGREEMENT REFERENCED HEREIN OTHER THAN THE STIPULATED ICC RULES AND GOVERNING LAWS.

CANCELLATION PRIOR TO EXPIRATION: YOU MAY RETURN THIS LETTER OF CREDIT TO US FOR CANCELLATION PRIOR TO ITS EXPIRATION PROVIDED THAT THIS LETTER OF CREDIT IS ACCOMPANIED BY YOUR WRITTEN AGREEMENT TO ITS CANCELLATION. SUCH WRITTEN AGREEMENT TO CANCELLATION SHOULD SPECIFICALLY REFERENCE THIS LETTER OF CREDIT

BY NUMBER, CLEARLY INDICATE THAT IT IS BEING RETURNED FOR CANCELLATION AND BE SIGNED BY A PERSON IDENTIFYING THEMSELVES AS AUTHORIZED TO SIGN FOR YOU.

EXCEPT AS OTHERWISE EXPRESSLY STATED HEREIN, THIS STANDBY LETTER OF CREDIT IS SUBJECT TO THE INTERNATIONAL STANDBY PRACTICE 1998, INTERNATIONAL CHAMBER OF COMMERCE PUBLICATION NO. 590

Very Truly Yours,

WELLS FARGO BANK, N.A.

By: _____

Authorized Signature

The original of the Letter of Credit contains an embossed seal over the Authorized Signature.

Please direct any written correspondence or inquiries regarding this Letter of Credit, always quoting our reference number, to **Wells Fargo Bank, National Association,** Attn: U.S. Standby Trade Services

at either

794 Davis Street, 2nd Floor
MAC A0283-023,
San Leandro, CA 94577-6922

or

401 N. Research Pkwy, 1st Floor
MAC 04004-017,
WINSTON-SALEM, NC27101-4157

Phone inquiries regarding this credit should be directed to our Standby Customer Connection Professionals

1-800-798-2815 Option 1
(Hours of Operation: 8:00 a.m. PT to 5:00 p.m. PT)

1-800-776-3862 Option 2
(Hours of Operation: 8:00 a.m. EST to 5:30 p.m. EST)

EXHIBIT A
TRANSFER REQUEST OF WELLS FARGO BANK, N.A. IRREVOCABLE STANDBY
LETTER OF CREDIT NUMBER: IS0394885U

TO: WELLS FARGO BANK, N.A. DATE: _____

U.S. TRADE SERVICES
STANDBY LETTER OF CREDIT DEPARTMENT
794 DAVIS STREET, 2ND FLOOR, MAC A0283-023
SAN LEANDRO, CALIFORNIA 94577-6922

U.S. TRADE SERVICES
STANDBY LETTER OF CREDIT DEPARTMENT
401 N. RESEARCH PKWY, MAC-D4004-017
WINSTON-SALEM, NORTH CAROLINA 27101

FOR VALUE RECEIVED, THE UNDERSIGNED BENEFICIARY OF THE ABOVE DESCRIBED LETTER OF CREDIT (THE "TRANSFEROR") HEREBY IRREVOCABLY TRANSFERS ALL ITS RIGHTS UNDER THE LETTER OF CREDIT AS AMENDED TO THIS DATE (THE "CREDIT") TO THE FOLLOWING TRANSFEREE (THE "TRANSFEREE"):

_____
NAME OF TRANSFEREE

_____
ADDRESS

BY THIS TRANSFER, ALL RIGHTS OF TRANSFEROR IN THE LETTER OF CREDIT ARE TRANSFERRED TO THE TRANSFEREE, AND THE TRANSFEREE SHALL BE THE SOLE BENEFICIARY OF THE LETTER OF CREDIT, POSSESSING ALL RIGHTS PERTAINING THERETO, INCLUDING, BUT NOT LIMITED TO, SOLE RIGHTS RELATING TO THE APPROVAL OF ANY AMENDMENTS, WHETHER INCREASES OR EXTENSIONS OR OTHER AMENDMENTS, AND WHETHER NOW EXISTING OR HEREAFTER MADE. YOU ARE HEREBY IRREVOCABLY INSTRUCTED TO ADVISE FUTURE AMENDMENT(S) OF THE LETTER OF CREDIT TO THE TRANSFEREE WITHOUT THE TRANSFEROR'S CONSENT OR NOTICE TO THE TRANSFEROR.

ENCLOSED ARE THE ORIGINAL LETTER OF CREDIT AND THE ORIGINAL(S) OF ALL AMENDMENTS TO DATE.

THE TRANSFEROR WARRANTS TO YOU THAT THIS TRANSFER AND THE TRANSACTION(S) HEREUNDER WILL NOT CONTRAVENE ANY FEDERAL LAWS OR REGULATIONS OF THE UNITED STATES NOR THE LAWS OR REGULATIONS OF ANY STATE THEREOF. PLEASE NOTIFY THE TRANSFEREE OF THIS TRANSFER AND OF THE TERMS AND CONDITIONS OF THE LETTER OF CREDIT AS TRANSFERRED. THIS TRANSFER WILL BECOME EFFECTIVE UPON WELLS FARGO BANK, N.A.'S WRITTEN NOTIFICATION TO THE TRANSFEREE THAT SUCH TRANSFER WAS EFFECTED.

_____
(TRANSFEROR'S NAME)

BY: _____

PRINTED NAME: _____

TITLE: _____

PHONE NUMBER: _____

THE BANK SIGNING BELOW GUARANTEES THAT THE TRANSFEROR'S SIGNATURE IS GENUINE AND THAT THE INDIVIDUAL SIGNING THIS TRANSFER REQUEST HAS THE AUTHORITY TO DO SO:

_____

(BANK'S NAME)

BY: _____

PRINTED NAME: _____

TITLE: _____

[A CORPORATE NOTARY ACKNOWLEDGMENT OR A CERTIFICATE OF AUTHORITY WITH CORPORATE SEAL IS ACCEPTABLE IN LIEU OF A BANK GUARANTEE]

EXHIBIT E

FORM OF GUARANTY

GUARANTY OF SUBLEASE

THIS GUARANTY OF SUBLEASE (this **"Guaranty")** is made by **PROTHENA CORPORATION plc,** an Ireland public limited company (the **"Guarantor"),** in favor of **AMGEN INC.,** a Delaware corporation **("Sublandlord"),** in connection with that certain Sublease, dated March _, 2016, and entered into concurrently with this Guaranty (the **"Sublease"),** by which Sublandlord subleases to **PROTHENA BIOSCIENCES INC,** a Delaware corporation **("Subtenant"),** certain premises (as more particularly defined in the Sublease) (the **"Premises")** consisting of a building located at 331 Oyster Point Boulevard in South San Francisco, California. As a material inducement to and in consideration of Sublandlord entering into the Sublease (Sublandlord having indicated that it would not enter into the Sublease without the execution of this Guaranty), Guarantor and Sublandlord agrees as follows:

1. Guarantor unconditionally and irrevocably guarantees, as a primary obligor and not as a surety, and promises to perform and be liable for, any and all obligations and liabilities of Subtenant under the terms of the Sublease.

2. Guarantor agrees that, without the consent of, or notice to, Guarantor and without affecting any of the obligations of Guarantor under this Guaranty, (a) Sublandlord and Subtenant may amend, compromise, release, or otherwise alter any term, covenant, or condition of the Sublease, and Guarantor guarantees and promises to perform all the obligations of Subtenant under the Sublease as so amended, compromised, released, or altered; (b) Sublandlord may release, substitute, or add any guarantor of or party to the Sublease; (c) Sublandlord may exercise, not exercise, impair, modify, limit, destroy, or suspend any right or remedy of Sublandlord under the Sublease; (d) Sublandlord or any other person acting on Sublandlord's behalf may deal in any manner with Subtenant, any guarantor, any party to the Sublease, or any other person; and (e) Sublandlord may permit all or any part of the Premises or of the rights or liabilities of Subtenant under the Sublease to be sublet, assigned, or assumed in accordance with the terms set forth in the Sublease. This is a continuing guaranty, and Guarantor waives the benefit of the provisions of California Civil Code §2815.

3. Guarantor waives and agrees not to assert or take advantage of (a) any right to require Sublandlord to proceed against Subtenant or any other person, or to pursue any other remedy before proceeding against Guarantor; (b) any right or defense that may arise by reason of the incapacity, lack of authority, death, or disability of Subtenant or any other person; (c) any right or defense arising by reason of the absence, impairment, modification, limitation, destruction, or cessation (in bankruptcy, by an election of remedies, or otherwise) of the liability of Subtenant, of the subrogation rights of Guarantor, or of the right of Guarantor to proceed against Subtenant for reimbursement; and (d) the benefit of any statute of limitations affecting the liability of Guarantor under this Guaranty or the enforcement of this Guaranty. Without in any manner limiting the generality of the foregoing, Guarantor waives the benefits of the

provisions of California Civil Code §§2809-2810, 2819, 2820, 2821, 2839, 2845, 2847. 2848, 2849-2850 and 2855 and any similar or analogous statutes of California or any other jurisdiction. In addition, Guarantor waives and agrees not to assert or take advantage of any right or defense based on the absence of any or all presentments, demands (including demands for performance), notices (including notices of adverse change in the financial status of Subtenant or other facts that increase the risk to Guarantor, notices of nonperformance, and notices of acceptance of this Guaranty), and protests of each and every kind.

4. Until all Subtenant's obligations under the Sublease are fully performed, Guarantor (a) will have no right of subrogation against Subtenant by reason of any payments or acts of performance by Guarantor under this Guaranty; and (b) subordinates any liability or indebtedness of Subtenant now or hereafter held by Guarantor to Subtenant's obligations under, arising out of, or related to the Sublease or Subtenant's use or occupancy of the Premises.

5. The liability of Guarantor and all rights, powers, and remedies of Sublandlord under this Guaranty and under any other agreement now or at any time hereafter in force between Sublandlord and Guarantor relating to the Sublease will be cumulative and not alternative, and such rights, powers, and remedies will be in addition to all rights, powers, and remedies given to Sublandlord by law or in equity.

6. This Guaranty applies to, inures to the benefit of, and binds all parties to this Guaranty, their heirs, devisees, legatees, executors, administrators, representatives, successors, and assigns (including any purchaser at a judicial foreclosure or trustee's sale or a holder of a deed in lieu of foreclosure). This Guaranty may be assigned by Sublandlord voluntarily or by operation of law.

7. Guarantor will not, without the prior written consent of Sublandlord, commence (or join with any other person in commencing) any bankruptcy, reorganization, or insolvency proceeding against Subtenant. The obligations of Guarantor under this Guaranty will not be altered, limited, or affected by any proceeding, voluntary or involuntary, involving the bankruptcy, insolvency, receivership, reorganization, liquidation, or arrangement of Subtenant, or by any defense that Subtenant may have by reason of any order, decree, or decision of any court or administrative body resulting from any such proceeding. Unless and until all Subtenant's obligations under the Sublease are fully performed, Guarantor will file in any bankruptcy, or other proceeding in which the filing of claims is required or permitted by law, all claims that Guarantor may have against Subtenant relating to any indebtedness of Subtenant to Guarantor, and Guarantor will assign to Sublandlord all rights of Guarantor under these claims. Sublandlord will have the sole right to accept or reject any plan proposed in such proceeding and to take any other action that a party filing a claim is entitled to take. In all such cases, whether in administration, bankruptcy, or otherwise, the person or persons authorized to pay such claim will pay to Sublandlord the amount payable on such claim and, to the full extent necessary for that purpose, Guarantor assigns to Sublandlord all of Guarantor's rights to any such payments or distributions to which Guarantor would otherwise be entitled; provided that Guarantor's obligations under this Guaranty will not be satisfied except to the extent that Sublandlord receives cash by reason of any such payment or distribution. If Sublandlord receives anything other than cash, it will be held as collateral for amounts due under this Guaranty.

8. It is acknowledged and confirmed that as of the date of execution and delivery of this Guaranty, Guarantor is a publicly traded corporation and audited financials for Guarantor are available for public review. If during any period of time when the Sublease remains in effect, Guarantor is not a publicly traded corporation with publicly available audited financials, then, subject to force majeure, Guarantor shall deliver to Landlord within sixty (60) days of Sublandlord's request (but no more frequently than once annually) a copy of an audited balance sheet and an audited income statement of Guarantor (the **"Financial Statements"),** which Financial Statements shall be (a) dated as of the end of the most recent fiscal year for which such statements are available (it being acknowledged, that statements for the immediately previous fiscal year may not be available until up to one hundred fifty (150) days after the end of such fiscal year), and (b) prepared in accordance with generally accepted accounting principles. In such event, Guarantor may condition delivery of any non-public Financial Statements on Sublandlord delivering a commercially reasonable confidentiality agreement, signed by Sublandlord and any other parties that will be entitled to review the Financial Statements.

9. TO THE EXTENT NOW OR HEREAFTER PERMITTED BY LAW, SUBLANDLORD AND GUARANTOR WAIVE THE RIGHT TO A JURY TRIAL OF ANY CAUSE OF ACTION, CLAIM, COUNTERCLAIM, OR CROSS-COMPLAINT IN ANY ACTION, PROCEEDING, OR OTHER HEARING BROUGHT BY EITHER SUBLANDLORD AGAINST SUBTENANT OR GUARANTOR OR BY SUBTENANT OR GUARANTOR AGAINST SUBLANDLORD ON ANY MATTER ARISING OUT OF, OR IN ANY WAY CONNECTED WITH, THE SUBLEASE, THIS GUARANTY, THE RELATIONSHIP OF SUBLANDLORD AND SUBTENANT, SUBTENANT'S USE OR OCCUPANCY OF THE PREMISES, OR ANY CLAIM OF INJURY OR DAMAGE, OR THE ENFORCEMENT OF ANY REMEDY UNDER ANY LAW, STATUTE, OR REGULATION, EMERGENCY OR OTHERWISE, NOW OR HEREAFTER IN EFFECT.

10. Sublandlord and Guarantor shall settle any dispute arising from or relating to this Guaranty by arbitration in the English language in San Francisco County, California before a single arbitrator appointed by the International Centre for Dispute Resolution. The Commercial Arbitration Rules of the American Arbitration Association, including the Optional Rules for Emergency Measures of Protection, shall apply in the arbitration. The parties irrevocably consent to the jurisdiction and venue of the state and federal courts having jurisdiction over San Francisco County, California for proceedings ("***Related Proceedings***") relating to enforcement of a party's obligation to arbitrate and to enforcement of any arbitral award. Any court having jurisdiction may enforce an arbitral award. The prevailing party in any arbitration or Related Proceedings shall recover its reasonable costs and attorneys' fees. Service of any document or pleading in an arbitration or Related Proceedings is proper if by personal delivery, commercial courier, or any form of mail requiring a return receipt at the address shown in this Guaranty for each party or at the address of Subtenant identified in the Sublease on behalf of Guarantor. Any notice, complaint, legal process or arbitration document shall be deemed properly served upon Guarantor if served upon Subtenant. Without limiting the generality of this Section 10, Guarantor waives and agrees not to assert by way of motion, defense, or otherwise in any Related Proceedings any claim that Guarantor is not personally subject to the jurisdiction of the above-named courts, that such Related Proceedings are brought in an inconvenient forum, or that the venue of such Related Proceedings is improper. Guarantor hereby represents and warrants

that the obligations of Guarantor under this Guaranty are fully enforceable against Guarantor in the State of California and Guarantor will raise no defenses to the enforceability of this Guaranty relating to Guarantor being a Ireland public limited company having its headquarters in Dublin, Ireland.

11. If a claim **("Recovery Claim")** is made on Sublandlord at any time (whether before or after payment or performance in full of any obligation of Guarantor, and whether such Recovery Claim is asserted in a bankruptcy proceeding or otherwise) for repayment or recovery of any amount or other value received by Sublandlord (from any source) in payment of, or on account of, any obligation of Guarantor under this Guaranty, and if Sublandlord repays such amount, returns value, or otherwise becomes liable for all or part of such Recovery Claim by reason of (a) any judgment, decree, or order of any court or administrative body; or (b) any settlement or compromise of such Recovery Claim, then Guarantor will remain severally liable to Sublandlord for the amount so repaid or returned or for which Sublandlord is liable to the same extent as if such payments or value had never been received by Sublandlord, despite any termination of this Guaranty, termination of the Sublease, or cancellation of any document evidencing any obligation of Guarantor under this Guaranty.

12. This Guaranty will constitute the entire agreement between Guarantor and Sublandlord with respect to the subject matter of this Guaranty and supersedes all prior agreements, understandings, negotiations, representations, and discussions, whether verbal or written, of the parties, pertaining to that subject matter. Guarantor is not relying on any representations, warranties, or inducements from Sublandlord that are not expressly stated in this Guaranty.

13. No provision of this Guaranty or right of Sublandlord under it may be waived, nor may any Guarantor be released from any obligation under this Guaranty except by a writing duly executed by an authorized officer or director of Sublandlord, which writing shall be promptly provided by Sublandlord upon full satisfaction of Guarantor's obligations hereunder.

14. When the context and construction so requires, all words used in the singular in this Guaranty will be deemed to have been used in the plural. The word "person" as used in this Guaranty will include an individual, company, firm, association, partnership, corporation, trust, or other legal entity of any kind whatsoever. "Sublandlord," whenever used in this Guaranty, refers to and means Sublandlord under the Sublease specifically named and also any assignee of Sublandlord, whether by outright assignment or by assignment for security, and also any successor to the interest of Sublandlord or of any assignee of the Sublease or any part of the Sublease, whether by assignment or otherwise. "Subtenant," whenever used in this Guaranty, refers to and means Subtenant under the Sublease and also any assignee of the interest of Subtenant in the Sublease and their respective successors in interest.

15. If any provision of this Guaranty is determined to be illegal or unenforceable, all other provisions will nevertheless be effective.

16. The waiver or failure to enforce any provision of this Guaranty will not operate as a waiver of any other breach of such provision or any other provisions of this Guaranty; nor will

any single or partial exercise of any right, power, or privilege preclude any other or further such exercise or the exercise of any other right, power, or privilege.

17. Time is strictly of the essence under this Guaranty and any amendment, modification, or revision of this Guaranty.

18. Guarantor represents and warrants that each individual executing this Guaranty on behalf of Guarantor is duly authorized to execute and deliver this Guaranty on behalf of Guarantor. Concurrently herewith, Guarantor shall deliver to Sublandlord evidence of such authority, including a legal opinion from Ireland counsel.

19. If either party to this Guaranty participates in an action against the other party arising out of or in connection with this Guaranty, the prevailing party will be entitled to have and recover from the other party reasonable attorney fees, collection costs, and other costs incurred in, and in preparation for, the action, arbitration, or mediation.

20. All notices given hereunder must be in writing delivered by certified or registered mail, return receipt requested, or by a nationally recognized overnight delivery service. Notice by registered or certified mail will be effective when the return receipt thereof is signed, and notice by overnight delivery will be effective when received or when receipt is refused as evidenced by the records of the courier service. Notices must be addressed to the following addresses, or to such other address or addresses as the parties may from time to time specify by notice so given:

In the case of notice to Guarantor, to:	Prothena Corporation plc Adelphi Plaza Upper George's Street, Dun Laoghaire Co. Dublin, A96 T927, Ireland Attn: Company Secretary
With a copy to:	Prothena Biosciences Inc 650 Gateway Boulevard South San Francisco, CA 94010 Attn: Legal Department
In the case of notice to Sublandlord, to:	Amgen Inc. One Amgen Center Drive Mail Stop: 28-1-A Thousand Oaks, CA 91320-1799 Attention: Corporate Real Estate
With a copy to:	Amgen Inc. One Amgen Center Drive Mail Stop: 35-2-A Thousand Oaks, CA 91320-1799 Attention: Operations Law Group

The parties shall be responsible for notifying each other hereunder of any changes of address by notice given in accordance with the above provisions.

21. Guarantor's execution and delivery of this Guaranty will not result in any breach of, or constitute a default under, any mortgage, deed of trust, lease loan, credit agreement, partnership agreement, or other contract or instrument to which Guarantor is a party or by which Guarantor may be bound.

22. If Guarantor is more than one (1) person, the obligations of the persons comprising Guarantor will be joint and several and the unenforceability of this Guaranty or Sublandlord's election not to enforce this Guaranty against one (1) or more of the persons comprising Guarantor will not affect the obligations of the remaining persons comprising Guarantor or the enforceability of this Guaranty against such remaining persons.

23. Each of the parties will execute such other and further documents and do such further acts as may be reasonably required to effectuate the intent of the parties and carry out the terms of this Guaranty.

[SIGNATURES ON NEXT PAGE]

IN WITNESS WHEREOF, the parties hereto have hereunto set their hand on the date first above written.

"Guarantor"

PROTHENA CORPORATION plc,
an Ireland public limited company

By: _____

Name: _____

Title: _____

By: _____

Name: _____

Title: _____

"Sublandlord"

AMGEN INC.,
a Delaware corporation

By: _____

Name: _____

Title: _____

EXHIBIT B-1

SUBLEASED PREMISES

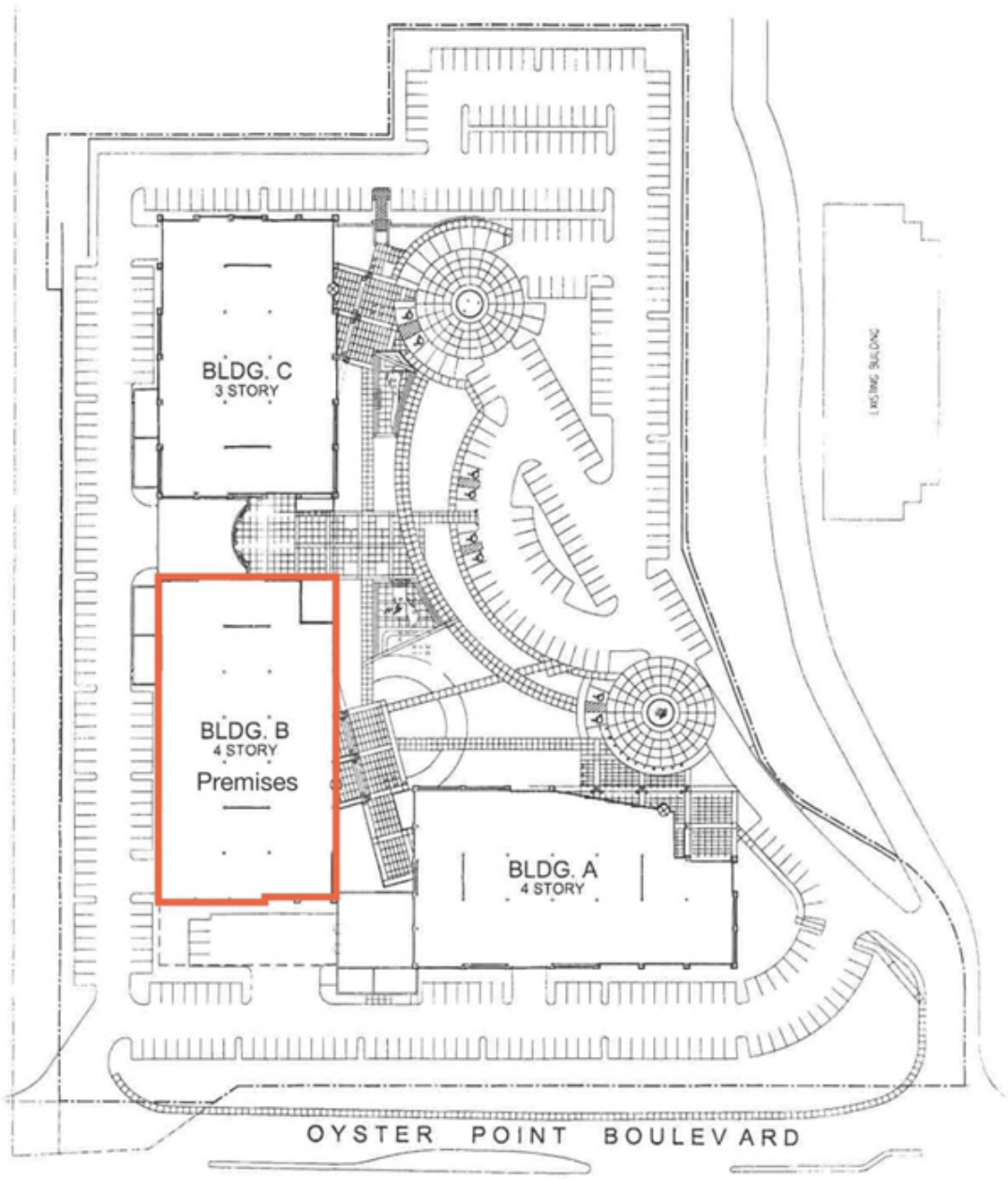

BLDG. C
3 STORY
BLDG. B
4 STORY
Premises
BLDG. A
4 STORY
EXISTING BUILDING
OYSTER POINT BOULEVARD

EXHIBIT B-2

COMPLETE PREMISES

FL01

prothena

AREA FLOOR PLAN - LEVEL 1

SCALE: 1/8" = 1'-0"

FEBRUARY 22, 2017

DGA planning | architecture | interiors

FL04

prothena

AREA FLOOR PLAN - LEVEL 4

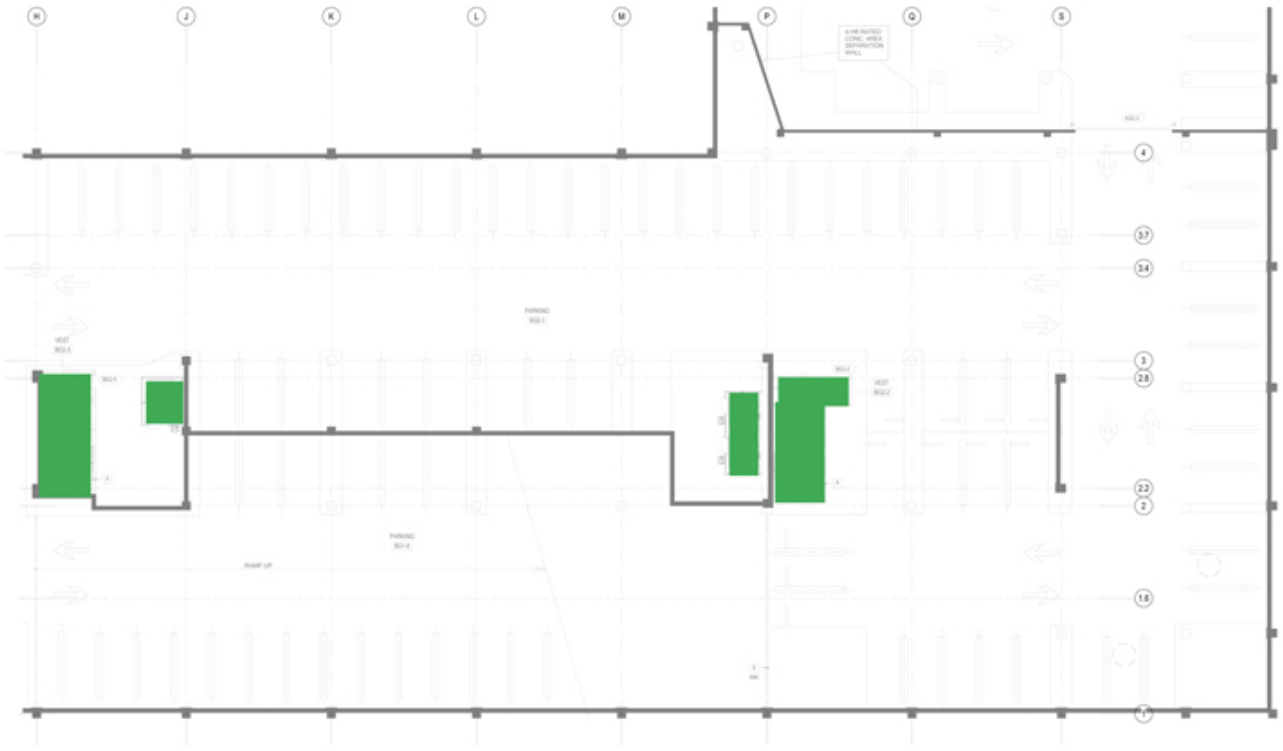
SCALE: 1/8" = 1'-0"

FEBRUARY 22, 2017

DGA planning | architecture | interiors

EXHIBIT B-3

BUILDING COMMON AREAS



FLOOR PLAN - OVERALL, LEVEL G2 **FLG2**

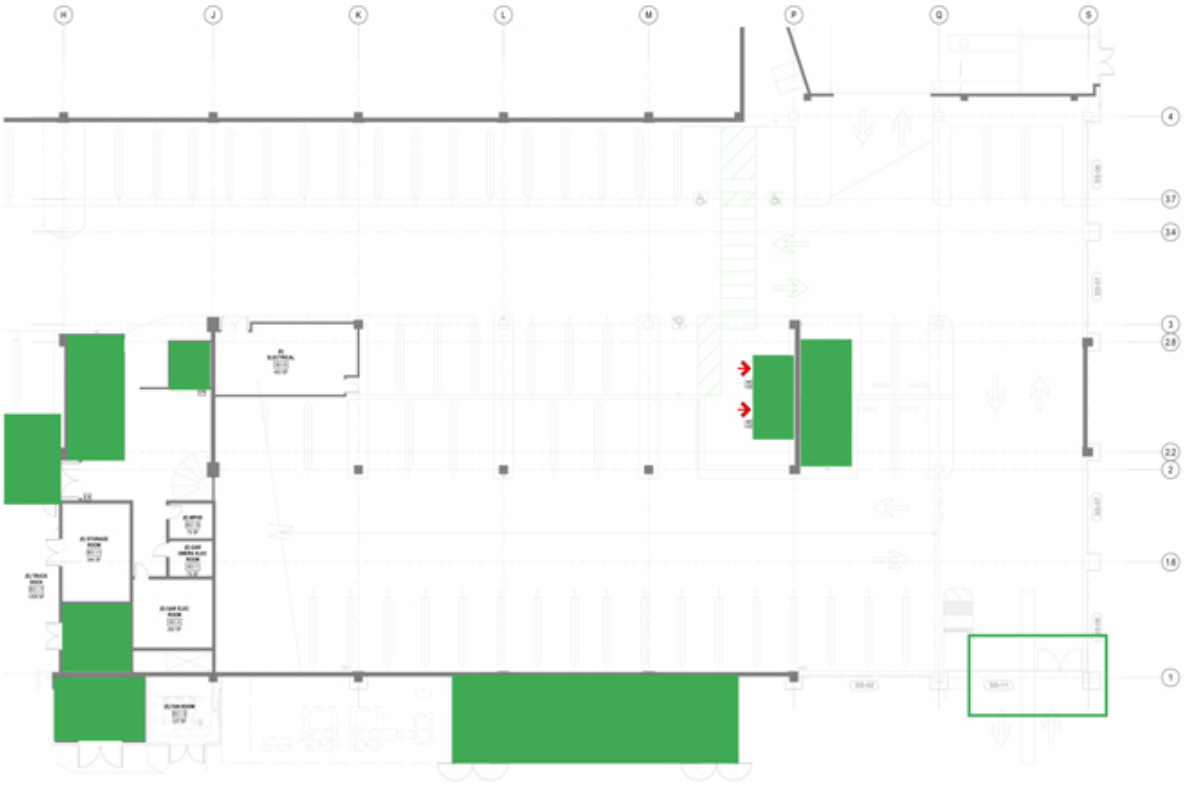
PROTHENA - 331 OYSTER POINT

07/16/18

SCALE: 1/8" = 1'-0"

prothena

DGA planning | architecture | interiors



FLGI

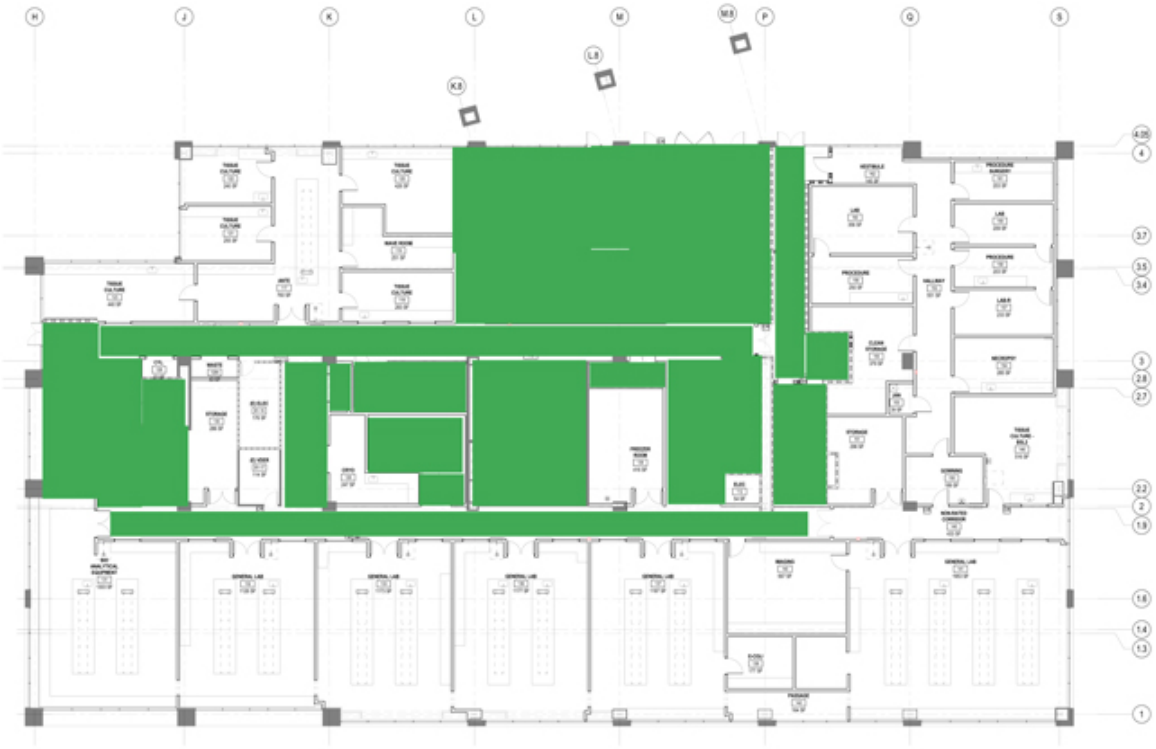
prothena

AREA FLOOR PLAN - LEVEL G1

SCALE: 1/8" = 1'-0"

FEBRUARY 22, 2017

DGA planning | architecture | interiors



FL01

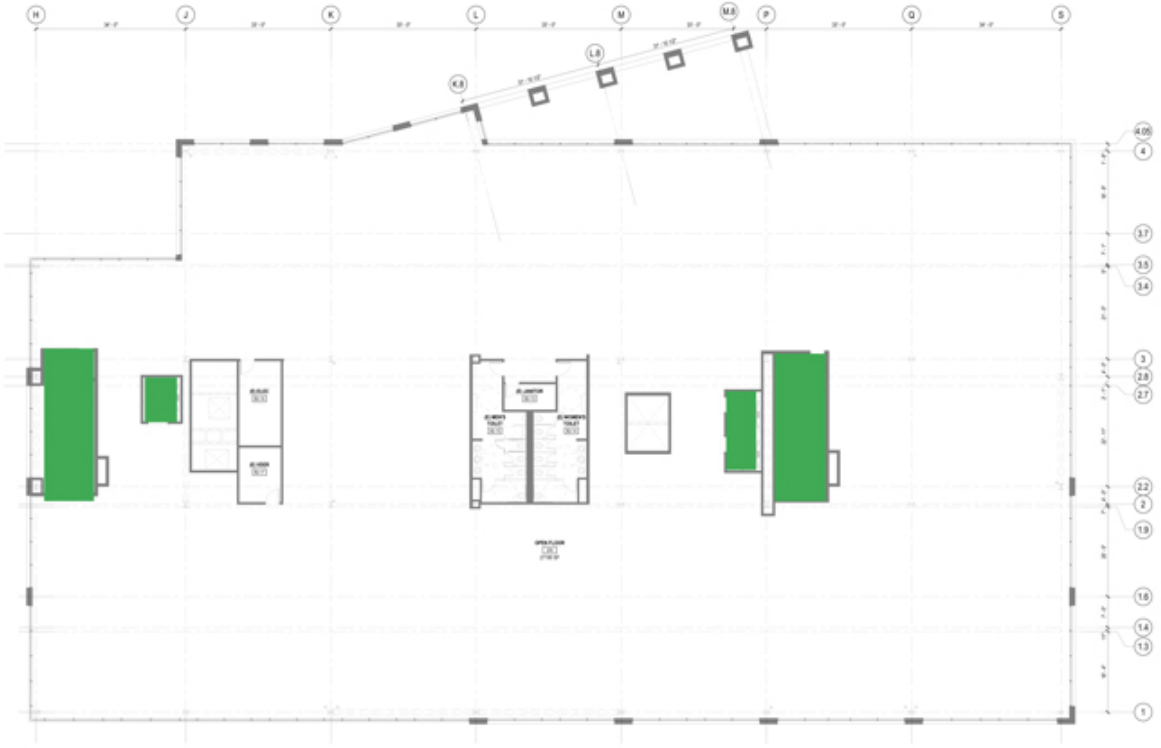
prothena

AREA FLOOR PLAN - LEVEL 1

SCALE: 1/8" = 1'-0"

FEBRUARY 22, 2017

DGA planning | architecture | interiors



FLOOR PLAN - OVERALL, LEVEL 2 **FL02**

PROTHENA - 331 OYSTER POINT

07/16/18

SCALE: 1/8" = 1'-0"

prothena

DGA planning | architecture | interiors

FL03

prothena

AREA FLOOR PLAN - LEVEL 3

SCALE: 1/8" = 1'-0"

FEBRUARY 22, 2017

DGA planning | architecture | interiors

FL04

prothena

AREA FLOOR PLAN - LEVEL 4

SCALE: 1/8" = 1'-0"

FEBRUARY 22, 2017

DGA planning | architecture | interiors

EXHIBIT 31.1

CERTIFICATION

I, Derek A. Small, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Assembly Biosciences, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: November 8, 2018

By: /s/ Derek A. Small
Derek A. Small
President and Chief Executive Officer
(Principal Executive Officer)

EXHIBIT 31.2

CERTIFICATION

I, Graham Cooper, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Assembly Biosciences, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: November 8, 2018

By: /s/ Graham Cooper
Graham Cooper
Chief Financial Officer and Chief Operating Officer
(Principal Financial Officer)

EXHIBIT 32.1

CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Quarterly Report on Form 10-Q of Assembly Biosciences, Inc. (the Company) for the period ended September 30, 2018 as filed with the Securities and Exchange Commission on or about the date hereof (the Report), I, Derek A. Small, Chief Executive Officer, hereby certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to my knowledge:

(1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company as of, and for, the periods presented in the Report.

/s/ Derek A. Small
Derek A. Small
President and Chief Executive Officer

Date: November 8, 2018

EXHIBIT 32.2

CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Quarterly Report on Form 10-Q of Assembly Biosciences, Inc. (the Company) for the period ended September 30, 2018 as filed with the Securities and Exchange Commission on or about the date hereof (the Report), I, Graham Cooper, Chief Financial Officer, hereby certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to my knowledge:

(1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company as of, and for, the periods presented in the Report.

/s/ Graham Cooper
Graham Cooper
Chief Financial Officer and Chief Operating Officer

Date: November 8, 2018