

**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 June 30, 2020

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: 001-37923

CRISPR THERAPEUTICS AG

(Exact name of Registrant as specified in its charter)

Switzerland
(State or other jurisdiction of
incorporation or organization)

Baarerstrasse 14
6300 Zug, Switzerland
(Address of principal executive offices)

Not Applicable
(I.R.S. Employer
Identification No.)

Not Applicable
(zip code)

+41 (0)41 561 32 77

(Registrant's telephone number, including area code)

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol	Name of each exchange on which registered
Common Shares, CHF 0.03 par value	CRSP	The Nasdaq Global Market

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 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	<input checked="" type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input type="checkbox"/>	Smaller reporting company	<input type="checkbox"/>
		Emerging growth company	<input type="checkbox"/>

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 July 23, 2020, there were 70,171,978 shares of registrant's common shares outstanding.

Throughout this Quarterly Report on Form 10-Q, the “Company,” “CRISPR,” “CRISPR Therapeutics,” “we,” “us,” and “our,” except where the context requires otherwise, refer to CRISPR Therapeutics AG and its consolidated subsidiaries.

“CRISPR Therapeutics” is a registered trademark of CRISPR Therapeutics AG. The trademarks for “CTX001TM,” “CTX110TM,” “CTX120TM,” and “CTX130TM” are pending in the United States and the trademark for “CRISPR Therapeutics” is a registered trademark in the United Kingdom and is pending in the European Union and Switzerland. Other brands, logos, names and trademarks contained in this Quarterly Report on Form 10-Q are the property of their respective owners. Solely for convenience, trademarks, service marks and trade names referred to in this Quarterly Report on Form 10-Q may appear without the ® or TM symbols, but such references are not intended to indicate, in any way, that we will not assert, to the fullest extent under applicable law, our rights to these trademarks, service marks and trade names.

FORWARD-LOOKING STATEMENTS

This Quarterly Report on Form 10-Q contains “forward-looking statements” that involve substantial risks and uncertainties. All statements, other than statements of historical facts, contained in this Quarterly Report on Form 10-Q are forward-looking statements. These statements are often identified by the use of words such as “anticipate,” “believe,” “continue,” “could,” “estimate,” “expect,” “intend,” “may,” “plan,” “predict,” “project,” “potential,” “will,” “would” or the negative or plural of these words or similar expressions or variations, although not all forward-looking statements contain these identifying words. Forward-looking statements in this Quarterly Report on Form 10-Q include, but are not limited to, statements about:

- the safety, efficacy and clinical progress of our various clinical programs including those for CTX001TM, CTX110TM, CTX120TM and CTX130TM;
- the status of clinical trials, development timelines and discussions with regulatory authorities related to product candidates under development by us and our collaborators;
- the initiation, timing, progress and results of our preclinical studies and clinical trials, including our ongoing clinical trials and any planned clinical trials for CTX001, CTX110, CTX120 and CTX130, and our research and development programs, including delays or disruptions in clinical trials, non-clinical experiments and investigational new drug application-enabling studies;
- the actual or potential benefits of United States Federal Drug Administration, or FDA, designations, such as orphan drug, fast track and regenerative medicine advanced therapy, or such European equivalents;
- our ability to advance product candidates into, and successfully complete, clinical trials;
- our intellectual property coverage and positions, including those of our licensors and third parties as well as the status and potential outcome of proceedings involving any such intellectual property;
- our anticipated expenses, ability to obtain funding for our operations and the sufficiency of our cash resources;
- our plan to consolidate our U.S. offices in the greater Boston area into a single location;
- the therapeutic value, development, and commercial potential of CRISPR/Cas9 gene-editing technologies and therapies; and
- potential impacts due to the coronavirus pandemic such as delays, interruptions or other adverse effects to clinical trials, delays in regulatory review, manufacturing and supply chain interruptions, adverse effects on healthcare systems and disruption of the global economy, and the overall impact of the coronavirus pandemic on our business, financial condition and results of operations.

Any forward-looking statements in this Quarterly Report on Form 10-Q reflect our current views with respect to future events or to our future financial performance and involve known and unknown risks, uncertainties and assumptions that could cause our actual results and the timing of certain events to differ materially from future results expressed or implied by the forward-looking statements. Factors that could cause or contribute to such differences include, but are not limited to, those identified herein, and those discussed in the section titled “Risk Factors,” set forth in Part II, Item 1A of this Quarterly Report on Form 10-Q, if any, our Annual Report on Form 10-K filed with the Securities and Exchange Commission, or SEC, on February 12, 2020, and in other SEC filings. You should not rely upon forward-looking statements as predictions of future events. Such forward-looking statements speak only as of the date of this report. Our forward-looking statements do not reflect the potential impact of any future acquisitions, mergers, dispositions, joint ventures or investments we may make or enter into.

You should read this Quarterly Report on Form 10-Q and the documents that we have filed as exhibits to this Quarterly Report on Form 10-Q completely and with the understanding that our actual future results, performance or achievements may be materially different from what we expect. Except as required by law, we undertake no obligation to update any forward-looking statements to reflect events or circumstances after the date of such statements.

Investors and others should note that we announce material information to our investors using our investor relations website (<https://crisprtx.gcs-web.com/>), SEC filings, press releases, public conference calls and webcasts. We use these channels as well as social media to communicate with the public about our company, our business, our product candidates and other matters. It is possible that the information we post on social media could be deemed to be material information. Therefore, we encourage investors, the media, and others interested in our company to review the information we post on the social media channels listed on our investor relations website.

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Item 1. Financial Statements

CRISPR Therapeutics AG
Condensed Consolidated Balance Sheets
(unaudited, in thousands, except share and per share data)

	As of	
	June 30, 2020	December 31, 2019
Assets		
Current assets:		
Cash and cash equivalents	\$ 945,068	\$ 943,771
Accounts receivable	33	99
Prepaid expenses and other current assets	20,517	43,677
Total current assets	965,618	987,547
Property and equipment, net	34,444	31,330
Intangible assets, net	208	235
Restricted cash	6,303	5,041
Operating lease assets	39,297	41,502
Other non-current assets	662	1,097
Total assets	<u>\$ 1,046,532</u>	<u>\$ 1,066,752</u>
Liabilities and shareholders' equity		
Current liabilities:		
Accounts payable	\$ 13,219	\$ 5,944
Accrued expenses	36,685	30,180
Deferred revenue, current	759	960
Accrued tax liabilities	1,507	583
Operating lease liabilities	9,906	8,489
Other current liabilities	12,429	10,950
Total current liabilities	74,505	57,106
Deferred revenue, non-current	11,776	11,776
Operating lease liabilities, net of current portion	40,317	44,050
Other non-current liabilities	9,264	14,395
Total liabilities	<u>135,862</u>	<u>127,327</u>
Commitments and contingencies, see Note 4		
Shareholders' equity:		
Common shares, CHF 0.03 par value, 115,172,786 and 103,901,006 shares authorized at June 30, 2020 and December 31, 2019, respectively, 62,747,821 and 61,034,025 shares issued at June 30, 2020 and December 31, 2019, respectively, 62,552,505 and 60,783,799 shares outstanding at June 30, 2020 and December 31, 2019, respectively.	1,900	1,847
Treasury shares, at cost, 195,316 and 250,226 shares at June 30, 2020 and December 31, 2019, respectively.	(63)	(63)
Additional paid-in capital	1,282,952	1,162,345
Accumulated deficit	(374,098)	(224,711)
Accumulated other comprehensive (loss) income	(21)	7
Total shareholders' equity	<u>910,670</u>	<u>939,425</u>
Total liabilities and shareholders' equity	<u>\$ 1,046,532</u>	<u>\$ 1,066,752</u>

The accompanying notes are an integral part of these unaudited condensed consolidated financial statements.

CRISPR Therapeutics AG
Condensed Consolidated Statements of Operations and Comprehensive Loss
(unaudited, in thousands, except share and per share data)

	Three Months Ended June 30,		Six Months Ended June 30,	
	2020	2019	2020	2019
Collaboration revenue (1)	\$ 44	\$ 318	\$ 201	\$ 646
Operating expenses:				
Research and development (2)	59,380	39,533	113,573	73,355
General and administrative	21,353	15,768	40,903	30,697
Total operating expenses	<u>80,733</u>	<u>55,301</u>	<u>154,476</u>	<u>104,052</u>
Loss from operations	<u>(80,689)</u>	<u>(54,983)</u>	<u>(154,275)</u>	<u>(103,406)</u>
Other income (expense):				
Loss from equity method investment	—	(1,012)	—	(2,037)
Other income, net	1,412	2,381	5,644	3,506
Total other income, net	<u>1,412</u>	<u>1,369</u>	<u>5,644</u>	<u>1,469</u>
Net loss before income taxes	<u>(79,277)</u>	<u>(53,614)</u>	<u>(148,631)</u>	<u>(101,937)</u>
Provision for income taxes	(379)	(85)	(756)	(170)
Net loss	<u>(79,656)</u>	<u>(53,699)</u>	<u>(149,387)</u>	<u>(102,107)</u>
Foreign currency translation adjustment	(3)	(10)	(28)	(2)
Comprehensive loss	<u>\$ (79,659)</u>	<u>\$ (53,709)</u>	<u>\$ (149,415)</u>	<u>\$ (102,109)</u>
Net loss per share attributable to common shareholders—basic and diluted	<u>\$ (1.30)</u>	<u>\$ (1.01)</u>	<u>\$ (2.44)</u>	<u>\$ (1.94)</u>
Weighted-average common shares outstanding used in net loss per share attributable to common shareholders—basic and diluted	<u>61,420,746</u>	<u>53,188,041</u>	<u>61,134,214</u>	<u>52,643,649</u>
(1) Including the following revenue from a related party, see Notes 5 & 10:	\$ —	\$ 318	\$ —	\$ 646
(2) Including the following research and development expense with a related party, see Notes 5 & 10:	\$ —	\$ 6,870	\$ —	\$ 14,459

The accompanying notes are an integral part of these unaudited condensed consolidated financial statements.

CRISPR Therapeutics AG
Condensed Consolidated Statements of Shareholders' Equity
(In thousands, except share and per share data)

	Common Shares		Treasury Shares			Additional Paid-in Capital	Accumulated Deficit	Accumulated Other Comprehensive Income (Loss)	Total Shareholders' Equity
	Shares	CHF 0.03 Par Value	Shares	Amount, at cost					
Balance at December 31, 2018	51,852,862	1,584	307,936	(57)	682,245	(291,569)	(8)	392,195	
Issuance of common shares, net of issuance costs of \$1.2 million	631,580	—	—	—	23,472	—	—	23,472	
Vesting of restricted shares	9,288	—	—	—	15	—	—	15	
Exercise of vested options	141,915	5	—	—	1,827	—	—	1,832	
Stock-based compensation expense	—	—	—	—	10,696	—	—	10,696	
Other comprehensive income	—	—	—	—	—	—	8	8	
Net loss	—	—	—	—	—	(48,408)	—	(48,408)	
Balance at March 31, 2019	52,635,645	\$ 1,589	307,936	\$ (57)	\$ 718,255	\$ (339,977)	\$ -	\$ 379,810	
Issuance of common shares, net of issuance costs of \$1.3 million	732,108	40	(47,297)	—	28,074	—	—	28,114	
Vesting of restricted shares	12,317	1	—	—	15	—	—	16	
Exercise of vested options	118,987	—	(3,650)	—	1,254	—	—	1,254	
Stock-based compensation expense	—	—	—	—	12,198	—	—	12,198	
Other comprehensive loss	—	—	—	—	—	—	(10)	(10)	
Net loss	—	—	—	—	—	(53,699)	—	(53,699)	
Balance at June 30, 2019	53,499,057	\$ 1,630	256,989	\$ (57)	\$ 759,796	\$ (393,676)	\$ (10)	\$ 367,683	
Balance at December 31, 2019	60,783,799	1,847	250,226	(63)	1,162,345	(224,711)	7	939,425	
Vesting of restricted shares	5,000	—	—	—	—	—	—	-	
Exercise of vested options	83,406	3	—	—	1,385	—	—	1,388	
Stock-based compensation expense	—	—	—	—	14,151	—	—	14,151	
Issuance of common shares related to license agreement	17,830	—	(17,830)	—	889	—	—	889	
Other comprehensive loss	—	—	—	—	—	—	(25)	(25)	
Net loss	—	—	—	—	—	(69,731)	—	(69,731)	
Balance at March 31, 2020	60,890,035	\$ 1,850	232,396	\$ (63)	\$ 1,178,770	\$ (294,442)	\$ (18)	\$ 886,097	
Issuance of common shares, net of issuance costs of \$3.1 million	1,238,453	38	—	—	82,151	—	—	82,189	
Vesting of restricted shares	29,916	1	—	—	—	—	—	1	
Exercise of vested options	394,101	11	(37,080)	—	6,334	—	—	6,345	
Stock-based compensation expense	—	—	—	—	15,697	—	—	15,697	
Other comprehensive loss	—	—	—	—	—	—	(3)	(3)	
Net loss	—	—	—	—	—	(79,656)	—	(79,656)	
Balance at June 30, 2020	62,552,505	\$ 1,900	195,316	\$ (63)	\$ 1,282,952	\$ (374,098)	\$ (21)	\$ 910,670	

The accompanying notes are an integral part of these unaudited condensed consolidated financial statements.

CRISPR Therapeutics AG
Condensed Consolidated Statements of Cash Flows
(unaudited, in thousands)

	<u>Six Months Ended June 30,</u>	
	<u>2020</u>	<u>2019</u>
Operating activities:		
Net loss	\$ (149,387)	\$ (102,107)
Reconciliation of net loss to net cash used in operating activities:		
Depreciation and amortization	4,283	2,010
Equity-based compensation	29,848	20,857
Loss from equity method investment	—	2,037
Other expense, non-cash	889	—
Changes in:		
Accounts receivable	66	(233)
Prepaid expenses and other assets	23,595	(1,399)
Accounts payable and accrued expenses	13,216	(849)
Deferred revenue	(201)	(50)
Operating lease assets and liabilities	(111)	(391)
Other liabilities, net	(3,652)	6
Net cash used in operating activities	<u>(81,454)</u>	<u>(80,119)</u>
Investing activities:		
Purchase of property and equipment	(6,596)	(3,271)
Net cash used in investing activities	<u>(6,596)</u>	<u>(3,271)</u>
Financing activities:		
Proceeds from issuance of common shares, net of issuance costs	83,021	52,294
Proceeds from exercise of options, net of issuance costs	7,616	3,086
Net cash provided by financing activities	<u>90,637</u>	<u>55,380</u>
Effect of exchange rate changes on cash	(28)	(2)
Increase (decrease) in cash	<u>2,559</u>	<u>(28,012)</u>
Cash, cash equivalents and restricted cash, beginning of period	<u>948,812</u>	<u>459,812</u>
Cash, cash equivalents and restricted cash, end of period	<u>\$ 951,371</u>	<u>\$ 431,800</u>
Supplemental disclosure of non-cash investing and financing activities		
Property and equipment purchases in accounts payable and accrued expenses	\$ 2,585	\$ 702
Equity issuance costs in accounts payable and accrued expenses	\$ 1,009	\$ 477

	<u>As of June 30,</u>	
	<u>2020</u>	<u>2019</u>
Reconciliation to amounts within the condensed consolidated balance sheets		
Cash and cash equivalents	\$ 945,068	\$ 427,885
Restricted cash	<u>6,303</u>	<u>3,915</u>
Cash, cash equivalents and restricted cash at end of period	<u><u>951,371</u></u>	<u><u>431,800</u></u>

The accompanying notes are an integral part of these unaudited condensed consolidated financial statements.

CRISPR Therapeutics AG
Notes to Condensed Consolidated Financial Statements
(unaudited)

1. Basis of Presentation and Significant Accounting Policies

Basis of Presentation

The accompanying condensed consolidated financial statements are unaudited and have been prepared by the Company in accordance with accounting principles generally accepted in the United States of America, or GAAP.

The accompanying condensed consolidated financial statements include the accounts of the Company and its wholly-owned subsidiaries. Prior to December 13, 2019, the Company accounted for its 50% investment in Casebia Therapeutics Limited Liability Partnership, or Casebia, under the equity method. As described in Note 5, on December 13, 2019, Casebia became a fully-owned subsidiary and, as a result, the Company consolidated Casebia's financial results from that date forward. All intercompany balances and transactions have been eliminated in consolidation. The Company views its operations and manages its business in one operating segment, which is the business of discovering, developing and commercializing therapies derived from or incorporating genome-editing technology. Certain information and footnote disclosures normally included in the Company's annual financial statements have been condensed or omitted. These interim financial statements, in the opinion of management, reflect all normal recurring adjustments necessary for a fair presentation of the financial position and results of operations for the three and six-month interim periods ended June 30, 2020 and 2019.

The results of operations for the interim periods are not necessarily indicative of the results of operations to be expected for the full year. These interim financial statements should be read in conjunction with the audited financial statements for the year ended December 31, 2019, which are contained in the 2019 Annual Report on Form 10-K filed with the Securities and Exchange Commission, or the SEC, on February 12, 2020.

Use of Estimates

The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the amounts reported in the financial statements and accompanying notes. On an ongoing basis, the Company's management evaluates its estimates, which include, but are not limited to, revenue recognition, equity-based compensation expense and reported amounts of expenses during the period. Significant estimates in these consolidated financial statements have been made in connection with revenue recognition and equity-based compensation expense. The Company bases its estimates on historical experience and other market-specific or other relevant assumptions that it believes to be reasonable under the circumstances. Actual results may differ from those estimates or assumptions. Changes in estimates are reflected in reported results in the period in which they become known.

Significant Accounting Policies

The significant accounting policies used in preparation of these condensed consolidated financial statements for the three and six months ended June 30, 2020 are consistent with those discussed in Note 2 to the consolidated financial statements in the Company's 2019 Annual Report on Form 10-K filed with the SEC on February 12, 2020, except with respect to the Company's policy on credit losses noted within the "Recently adopted accounting standards" section below.

Recently Adopted Accounting Standards

Credit Losses

On January 1, 2020, the Company adopted ASU 2016-13, *Financial Instruments – Credit Losses (Topic 326): Measurement of Credit Losses on Financial Statements*, or ASC 326. The new standard 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. It also 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 targeted transition relief standard allows filers an option to irrevocably elect the fair value option of ASC 825-10, *Financial Instruments-Overall*, applied on an instrument-by-instrument basis for eligible instruments. The Company adopted ASC 326 using the modified retrospective method for all financial assets measured at amortized cost. The adoption of ASU 2016-13 did not have a material impact on the Company's financial position or results of operations upon adoption.

2. Property and Equipment, net

Property and equipment, net, consists of the following (in thousands):

	As of	
	June 30, 2020	December 31, 2019
Computer equipment	\$ 727	\$ 727
Furniture, fixtures and other	3,215	3,215
Laboratory equipment	21,789	16,640
Leasehold improvements	21,510	21,400
Construction work in process	3,505	1,394
Total property and equipment, gross	50,746	43,376
Accumulated depreciation	(16,302)	(12,046)
Total property and equipment, net	\$ 34,444	\$ 31,330

Depreciation expense for the three and six months ended June 30, 2020 was \$2.2 million and \$4.3 million, respectively. Depreciation expense for the three and six months ended June 30, 2019 was \$1.0 million and \$2.0 million, respectively.

3. Accrued Expenses

Accrued expenses consist of the following (in thousands):

	As of	
	June 30, 2020	December 31, 2019
Payroll and employee-related costs	\$ 10,128	\$ 15,229
Research costs	19,723	9,434
Licensing fees	300	750
Professional fees	1,742	2,040
Intellectual property costs	2,553	2,311
Accrued property and equipment	576	407
Other	1,663	9
Total	\$ 36,685	\$ 30,180

4. Commitments and Contingencies

Future Lease Commitments

The Company has entered into certain leasing commitments, for which, right of use assets and right of use liabilities are not reflected on the consolidated balance sheet as the leases have not yet commenced.

In November 2019, the Company, together with one of its partners, committed to making \$3.7 million in annual rental payments to a clinical manufacturing organization under a lease arrangement for a five-year period following commencement of the lease arrangement. The lease arrangement is expected to commence in the second half of 2020 and all payments will be split equally between the Company and its partner.

In May 2020, the Company entered into a lease agreement for a cell therapy manufacturing facility in Framingham, Massachusetts, or the Framingham Lease, for clinical and commercial production of the Company's investigational cell therapy product candidates. The Framingham Lease is expected to commence in the second half of 2020. In connection therewith, the Company has committed to making at least \$40.2 million in rental payments over the fifteen-year lease term.

In July 2020, the Company entered into a lease agreement for an office and laboratory facility in Boston, Massachusetts, or the 2020 Boston Lease. The 2020 Boston Lease is expected to commence in the first half of 2022. In connection therewith, the Company has committed to making at least \$292.5 million in rental payments over a lease term of 152 months.

Litigation

In the ordinary course of business, the Company is from time to time involved in lawsuits, claims, investigations, proceedings, and threats of litigation relating to intellectual property, commercial arrangements, employment and other matters. While the outcome of those proceedings and claims cannot be predicted with certainty, the Company is not party to any legal or arbitration proceedings that may have significant effects on its financial position. It is not a party to any material proceedings in which any director, member of executive management or affiliate of the Company is either a party adverse to it or its subsidiaries or has a material interest adverse to it or its subsidiaries.

Letters of Credit

As of June 30, 2020, the Company had restricted cash of \$6.3 million representing letters of credit securing the Company's obligations under certain leased facilities, as well as certain credit card arrangements. The letters of credit are secured by cash held in a restricted depository account. The cash deposit is recorded in restricted cash in the accompanying consolidated balance sheet as of June 30, 2020. In addition, in connection with the 2020 Boston Lease, a letter of credit for \$10.5 million was issued.

Research, License and Intellectual Property Agreements

The Company has engaged several research institutions and companies to identify new delivery strategies and applications of the Company's gene-editing technology. The Company is also a party to a number of research license agreements which require significant upfront payments and may be required to make future royalty payments and potential milestone payments from time to time. In addition, the Company is also a party to intellectual property agreements, which require maintenance and milestone payments from time to time. Further, the Company is a party to a number of manufacturing agreements that require upfront payments for the future performance of services.

In association with these agreements, on a product-by-product basis, the counterparties are eligible to receive up to low eight-digit potential payments upon specified research, development and regulatory milestones. In addition, on a product-by-product basis, the counterparties are eligible to receive potential commercial milestone payments based on specified annual sales thresholds. The potential payments are low-single digit percentages of the specified annual sales thresholds. The counterparties are also eligible to receive low single-digit royalties on future net sales.

Under certain circumstances and if certain contingent future events occur, Vertex Pharmaceuticals Incorporated and certain of its subsidiaries, or Vertex, is eligible to receive up to \$395.0 million in potential specified research, development, regulatory and commercial milestones and tiered single-digit percentage royalties on future net sales. Refer to Note 5 for further discussion on the Company's arrangements with Vertex.

5. Significant Contracts

Agreements with Vertex Pharmaceuticals Incorporated and certain of its subsidiaries

Summary

On October 26, 2015, the Company entered into a strategic collaboration, option and license agreement, or the 2015 Collaboration Agreement, with Vertex. The 2015 Collaboration Agreement is focused on the use of the Company's CRISPR/Cas9 gene-editing technology to discover and develop potential new treatments aimed at the underlying genetic causes of human disease.

On December 12, 2017, the Company and Vertex entered into Amendment No. 1 to the 2015 Collaboration Agreement, or Amendment No. 1, and the Joint Development Agreement, or the JDA. Amendment No. 1, among other things, modified certain definitions and provisions of the 2015 Collaboration Agreement to make them consistent with the JDA and clarified how many options are exercised (or deemed exercised) in connection with certain targets specified under the 2015 Collaboration Agreement. Amendment No. 1 also amended other provisions of the 2015 Collaboration Agreement, including the expiration terms.

In connection with the 2015 Collaboration Agreement, Vertex made a nonrefundable upfront payment of \$75.0 million. Under the 2015 Collaboration Agreement, Vertex agreed to fund the discovery activities conducted pursuant to the agreement while retaining options to co-exclusive and exclusive licenses. In December 2017, upon execution of the JDA and Amendment No. 1, Vertex exercised its option to obtain a co-exclusive license to develop and commercialize hemoglobinopathy and beta-globin targets. As such, for potential hemoglobinopathy treatments, including treatments for sickle cell disease, the Company and Vertex will share equally all research and development costs and worldwide revenues. In connection with the JDA, the Company received a \$7.0 million up-front payment from Vertex and subsequently received a one-time low seven-digit milestone payment upon the dosing of the second patient in a clinical trial with the initial product candidate. In addition, upon execution of the JDA and Amendment No. 1, it was clarified that

Vertex may elect to license up to four remaining targets, for which it will lead global development and commercialization activities and the Company received the right to receive up to \$420.0 million in development, regulatory and commercial milestones and royalties on net product sales for each of the targets (inclusive of \$10 million due upon exercise of each exclusive option).

In June 2019, the Company and Vertex entered into a series of agreements, which closed on July 23, 2019, including a strategic collaboration and license agreement, or the 2019 Collaboration Agreement, for the development and commercialization of products for the treatment of Duchenne muscular dystrophy, or DMD, and myotonic dystrophy type 1, or DM1. Under the terms of the 2019 Collaboration Agreement, the Company received an upfront, nonrefundable payment of \$175.0 million. In addition, the Company is eligible to receive potential aggregate payments of up to \$825.0 million based upon the successful achievement of specified research, development, regulatory and commercial milestones for the DMD and DM1 programs. The Company is also eligible to receive tiered royalties on future net sales on any products that may result from this collaboration. For the DMD program, Vertex is responsible for all research, development, manufacturing and commercialization activities and all related costs. For the DM1 program, the Company will perform specified guide RNA research and Vertex is responsible for all other research, development, manufacturing and commercialization costs. Upon Investigational New Drug, or IND, application filing, the Company has the option to forego the DM1 milestones and royalties and instead, co-develop and co-commercialize all DM1 products globally in exchange for payment of 50% of research and development costs incurred by Vertex from the effective date of the agreement through IND filing.

In connection with the execution of the 2019 Collaboration Agreement, the Company and Vertex entered into a second amendment to the 2015 Collaboration Agreement, or Amendment No. 2. Among other things, Amendment No. 2 modified certain definitions and provisions of the 2015 Collaboration Agreement to make them consistent with the 2019 Collaboration Agreement and set forth the number and identity of the collaboration targets under the 2015 Collaboration Agreement. The Company and Vertex agreed that one of the four remaining options under the 2015 Collaboration Agreement, as amended, would not be exercised; instead, the Company will reacquire the exclusive rights and will conduct research and development activities for the specified target. Vertex will have the option to co-develop and co-commercialize the specified target upon IND filing in exchange for payment of 50% of research and development costs incurred by the Company from the effective date of the agreement through IND filing. If Vertex does not exercise its option to co-develop and co-commercialize the specified target, Vertex is eligible to receive up to \$395.0 million in potential specified research, development, regulatory and commercial milestones and tiered single-digit royalties on future net sales.

In October 2019, Vertex exercised the remaining three options granted to it under the 2015 Collaboration Agreement to exclusively license the collaboration targets developed under the 2015 Collaboration Agreement, resulting in a payment of \$30.0 million to the Company in the fourth quarter of 2019. The Company achieved the first milestone under the 2019 Collaboration Agreement in the first quarter of 2020 and in connection therewith received a payment of \$25.0 million in April 2020.

Accounting for the Vertex Agreements

The 2015 Collaboration Agreement, Amendment No. 1, and JDA are collectively the “2015 Agreements” and the 2019 Collaboration Agreement and Amendment No. 2. are collectively the “2019 Agreements.” The 2015 Collaboration Agreement, Amendment No. 1, Amendment No. 2, JDA and 2019 Collaboration Agreement are collectively the “Vertex Agreements.”

The Vertex Agreements include components of a customer-vendor relationship as defined under ASC 606, *Revenue from Contracts with Customers*, or ASC 606, collaborative arrangements as defined under ASC 808, *Collaborative Agreements*, or ASC 808, and research and development costs as defined under ASC 730, *Research and Development*, or ASC 730.

Accounting Analysis Under ASC 606

Accounting for the 2019 Agreements

Identification of the Contract

The 2019 Agreements represented a contract modification to the 2015 Agreements. As a result, the 2019 Agreements and the 2015 Agreements are combined for accounting purposes and treated as a single arrangement.

Identification of Performance Obligations

The Company concluded the following material promises were both capable of being distinct and distinct within the context of the Vertex Agreements and represented separate performance obligations: (i) an exclusive license for worldwide rights for DMD gene editing products, or DMD License; (ii) an exclusive license for worldwide rights for DM1 gene editing products, or DM1 License; (iii) the performance of specified guide RNA research for DM1, or DM1 R&D Services; (iv) a material right representing the option to obtain a co-exclusive development and commercialization license for a specified target, or Specified Target Option; (v) three material rights representing the option for up to three exclusive licenses to develop and commercialize the collaboration targets, or Collaboration Target Options; and (vi) the waiving of Vertex’s material right associated with its option to a fourth exclusive license in connection with the Company’s reacquisition of exclusive rights to the specified target.

Determination of Transaction Price

The overall transaction price was determined based on the remaining transaction price from the 2015 Agreements, as well as the transaction price from the 2019 Agreements. The transaction price includes variable consideration estimated using the most likely amount methodology. As such, the Company determined the transaction price totaling \$268.6 million was comprised of: (i) \$57.8 million of pre-existing deferred revenue from the 2015 Agreements; (ii) non-cash consideration of \$10.0 million related to the waiving of Vertex's material right associated with its option to a fourth exclusive license in connection with the Company's reacquisition of exclusive rights to the specified target; (iii) an upfront payment of \$175.0 million; (iv) variable consideration of \$25.0 million which represented the Company's estimate related to a near-term research and development milestone for which the Company determined that it is not probable that a significant reversal of cumulative consideration will occur at the onset of the transaction; and (v) variable consideration of \$0.8 million which represents the Company's estimate of payments from Vertex for DM1 R&D Services.

The Company determined that all other possible variable consideration resulting from milestones and royalties discussed above was fully constrained as of June 30, 2020. The Company will re-evaluate the transaction price in each reporting period.

Allocation of Transaction Price to Performance Obligations

The selling price of each performance obligation was determined based on the Company's estimated standalone selling price, or the ESSP. The Company developed the ESSP for all the performance obligations included in the Vertex Agreements with the objective of determining the price at which it would sell such an item if it were to be sold regularly on a standalone basis. The Company then allocated the transaction price to each performance obligation on a relative standalone selling price basis.

The ESSP for the DMD License and DM1 License was determined to be \$224.6 million and \$76.2 million, respectively. The ESSP was determined based on probability and present value adjusted cash flows from projected worldwide net profit for each of the respective programs based on probability assessments, projections based on internal forecasts, industry data, and information from other guideline companies within the same industry and other relevant factors. On a relative basis, \$151.1 million and \$51.3 million of the transaction price was allocated to the DMD License and DM1 License, respectively.

The ESSP for the Specified Target Option material right was determined to be \$17.5 million, which was based on the incremental discount between (i) the value of the probability and present value adjusted cash flows from the equal sharing of projected worldwide net profit increased by the value of the option provided to Vertex less (ii) the expected exercise price at the time of option exercise. The present value adjusted cash flows also considered projections based on internal forecasts, industry data, and information from other guideline companies within the same industry and other relevant factors. On a relative basis, \$11.8 million of the transaction price was allocated to the Specified Target Option material right.

The ESSP for each of the three Collaboration Target Option material rights was determined to be \$25.0 million, \$22.2 million and \$22.2 million, respectively, which was determined based on the probability and present value adjusted cash flows from milestone payments owed for exclusive licenses, less the price paid to exercise each option. On a relative basis, \$46.7 million of the transaction price was allocated to the Collaboration Target Option material rights.

The aforementioned ESSPs reflect the level of risk and expected probability of success inherent in the nature of the associated research area.

The ESSP for the waiving of Vertex's material right associated with its option to a fourth exclusive license under the 2015 Agreements was determined to be \$10.0 million, or the contractual value of the option. On a relative basis, \$6.7 million of the transaction price was allocated to the waiving of Vertex's material right associated with its option to a fourth exclusive license under the 2015 Agreements.

The ESSP for the DM1 R&D Services was determined to be \$1.7 million, which was based on estimates of the associated effort and cost of the services, adjusted for a reasonable profit margin that would be expected to be realized under similar contracts. On a relative basis, \$1.1 million of the transaction price was allocated to the DM1 R&D Services.

Recognition of Revenue

The Company determined that the DMD License and DM1 License represent functional intellectual property, as the intellectual property provides Vertex with the ability to perform a function or task in the form of research and development. As such, the revenue related to the licenses was recognized at the point in time in which they were delivered during the third quarter of 2019.

The revenue allocated to the waiving of Vertex's material right associated with its option to a fourth exclusive license in connection with Company's reacquisition of exclusive rights to the specified target was recognized at the point in time in which the option was waived, on the effective date of the 2019 Agreements.

The Company concluded that the Specified Target Option and Collaboration Target Options were considered material rights under the Vertex Agreements. Revenue related to the three Collaboration Target Options material right was recognized at the point in time in which Vertex exercised the Collaboration Target Options, which occurred in the fourth quarter of 2019. Revenue related to the Specified Target Option will be recognized at the point in time in which the option is exercised.

The Company recognizes revenue related to the DM1 R&D Services over time as the services are rendered, which is expected to be over an 18-month period from the effective date of the 2019 Agreements.

Accounting for the 2015 Agreements (prior to the execution of the 2019 Agreements)

On January 1, 2018, the Company adopted ASC 606 using the modified retrospective approach. The Company applied the practical expedient in ASC 606-10-65-1 in identifying the satisfied and unsatisfied performance obligations, determining the transaction price and allocating the transaction price under the practical expedient in ASC 606. There was no significant impact on revenue recognized under ASC 606 and the prior revenue recognition as a result of the adoption.

Identification of the Contract

Amendment No. 1 and the JDA represented a contract modification to the 2015 Collaboration Agreement. As a result, the 2015 Agreements are combined for accounting purposes and treated as a single arrangement.

Identification of Performance Obligations

The Company concluded the following material promises were both capable of being distinct and distinct within the context of the 2015 Agreements and represented separate performance obligations: (i) the non-exclusive research license; (ii) four material rights representing the option for up to four exclusive licenses to develop and commercialize the collaboration targets; (iii) a combined performance obligation representing the co-exclusive research license, and a development and commercialization license to develop and commercialize hemoglobinopathies and beta-globin targets; and (iv) the performance of R&D Services.

Determination of Transaction Price

The overall transaction price was comprised of: (i) original upfront payment of \$75.0 million, (ii) an upfront payment of \$7.0 million under the JDA, and (iii) \$19.3 million of variable consideration associated with the R&D services.

The Company determined that all other possible variable consideration resulting from milestones and royalties discussed above was fully constrained at the time of the transaction.

Allocation of Transaction Price to Performance Obligations

The selling price of each performance obligation was determined based on the Company's ESSP. The Company developed the ESSP for all the performance obligations included in the 2015 Agreements with the objective of determining the price at which it would sell such an item if it were to be sold regularly on a standalone basis. The Company then allocated the transaction price to each performance obligation on a relative standalone selling price basis.

The ESSP for R&D Services was determined to be \$19.3 million. The Company developed the ESSP for the R&D Services primarily based on the nature of the services to be performed and estimates of the associated effort and cost of the services, adjusted for a reasonable profit margin that would be expected to be realized under similar contracts. The Company allocated \$19.3 million of the transaction price to R&D Services.

The Company's ESSP for each of the remaining material rights to obtain an exclusive license to develop and commercialize a single collaboration target are \$45.6 million, \$38.4 million, \$17.3 million and \$17.3 million for a total of \$118.6 million. ESSPs for these items were determined based on the probability and present value adjusted cash flows from milestone payments owed for exclusive licenses, less the price paid to exercise each option. On a relative basis, \$57.7 million of the transaction price was allocated to these material rights.

The Company's ESSP for the co-exclusive research license and the development and commercialization licenses for hemoglobinopathy and beta-globin targets is \$48.9 million. The ESSP for this item was determined based on probability and present value adjusted cash flows from the equal sharing of projected worldwide net profit. ESSP reflects the level of risk and expected probability of success inherent in the nature of the associated research area. On a relative basis, \$23.8 million of the transaction price was allocated to the co-exclusive research license and the development and commercialization licenses for hemoglobinopathy and beta-globin targets.

The Company used a market-based approach to determine the ESSP of the non-exclusive research license of \$1.0 million. The Company determined ESSP by use of comparative data, including in-licensed research agreements negotiated and executed within the Company. On a relative basis, \$0.5 million of the transaction price was allocated to the non-exclusive research license.

The aforementioned ESSPs reflect the level of risk and expected probability of success inherent in the nature of the associated research area.

Recognition of Revenue

The Company determined that the non-exclusive research license is symbolic intellectual property as Vertex receives value from the license through the Company's ongoing activities, and, as such, the revenue related to the non-exclusive research license was recognized ratably over the term of the arrangement. Upon the execution of the JDA, a co-exclusive research, development and commercialization license was granted for hemoglobinopathy and beta-globin targets. The Company determined that the revenue related to these licenses was recognized at a point in time, in which they were delivered at inception of the JDA in December 2017. As Vertex has the material right in its option to obtain four additional exclusive licenses to develop and commercialize four additional collaboration targets, the Company determined that consideration allocated to these material rights would be included in the transaction price of the exclusive license and recognized at a point in time, upon the exercise of the option by Vertex or expiration. As the Company has a right to consideration from Vertex in an amount that corresponds directly with the value of the Company's performance completed to date for the R&D services, the Company recognized revenue related to the R&D services as invoiced, in line with the practical expedient in ASC 606-10-55-18.

Revenue recognized in connection with the Vertex Agreements

Revenue recognized under the 2015 and 2019 Agreements for the three and six months ended June 30, 2020, respectively, was not material. Revenue recognized under the 2015 Agreements for the three and six months ended June 30, 2019, respectively, was not material. The 2019 Agreements were not effective as of June 30, 2019.

As of June 30, 2020, there was \$0.8 million of current deferred revenue related to the collaboration with Vertex compared to \$0.9 million as of December 31, 2019. As of June 30, 2020, there was \$11.8 million of non-current deferred revenue related to the collaboration with Vertex, which is unchanged from December 31, 2019. The transaction price allocated to the remaining performance obligations was \$12.6 million.

Milestones under the Vertex Agreements

The Company has evaluated the milestones that may be received in connection with the Vertex Agreements. As discussed above, the Company is eligible to receive up to \$410.0 million in additional development, regulatory and commercial milestones and royalties on net product sales for each of the three collaboration targets that Vertex licensed in the fourth quarter of 2019. Each milestone is payable only once per collaboration target, regardless of the number of products directed to such collaboration target that achieve the relevant milestone event.

The Company is eligible to receive potential future payments of up to \$800.0 million based upon the successful achievement of specified research, development, regulatory and commercial milestones for the DMD and DM1 programs. As discussed above, the first research milestone of \$25.0 million was included in the transaction price. This amount was recorded as a contract asset within prepaid expenses and other current assets on the condensed consolidated balance sheet at December 31, 2019. This milestone was achieved during the first quarter of 2020 and paid during the second quarter of 2020. The Company is also eligible to receive tiered royalties on future net sales on any products that may result from this collaboration; however, the Company has the option to forego the DM1 milestones and royalties to co-develop and co-commercialize all DM1 products globally.

Each of the remaining milestones are fully constrained as of June 30, 2020. There is uncertainty that the events to obtain the research and developmental milestones will be achieved given the nature of clinical development and the stage of the CRISPR/Cas9 technology. The remaining research, development and regulatory milestones will be constrained until it is probable that a significant revenue reversal will not occur. Commercial milestones and royalties relate predominantly to a license of intellectual property and are determined by sales or usage-based thresholds. The commercial milestones and royalties are accounted for under the royalty recognition constraint and will be accounted for as constrained variable consideration. The Company applies the royalty recognition constraint for each commercial milestone and will not recognize revenue for each until the subsequent sale of a licensed product (achievement of each) occurs.

Accounting Analysis under ASC 808

In connection with the 2019 Agreements, the Company identified the following collaborative elements, which were unchanged as those identified with the 2015 Agreements and are accounted for under ASC 808: (i) development and commercialization services for shared products; (ii) R&D Services for follow-on products; and (iii) committee participation. The related impact of the cost sharing associated with research and development is included in research and development expense. Expenses related to services performed by the Company are classified as research and development expense. Payments received from Vertex for partial reimbursement of expenses are recorded as a reduction of research and development expense.

During the three and six months ended June 30, 2020, the Company recognized \$9.9 million and \$19.0 million of research and development expense related to the Vertex Agreements, respectively. During the three and six months ended June 30, 2019, the Company recognized \$6.6 million and \$13.7 million of research and development expense related to the Vertex Agreements, respectively. Research and development expense for the three and six months ended June 30, 2020 was net of \$5.5 million and \$11.0 million of reimbursements from Vertex, respectively. Research and development expense for the three and six months ended June 30, 2019 was net of \$3.3 million and \$7.8 million of reimbursements from Vertex, respectively.

Accounting Analysis under ASC 730

In connection with the 2019 Vertex Agreements, the Company and Vertex agreed that one of the four remaining options under the 2015 Agreements, as amended, would not be exercised; instead, the Company will conduct research and development activities for a specified target. Vertex will have the option to co-develop and co-commercialize the specified target upon IND filing in exchange for payment of 50% of research and development costs incurred by the Company from the effective date of the agreement through IND filing. If Vertex does not exercise its option to do so within a specified time period, Vertex is eligible to receive up to \$395.0 million in potential specified research, development, regulatory and commercial milestones and tiered single-digit royalties on future net sales.

In connection therewith, the Company determined that in order for the Company to obtain the right to conduct research and development activities on the specified target, the Company had waived its right to receive an option exercise payment of \$10.0 million from Vertex, which was included as non-cash consideration in the transaction price for the 2019 Agreements described above. The Company then subsequently reacquired its rights to the specified target by waiving payment owed by Vertex of \$10.0 million for a license that represents in-process research and development and therefore, \$10.0 million of non-cash consideration was fully expensed upon the execution of the 2019 Agreements. The Company also determined that research and development services through IND for the specified target and any payment of future development and commercialization milestones, as well as sales-based milestones and royalties for the specified target, would be accounted for as research and development costs under ASC 730 and expensed as incurred. In addition, the Company also determined that should the Company elect its option to co-develop and co-commercialize all DM1 products globally, it will record the option fee as research and development expense upon exercise.

Joint Venture with Bayer Healthcare LLC

Summary

On December 19, 2015, the Company entered into an agreement with Bayer, to establish a joint venture to focus on the research and the development of new therapeutics to cure blood disorders, blindness and congenital heart disease. On February 12, 2016, the Company and Bayer completed the formation of the joint venture entity, Casebia. Bayer and the Company each received a 50% equity interest in the entity in exchange for their respective contributions to the entity. At that time, the Company also entered into a separate service agreement with Casebia, under which the Company agreed to provide compensated research and development services. Collectively, these agreements are referred to as the “2015 Casebia Agreements.”

On December 13, 2019, the Company, Bayer and Casebia entered into a series of transactions by which, among other things, the Company acquired 100% of the partnership interests in Casebia, or the Retirement Agreement, the Company and Bayer terminated their joint venture, or the Joint Venture Termination Agreement, and the Company and Bayer entered into a new option agreement, or the 2019 Option Agreement. Collectively, these agreements are referred to as the “2019 Casebia Agreements.”

In connection with the Retirement Agreement, Casebia retired Bayer’s outstanding partnership interests in exchange for \$22.0 million less certain estimated interim operating expenses of \$6.0 million, and the Company acquired 100% of the partnership interests in Casebia.

In connection with entering into the Retirement Agreement, the Company, Bayer and Casebia entered into the Joint Venture Termination Agreement. In connection therewith, the Company and Bayer agreed to terminate the Joint Venture Agreement from December 2015. Under the Joint Venture Termination Agreement, Casebia-owned patents are co-owned by the Company and Bayer, subject to certain exclusive licenses granted therein. Under the Joint Venture Termination Agreement, the Company and Bayer each retained rights to their respective contributed intellectual property.

In connection with entering into the Retirement Agreement and the Joint Venture Termination Agreement, the Company and Bayer also entered into the 2019 Option Agreement, under which, among other things, the Company committed to invest a specified amount in certain research and development activities as described under “Accounting Analysis – Accounting for 2019 Casebia Agreements”. In addition, Bayer has an option (exercisable during a specified exercise period defined by future events, but in no event longer than 5 years after the effective date of the 2019 Option Agreement) to co-develop and co-commercialize two products for the diagnosis, treatment or prevention of certain autoimmune disorders, eye disorders or hemophilia A disorders. In the event Bayer elects to co-develop and co-commercialize a product, the parties will negotiate and enter into a co-development and co-commercialization agreement, or the Co-Commercialization Agreement, for such product, and Bayer would be responsible for 50% of the research and development costs incurred by the Company for such product going forward. Bayer would receive 50% of all profits from sales of such product and would be responsible for 50% of all losses.

If Bayer elects to exercise its option to co-develop and co-commercialize a product, Bayer will make a one-time \$20.0 million payment, or the Option Payment, to the Company that will become non-refundable once the parties execute a Co-Commercialization Agreement with respect to such optioned product. The Option Payment is payable only once with respect to the first time Bayer exercises an option under the 2019 Option Agreement.

In addition, following Bayer’s exercise of its option and/or the execution of the Co-Commercialization Agreement for an optioned product, for a period beginning on the effective date of such Co-Commercialization Agreement and ending on the earlier of the three month anniversary of such effective date or during the 90-day negotiation process of such Co-Commercialization Agreement, Bayer has a right to negotiate an exclusive license to develop and commercialize such optioned product. If Bayer exercises such right, the parties will enter into an exclusive license agreement for such optioned product on terms mutually agreeable to the parties. Further, the Option Payment paid for such optioned product would become credited against payments due under such exclusive license or any other exclusive license entered into in connection with the 2019 Option Agreement.

Either party may terminate the 2019 Option Agreement upon the other party’s material breach, subject to specified notice and cure provisions. The Company may also terminate the 2019 Option Agreement in the event Bayer commences or participates in any action or proceeding challenging the validity or enforceability of any Company patent necessary or useful for the research, development, manufacture or commercialization of a product that is the subject of the 2019 Option Agreement. Bayer may also terminate the 2019 Option Agreement upon the Company’s bankruptcy or insolvency, or for convenience at any time, after giving written notice.

Accounting Analysis

Accounting for the 2015 Casebia Agreements

During 2016, the Company recorded an equity method investment of \$36.5 million equal to the fair value of the Company’s interest in Casebia and subsequently recorded unrealized equity method losses for the same amount. The Company had no further contractual obligations to provide cash financing to Casebia and accordingly, no additional losses were recorded beyond the initial equity amount. Casebia’s net losses were \$14.2 million for the three months ended March 31, 2019 and unrecognized equity method losses in excess of the Company’s equity method investment in Casebia were \$51.9 million as of March 31, 2019.

The remaining performance obligations prior to the 2019 Casebia Agreements included research and development services, which were recorded as revenue under ASC 606, and cost sharing activities with Casebia related to shared research and technology licenses, which were recorded as a cost/profit sharing arrangement under ASC 808, with the related impact of the cost sharing included as research and development expense. All performance obligations were terminated upon the execution of the 2019 Casebia Agreements.

During the three and six months ended June 30, 2019, the Company recognized \$0.2 million and \$0.4 million, respectively, of revenue related to the collaboration with Casebia. During the three and six months ended June 30, 2019, the Company recognized \$0.2 million and \$0.7 million of research and development expense related to the collaboration with Casebia. During the three and six months ended June 30, 2019, the Company recognized a loss from equity method investment of \$1.0 million and \$2.0 million, respectively, related to stock-based compensation expense for Casebia employees.

Accounting for the 2019 Casebia Agreements

The Company determined that the Retirement Agreement and Joint Venture Termination Agreement resulted in the Company obtaining a controlling interest in Casebia and should be accounted for as a separate component from the 2019 Option Agreement. In doing so, the Company allocated the consideration transferred of \$41.0 million (consisting of \$16.0 million of assets acquired net of the purchase price, as displayed in the table below, and \$25.0 million of cash allocated to the 2019 Option Agreement) between the two components using a relative fair value approach. The Company determined the relative fair value related to obtaining a controlling interest in Casebia was \$32.0 million and the relative fair value of the consideration transferred related to the 2019 Option Agreement was \$25.0 million, which is comprised of \$20.2 million related to certain research and development activities and \$4.8 million related to certain options as described above.

As a result of the Retirement Agreement, the Company determined that it had obtained a controlling interest in a variable interest entity, for which it became the primary beneficiary. As such, under ASC 810, *Consolidation*, the Company accounted for the net assets obtained under ASC 805, *Business Combinations*. In accordance therewith, the Company determined the set of acquired assets and assumed liabilities did not meet the definition of a business, as the Company did not acquire an assembled workforce and thus the Company did not acquire substantive processes capable of producing outputs. As such, no goodwill was recorded. The Company measured the fair value of the assets and liabilities received, determining the relative fair value was \$16.0 million (after paying the \$16.0 million for Bayer's 50% interest) and recorded the difference between that amount and the Company's carrying amount, which was zero, as a gain within other income (expense). The relative fair value of the assets and liabilities received (exclusive of the \$16.0 million paid from Casebia to Bayer to retire Bayer's interest in the JV) was determined as follows (in thousands):

Fair value	Amount
Cash and cash equivalents	\$ 6,784
Prepaid expenses and other current assets	2,565
Property, plant and equipment, net	9,340
Operating lease assets	11,003
Restricted cash	1,226
Accrued expenses and other current liabilities	(3,915)
Operating lease liabilities	(11,003)
Net assets	<u>\$ 16,000</u>

The value of the reacquired rights related to the intellectual property was determined to be insignificant.

The Company determined that the 2019 Option Agreement should be accounted for under ASC 730-20, *Research and Development Expense*. This determination was based on the fact that the financial risk associated with the research and development has been transferred to the Company because repayment of any of the funds provided by Bayer depends solely on the results of the research and development having a future economic benefit. The Company further determined that it had two separate obligations under the 2019 Option Agreements, which consist of research and development services and future delivery of up to two options for products in defined fields. The relative fair value of the obligations was determined to be \$20.2 million and \$4.8 million, respectively. As the Company has accounted for its obligations as a contract to perform research and development for others, with respect to the obligation to perform research and development services the Company will recognize an offset to research and development expense as the research is performed and, with respect to the future delivery of up to two option for products in defined fields, at the earlier of option exercise (at or near IND application filing), expiration, or when commercially reasonable efforts to progress the program have been exhausted.

During the three and six months ended June 30, 2020, the Company recorded a benefit of \$2.3 million and \$4.2 million, respectively, to research and development expense for qualifying expenses incurred under the 2019 Option Agreement. The Company has recorded \$12.4 million in other current liabilities relating to certain research and development obligations to be satisfied within one year of the balance sheet date and \$8.3 million in other long-term liabilities consisting of the relative fair value of such obligations to be satisfied beyond one year from the balance sheet date as well as the relative fair value of the options.

6. Share Capital

The Company had 115,172,786 authorized common shares as of June 30, 2020, with a par value of CHF 0.03 per share. Share Capital consisted of the following:

Type of Share Capital	Conditional Capital	As of	
		June 30, 2020	December 31, 2019
Common shares	Registered share capital	64,241,094	61,036,566
Common shares	Authorized share capital	28,518,283	19,246,503
Common shares	Conditional share capital - Bonds or similar debt instruments	4,919,700	4,919,700
Common shares	Conditional share capital - Employee benefit plans	17,493,709	18,698,237
	Total	115,172,786	103,901,006

At-the-Market Offering

In August 2018, the Company entered into an Open Market Sale AgreementSM, or the 2018 ATM, with Jefferies LLC, or Jefferies, under which Jefferies was able to offer and sell, from time to time, common shares having aggregate gross proceeds of up to \$125.0 million.

In August 2019, following the termination of the 2018 ATM by its terms, the Company entered into a new Open Market Sale AgreementSM with Jefferies, or the 2019 ATM, under which the Company may offer and sell, from time to time, common shares having aggregate gross proceeds of up to \$200.0 million.

During the three and six months ended June 30, 2019, the Company sold 0.7 million and 1.4 million common shares, respectively, under the 2018 ATM for net cash proceeds of \$28.5 million and \$52.5 million, respectively, after deducting commission fees of \$0.8 million and \$1.6 million, respectively.

For the year ended December 31, 2019, the Company issued and sold an aggregate of 2.8 million common shares under the 2018 ATM, for aggregate proceeds of \$120.6 million, which were net of equity issuance costs of \$4.4 million.

During the three and six months ended June 30, 2020, the Company sold 1.2 million common shares under the 2019 ATM for net cash proceeds of \$83.0 million, after deducting commission fees of \$2.4 million. As of June 30, 2020, an additional \$0.8 million of issuance costs were recorded in accrued expenses on the consolidated balance sheet.

July 2020 Offering

In July, 2020, the Company sold 7.4 million common shares through an underwritten public offering (inclusive of shares sold pursuant to the exercise of the underwriters' option to purchase additional shares) at a public offering price of \$70.00 per share for aggregate net proceeds of \$484.8 million, which were net of equity issuance costs of \$32.7 million.

7. Stock-based Compensation

During the three and six months ended June 30, 2020 and 2019, the Company recognized the following stock-based compensation expense (in thousands):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2020	2019	2020	2019
Research and development	\$ 8,021	\$ 5,913	\$ 15,383	\$ 10,875
General and administrative	7,676	5,273	14,465	9,982
Loss from equity method investment	-	1,012	-	2,037
Total	\$ 15,697	\$ 12,198	\$ 29,848	\$ 22,894

Stock option activity

The following table summarizes stock option activity for the six months ended June 30, 2020:

	Shares (in thousands)	Weighted- average exercise price per share
Outstanding at December 31, 2019	7,782,437	\$ 31.30
Granted	1,173,458	\$ 48.18
Exercised	(511,141)	\$ 18.78
Cancelled or forfeited	(247,493)	\$ 42.12
Outstanding at June 30, 2020	8,197,261	\$ 34.17
Exercisable at June 30, 2020	3,745,480	\$ 27.23
Vested and expected to vest at June 30, 2020	8,197,261	\$ 34.17

As of June 30, 2020, total unrecognized compensation expense related to stock options was \$205.8 million, which the Company expects to recognize over a remaining weighted-average period of 2.6 years.

Restricted stock activity

The following table summarizes restricted stock activity for the six months ended June 30, 2020:

	Restricted Stock	Weighted- Average Grant Date Fair Value
Unvested balance as of December 31, 2019	699,534	\$ 56.53
Granted	285,720	46.13
Vested	(34,916)	49.31
Cancelled or forfeited	(26,972)	46.27
Unvested balance as of June 30, 2020	923,366	\$ 53.88

As of June 30, 2020, total unrecognized compensation expense related to unvested restricted common shares was \$35.0 million, which the Company expects to recognize over a remaining weighted-average vesting period of 2.2 years.

8. Net Loss Per Share Attributable to Common Shareholders

The following common stock equivalents were excluded from the calculation of diluted net loss per share for the periods indicated because including them would have had an anti-dilutive effect (in thousands):

	Six months ended June 30,	
	2020	2019
Outstanding options	8,197,261	8,195,866
Unvested restricted common shares	923,366	338,003
ESPP	13,509	—
Total	8,210,770	8,195,866

9. Income Taxes

During the three and six months ended June 30, 2020, the Company recorded an income tax provision of \$0.4 million and \$0.8 million, respectively, representing an effective tax rate of -0.5% and -0.5%, respectively. During the three and six months ended June 30, 2019, the Company recorded an income tax provision of \$0.1 million and \$0.2 million, respectively, representing an effective tax rate of -0.2% and -0.2%, respectively. The income tax provision is primarily attributable to the year-to-date pre-tax income earned by the Company's U.S. subsidiary. The difference in the statutory tax rate and effective tax rate is primarily a result of the jurisdictional mix of earnings and losses that are not benefited. The Company maintains a valuation allowance against certain deferred tax assets that are not more-likely-than-not realizable. As a result, the Company has not recognized a tax benefit related to losses generated in Switzerland in the current periods. On March 27, 2020, the Coronavirus Aid, Relief, and Economic Security Act, or the CARES Act, was enacted in the United States, the impact of which was not material.

10. Related Party Transactions

Casebia

Prior to the termination of the joint venture in December 2019, Casebia was a related party under ASC 850, *Related Party Disclosures*, or ASC 850. Refer to Note 5, "*Joint Venture with Bayer Healthcare LLC*."

Vertex

In the fourth quarter of 2018, upon becoming owners of record of more than 10% of the voting interest of the Company, Vertex became a related party under ASC 850. As of July 2, 2019, upon becoming owners of record of less than 10% of the voting interest of the Company, Vertex was no longer a related party under ASC 850. Refer to Note 5, "*Agreements with Vertex Pharmaceuticals Incorporated and certain of its subsidiaries*."

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

The following discussion and analysis of our financial condition and results of operations should be read in conjunction with (i) our unaudited condensed consolidated financial statements and related notes appearing elsewhere in this Quarterly Report on Form 10-Q and (ii) our audited consolidated financial statements and related notes and management’s discussion and analysis of financial condition and results of operations included in our Annual Report on Form 10-K for the year ended December 31, 2019 filed with the Securities and Exchange Commission, or the SEC, on February 12, 2020. Some of the information contained in this discussion and analysis or set forth elsewhere in this Quarterly Report on Form 10-Q, including information with respect to our plans and strategy for our business and impact and potential impacts on our business, includes forward-looking statements that involve risks and uncertainties. As a result of many factors, including, without limitation, those factors set forth in the “Risk Factors” section of this Quarterly Report on Form 10-Q and the “Risk Factors” section of our Annual Report on Form 10-K for the year ended December 31, 2019, our actual results or timing of certain events could differ materially from the results or timing described in, or implied by, these forward-looking statements.

Special Note About Coronavirus (COVID-19)

Since March 2020, we have been evaluating the actual and potential business impacts related to the outbreak of a novel strain of virus named SARS-CoV-2 (severe acute respiratory syndrome 2), or coronavirus, which causes coronavirus disease, or COVID-19. As a result of the coronavirus pandemic, we have experienced, and may further experience, disruptions, pauses and/or delays that have and could further adversely impact our business operations, including the conduct of our clinical trials and other research and development operations in accordance with previously-announced timelines.

Recently, we re-initiated dosing patients in our Phase 1/2 open-label clinical trials of CTX001 for transfusion-dependent beta thalassemia and severe sickle cell disease (CLIMB THAL-111 and CLIMB SCD-121). However, if negative developments relating to the coronavirus pandemic (such as a so-called “resurgence”) were to occur, we may elect to pause patient dosing in these trials again if ICU beds and related healthcare resources become significantly constrained again or governmental authorities impose additional business or travel restrictions. With respect to our immuno-oncology clinical trials (which are currently open for enrollment), if such negative developments were to occur, investigators participating in our clinical trials may not want to take the risk of exposing cancer patients to COVID-19 since the dosing of patients is conducted within an in-patient setting. Moreover, certain aspects of our supply chain could be disrupted if our third party suppliers and manufacturers paused their operations in response to those developments. Finally, we are in the process of reopening our offices to additional staff in accordance with state and local regulations. If negative developments relating to the coronavirus pandemic were to occur, we may elect to restrict on-site staff at our offices again to those personnel and contractors who perform essential activities that must be completed on-site and limit the number of staff in any given research and development laboratory.

The ultimate impact of the coronavirus pandemic on our business operations remains uncertain and subject to change and will depend on future developments, which cannot be accurately predicted. We will continue to monitor the situation closely.

Overview

We are a leading gene editing company focused on the development of CRISPR/Cas9-based therapeutics. CRISPR/Cas9 is a revolutionary gene editing technology that allows for precise, directed changes to genomic DNA. The application of CRISPR/Cas9 for gene editing was co-invented by one of our scientific founders, Dr. Emmanuelle Charpentier, who, along with her collaborators, published work elucidating how CRISPR/Cas9, a naturally occurring viral defense mechanism found in bacteria, can be adapted for use in gene editing. We are applying this technology to potentially treat a broad set of rare and common diseases by disrupting, correcting or regulating the genes related to such diseases. We believe that our scientific expertise, together with our approach, may enable an entirely new class of highly active and potentially curative therapies for patients for whom current biopharmaceutical approaches have had limited success.

We have established a portfolio of therapeutic programs across a broad range of disease areas including hemoglobinopathies, oncology, regenerative medicine and rare diseases.

Our lead product candidate, CTX001, is an investigational, autologous, gene-edited hematopoietic stem cell therapy that is being evaluated for the treatment of transfusion-dependent beta thalassemia, or TDT, and severe sickle cell disease, or SCD. CTX001 is being developed under a co-development and co-commercialization agreement between us and Vertex Pharmaceuticals Incorporated and certain of its subsidiaries, or Vertex.

We and Vertex are investigating CTX001 in a Phase 1/2 open-label clinical trial, CLIMB THAL-111, that is designed to assess the safety and efficacy of a single dose of CTX001 in patients ages 12 to 35 with TDT. In the fourth quarter of 2019, we expanded the TDT patient population for CTX001 to include beta zero/beta zero subtypes. The first two patients in the trial were treated sequentially and, following data from the initial two patients indicating successful dosing and engraftment, the trial opened for broader concurrent enrollment. CLIMB THAL-111 is designed to enroll up to 45 patients and follow patients for approximately two years after infusion. Each patient will be asked to participate in a long-term follow-up study. CTX001 has been granted Regenerative Medicine Advanced Therapy, or RMAT, designation by the United States Federal Drug Administration, or FDA, for the treatment of TDT, as well as Fast Track Designation. Additionally, CTX001 for the treatment of TDT has received orphan drug designation, or ODD, by the FDA and European Commission. In the fourth quarter of 2019, we released preliminary clinical data from the first patient treated with CTX001 in the ongoing Phase 1/2 clinical trial in TDT. In June 2020, we released 15 months of follow-up data for this patient and preliminary data for a second patient treated with CTX001 in the ongoing Phase 1/2 clinical trial in TDT.

We and Vertex are also investigating CTX001 in a Phase 1/2 open-label clinical trial, CLIMB SCD-121, that is designed to assess the safety and efficacy of a single dose of CTX001 in patients ages 18 to 35 with severe SCD. Similar to the trial in beta thalassemia, the first two patients in the trial were treated sequentially and, following data from the initial two patients indicating successful dosing and engraftment, the trial opened for broader concurrent enrollment. CLIMB SCD-121 is designed to enroll up to 45 patients and follow patients for approximately two years after infusion. Each patient will be asked to participate in a long-term follow-up study. CTX001 has been granted RMAT Designation, as well as Fast Track Designation by the FDA for the treatment of SCD. In addition, CTX001 for the treatment of SCD has received ODD by the FDA and European Commission. In the fourth quarter of 2019, we released preliminary clinical data from the first patient treated with CTX001 in the ongoing Phase 1/2 clinical trial in severe SCD. In June 2020, we released nine months of follow-up data for this patient.

In addition, we are developing our own portfolio of CAR-T cell product candidates based on our gene-editing technology.

CTX110. Our lead candidate, CTX110, is a healthy donor-derived gene-edited allogeneic CAR-T therapy targeting cluster differentiation 19, or CD19, for the treatment of CD19+ malignancies. CTX110 is being investigated in a Phase 1 clinical trial that is designed to assess the safety and efficacy of CTX110 for the treatment of relapsed or refractory B-cell malignancies. The multi-center, open-label clinical trial is designed to enroll up to 131 patients and investigate several dose levels of CTX110.

CTX120. CTX120 is a healthy donor-derived gene-edited allogeneic CAR-T therapy targeting B-cell maturation antigen. CTX120 is being investigated in a Phase 1 clinical trial that is designed to assess the safety and efficacy of CTX120 for the treatment of relapsed or refractory multiple myeloma. The multi-center, open-label clinical trial is designed to enroll up to 88 patients and investigate several dose levels of CTX120.

CTX130. CTX130 is a healthy donor-derived gene-edited allogeneic CAR-T therapy targeting cluster of differentiation 70, or CD70, an antigen expressed on various solid tumors and hematologic malignancies. CTX130 is being developed for the treatment of both solid tumors, such as renal cell carcinoma, and T-cell and B-cell hematologic malignancies. CTX130 is being investigated in two independent Phase 1 clinical trials that are designed to assess the safety and efficacy of CTX130 for the treatment of relapsed or refractory renal cell carcinoma and various types of lymphoma, respectively. The multi-center, open-label clinical trial investigating CTX130 for the treatment of relapsed or refractory renal cell carcinoma is designed to enroll approximately 95 patients and investigate several dose levels of CTX130. The multi-center, open-label clinical trial investigating CTX130 for the treatment of various lymphomas is designed to enroll approximately 46 patients and investigate several dose levels of CTX130.

Given the numerous potential therapeutic applications for CRISPR/Cas9, we have partnered strategically to broaden the indications we can pursue and accelerate development of programs by accessing specific technologies and/or disease-area expertise. We maintain three broad strategic partnerships to develop gene editing-based therapeutics in specific disease areas.

Vertex. We established our initial collaboration agreement in 2015 with Vertex Pharmaceuticals Incorporated and certain subsidiaries, or Vertex, which focused on TDT, SCD, cystic fibrosis and select additional indications. In December 2017, we entered into a joint development and commercialization agreement with Vertex to co-develop and co-commercialize CTX001 as part of that collaboration. In June 2019, we expanded our collaboration and entered into a strategic collaboration and license agreement for the development and commercialization of products for the treatment of Duchenne muscular dystrophy and myotonic dystrophy type 1.

ViaCyte. We entered into the ViaCyte Collaboration Agreement in September 2018 with ViaCyte, Inc., or ViaCyte, to pursue the discovery, development and commercialization of gene-edited allogeneic stem cell therapies for the treatment of diabetes. The combination of ViaCyte's stem cell capabilities and our gene-editing capabilities has the potential to enable a beta-cell replacement product that may deliver durable benefit to patients without the need for immune suppression.

Bayer. In the fourth quarter of 2019, we entered into a series of transactions, or the Bayer Transaction, pursuant to which we and Bayer terminated our 2015 agreement, which created the joint venture, Casebia Therapeutics Limited Liability Partnership, or Casebia, to discover, develop and commercialize CRISPR/Cas9 gene-editing therapeutics to treat the genetic causes of bleeding disorders, autoimmune disease, blindness, hearing loss and heart disease. In connection thereto, Casebia became a wholly-owned subsidiary of ours. We and Bayer also entered into a new option agreement pursuant to which Bayer has an option to co-develop and co-commercialize two products for the diagnosis, treatment or prevention of certain autoimmune disorders, eye disorders, or hemophilia A disorders for a specified period of time, or, under certain circumstances, exclusively license such optioned products.

Refer to Note 7 of the notes to our consolidated financial statements included in our Annual Report on Form 10-K for the year ended December 31, 2019 for a description of the key terms of our arrangement with ViaCyte. Refer to Note 5 of the notes to our unaudited condensed consolidated financial statements included in this Quarterly Report on Form 10-Q for a description of the key terms of our arrangements with Vertex and Bayer.

Since our inception in October 2013, we have devoted substantially all of our resources to our research and development efforts, identifying potential product candidates, undertaking drug discovery and preclinical development activities, building and protecting our intellectual property estate, organizing and staffing our company, business planning, raising capital and providing general and administrative support for these operations. To date, we have primarily financed our operations through private placements of our preferred shares, common share issuances, convertible loans and collaboration agreements with strategic partners.

All of our revenue to date has been collaboration revenue. We were profitable for the year ended December 31, 2019 due to collaboration revenue from Vertex and Casebia, but we do not expect to sustain our profitability in future years. With the exception of the year ended December 31, 2019, we have incurred significant net operating losses each year since our inception and expect to continue to incur net operating losses for the foreseeable future. As of June 30, 2020, we had \$945.1 million in cash and cash equivalents and an accumulated deficit of \$374.1 million. We expect to continue to incur significant expenses and increasing operating losses for the next several years. Our net losses may fluctuate significantly from quarter to quarter and year to year. We anticipate that our expenses will increase significantly as we continue our current research programs and development activities; seek to identify additional research programs and additional product candidates; conduct initial drug application supporting preclinical studies and initiate clinical trials for our product candidates; initiate preclinical testing and clinical trials for any other product candidates we identify and develop; maintain, expand and protect our intellectual property estate; further develop our gene editing platform; hire additional research, clinical and scientific personnel; develop manufacturing infrastructure; and incur additional costs associated with operating as a public company.

Financial Overview

Revenue

We have not generated any revenue to date from product sales and do not expect to do so in the near future. Revenue recognized for the six months ended June 30, 2020 and 2019, respectively, was not material. For additional information about our revenue recognition policy, see Note 2, “Summary of Significant Accounting Policies,” in our Annual Report on Form 10-K for the year ended December 31, 2019 filed with the SEC on February 12, 2020, as well as Note 5 of the notes to our unaudited condensed consolidated financial statements included in this Quarterly Report on Form 10-Q.

Research and Development Expenses

Research and development expenses consist primarily of costs incurred for our research activities, including our product discovery efforts and the development of our product candidates, which include:

- employee-related expenses, including salaries, benefits and equity-based compensation expense;
- costs of services performed by third parties that conduct research and development and preclinical activities on our behalf;
- costs of purchasing lab supplies and non-capital equipment used in our preclinical activities and in manufacturing preclinical study materials;
- consultant fees;
- facility costs, including rent, depreciation and maintenance expenses; and
- fees and other payments related to acquiring and maintaining licenses under our third-party licensing agreements.

Research and development costs are expensed as incurred. Nonrefundable advance payments for research and development goods or services to be received in the future are deferred and capitalized. The capitalized amounts are expensed as the related goods are delivered or the services are performed. At this time, we cannot reasonably estimate or know the nature, timing or estimated costs of the efforts that will be necessary to complete the development of any product candidates we may identify and develop. This is due to the numerous risks and uncertainties associated with developing such product candidates, including the uncertainty of:

- successful completion of preclinical studies and IND-enabling studies;
- successful enrollment in, and completion of, clinical trials;
- receipt of marketing approvals from applicable regulatory authorities;
- establishing commercial manufacturing capabilities or making arrangements with third-party manufacturers;
- obtaining and maintaining patent and trade secret protection and non-patent exclusivity;
- launching commercial sales of the product, if and when approved, whether alone or in collaboration with others;
- acceptance of the product, if and when approved, by patients, the medical community and third-party payors;
- effectively competing with other therapies and treatment options;
- a continued acceptable safety profile following approval;
- enforcing and defending intellectual property and proprietary rights and claims; and
- achieving desirable medicinal properties for the intended indications.

A change in the outcome of any of these variables with respect to the development of any product candidates or the subsequent commercialization of any product candidates we may successfully develop could significantly change the costs, timing and viability associated with the development of that product candidate.

Except for activities we perform in connection with our collaboration with Vertex, as well as certain arrangements we had with Casebia prior to the Bayer Transaction, we do not track research and development costs on a program-by-program basis.

Research and development activities are central to our business model. We expect our research and development costs to increase significantly for the foreseeable future as our current development programs progress, new programs are added and as we continue to prepare regulatory filings. These increases will likely include the costs related to the implementation and expansion of clinical trial sites and related patient enrollment, monitoring, program management and manufacturing expenses for current and future clinical trials. In addition, we expect that our research and development expenses will increase in future periods as we incur additional costs in connection with research and development activities under our collaboration with ViaCyte.

General and Administrative Expenses

General and administrative expenses consist primarily of employee related expenses, including salaries, benefits and equity-based compensation, for personnel in executive, finance, accounting, business development and human resources functions. Other significant costs include facility costs not otherwise included in research and development expenses, legal fees relating to patent and corporate matters and fees for accounting and consulting services.

We anticipate that our general and administrative expenses will increase in the future to support continued research and development activities, potential commercialization of our product candidates and increased costs of operating as a public company. In addition, we anticipate increased expenses related to the reimbursements of third-party patent related expenses in connection with certain of our in-licensed intellectual property.

Results of Operations

Comparison of three months ended June 30, 2020 and 2019 (in thousands):

	Three Months Ended June 30,		Period to Period Change
	2020	2019	
Collaboration revenue	\$ 44	\$ 318	\$ (274)
Operating expenses:			
Research and development	59,380	\$ 39,533	19,847
General and administrative	21,353	\$ 15,768	5,585
Total operating expenses	80,733	55,301	25,432
Loss from operations	(80,689)	(54,983)	(25,706)
Other income, net	1,412	\$ 1,369	43
Net loss before income taxes	(79,277)	(53,614)	(25,663)
Provision for income taxes	(379)	\$ (85)	(294)
Net loss	\$ (79,656)	\$ (53,699)	\$ (25,957)

Collaboration Revenue

Collaboration revenue for the three months ended June 30, 2020 and 2019, respectively, was not material. Please refer to Note 5 of the notes to our unaudited condensed consolidated financial statements included in this Quarterly Report on Form 10-Q for further information.

Research and Development Expenses

Research and development expenses were \$59.4 million for the three months ended June 30, 2020, compared to \$39.5 million for the three months ended June 30, 2019. The increase of approximately \$19.9 million was primarily attributable to the following:

- \$7.6 million of increased employee compensation, benefit and other headcount related expenses, of which \$2.2 million is increased stock-based compensation expense, primarily due to an increase in headcount to support overall growth;
- \$7.9 million of increased variable research and development costs; and,
- \$4.1 million of increased facility-related expenses.

General and Administrative Expenses

General and administrative expenses were \$21.4 million for the three months ended June 30, 2020, compared to \$15.8 million for the three months ended June 30, 2019. The increase of approximately \$5.6 million was primarily attributable to the following:

- \$3.2 million of increased employee compensation, benefit and other headcount related expenses, of which \$2.3 million is increased stock-based compensation expense, primarily due to an increase in headcount to support overall growth; and,
- \$2.2 million of increased facility-related expenses.

Other Income, Net

Other income was \$1.4 million for the three months ended June 30, 2020 and for the three months ended June 30, 2019. Other income primarily consists of interest income earned on cash and cash equivalents for the three months ended June 30, 2020 and 2019.

Comparison of six months ended June 30, 2020 and 2019 (in thousands):

	Six Months Ended June 30,		Period to Period Change
	2020	2019	
Collaboration revenue	\$ 201	\$ 646	\$ (445)
Operating expenses:			
Research and development	113,573	\$ 73,355	40,218
General and administrative	40,903	\$ 30,697	10,206
Total operating expenses	154,476	104,052	50,424
Income (loss) from operations	(154,275)	(103,406)	(50,869)
Other income (expense), net	5,644	1,469	4,175
Net income (loss) before income taxes	(148,631)	(101,937)	(46,694)
Provision for income taxes	(756)	(170)	(586)
Net income (loss)	\$ (149,387)	\$ (102,107)	\$ (47,280)

Collaboration Revenue

Collaboration revenue for the six months ended June 30, 2020 and 2019, respectively, was not material. Please refer to Note 5 of the notes to our unaudited condensed consolidated financial statements included in this Quarterly Report on Form 10-Q for further information.

Research and Development Expenses

Research and development expenses were \$113.6 million for the six months ended June 30, 2020, compared to \$73.4 million for the six months ended June 30, 2019. The increase of approximately \$40.2 million was primarily attributable to the following:

- \$15.1 million of increased employee compensation, benefit and other headcount related expenses, of which \$4.5 million is increased stock-based compensation expense, primarily due to an increase in headcount to support overall growth;
- \$11.8 million of increased variable research and development costs; and,
- \$11.7 million of increased facility-related expenses.

General and Administrative Expenses

General and administrative expenses were \$40.9 million for the six months ended June 30, 2020, compared to \$30.7 million for the six months ended June 30, 2019. The increase of approximately \$10.2 million was primarily attributable to the following:

- \$6.6 million of increased employee compensation, benefit and other headcount related expenses, of which \$4.5 million is increased stock-based compensation expense, primarily due to an increase in headcount to support overall growth; and,
- \$3.4 million of increased facility-related expenses

Other Income, Net

Other income was \$5.6 million for the six months ended June 30, 2020, compared to \$1.5 million of income for the six months ended June 30, 2019. The change was primarily due to interest income earned on cash and cash equivalents for the six months ended June 30, 2020.

Liquidity and Capital Resources

As of June 30, 2020, we had cash and cash equivalents of approximately \$945.1 million, of which approximately \$631.7 million was held outside of the United States.

We have predominantly incurred losses and cumulative negative cash flows from operations since our inception, and as of June 30, 2020, we had an accumulated deficit of \$374.1 million. We anticipate that we will continue to incur losses for at least the next several years. We expect that our research and development and general and administrative expenses will continue to increase and, as a result, we will need additional capital to fund our operations, which we may raise through public or private equity or debt financings, strategic collaborations, or other sources.

July 2020 Offering

In July 2020, we sold 7.4 million common shares through an underwritten public offering (inclusive of shares sold pursuant to the exercise of underwriters' option to purchase additional shares) at a public offering price of \$70.00 per share for aggregate net proceeds of \$484.8 million, which were net of equity issuance costs of \$32.7 million.

Funding Requirements

Our primary uses of capital are, and we expect will continue to be, research and development activities, compensation and related expenses, laboratory and related supplies, legal and other regulatory expenses, patent prosecution filing and maintenance costs for our licensed intellectual property and general overhead costs. We expect our expenses to increase compared to prior periods in connection with our ongoing activities, particularly as we continue research and development and preclinical activities and initiate preclinical studies to support initial drug applications. We also anticipate that we will incur significant capital expenditures as we develop our manufacturing infrastructure. In addition, we expect to incur additional costs associated with operating as a public company.

Because our research programs are still in early stages of development and the outcome of these efforts is uncertain, we cannot estimate the actual amounts necessary to successfully complete the development and commercialization of any current or future product candidates, if approved, or whether, or when, we may achieve profitability. Until such time as we can generate substantial product revenues, if ever, we expect to finance our cash needs through a combination of equity, debt financings and payments received in connection with our collaboration agreements. We are entitled to research payments under our collaboration with Vertex. Additionally, we are eligible to earn payments, in each case, on a per-product basis under our collaboration with Vertex. Except for this source of funding, we do not have any committed external source of liquidity. We intend to consider opportunities to raise additional funds through the sale of equity or debt securities when market conditions are favorable to us to do so. However, including as a result of the coronavirus pandemic, the trading prices for our common shares and other biopharmaceutical companies have been highly volatile. As a result, we may face difficulties raising capital through sales of our common shares or such sales may be on unfavorable terms. In addition, a recession, depression or other sustained adverse market event, including resulting from the spread of the coronavirus, could materially and adversely affect our business and the value of our common shares. To the extent that we raise additional capital through the future sale of equity or debt securities, the ownership interests of our shareholders will be diluted, and the terms of these securities may include liquidation or other preferences that adversely affect the rights of our existing shareholders. If we raise additional funds through collaboration arrangements in the future, we may have to relinquish valuable rights to our technologies, future revenue streams or product candidates or 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.

Outlook

Based on our research and development plans and our timing expectations related to the progress of our programs, we expect our existing cash will enable us to fund our operating expenses and capital expenditures for at least the next 24 months without giving effect to any additional proceeds we may receive under our collaboration with Vertex and any other capital raising transactions we may complete. We have based this estimate on assumptions that may prove to be wrong, and we could use our capital resources sooner than we expect. Given our need for additional financing to support the long-term clinical development of our programs, we intend to consider additional financing opportunities when market terms are favorable to us.

Our ability to generate revenue and achieve profitability depends significantly on our success in many areas, including: developing our delivery technologies and our gene-editing technology platform; selecting appropriate product candidates to develop; completing research and preclinical and clinical development of selected product candidates; obtaining regulatory approvals and marketing authorizations for product candidates for which we complete clinical trials; developing a sustainable and scalable manufacturing process for product candidates; launching and commercializing product candidates for which we obtain regulatory approvals and marketing authorizations, either directly or with a collaborator or distributor; obtaining market acceptance of our product candidates, if approved; addressing any competing technological and market developments; negotiating favorable terms in any collaboration, licensing or other arrangements into which we may enter; maintaining good relationships with our collaborators and licensors; maintaining, protecting and expanding our estate of intellectual property rights, including patents, trade secrets and know-how; and attracting, hiring and retaining qualified personnel.

Cash Flows

The following table provides information regarding our cash flows for each of the periods below (in thousands):

	Six Months Ended June 30,		Period to Period Change
	2020	2019	
Net cash used in operating activities	\$ (81,454)	\$ (80,119)	\$ (1,335)
Net cash used in investing activities	(6,596)	(3,271)	(3,325)
Net cash provided by financing activities	90,637	55,380	35,257
Effect of exchange rate changes on cash	(28)	(2)	(26)
Net increase (decrease) in cash	<u>\$ 2,559</u>	<u>\$ (28,012)</u>	<u>\$ 30,571</u>

Net Cash Used in Operating Activities

Net cash used in operating activities was \$81.5 million for the six months ended June 30, 2020, compared to cash used of \$80.1 million for the six months ended June 30, 2019. The \$1.3 million increase in cash used in operating activities was primarily driven by the increase in net loss of \$47.2 million, which was driven by increased spending on our clinical and pre-clinical stage programs and increased payroll and payroll-related expenses to support overall growth. The increase was offset by an increase of \$10.1 million of non-cash expense and an increase of \$35.8 million in net changes of operating assets and liabilities, primarily driven by the receipt of the \$25.0 million milestone payment from Vertex in the second quarter of 2020.

Net Cash Used in Investing Activities

Net cash used in investing activities for the six months ended June 30, 2020 was \$6.6 million, compared to \$3.3 million for the six months ended June 30, 2019. The increase in net cash used in investing activities consisted primarily of purchases of property and equipment.

Net Cash Provided by Financing Activities

Net cash provided by financing activities for the six months ended June 30, 2020 was \$90.6 million, compared with \$55.4 million for the six months ended June 30, 2019. The net cash provided by financing activities for the six months ended June 30, 2020 consisted of proceeds from the issuance of 1.2 million common shares in connection with our Open Market Sale AgreementSM, which resulted in \$83.0 million of net cash proceeds, after deducting \$2.4 million in commissions, as well as option exercise proceeds, net of issuance costs.

Contractual Obligations

The disclosure of our contractual obligations and commitments was reported in our Annual Report on Form 10-K for the year ended December 31, 2019 filed with the SEC on February 12, 2020. There have been no material changes from the contractual commitments and obligations previously disclosed in our Annual Report on Form 10-K except for certain lease commitments described in Note 4 of the notes to our unaudited condensed consolidated financial statements included in this Quarterly Report on Form 10-Q and Part II, Item 5. Other Items below.

Off-Balance Sheet Arrangements

As of June 30, 2020, we did not have any off-balance sheet arrangements as defined under applicable SEC rules.

Critical Accounting Policies and Significant Judgments and Estimates

This discussion and analysis of our financial condition and results of operations is based on our financial statements, which we have prepared in accordance with U.S. GAAP. We believe that several accounting policies are important to understanding our historical and future performance. We refer to these policies as critical because these specific areas generally require us to make judgments and estimates about matters that are uncertain at the time we make the estimate, and different estimates—which also would have been reasonable—could have been used. On an ongoing basis, we evaluate our estimates and judgments, including those described in greater detail below. We base our estimates on historical experience and other market-specific or other relevant assumptions that we believe to be 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.

We believe that our most critical accounting policies are those relating to revenue recognition, variable interest entities and equity-based compensation, and there have been no changes to our accounting policies discussed in our Annual Report on Form 10-K for the year ended December 31, 2019 filed with the SEC on February 12, 2020.

Recent Accounting Pronouncements

Refer to Note 1 of the notes to our unaudited condensed consolidated financial statements included in this Quarterly Report on Form 10-Q for a discussion of recent accounting pronouncements.

Item 3. Qualitative and Quantitative Disclosures about Market Risk

Interest Rate Sensitivity

Cash and cash equivalents were held primarily in cash deposits and money market funds. The fair value of our cash and cash equivalents would not be significantly affected by either an increase or decrease in interest rates due mainly to the short-term nature of these instruments.

Foreign Currency Exchange Rate Risk

As a result of our foreign operations, we face exposure to movements in foreign currency exchange rates, primarily the Swiss Franc and British Pound, against the U.S. dollar. The current exposures arise primarily from cash, accounts payable and intercompany receivables and payables. Changes in foreign exchange rates affect our consolidated statement of operations and distort comparisons between periods. To date, foreign currency transaction gains and losses have not been material to our financial statements and we have not engaged in any foreign currency hedging transactions.

Item 4. Controls and Procedures.

Management's Evaluation of our Disclosure Controls and Procedures

We maintain disclosure controls and procedures that are designed to ensure that information required to be disclosed in the reports that we file or submit under the Securities and Exchange Act of 1934 is (1) recorded, processed, summarized, and reported within the time periods specified in the SEC's rules and forms and (2) accumulated and communicated to our management, including our principal executive officer and principal financial officer, to allow timely decisions regarding required disclosure.

As of June 30, 2020, our management, with the participation of our principal executive officer and principal financial officer, evaluated the effectiveness of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Securities and Exchange Act of 1934). Our management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving their objectives, and management necessarily applies its judgment in evaluating the cost-benefit relationship of possible controls and procedures. Our principal executive officer and principal financial officer have concluded based upon the evaluation described above that, as of June 30, 2020, our disclosure controls and procedures were effective at the reasonable assurance level.

Changes in Internal Control over Financial Reporting

During the quarter ended June 30, 2020, there were no changes in our internal control over financial reporting, as such term is defined in Rules 13a-15(f) and 15(d)-15(f) promulgated under the Securities Exchange Act of 1934, that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

PART II—OTHER INFORMATION

Item 1. Legal Proceedings.

From time to time, we may become involved in litigation or other legal proceedings relating to claims arising from the ordinary course of business. There are currently no claims or actions pending against us that, in the opinion of our management, are likely to have a material adverse effect on our business.

There have been no material developments with respect to the legal proceedings previously disclosed in “Item 3. Legal Proceedings” of our Annual Report on Form 10-K for the fiscal year ended December 31, 2019 filed with the SEC on February 12, 2020.

Item 1A. Risk Factors.

In light of the rapid spread of SARS-CoV-2, which causes coronavirus disease 2019, or COVID-19, in the United States and globally, we are updating and supplementing our risk factors previously disclosed in Item 1A of our Annual Report on Form 10-K for the year ended December 31, 2019 filed with the SEC on February 12, 2020 with the following updated risk factor:

Our business may be adversely affected by the ongoing coronavirus pandemic.

Our business could be adversely affected by health epidemics in regions where we have concentrations of clinical trial sites or other business activities and could cause significant disruption in the operations of third party manufacturers and CROs upon whom we rely. For example, beginning in late 2019, the outbreak of a novel strain of virus named SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2), or coronavirus, which causes coronavirus disease 2019, or COVID-19, has evolved into a global pandemic.

As a result of the coronavirus pandemic, we have experienced and may further experience disruptions that have and could further impact our business, preclinical studies and clinical trials, including:

- We are conducting a number of clinical trials for product candidates in the fields of severe hemoglobinopathies and immuno-oncology in geographies which are affected by the coronavirus pandemic. We believe that the coronavirus pandemic has had, and will likely continue to have, an impact on various aspects of our clinical trials. For example, recently, we re-initiated dosing patients in our CTX001 clinical trials for severe hemoglobinopathies (specifically, transfusion-dependent beta thalassemia and severe sickle cell disease). However, if negative developments relating to the coronavirus pandemic (such as a so-called resurgence) were to occur, we may elect to pause patient dosing in these trials again if ICU beds and related healthcare resources become significantly constrained again or governmental authorities impose additional business or travel restrictions. With respect to our immuno-oncology clinical trials (which are currently open for enrollment), if such negative developments were to occur, investigators participating in our clinical trials may not want to take the risk of exposing cancer patients to COVID-19 since the dosing of patients is conducted within an in-patient setting. Other potential impacts of the coronavirus pandemic on our various clinical trials include patient dosing and study monitoring, which may be paused or delayed due to changes in policies at various clinical sites, federal, state, local or foreign laws, rules and regulations, including quarantines or other travel restrictions, prioritization of healthcare resources toward pandemic efforts, including diminished attention of physicians serving as our clinical trial investigators and reduced availability of site staff supporting the conduct of our clinical trials, interruption or delays in the operations of the U.S. Food and Drug Administration, or other reasons related to the coronavirus pandemic. If the coronavirus pandemic continues, actions we have taken to re-initiate dosing of patients in our CTX001 clinical trials for severe hemoglobinopathies or other aspects of our clinical trials may be adversely affected, delayed or interrupted, including, for example, site initiation, patient recruitment and enrollment, availability of clinical trial materials, and data analysis. Some patients and clinical investigators may not be able to comply with clinical trial protocols and patients may choose to withdraw from our studies or we may have to pause enrollment or we may choose to or be required to pause enrollment and or patient dosing in our ongoing clinical trials in order to preserve health resources and protect trial participants. It is unknown how long these pauses or disruptions could continue.

- We currently rely on third parties to, among other things, manufacture raw materials, manufacture our product candidates for our clinical trials, shipping of investigational drugs and clinical trial samples, perform quality testing and supply other goods and services to run our business. Certain of our third party manufacturers and suppliers have paused their operations in response to the coronavirus pandemic or have otherwise encountered delays in providing their services. As a result, we may not be able to manufacture our product candidates for our clinical trials and conduct other research and development operations and maintain current clinical and pre-clinical timelines. In addition, if additional third parties in our supply chain for materials are adversely impacted by restrictions resulting from the coronavirus pandemic, including staffing shortages, production slowdowns and disruptions in delivery systems, our supply chain may be disrupted in other ways, further limiting our ability to manufacture our product candidates for our clinical trials and conduct our research and development operations.
- We are in the process of reopening our offices to additional staff in accordance with state and local regulations. However, if negative developments relating to the coronavirus pandemic were to occur, we may elect to close our offices again or request that most of our personnel, including all of our administrative employees, work remotely, or restrict on-site staff at our offices again to only those personnel and contractors who perform essential activities that must be completed on-site and limit the number of staff in any given research and development laboratory. Our increased reliance on personnel working from home, now and in the future, may negatively impact productivity, or disrupt, delay, or otherwise adversely impact our business. In addition, this could increase our cyber security risk, create data accessibility concerns, and make us more susceptible to communication disruptions, any of which could adversely impact our business operations or delay necessary interactions with local and federal regulators, ethics committees, manufacturing sites, research or clinical trial sites and other important agencies and contractors.
- Our employees and contractors conducting research and development activities may not be able to access our laboratory for an extended period of time as a result of the closure of our offices or reduced capacity at our offices imposed by local and state regulations and the possibility that governmental authorities further modify current restrictions now, or in the future, if additional negative developments relating to the coronavirus pandemic were to occur. As a result, this could delay timely completion of preclinical activities, including completing Investigational New Drug (IND)/Clinical Trial Application (CTA)-enabling studies or our ability to select future development candidates, and initiation of additional clinical trials for other of our development programs. In addition, when we re-open our facilities, we could encounter delays in connection with implementing precautionary measures to mitigate the risk of exposing our facilities and employees to the coronavirus (for example, implementing screening procedures or procuring appropriate non-medical personal protective equipment for use while in our facilities) or otherwise in connection with addressing an actual or potential exposure to the coronavirus (for example, temporarily closing all or a portion of a facility or disinfecting all or a portion of a facility that may have been exposed to the coronavirus).
- Health regulatory agencies globally may experience disruptions in their operations as a result of the coronavirus pandemic. The U.S. Food and Drug Administration, or FDA, and comparable foreign regulatory agencies may have slower response times or be under-resourced to continue to monitor our clinical trials and, as a result, review, inspection, and other timelines may be materially delayed. It is unknown how long these disruptions could continue, were they to occur. Any elongation or de-prioritization of our clinical trials or delay in regulatory review resulting from such disruptions could materially affect the development and study of our product candidates. For example, regulatory authorities may require that we not distribute a product candidate lot until the relevant agency authorizes its release. Such release authorization may be delayed as a result of the coronavirus pandemic and could result in delays to our clinical trials.
- The trading prices for our common shares and other biopharmaceutical companies have been highly volatile as a result of the coronavirus pandemic. As a result, we may face difficulties raising capital through sales of our common shares or such sales may be on unfavorable terms. In addition, a recession, depression or other sustained adverse market event resulting from the spread of the coronavirus could materially and adversely affect our business and the value of our common shares.

The coronavirus pandemic continues to rapidly evolve. The ultimate impact of the coronavirus pandemic on our business operations is highly uncertain and subject to change and will depend on future developments, which cannot be accurately predicted, including the duration of the pandemic, additional or modified government actions, new information that will emerge concerning the severity and impact of COVID-19 and the actions taken to contain coronavirus or address its impact in the short and long term, among others. We do not yet know the full extent of potential delays or impacts on our business, our clinical trials, our research programs, healthcare systems or the global economy. We will continue to monitor the situation closely.

There have been no other material changes from the risk factors disclosed in our Annual Report on Form 10-K filed with the SEC on February 12, 2020. Please refer to the complete Part I, Item 1A of our Annual Report for additional risks and uncertainties we are facing that may have a material adverse effect on our business prospects, financial condition and results of operations.

Item 5. Other Information

On July 24, 2020, our wholly-owned subsidiary, CRISPR Therapeutics, Inc., entered into a lease with 105 W First Street Owner, L.L.C., or Landlord, for approximately 263,500 square feet of office and laboratory space, or the Premises, in a to-be-constructed building to be located at 105 West First Street, Boston, Massachusetts, or the 2020 Boston Lease. We intend for the new facility to be our new U.S. headquarters for research and development and plan to consolidate our various office and laboratory locations in the greater Boston area into this single location.

The term of the 2020 Boston Lease commences on the date which Landlord has met certain delivery conditions and tenders possession of the Premises to us, or the Commencement Date, subject to extension under certain circumstances. The anticipated Commencement Date of the 2020 Boston Lease is on or about March 1, 2022. The initial term of the 2020 Boston Lease continues for 152 months from the Commencement Date, or the Initial Term. The 2020 Boston Lease contains customary terms and conditions for leases of this type, including allowing the Landlord to terminate the 2020 Boston Lease if we fail to remedy a breach of any of our obligations within specified time periods, or upon our bankruptcy or insolvency, as well as a right for us to sublet the Premises.

Rent payments by us commence on the date that is the later to occur of (i) the date which is two hundred forty (240) days after the Commencement Date, or (ii) November 1, 2022, except as otherwise provided in the 2020 Boston Lease. Base rent for the first year is expected to be approximately \$21.1 million, increasing to approximately \$28.0 million in the final year of the Initial Term. We have two options to extend the term of the 2020 Boston Lease by five years for each option, subject to a market-based rent escalation provision applicable in the first year of each such extension term. Each of these options may be exercised by us no later than eighteen months prior to the then-existing expiration date of the 2020 Boston Lease. In connection with execution of the 2020 Boston Lease, we were required to deliver a letter of credit for approximately \$10.5 million to Landlord, which such amount, provided certain conditions are met, will be decreased at set intervals during the lease term.

The foregoing summary does not purport to be complete and is qualified in its entirety by reference to the 2020 Boston Lease, which is filed as Exhibit 10.1 hereto.

Item 6. Exhibits

The exhibits filed as part of this Quarterly Report on Form 10-Q are set forth in the Exhibit Index below.

Exhibit Number	Description of Document
10.1*†	Lease, dated July 24, 2020, by and between the Registrant and 105 W First Street Owner, L.L.C.
31.1*	Certification of Chief Executive Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
31.2*	Certification of Chief Financial Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
32.1*+	Certification pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
101.INS*	Inline XBRL Instance Document – the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the inline XBRL document.
101.SCH*	Inline XBRL Taxonomy Extension Schema Document
101.CAL*	Inline XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF*	Inline XBRL Taxonomy Extension Definition Linkbase Document
101.LAB*	Inline XBRL Taxonomy Extension Label Linkbase Document
101.PRE*	Inline XBRL Taxonomy Extension Presentation Linkbase Document
104*	Cover Page Interactive Data File (formatted as inline XBRL with applicable taxonomy extension information contained in Exhibits 101.*)

* Filed herewith.

+ The certification attached as Exhibit 32.1 that accompany this Quarterly Report on Form 10-Q are not deemed filed with the Securities and Exchange Commission and are not to be incorporated by reference into any filing of CRISPR Therapeutics AG 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 Form 10-Q, irrespective of any general incorporation language contained in such filing.

† Confidential portions of this exhibit have been omitted.

SIGNATURES

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

CRISPR Therapeutics AG

Dated: July 27, 2020

By: /s/ Samarth Kulkarni
Samarth Kulkarni
Chief Executive Officer
(Principal Executive Officer)

Dated: July 27, 2020

By: /s/ Michael Tomsicek
Michael Tomsicek
Chief Financial Officer
(Principal Financial Officer)

LEASE

**105 W FIRST STREET OWNER, L.L.C.,
a Delaware limited liability company**

Landlord

and

**CRISPR THERAPEUTICS, INC.,
a Delaware corporation**

Tenant

for

Premises

at

**The 105 by Breakthrough
105 West First Street
Boston, Massachusetts**

July 24, 2020

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[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

Schedule of Exhibits

Exhibit A	Floor Plans of the Premises
Exhibit B	Definitions
Exhibit C	Plans Showing Office Areas, Lab Areas, and Flex Areas
Exhibit D-1	Schedule of Base Building Plans
Exhibit D-2	Base Building Work Matrix
Exhibit D-3	Landlord's Work Design Narrative
Exhibit E	Schedule of Tenant's Hazardous Materials
Exhibit F	Rules and Regulations
Exhibit G	Form of Commencement Date Agreement
Exhibit H	Form of Environmental Questionnaire
Exhibit I	Cleaning Specifications (Office Areas)
Exhibit J	Plan of Rooftop/Penthouse Rooftop Areas
Exhibit K	Plan of Approved Locations of Tenant's Exterior Building Signage
Exhibit L	Plan of Tenant's Entrance/Lobby Feature Wall Signs
Exhibit M	Construction Schedule for Landlord's Work
Exhibit N	Form of Guaranty
Exhibit O	HVAC Design Standards

LEASE

THIS LEASE is made as of the 24th day of July, 2020 ("**Effective Date**"), between **105 W FIRST STREET OWNER, L.L.C.** ("**Landlord**"), a Delaware limited liability company, and **CRISPR THERAPEUTICS, INC.** ("**Tenant**"), a Delaware corporation.

Landlord and Tenant hereby covenant and agree as follows:

ARTICLE 1

BASIC LEASE PROVISIONS

- ADDITIONAL RENT:** All sums other than Fixed Rent payable by Tenant to Landlord under this Lease, including Tenant's Tax Payment, Tenant's Operating Payment, Tenant's Insurance Payment, Electricity Additional Rent, charges for utilities and services furnished to the Premises (including, without limitation, PH neutralization, water and sewer services, natural gas, condenser water, chilled water, and forced air), late charges, overtime or excess service charges, damages, and interest and other costs related to Tenant's failure to perform any of its obligations under this Lease.
- AGREED AREA OF BUILDING:** 263,500 rentable square feet, as mutually agreed by Landlord and Tenant.
- AGREED AREA OF PREMISES:** 263,500 rentable square feet, as mutually agreed by Landlord and Tenant.
- BUILDING:** The building commonly known as The 105 by Breakthrough, 105 West First Street, Boston, Massachusetts, including all fixtures, equipment and other improvements and appurtenances now or hereafter erected, located or placed therein or on the land upon which the Building is located.
- COMMENCEMENT DATE:** The date on which Landlord tenders possession of the Premises to Tenant in the Delivery Condition (as defined in **Section 4.2**).
- EXPIRATION DATE:** The date which is the last day of the calendar month in which the day immediately preceding the twelfth (12th) anniversary of the Rent Commencement Date occurs or, if the Term of this Lease is extended in accordance with the provisions of **Article 29**, the last day of the respective Extension Term.

FIXED RENT:

Lease Year Per Annum Per Month

Lease Year 1 \$21,080,000.00 \$1,756,666.66
Lease Year 2 \$21,628,080.00 \$1,802,340.00
Lease Year 3 \$22,190,410.08 \$1,849,200.84
Lease Year 4 \$22,767,360.74 \$1,897,280.06
Lease Year 5 \$23,359,312.12 \$1,946,609.34
Lease Year 6 \$23,966,654.24 \$1,997,221.19
Lease Year 7 \$24,589,787.25 \$2,049,148.94
Lease Year 8 \$25,229,121.72 \$2,102,426.81
Lease Year 9 \$25,885,078.88 \$2,157,089.91
Lease Year 10 \$26,558,090.93 \$2,213,174.24
Lease Year 11 \$27,248,601.29 \$2,270,716.77
Lease Year 12 \$27,957,064.93 \$2,329,755.41

GUARANTOR:

CRISPR Therapeutics AG, a Swiss corporation.

INTEREST RATE:

The lesser of (i) 4% per annum above the then-current Base Rate, and (ii) the maximum rate permitted by applicable Requirements.

LANDLORD'S ADDRESS FOR NOTICES:

105 W First Street Owner, L.L.C.
c/o Breakthrough Spaces, L.L.C.
105 West First Street
Boston, Massachusetts 02210
Attn: Office of the Building

with copies to:

105 W First Street Owner, L.L.C.
c/o Breakthrough Spaces, L.L.C.
Tishman Speyer
45 Rockefeller Plaza
New York, New York 10111
Attn: Chief Legal Officer

105 W First Street Owner, L.L.C.
c/o Breakthrough Spaces, L.L.C.
Bellco Capital
2049 Century Park East, Suite 1940
Los Angeles, CA 90067
Attn: Legal

and:

Goulston & Storrs PC
400 Atlantic Avenue
Boston, Massachusetts 02110
Attn: [***]

LANDLORD'S AGENT:

Breakthrough Spaces, L.L.C. or any other person or entity designated at any time and from time to time by Landlord as Landlord's Agent.

Newmark Real Estate of Massachusetts, LLC, d/b/a Newmark Knight Frank.

LANDLORD'S BROKER:

LETTER OF CREDIT AMOUNT:

\$10,540,000.00, subject to the provisions of **Article 28**.

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

PREMISES: The rentable areas located on the 1st through 7th floors of the Building (inclusive), as more particularly shown on the floor plans attached hereto as **Exhibit A**.

PERMITTED USES: Within the Office Areas, general office and other lawfully permitted uses ancillary thereto, subject in all respects to applicable Requirements (the "**Office Area Permitted Uses**"). Within the Lab Areas, research, development and laboratory uses, and other lawfully permitted uses ancillary thereto, including a Vivarium, subject in all respects to applicable Requirements (the "**Lab Area Permitted Uses**"). Within the Flex Areas, either Office Area Permitted Uses or Lab Area Permitted Uses.

REAL PROPERTY: The Building, together with the plot(s) of land upon which it stands.

RENT: Fixed Rent and Additional Rent, collectively.

RENT COMMENCEMENT DATE: The later to occur of (i) the date which is two hundred forty (240) days after the Commencement Date, or (ii) November 1, 2022.

SCHEDULED COMMENCEMENT DATE: March 1, 2022

TENANT'S ADDRESS FOR NOTICES: Until Tenant commences business operations from the Premises:
610 Main Street North
Cambridge, Massachusetts 02139
Attn: [***]

Thereafter, at the Premises.

In each instance, with a copy to the same address, to the attention of the General Counsel.

TENANT'S BROKER: Cushman & Wakefield of Massachusetts, Inc.

TENANT'S PROPORTIONATE SHARE 100 % (i.e., ratio of the rentable area of the Premises to the rentable area of the Building, expressed as a percentage).

TERM: The period of time commencing on the Commencement Date and ending on the Expiration Date, or such earlier date upon which this Lease is terminated in accordance with the terms and conditions hereof.

All capitalized terms used in this Lease which are not otherwise defined in this Article 1 or in the following Articles of this Lease are defined in Exhibit B.

ARTICLE 2

PREMISES; TERM; RENT

Section 2.1. Lease of Premises. Subject to the terms of this Lease, Landlord leases to Tenant and Tenant leases from Landlord the Premises for the Term. In addition, Landlord grants to Tenant the right to use the Common Areas, the Common Facilities, and the Building Systems, which usage shall be on an exclusive basis for as long as the Premises includes all of the rentable areas of the Building, subject in all respects to access to and use by Landlord and Landlord's Agent of the Common Areas, the Common Facilities, and the Building Systems, in accordance with the provisions of this Lease, and to access to and use by others of the passageway area, the Convenor Space, and the Lobby Café. Subject to casualties and to Unavoidable Delays and the terms and conditions of this Lease, Landlord shall provide Tenant with access to and use of the Premises, on a 24 hour per day, 7 day per week basis.

Section 2.2. Commencement Date. Upon the Effective Date, the terms and provisions of this Lease shall be fully binding on Landlord and Tenant. The Term of this Lease shall commence on the Commencement Date (as defined in **Article 1**). Unless sooner terminated or extended as hereinafter provided, the Term shall expire on the Expiration Date. Once the Commencement Date is determined, Landlord and Tenant shall endeavor to execute an agreement, substantially in the form attached hereto as **Exhibit G**, confirming the Commencement Date, the Rent Commencement Date and the Expiration Date; provided, however, the failure to execute said agreement will not limit or detract from the occurrence of such dates.

Section 2.3. Payment of Rent. Tenant shall pay to Landlord, without notice or demand, and without any set-off, counterclaim, abatement or deduction whatsoever, except as may be expressly set forth in this Lease, in lawful money of the United States by wire transfer of funds, (i) Fixed Rent in equal monthly installments, in advance, on the first day of each month during the Term, commencing on the Rent Commencement Date, and (ii) Additional Rent, at the times and in the manner set forth in this Lease.

Section 2.4. Guaranty. Concurrent with the execution of this Lease, the Guarantor has executed and delivered to Landlord the Guaranty (the "**Guaranty**") in the form attached hereto as **Exhibit N**. The Guaranty shall remain in full force and effect throughout the Term. Tenant hereby represents and warrants to Landlord that it is a wholly-owned direct subsidiary of Guarantor.

ARTICLE 3

USE AND OCCUPANCY

Section 3.1. Permitted Uses. (a) Tenant shall use and occupy the Premises only for the Permitted Uses and for no other purpose or purposes. Tenant shall not use or occupy or permit the use or occupancy of any part of the Premises in a manner constituting a Prohibited Use. If Tenant uses the Premises for any Prohibited Use, in violation of any applicable Requirement, or in a manner which causes the Building to be in violation of any Requirement, then Tenant shall promptly discontinue such use upon notice from Landlord.

- (b) Tenant shall use Office Areas only for the Office Area Permitted Uses and for no other purposes. Notwithstanding the foregoing, Tenant may elect, from time-to-time, subject to the terms and conditions of **Section 3.1(e)**, to change the use of Office Areas to the Lab Area Permitted Uses, subject in each instance to the prior consent of Landlord, which consent may be granted or withheld by Landlord in its sole discretion. Any such change in use of Office Areas to the Lab Area Permitted Uses shall be subject to applicable Requirements and to compliance by Tenant with the terms and conditions of **Article 5**. Tenant shall be responsible for all costs and expenses arising out of or resulting from any such change in use of Office Areas to the Lab Area Permitted Uses.
- (c) Tenant shall use the Lab Areas only for the Lab Area Permitted Uses and for no other purposes. Tenant may elect, from time-to-time, subject to the terms and conditions of **Section 3.1(e)**, to change the use of Lab Areas to Office Area Permitted Uses, subject in each instance to the prior consent of Landlord, which consent shall not be unreasonably withheld, conditioned, or delayed (subject to the terms and conditions of **Section 3.1(e)**). Any such change in use of Lab Areas to Office Area Permitted Uses shall be subject to applicable Requirements and to compliance by Tenant with the terms and conditions of **Article 5**. Tenant shall be responsible for all costs and expenses arising out of or resulting from any such change in use of Lab Areas to Office Area Permitted Uses.
- (d) Tenant may elect to use Flex Areas for either Lab Area Permitted Uses or Office Area Permitted Uses, subject to the terms and conditions of **Section 3.1(e)**, to applicable Requirements, and to compliance by Tenant with the terms and conditions of **Article 5**. The prior consent of Landlord shall not be required for such change in use of Flex Areas, subject to the provisions of **Article 5**. Tenant shall be responsible for all costs and expenses arising out of or resulting from any such change in use of Flex Areas.
- (e) Notwithstanding the foregoing, at all times during the Term, not less than approximately thirty percent (30%) of the rentable area of the Premises shall be used for the Lab Area Permitted Uses, and not more than approximately seventy percent (70%) of the rentable area of the Premises shall be used for the Office Area Permitted Uses. Landlord shall not be considered to be unreasonable in withholding consent for a change in the use of any respective area of the Premises that when given effect would result in the use of the Premises being in breach of the foregoing covenant.

Section 3.2. Permits and Approvals. Tenant shall, at its sole cost and expense, obtain and at all times maintain all licenses, approvals, and permits required for the lawful conduct of the business operations of Tenant in the Premises, including any and all permits and approvals required for or incident to the conduct of its scientific activities in the Premises, or the transportation, storage, handling, use and disposal of Hazardous Materials, chemical or biological substances or organisms, animals, and/or laboratory specimens. Upon request of Landlord from time-to-time, Tenant shall provide copies of such licenses, permits and approvals to Landlord. Landlord will exercise commercially reasonable efforts to cooperate with the efforts of Tenant to obtain and maintain such licenses, permits or approvals; provided, however, Tenant shall reimburse Landlord for all commercially reasonable actual documented out-of-pocket costs and expenses incurred by Landlord in connection therewith. Immediately upon receipt, Tenant shall provide Landlord with copies of any notices or other communications concerning the termination or expiration of any such permits, licenses or approvals, or concerning or alleging a violation or alleged violation by Tenant of any Requirements. In no event shall Tenant seek any amendments or modifications to, or variances or special use permits under, the Zoning Code of the City of Boston without the prior written consent of

Landlord in each instance; provided, however, Landlord hereby consents to Tenant obtaining a conditional use permit to construct and operate the Vivarium (as hereinafter defined), subject to the review and approval by Landlord of any conditions and requirements set forth in said conditional use permit which could impact or restrict the Building and/or the Real Property after the expiration or termination of this Lease (which approval will not be unreasonably withheld).

Section 3.3. Building Roof and Penthouse Roof Areas. Subject to the terms and conditions of this **Section 3.3**, during the Term of this Lease Tenant shall have the right to install, operate, maintain, repair and replace mechanical equipment which is required for its operations in the Premises (collectively, the "**Rooftop Equipment**") located on the roof of the Building and the roof of the penthouse area of the Building, respectively, in the areas (collectively, the "**Rooftop Areas**") depicted on the plan attached to this Lease as **Exhibit J**. The Rooftop Areas shall be provided to Tenant in the condition set forth in the Base Building Plans, and except as expressly set forth in the Base Building Plans, Landlord shall have no obligation to prepare the roof, the penthouse, or any portion thereof for use by Tenant. The location, type, size, weight and manner of attachment of the Rooftop Equipment shall be subject to the prior approval of Landlord in each instance. Landlord's approval of the Rooftop Equipment shall not be unreasonably withheld, conditioned or delayed, provided that Tenant demonstrates to Landlord's reasonable satisfaction that the proposed Rooftop Equipment (i) does not interfere with any Building Systems; (ii) will not affect the structural integrity of the Building or adversely impact the roof or the roof membrane in any manner or void, or adversely affect Landlord's rights under, the roof warranty in any manner; and (iii) complies with all applicable Requirements. Tenant shall be responsible for screening the Rooftop Equipment in accordance with all applicable Requirements, subject however to Landlord installing the base building equipment to be installed on the roof of the Building in the locations set forth in the Base Building Plans. Tenant shall not install Tenant's Rooftop Equipment unless and until Tenant has obtained and submitted to Landlord copies of all required governmental permits, licenses, approvals, and authorizations necessary for the installation and operation thereof. Tenant shall not operate Tenant's Rooftop Equipment unless and until Tenant has obtained and submitted to Landlord commissioning reports and acoustical reports, as required pursuant to, and evidencing compliance with, all applicable Requirements. Tenant shall comply with all Requirements applicable to the operation, use, repair and maintenance of the Rooftop Equipment. In addition, in connection with the installation, maintenance and operation of the Rooftop Equipment, Tenant shall comply with all customary construction Rules and Regulations adopted by Landlord from time-to-time. In connection with all work and services performed by or on behalf of Tenant on the roof and/or penthouse of the Building, such work or services (i) shall not interfere with any Building Systems; (ii) shall not affect the structural integrity of the Building or adversely impact the roof or the roof membrane in any manner or void, or adversely affect Landlord's rights under, the roof warranty in any manner; (iii) shall be adequately screened in accordance with all applicable Requirements; and (iv) shall comply with all applicable Requirements. Notwithstanding the foregoing, upon the request of Tenant, the electricity and/or other utilities provided to the Rooftop Areas may be temporarily interrupted as required in connection with the installation, maintenance, and testing of the Rooftop Equipment, provided that (A) Tenant provides reasonable prior notice of such required interruption to Landlord, (B) such interruption shall be scheduled at a time which is reasonably satisfactory to Landlord and Tenant (taking into account the need for immediate scheduling in the event of an emergency); (C) Tenant shall exercise good faith diligent efforts to minimize the extent and duration of any such interruption, and (D) Tenant shall reimburse Landlord, as Additional Rent, for all reasonable out-of-pocket costs and expenses incurred by Landlord in connection with such interruption. Landlord shall have no obligation to provide any electricity or other utilities or services to the Rooftop Equipment. Tenant shall be responsible for connecting the Rooftop Equipment to the electrical outlets located on the roof, and for the costs and expenses of all electricity consumed in connection with the operation of the Rooftop Equipment.

Section 3.4. Vivarium. Tenant shall be responsible, at its sole expense, for the installation, operation, maintenance, repair and removal of any vivarium (the "**Vivarium**") installed or operated by Tenant in the Premises, in accordance with all applicable Requirements and with first-class standards and best industry practices. Without limitation, Tenant shall separately dispose of all waste products from the operation of the Vivarium, including all animals, animal carcasses, food or supplies relating to any animals in accordance with all applicable Requirements. Tenant shall comply with all Rules and Regulations adopted by Landlord from time-to-time with respect to the operation of the Vivarium, including Rules and Regulations concerning noise mitigation. All transportation by Tenant to and from the Premises of any animals, animal waste, animal carcasses, food or supplies relating to any animals from time to time in any animal storage areas of the Premises shall be in accordance with the terms and conditions of this **Section 3.4**. All animals shall be transported to and from the Premises in appropriate cages or other containers. At no time shall any animals, animal waste, animal carcasses, food or supplies relating to the animals be brought into, transported through, or delivered to the lobby of the Building or be transported in any passenger elevators. At no time shall any large animals or the carcasses of any large animals be used in the Vivarium.

Section 3.5. Innovation Area. The Landlord's Work shall include the buildout and improvement of the area shown as the "Innovation Areas" on the floor plans attached as **Exhibit C** (the "**Innovation Area**"). Tenant may use and occupy the Innovation Area for any of the Permitted Uses and for no other purpose or purposes; provided, however, in no event shall Tenant use the Innovation Area for any Prohibited Innovation Area Use. Pursuant to the approval of the construction of the Building by the Boston Redevelopment Authority d/b/a Boston Planning & Development Agency (the "**BPDA**"), the Innovation Area is to be used as "innovation space." As long as Tenant uses the Innovation Area for Permitted Uses and does not use the Innovation Area for any Prohibited Innovation Area Use, if the BPDA or another Governmental Authority issues an order or directive prohibiting Tenant from using the Innovation Area for such Permitted Use (each, an "**Innovation Area Prohibition**"), then (i) the party which receives notice of said Innovation Area Prohibition shall deliver a copy of such notice to the other party promptly after receipt thereof, (ii) Landlord shall be afforded sixty (60) days after receipt of such notice within which period of time it may elect to contest or dispute the Innovation Area Prohibition, and to seek to cause the BPDA or other Governmental Authority to rescind or revoke the Innovation Area Prohibition, and (iii) if Landlord does not cause the Innovation Area Prohibition to be revoked or rescinded within said sixty (60) day period of time, then within thirty (30) days after the expiration of said sixty (60) day period of time, Tenant shall either (a) elect to surrender the Innovation Area to Landlord and to remove the Innovation Area from the Premises by delivering notice (an "**Innovation Area Surrender Notice**") of such election to Landlord, or (b) elect to comply with the Innovation Area Prohibition, and to change the use of the Innovation Area and to comply with the requirements, directives, and conditions of the BPDA or other Governmental Authority by delivering notice (an "**Innovation Area Use Change Notice**") of such election to Landlord. If Tenant so elects to comply with the Innovation Area Prohibition and to change the use of the Innovation Area, then as soon as reasonably practicable after delivery of the Innovation Area Use Change Notice, Tenant shall change the use of the Innovation Area to cause the use of the Innovation Area to comply with the requirements, directives, and conditions of the BPDA or other Governmental Authority with respect thereto. If Tenant so elects to change the use and to cause the use of the Innovation Area to comply with the requirements, directives, and conditions of the BPDA or other Governmental Authority, then Tenant shall assume all liabilities and obligations for such compliance, and in connection therewith, shall reimburse Landlord for any fines, penalties or other governmental charges imposed as a result of the Innovation Area Prohibition, and shall indemnify Landlord for all liabilities and obligations arising out of or resulting therefrom. If

Tenant so elects to surrender the Innovation Area and to remove the Innovation Area from the Premises in accordance with the foregoing provisions, then on the date specified in the Innovation Area Surrender Notice (the "**Innovation Area Surrender Date**"), Tenant shall surrender to Landlord possession of the Innovation Area, free and clear of all occupants, vacant and free of any lien or encumbrance created by Tenant or persons claiming by, through or under Tenant, and with Tenant's Property removed therefrom. Landlord shall indemnify and hold Tenant harmless from the costs and expenses incurred by Tenant in connection with such surrender of the Innovation Area, including the costs of moving Tenant's Property from the Innovation Area, relocation costs and demising costs. Effective as of the Innovation Area Surrender Date, Tenant's lease of the Innovation Area shall end and expire, and the Term of this Lease solely with respect to the Innovation Area shall terminate and expire as if the Innovation Area Surrender Date was the Expiration Date (solely with respect to the Innovation Area). Effective as of the Innovation Area Surrender Date, the Fixed Rent, Tenant's Proportionate Share, the number of parking passes afforded to Tenant, and all other amounts payable under this Lease which are calculated based on the area of the Premises shall be adjusted to reflect the removal of the Innovation Area from the Premises. If Tenant fails to timely deliver either an Innovation Area Surrender Notice or an Innovation Area Use Change Notice pursuant to the foregoing provisions, then Tenant shall be considered to have delivered an Innovation Use Change Notice.

Section 3.6. Lobby Café. The area on the ground floor of the Building shown as "Cafe" on the floor plans attached as **Exhibit C** is referred to in this Lease as the "**Lobby Cafe**". Pursuant to applicable Requirements, the Lobby Café is to be used to operate a café which is open to the general public. In accordance with and subject to applicable Requirements, Landlord will operate or cause the Lobby Café to be operated in a first-class manner, consistent with the quality standards of lobby café operations in Comparable Buildings. Both parties will meet as often as reasonably practicable to review and discuss the operation of the Lobby Cafe. If, from time-to-time, Tenant has suggestions or concerns with respect to the quality of the operation of the Lobby Café, then Landlord and Tenant shall engage in good faith discussions and consultations in order to address such suggestions and concerns. As part of said discussions, Tenant may suggest alternative menu items and services to be provided at the Lobby Café.

Section 3.7. Convenor Space. The area shown as "Convenor Space" on the floor plans attached as **Exhibit C** is referred to in this Lease as the "**Convenor Space**." Pursuant to applicable Requirements, the Convenor Space is to be open to the general public, for use by community and neighborhood groups. In accordance with and subject to applicable Requirements, Landlord will operate or cause the Convenor Space to be operated in a first-class manner, consistent with the quality standards of Comparable Buildings. Landlord shall provide Tenant with the schedule for use of the Convenor Space, including the names of the groups which are scheduled to use the Convenor Space. The use and operation of the Convenor Space shall not disrupt the business operations of Tenant in the Premises, and the Convenor Space shall not (x) be used for any offensive purposes or for any for purposes constituting a nuisance, or (y) be used by other life science companies which are business competitors of Tenant. If, from time-to-time, Tenant has suggestions or concerns with respect to the quality of the operation of the Convenor Space, then Landlord and Tenant shall engage in good faith discussions and consultations in order to address such suggestions and concerns.

ARTICLE 4

BASE BUILDING WORK; CONDITION OF THE PREMISES

Section 4.1. Base Building Work. Subject to and in accordance with the provisions of this **Section 4.1**, Landlord shall perform the Base Building Work (as hereinafter defined), at its sole cost and expense, substantially in accordance with the plans which are listed on the schedule attached to this Lease as **Exhibit D-1** (the “**Base Building Plans**”), including the items which are listed in the column marked “landlord” on the Base Building Work Matrix attached to this Lease as **Exhibit D-2**. The work which is depicted and described in the Base Building Plans is referred to in this Lease as the “**Base Building Work**.” Landlord has commenced performance of the Base Building Work and, subject to extensions for Unavoidable Delays, COVID-19 Delays, and Tenant Delays, Landlord anticipates commencing vertical construction of the Building by November 1, 2020. Landlord shall cause the Base Building Work to be completed in a good and workmanlike manner, in compliance with all applicable Requirements. The issuance by the architect for the Base Building Work of a certificate of substantial completion for the Base Building Work (the “**Base Building Work Certificate of Substantial Completion**”) shall be presumptive evidence that Landlord has substantially completed all of the Base Building Work; provided, however, if Tenant in good faith disputes whether substantial completion of the Base Building Work has in fact occurred, then within thirty (30) days after the delivery to Tenant of said Base Building Work Certificate of Substantial Completion, Tenant shall deliver notice thereof to Landlord (a “**Base Building Work Substantial Completion Dispute Notice**”), in which event either Landlord or Tenant may elect to submit the resolution of such dispute to the Dispute Resolution Procedure (as defined in **Article 34**). Time is of the essence of the delivery of a Base Building Work Substantial Completion Dispute Notice, and notwithstanding the foregoing, if Tenant fails to timely deliver a Base Building Work Substantial Completion Dispute Notice within said thirty (30) day period, then substantial completion of the Base Building Work shall be considered to have occurred, and Tenant shall have no further right to contest said occurrence. The Base Building Work Certificate of Substantial Completion shall include confirmation of the completion of required inspections of the Base Building Work by ISD. Landlord will cause its general contractor to complete all punch-list items of the Base Building Work and will obtain from its general contractor customary construction warranties with regard to defects in materials and workmanship of the Base Building Work covering, without limitation, the roof, elevators, Building Systems, and structural elements of the Base Building Work. With respect to any material defects or deficiencies in the Base Building Work of which Tenant notifies Landlord prior to the first (1st) anniversary of the Commencement Date, Landlord will cause the Contractor to repair and correct such defect or deficiency promptly after receipt of such notice. In addition, Landlord will repair or cause the Contractor to repair all Latent Defects in the Base Building Work of which Tenant provides notice prior to the first (1st) anniversary of the substantial completion of the Base Building Work. Tenant shall notify Landlord promptly after it becomes aware of any Latent Defects in the Base Building Work. All Building Systems shall be delivered in good working order, condition, and repair, and in compliance with the operating specifications for such Building Systems (as set forth in the Base Building Plans), all applicable Requirements, and the standards established by the American Society of Heating, Refrigeration, and Air Conditioning Engineers (ASHRAE) for Class A office buildings. Landlord will cause all Building Systems to be commissioned, and will provide complete commissioning data reports to Tenant. In addition, Landlord will cause the base building architect to provide complete as-built CAD plans for the base building and core and shell areas to Tenant. After the Base Building Work is completed, Landlord shall submit an application to the United States Green Building Council (“**USGBC**”) based upon the LEED CS Matrix for Base Building, in order to obtain certification by

the USGBC of the Building as a Gold LEED Rated building. Thereafter, Landlord will exercise good faith reasonable efforts to obtain said LEED certification, at its sole cost and expense. Tenant shall cooperate with such application process and provide such customary information and documentation as may be reasonably required by Landlord in connection with said application, if any. Landlord has no obligation to perform any work, supply any materials, incur any expense or make any alterations, additions or improvements in order to prepare the Building for Tenant's use and occupancy, except for the performance of the Base Building Work and the Landlord's Work.

Section 4.2. Definitions for Landlord's Work. For purposes of this **Article 4**, the following terms shall have the meanings set forth below:

(a) **"Architect"** shall mean Jacobs or another qualified third-party architect selected by Tenant and approved by Landlord (such approval not to be unreasonably withheld, conditioned, or delayed) to prepare each of the Test Fit Plans, the Permit Set Plans, and the Construction Set Plans.

(b) **"Approved Plans"** shall mean the Construction Set Plans for the Landlord's Work, prepared by the Architect and approved by both Landlord and Tenant in accordance with the provisions of this **Article 4**.

(c) **"Budget"** shall mean the project budget for the Landlord's Work (including allowances and contingencies), prepared by the Contractor and approved by both Landlord and Tenant in accordance with the provisions of this **Article 4**, as the same may be revised and updated from time-to-time with the approval of both Landlord and Tenant in accordance with the provisions of this **Article 4**.

(d) **"Construction Set Plans"** shall mean the construction set architectural and engineering plans and specifications for the Landlord's Work, issued by the Architect in accordance with the provisions of this **Article 4**.

(e) **"Construction Schedule"** shall mean the milestone construction schedule for the performance of Landlord's Work which is attached to this Lease as **Exhibit M**.

(f) **"Contractor"** means the general contractor designated and engaged by Landlord and approved by Tenant (such approval not to be unreasonably withheld, conditioned, or delayed) to construct, install and perform the Landlord's Work.

(g) **"Delivery Condition"** shall mean the following: (i) Substantial Completion of the Landlord's Work has occurred (subject only to the completion of the Punch-List Items) (subject to the provisions of **Section 4.3(f)** and **Section 4.5(c)**), (ii) the Base Building Work Substantial Completion Certificate has been delivered and the Base Building Work has been substantially completed in accordance with and subject to the provisions of **Section 4.1**, and (iii) the Premises are vacant, and free and clear of all tenants and occupants.

(h) **"Landlord's Additional Contribution Amount"** shall mean an amount equal to up but not more than \$6,587,500.00.

(i) **"Landlord's Change Order"** shall mean a change order proposed by Landlord to the Approved Plans.

(j) **“Landlord’s Contribution”** shall mean an amount equal to Landlord’s Initial Contribution Amount and Landlord’s Additional Contribution Amount, if applicable.

(k) **“Landlord Delay”** shall mean the following: (i) if the proposed Test Fit Plans are not submitted to Tenant by the Proposed Test Fit Plans Submission Date, each day after the Proposed Test Fit Plans Submission Date which is prior to the date on which the Test Fit Plans actually are submitted to Tenant; (ii) if the proposed Budget is not submitted to Tenant by the Proposed Budget Submission Date, each day after the Proposed Budget Submission Date which is prior to the date on which the proposed Budget actually is submitted to Tenant; (iii) if the proposed Permit Set Plans are not submitted to Tenant by the Proposed Permit Set Plans Submission Date, each day after the Proposed Permit Set Plans Submission Date which is prior to the date on which the Permit Set Plans actually are submitted to Tenant; and (iv) if the Construction Set Plans are not submitted to Tenant by the Proposed Construction Set Plans Submission Date, each day after the Proposed Construction Set Plans Submission Date which is prior to the date on which the Construction Set Plans actually are submitted to Tenant.

(l) **“Landlord’s Initial Contribution Amount”** shall mean \$52,700,000.00.

(m) **“Landlord’s Work”** shall mean the improvements and alterations expressly and specifically shown on the Approved Plans. Without limitation, Landlord’s Work shall not include the acquisition or installation of Tenant’s trade fixtures, furniture or personal property.

(n) **“Landlord’s Work Costs”** shall mean, collectively, all of the out-of-pocket costs and expenses incurred by Landlord arising out of and in connection with designing, permitting, and performing the Landlord’s Work, including construction costs, permit fees, fees and general conditions payable to the Contractor (at the rates set forth in the Budget), overhead and profit of the Contractor (at the rates set forth in the Budget), costs and expenses for the purchase and installation of improvements set forth in the Approved Plans, the costs of commissioning and testing the Building Systems serving the Premises and equipment installed in or serving the Premises as part of the Landlord’s Work, a construction oversight fee payable to Landlord or Landlord’s Agent in an amount equal to two and one-half percent (2.5%) of the hard construction costs, and the actual commercially reasonable out-of-pocket architectural and engineering fees and costs incurred by Landlord in connection with the preparation and review of the plans and specifications for the Landlord’s Work.

(o) **“Long Lead Items”** means improvements, items, materials, finishes or installations that Landlord, the Architect, or the Contractor advises Tenant in writing (in connection with the review of the Test Fit Plans, Permit Set Plans, Construction Set Plans and/or the review of proposed Tenant Change Orders) are not generally available as needed to meet the milestone dates set forth on the Construction Schedule.

(p) **“Permit Set Plans”** shall mean the permit set architectural and engineering plans and specifications for the Landlord’s Work to be submitted to ISD for issuance of a building permit for Landlord’s Work, prepared by the Architect and approved by both Landlord and Tenant in accordance with the provisions of this **Article 4**.

(q) **“Punch-List Items”** shall mean punch-list items of Landlord’s Work identified by Landlord’s construction representative and Tenant’s construction representative in accordance with **Section 4.5(c)**, which punch-list items can be completed without material interference with Tenant’s use and occupancy of the Premises, and any other items which because of the seasonal nature of the item (such as HVAC balancing) or in accordance with good construction practice, are not practicable to complete at such time.

(r) **“Substantial Completion”** shall mean (a) the substantial completion of Landlord’s Work, excepting only Punch-List Items (subject to the provisions of **Section 4.3(f)** and **Section 4.5(c)**); (b) the delivery by the Architect of a certificate of substantial completion with respect to Landlord’s Work, substantially in the form of AIA G704-2017; and (c) the Base Building Work Substantial Completion Certificate has been delivered and the Base Building Work has been substantially completed in accordance with and subject to the provisions of **Section 4.1**.

(s) **“Tenant Change Order”** shall mean a change order proposed by Tenant to the Approved Plans.

(t) **“Tenant’s Contribution”** shall mean an amount equal to the positive excess (if any) of (i) the Landlord’s Work Costs minus (ii) the amount of the Landlord’s Contribution.

(u) **“Tenant Delay”** shall mean any delay in the performance of Landlord’s Work and/or the issuance of a building permit for Landlord’s Work arising out of or resulting from the following: (i) the failure of the Test Fit Plans Approval Date to occur by the Scheduled Test Fit Plans Approval Date, excepting only as a result of a Landlord Delay; (ii) the failure of the Budget Approval Date to occur by the Scheduled Budget Approval Date, excepting only as a result of a Landlord Delay; (iii) the failure of the Permit Set Plans Approval Date to occur by the Scheduled Permit Set Plans Approval Date, excepting only as a result of a Landlord Delay; (iv) the failure of the Construction Set Plans Approval Date to occur by the Scheduled Construction Set Plans Approval Date, excepting only as a result of a Landlord Delay; (v) the failure by Tenant to review and consent to, or to provide comments or responses to, the proposed Test Fit Plans, the Budget, the Permit Set Plans, and/or the Construction Set Plans, as applicable, by not later the respective period of time set forth in **Section 4.3** (time being of the essence of each such date), (vi) the failure by Tenant to timely pay to Landlord any Tenant’s Progress Payment when due in accordance with the provisions of **Section 4.3(f)**; (vii) any Tenant Change Orders or Long Lead Items requested by Tenant, (viii) any delay and/or default on the part of Tenant or its agents, engineers, architects, or contractors which delays performance of an obligation beyond the respective milestone date set forth in the Construction Schedule, (ix) any material interference with the performance of Landlord’s Work by Tenant or any of its agents, engineers, architects, or contractors, or (x) any other action or inaction by Tenant or any of Tenant’s agents, engineers, architects, or contractors. Notwithstanding the foregoing, except where a Tenant Delay arises from Tenant’s failure timely to act on or before a date or within a time period expressly set forth in this Lease (in which event no Tenant Delay Notice shall be required): (A) in no event shall any act or omission be deemed to be a Tenant Delay until and unless Landlord has given Tenant notice (the **“Tenant Delay Notice”**) (which notice may be by email to Tenant’s construction representative) advising Tenant (a) that a Tenant Delay is occurring, and (b) of the basis on which Landlord has determined that a Tenant Delay is occurring, and (B) no period of time prior to the date that is two (2) Business Days after Tenant receives a Tenant Delay Notice shall be included in the period of time charged to Tenant pursuant to such Tenant Delay Notice.

(v) **“Tenant’s Progress Payments”** shall mean the payments to be made by Tenant on account of Tenant’s Contribution as the Landlord’s Work is performed, in accordance with the provisions of **Section 4.3(f)**.

(w) **“Tenant’s Work”** shall mean the installation and commissioning of laboratory and related equipment to be installed by Tenant, and the installation of trade fixtures, furniture, personal property, and any other improvements and alterations necessary or desired to prepare the Premises for initial occupancy of the Premises by Tenant, excepting only such alterations and improvements performed in connection with Landlord’s Work. Without limitation, Tenant’s Work shall include each item marked in the “tenant” column on the Base Building Work Matrix attached to this Lease as **Exhibit D-2**.

(x) **“Test Fit Plans”** means, collectively, (i) the preliminary test fit plans showing the general layout of the Premises upon completion of the Landlord’s Work, prepared by the Architect, (ii) the preliminary equipment list for the Landlord’s Work, and (iii) the conceptual budget for the Landlord’s Work, each as approved by both Landlord and Tenant in accordance with the provisions of this **Article 4**. Without limitation, the Test Fit Plans shall designate which of the Flex Areas initially shall be constructed as Lab Areas and which of the Flex Areas initially shall be constructed as Office Areas.

Section 4.3. Landlord’s Work; Plans and Specifications; Change Orders.

(a) Tenant has elected and Landlord has approved the selection of Jacobs as the Architect for Landlord’s Work. Tenant shall cooperate with Landlord, the Architect, and the Contractor in connection with the preparation of each of the Test Fit Plans, the Permit Set Plans, and the Construction Set Plans, and, promptly after request therefor, shall respond to requests for information and authorizations in connection therewith. Tenant shall reasonably cooperate with Landlord in order to establish the anticipated budget for Landlord’s Work prior to commencement of the design process and thereafter from time to time in connection with the design, acquisition, installation and construction of the Landlord’s Work.

(b) Landlord shall cause the proposed Test Fit Plans to be prepared and submitted to Tenant for its approval by not later than August 21, 2020 (as such date may be extended on a day-for-day basis for Tenant Delays and/or Unavoidable Delays, the **“Proposed Test Fit Plans Submission Date”**). The approval by Tenant of the proposed Test Fit Plans shall not be unreasonably withheld, conditioned or delayed, unless the proposed Test Fit Plans (i) are materially inconsistent with the Landlord’s Work Design Narrative attached hereto as **Exhibit D-3**, or (ii) would materially and adversely affect the use of the Premises by Tenant for its intended business operations. Tenant shall approve or disapprove of each element of the proposed Test Fit Plans within ten (10) Business Days after receipt thereof, and if Tenant so disapproves Tenant shall specify the reason for disapproval in sufficient detail so that Landlord can attempt to make the necessary revisions to satisfy such objections). Landlord shall direct the Architect to revise the respective element of the proposed Test Fit Plans to address Tenant’s objections, if any, and to deliver the revised proposed Test Fit Plans to Tenant for its approval. Tenant shall advise Landlord of Tenant’s approval or disapproval of the revised proposed Test Fit Plans and specifications within five (5) Business Days after Landlord delivers same (which disapproval shall specify Tenant’s objections in sufficient detail so that Landlord can make the necessary revisions to satisfy such objections). Tenant and Landlord shall continue to follow the revision, delivery and notice of objections procedure and schedule set forth above until Tenant approves the proposed Test Fit Plans. The **“Scheduled Test Fit Plans Approval Date”** shall mean September 4, 2020; provided, however, said date shall be extended on a day-for-day basis for each day of Landlord Delay. The date on which Tenant approves the Test Fit Plans is referred to in this Lease as the **“Test Fit Plans Approval Date.”**

(c) Landlord shall cause the proposed Budget to be prepared and submitted to Tenant for its approval by not later than November 16, 2020 (as such date may be extended on a day-for-day basis for Tenant Delays and/or Unavoidable Delays, the "**Proposed Budget Submission Date**"). The approval by Tenant of the proposed Budget shall not be unreasonably withheld, conditioned or delayed, unless the proposed Budget is materially inconsistent with the conceptual budget included with the Test Fit Plans. Tenant shall approve or disapprove of the proposed Budget within ten (10) Business Days after receipt thereof, and if Tenant so disapproves Tenant shall specify the reason for disapproval in sufficient detail so that Landlord can attempt to make the necessary revisions to satisfy such objections. Landlord, Tenant, the Contractor, and the Architect shall cooperate (including any required revisions to the plans and/or any value engineering) to address Tenant's objections, if any, and to cause the proposed Budget to be revised until Tenant approves the proposed Budget. The "**Scheduled Budget Approval Date**" shall mean December 2, 2020; provided, however, said date shall be extended on a day-for-day basis for each day of Landlord Delay. The date on which Tenant approves the Budget is referred to in this Lease as the "**Budget Approval Date.**" After the initial approval thereof by Tenant, as the design and performance of Landlord's Work progresses, Landlord may submit proposed revisions to and updates of the Budget to Tenant for its approval, which approval shall not be unreasonably withheld, conditioned, or delayed and, if applicable, after approval thereof by Tenant, the revised budget shall be considered to be the "**Budget.**"

(d) Landlord shall cause the proposed Permit Set Plans to be prepared and submitted to Tenant for its approval by not later than March 1, 2021 (as such date may be extended on a day-for-day basis for Tenant Delays and/or Unavoidable Delays, the "**Proposed Permit Set Plans Submission Date**"). The approval by Tenant of the proposed Permit Set Plans shall not be unreasonably withheld, conditioned or delayed, unless the proposed Permit Set Plans (i) are materially inconsistent with the Test Fit Plans, or (ii) would materially and adversely affect the use of the Premises by Tenant for its intended business operations. Tenant shall approve or disapprove of each element of the proposed Permit Set Plans within ten (10) Business Days after receipt thereof, and if Tenant so disapproves Tenant shall specify the reason for disapproval in sufficient detail so that Landlord can attempt to make the necessary revisions to satisfy such objections). Landlord shall direct the Architect to revise the respective element of the proposed Permit Set Plans to address Tenant's objections, if any, and to deliver the revised proposed Permit Set Plans to Tenant for its approval. Tenant shall advise Landlord of Tenant's approval or disapproval of the revised proposed Permit Set Plans and specifications within five (5) Business Days after Landlord delivers same (which disapproval shall specify Tenant's objections in sufficient detail so that Landlord can make the necessary revisions to satisfy such objections). Tenant and Landlord shall continue to follow the revision, delivery and notice of objections procedure and schedule set forth above until Tenant approves the proposed Permit Set Plans. The "**Scheduled Permit Set Plans Approval Date**" shall mean March 15, 2021; provided, however, said date shall be extended on a day-for-day basis for each day of Landlord Delay. The date on which Tenant approves the Permit Set Plans is referred to in this Lease as the "**Permit Set Plans Approval Date.**"

(e) Landlord shall cause the proposed Construction Set Plans to be prepared and submitted to Tenant for its approval by not later than May 26, 2021 (as such date may be extended on a day-for-day basis for Tenant Delays and/or Unavoidable Delays, the "**Proposed Construction Set Plans Submission Date**"). The approval by Tenant of the proposed Construction Set Plans shall not be unreasonably withheld, conditioned or delayed, unless the proposed Construction Set Plans (i) are materially inconsistent with the Permit Set Plans, or (ii) would materially and adversely affect the use of the Premises by Tenant for its intended business operations. Tenant shall approve or disapprove of each element of the proposed

Construction Set Plans within ten (10) Business Days after receipt thereof, and if Tenant so disapproves Tenant shall specify the reason for disapproval in sufficient detail so that Landlord can attempt to make the necessary revisions to satisfy such objections). Landlord shall direct the Architect to revise the respective element of the proposed Construction Set Plans to address Tenant's objections, if any, and to deliver the revised proposed Construction Set Plans to Tenant for its approval. Tenant shall advise Landlord of Tenant's approval or disapproval of the revised proposed Construction Set Plans within five (5) Business Days after Landlord delivers same (which disapproval shall specify Tenant's objections in sufficient detail so that Landlord can make the necessary revisions to satisfy such objections). Tenant and Landlord shall continue to follow the revision, delivery and notice of objections procedure and schedule set forth above until Tenant approves the proposed Construction Set Plans. The "**Scheduled Construction Set Plans Approval Date**" shall mean June 10, 2021; provided, however, said date shall be extended on a day-for-day basis for each day of Landlord Delay. The date on which Tenant approves the Construction Set Plans is referred to in this Lease as the "**Construction Set Plans Approval Date.**"

(f) Subject to and in accordance with the provisions of this **Article 4**, Landlord shall provide Tenant with a turnkey construction of the Premises by performing the Landlord's Work substantially in accordance with the Approved Plans; provided, however, (i) in no event shall Landlord be obligated to perform any work or alterations which are not shown on the Approved Plans or the Base Building Plans; and (ii) in no event shall Landlord be obligated to expend an amount in excess of the Landlord's Contribution on account of the Landlord's Work. Landlord's Contribution shall be applied toward all of the Landlord's Work Costs. If, from time to time, Landlord determines in its good faith reasonable discretion (based on the Budget and requisitions submitted by the Contractor for the Landlord's Work) that the Landlord's Work Costs will exceed the amount of the Landlord's Contribution, then Tenant shall pay Tenant's Progress Payments on account of Tenant's Contribution to Landlord, in accordance with the provisions of this **Section 4.3**. Tenant shall make Tenant's Progress Payments on account of Tenant's Contribution to Landlord from time-to-time as the Landlord's Work progresses, concurrent with the performance of Landlord's Work and the payment by Landlord of the requisitions therefor to the Contractor. The amount of such Tenant's Progress Payments shall take into account any holdbacks and contingency amounts pursuant to the contract between Landlord and the Contractor. Each Tenant's Progress Payment shall be paid by Tenant within twenty-five (25) days after submission by Landlord of the requisition therefor. Each requisition submitted to Tenant shall include copies of the respective requisition submitted by the Contractor, together with the supporting documents and information submitted by the Contractor in connection therewith. Each of Tenant's Progress Payments shall be in an amount equal to the applicable aggregate amount of Landlord's Work Costs set forth in the requisition multiplied by a fraction, the numerator of which is the amount of Tenant's Contribution, and the denominator of which is the sum of the total amount of the Landlord's Contribution plus the total amount of the Tenant's Contribution, provided that in no event shall such fraction be greater than one. The final Tenant's Progress Payment shall be paid to Landlord upon the completion of Landlord's Work and the final determination of the Landlord's Work Costs, not later than twenty-five (25) days after submission by Landlord of a requisition therefor. Said final requisition from Landlord shall include copies of the respective requisition submitted by the Contractor, together with the supporting documents and information submitted by the Contractor in connection therewith, and a reconciliation of all additive and deductive changes in Landlord's Work Costs. In addition, upon request of Tenant, Landlord will provide Tenant with access to customary documentation substantiating the application of Landlord's Contribution and Tenant's Contribution, as well as customary documentation substantiating Landlord's Work Costs, including paid bills, invoices, purchase orders or other customary documentation sufficient to substantiate the same. Tenant shall not be entitled to any payment or a credit for any portion of

the Landlord's Contribution that is not used for the performance of Landlord's Work. If Tenant fails to timely pay to Landlord any of Tenant's Progress Payments when due in accordance with the provisions of this **Section 4.3(f)**, and such failure remains uncured for thirty (30) days after notice thereof from Landlord then, notwithstanding any provision contain in the **Article 4** to the contrary, (i) Landlord may elect to cease performing the Landlord's Work, and Landlord shall be relieved and discharged of any further obligation to proceed with the performance and/or completion of the Landlord's Work, (ii) such failure shall constitute a Tenant Delay, and (iii) Landlord shall have all rights and remedies afforded to Landlord under this Lease as a result of a failure by Tenant to pay Additional Rent when due and payable.

(g) If the anticipated Landlord's Work Costs exceed the Landlord's Initial Contribution Amount, then upon the request of Tenant, the amount of Landlord's Contribution may be increased by an amount of up to the Landlord's Additional Contribution Amount. Tenant shall notify Landlord whether Tenant has elected to increase the amount of Landlord's Contribution as aforesaid and the amount of said increase prior to the commencement of Landlord's Work. If Tenant so elects, then Tenant shall pay to Landlord, during the Initial Term, as additional Fixed Rent, an amount equal to the Landlord's Additional Contribution Amount so elected by Tenant and applied to Landlord's Work Costs, together with interest thereon at a rate of ten percent (10%) per annum, which payments on account of the Landlord's Additional Contribution, together with such interest, shall be amortized on a straight-line basis over the Initial Term and shall be payable in equally monthly installments concurrent with the monthly payments of Fixed Rent payable under this Lease during the Initial Term.

(h) The Approved Plans will not be modified or amended by more than a de minimus extent without the prior approval of Tenant, which approval shall not be unreasonably withheld, conditioned or delayed; provided, however proposed Landlord Change Orders which cost less than \$25,000.00 in each instance shall not require the prior approval of Tenant but shall be submitted to Tenant promptly after implementation thereof. From time to time, prior to or during the performance of the Landlord's Work Landlord may elect to propose Landlord Change Orders to the Approved Plans. Landlord shall submit each proposed Landlord's Change Order to Tenant for its approval, which approval shall not be unreasonably withheld, conditioned or delayed, unless the proposed Landlord Change Order (i) is materially inconsistent with the Approved Plans; or (ii) would materially and adversely affect the use of the Premises by Tenant for its intended business operations. Tenant shall approve or disapprove each proposed Landlord Change Order within three (3) Business Days after receipt thereof, and if Tenant so disapproves Tenant shall specify the reason for disapproval. If Tenant fails to approve or disapprove the proposed Landlord's Change Order within three (3) Business Days after receipt thereof, then the proposed Landlord's Change Order shall be considered to have been approved by Tenant, and the Approved Plans shall be considered to be amended and modified thereby.

(i) Tenant may elect to propose Tenant Change Orders to the Approved Plans by written request to Landlord from time to time prior to Substantial Completion of the respective component of Landlord's Work. Each proposed Tenant Change Order shall be subject to Landlord's approval, which approval shall not be unreasonably withheld, conditioned or delayed. If a proposed Tenant Change Order is determined by Landlord in its reasonable discretion to be likely to increase the Landlord's Work Costs and/or to delay the performance of the Landlord's Work, then Landlord shall provide Tenant with its good faith estimate of the increase in Landlord's Work Costs and/or the delay in the performance of Landlord's Work resulting therefrom, and within five (5) Business Days after receipt of such notice from Landlord, Tenant shall notify Landlord as to whether Tenant has elected to proceed with or to withdraw the proposed Tenant Change Order. If Tenant fails to notify Landlord within said five (5) Business Day period then Tenant shall be considered to have elected to proceed with the

proposed Tenant Change Order. Without limitation, if Tenant elects to proceed with the proposed Tenant Change Order (or is considered to have elected to proceed with the proposed Tenant Change Order pursuant to the foregoing provisions), then Tenant shall be responsible for the increase in Landlord's Work Costs and/or the delay in the performance of Landlord's Work resulting therefrom, and Tenant shall pay the increased costs resulting from the respective Tenant Change Order to Landlord, as Additional Rent, as the work resulting from the Tenant Change Order progresses, within thirty (30) days after submission by Landlord of requisitions therefor.

(j) After the approval thereof by Landlord and Tenant, Landlord and the Contractor shall execute the construction contract for the Landlord's Work or an amendment to the previously-executed construction contract confirming the Budget. The Contractor shall obtain all approvals and permits required by applicable Requirements to perform the Landlord's Work. Landlord shall keep Tenant and Tenant's Representative informed of all changes to the Construction Schedule. Tenant and Tenant's Representative shall have the right to attend Landlord's weekly construction meetings for the Landlord's Work (in person or by telephone conference). Landlord shall provide Tenant and Tenant's Representative with a copy of the weekly construction meeting minutes following each such construction meeting for Landlord's Work. Landlord shall inform Tenant and Tenant's Representative of changes to scheduled weekly construction meetings for Landlord's Work. Upon reasonable prior notice and subject to coordination with Landlord and the Contractor, Tenant and/or Tenant's Representative shall have the right to inspect the construction of Landlord's Work on a weekly basis in a manner that does not interfere with, hinder or delay the performance thereof. If Tenant and/or Tenant's Representative reasonably believes that Landlord's Work is not being conducted in accordance with this Lease or the Approved Plans, they shall promptly inform Landlord by a writing setting forth in reasonable detail their respective concerns, and Landlord shall exercise good faith efforts to investigate and take such customary and commercially reasonable measures (if any) as may be reasonably necessary to ensure such compliance.

(k) Time is of the essence of this **Section 4.3**.

Section 4.4. Tenant's Early Access. Landlord and Tenant shall coordinate the Construction Schedule in order to permit Tenant to access the Premises prior to Substantial Completion of Landlord's Work, in order to commence the performance of Tenant's Work, at such time as will not adversely affect the timely completion of the then-remaining elements of Landlord's Work. In connection with such early access and subject to the provisions of this **Section 4.4**, Tenant may enter the Premises and use the loading docks and freight elevators of the Building, for the purpose of installing its furniture, fixtures and equipment (including lab equipment) in the Premises. Any such early access shall be at Tenant's sole risk and expense, and Landlord shall have no liabilities or obligations to Tenant in connection therewith, including any liability for damage or injury to persons or property in connection therewith. Upon such early access to the Premises, Tenant shall be bound by and shall comply with all provisions of this Lease, including the provisions of this Lease regarding the performance of alterations, improvements and installations in the Premises, notwithstanding that the Commencement Date may not yet have occurred; provided, however, Tenant shall not be obligated to pay any costs for utilities provided to Tenant during said early access period. Tenant shall reimburse Landlord for the actual out-of-pocket costs and expenses (without mark-up) incurred by Landlord in connection with the overtime use by Tenant of the elevators and/or loading docks during said early access period. Without limitation, all of such work performed by Tenant in the Premises shall be coordinated with any work being performed by Landlord and in such manner as to maintain harmonious labor relations. In no event shall any such work by Tenant damage the Building or the Premises or materially interfere with the timely performance of Landlord's Work.

Section 4.5. Substantial Completion and Delivery; Delays in Delivery.

(a) After Tenant installs its furniture, fixtures, and personal property in the Premises, Tenant will apply for and obtain a certificate of occupancy for the Premises. Landlord will cooperate and assist Tenant in connection therewith. If ISD refuses to issue a certificate of occupancy for the Premises solely as a result of a defect or deficiency in the Base Building Work or the Landlord's Work, then Tenant shall notify Landlord thereof, and if Landlord does not correct such defect or deficiency within ten (10) Business Days after delivery of said notice, then the Commencement Date shall be extended on a day-for-day basis for each day between the date which is ten (10) Business Days after delivery of said notice and the date on which said defect or deficiency is corrected by Landlord.

(b) Landlord will exercise reasonable efforts to cause the Commencement Date to occur by the Scheduled Commencement Date, as the same may be extended by Tenant Delays, COVID-19 Delays, and/or Unavoidable Delays; provided, however, the failure to cause the Commencement Date to have occurred by the Scheduled Commencement Date or any other particular date, shall not impair the validity of this Lease or extend the Term. Without limiting the foregoing, if the Commencement Date has not occurred by the date which is thirty (30) days after the Scheduled Commencement Date (as such date may be extended on a day-for-day basis for Tenant Delays, COVID-19 Delays, and/or for up to but not more than one hundred twenty (120) days on account of Unavoidable Delays, the "**Outside Delivery Date**"), then as liquidated damages and the sole and exclusive remedy of Tenant on account thereof, Tenant shall receive the following credits against the Fixed Rent payable under this Lease: (x) for and with respect to each day between the Outside Delivery Date and the earlier to occur of (i) the date on which the Commencement Date actually occurs, or (ii) the date which is thirty (30) days after the Outside Delivery Date (both dates inclusive), in an amount equal to the per diem Fixed Rent payable for the Premises for the first Lease Year; (y) if the Commencement Date does not occur by the date which is thirty (30) days after the Outside Delivery Date, then for and with respect to each day between the date which is thirty-one (31) days after the Outside Delivery Date and the date on which the Commencement Date actually occurs (both dates inclusive), in an amount equal to 200% of the per diem Fixed Rent payable for the Premises for the first Lease Year; and (z) if the Commencement Date does not occur by the date which is one hundred fifty (150) days after the Outside Delivery Date, then for and with respect to each day between the date which is one hundred fifty-one (151) days after the Outside Delivery Date and the date on which the Commencement Date actually occurs (both dates inclusive), in an amount equal to 300% of the per diem Fixed Rent payable for the Premises for the first Lease Year. Notwithstanding any provision contained herein, Landlord shall have no liability for, and there shall be no postponement of the Rent Commencement Date, or any credit afforded to Tenant for any delay by Landlord in the performance of Landlord's Work arising out of or resulting from Tenant Delay, COVID-19 Delays, and/or for up to but not more than one hundred twenty (120) days of delay on account of Unavoidable Delay.

Notwithstanding the foregoing, if the Commencement Date has not occurred by the date which is three hundred sixty five (365) days after the Scheduled Commencement Date (as such date may be extended on a day-for-day basis for Tenant Delays, COVID-19 Delays, and/or for up to but not more than one hundred twenty (120) days on account of Unavoidable Delays, the "**Lease Cancellation Date**"), then at any time after the Lease Cancellation Date and prior to the date on which the Commencement Date actually occurs, Tenant may elect, as liquidated damages and its sole and exclusive remedy on account thereof, to terminate this Lease by giving Landlord a Termination Notice, which Termination Notice may be given not earlier than the Lease Cancellation Date and not later than sixty (60) Business Days following the Lease Cancellation Date, with such termination to be effective immediately upon the giving by Tenant of such Termination Notice. If Tenant validly terminates this Lease in accordance with the foregoing provisions, this Lease shall be null and void and of no further force and effect, and except as expressly and specifically set forth herein, then the parties shall have no further liabilities, responsibilities or obligations hereunder. Notwithstanding any provision contained herein, if the Commencement Date occurs at any time prior to the valid termination of this Lease in accordance with the foregoing provisions, then Tenant shall have no further right to terminate this Lease pursuant to this **Section 4.5**. A "**Termination Notice**" shall mean a written notice delivered by Tenant to Landlord stating the following in capitalized and bold type on the first page of such notice: "**IN ACCORDANCE WITH AND SUBJECT TO THE TERMS AND CONDITIONS OF SECTION 4.5 OF THE LEASE, TENANT HEREBY ELECTS TO TERMINATE THE LEASE.**"

(c) If Substantial Completion of any part of Landlord's Work is delayed as a result of or arising out of a Tenant Delay, then Landlord's Work shall be deemed to have been Substantially Completed on the date that such work would have been Substantially Completed but for such Tenant Delay. Without limiting the foregoing, if the Landlord's Work is deemed Substantially Completed as aforesaid, but the Landlord's Work is not in fact Substantially Completed, then Tenant shall not (except with Landlord's prior written consent) be entitled to take possession of the Premises for any purpose until the Landlord's Work is in fact Substantially Completed.

(d) If a dispute arises between the parties as to whether Landlord Delays, Tenant Delays, COVID-19 Delays, and/or Unavoidable Delays have occurred, and the number of days of such delays claimed by either party exceed thirty (30) days in the aggregate, then either party may elect to submit such dispute to resolution in accordance with the Dispute Resolution Procedure.

(e) On or about the date when Landlord's Work is Substantially Completed, the Architect, Landlord's construction representative, and Tenant's construction representative shall inspect the Landlord's Work, and based on said inspection the Architect shall prepare a punch-list setting forth any Punch-List Items of Landlord's Work which are incomplete and deliver the same to Tenant and Landlord. Landlord shall complete such Punch-List Items as soon as reasonably practicable after such walk-through of the Premises.

(f) Promptly following the Commencement Date and the completion by Landlord of the Landlord's Work, the Architect shall prepare as-built plans for the Landlord's Work, shall measure the actual rentable area of the Premises shown on the as-built plans, and shall deliver said measurement to Landlord and Tenant (said measurement, the "**As-Built Plans Measurement**"). The Architect shall certify that said As-Built Plans Measurement has been calculated in accordance with the Measurement Method. If the rentable area of the Premises pursuant to the As-Built Plans Measurement is either (x) less than 97% of the Agreed

Area of the Premises as set forth in Article 1, or (y) greater than 103% of the Agreed Area of the Premises as set forth in Article 1, then the Fixed Rent payable by Tenant under this Lease shall be proportionately increased or decreased, as applicable, on account thereof. If the rentable area of the Premises pursuant to the As-Built Plans Measurement is equal to or greater than 97% of the Agreed Area of the Premises as set forth in Article 1, and equal to or less than 103% of the rentable area of the Premises as set forth in Article 1, then there shall be no decrease or increase in the Fixed Rent payable by Tenant under this Lease on account thereof. The results of the As-Built Plans Measurement by the Architect shall be conclusive, definitive and binding upon the parties, unless Tenant gives notice to the Landlord of a dispute as to the calculation of the actual rentable area of the Premises within thirty (30) days after receipt of the As-Built Plans Measurement, which notice shall include the alternative calculation by Tenant's architect of the actual rentable area of the Premises (using the Measurement Method). Time is of the essence of the delivery of said notice by Tenant. In the event Tenant timely disputes the calculation of the As-Built Plans Measurement by the Architect pursuant to the foregoing provisions, and if the two architects are unable to agree as to the remeasurement of the rentable area of the Premises, then they shall jointly appoint a third independent qualified architect to remeasure the rentable area of the Premises, which architect shall be duly licensed in the Commonwealth of Massachusetts, having at least ten (10) years of experience as a licensed architect providing architectural services for Class A laboratory buildings in the Boston, Massachusetts area. The fees payable to said third independent architect shall be shared equally by both parties. The results of such remeasurement by said third architect shall be definitive and binding upon the parties. Promptly after the completion of said remeasurement procedure, if applicable, Landlord and Tenant shall execute a confirmatory agreement confirming the resulting remeasurement of the rentable area of the Premises and the changes to the Fixed Rent payable under this Lease resulting therefrom, if applicable.

(g) Landlord will cause the Contractor to provide customary commercially reasonable warranties for Landlord's Work. Landlord will cause the Contractor to include the warranty durations in the bid requirements for the Landlord's Work and will exercise good faith efforts to obtain warranties with the requested durations for the respective components of the Landlord's Work. Upon completion of Landlord's Work, Landlord shall, at Tenant's request, assign to Tenant all warranties with respect to Landlord's Work provided by Contractor or any contractors, subcontractors or manufacturers performing any portion of Landlord's Work or providing any material or equipment in connection therewith, if and to the extent such warranties are assignable. If any such warranties are not assignable, Landlord shall enforce said warranties on Tenant's behalf if so requested by Tenant. With respect to any defects or deficiencies in the Landlord's Work of which Tenant notifies Landlord prior to the expiration of the respective warranty, Landlord will cause the Contractor to repair and correct such defect or deficiency promptly after receipt of such written notice. In addition, Landlord will repair or cause the Contractor to repair all Latent Defects of which Tenant provides notice prior to the first (1st) anniversary of the Commencement Date (the "**Outside Latent Defect Repair Date**"). Tenant shall notify Landlord promptly after it becomes aware of any Latent Defects in Landlord's Work. If Tenant does not notify Landlord of a Latent Defect in Landlord's Work by the Outside Latent Defect Repair Date, then Landlord shall have no further obligations of any kind, to repair such Latent Defects in Landlord's Work. Notwithstanding the foregoing, Landlord shall not be responsible to repair or correct (i) defective work or materials installed by Tenant or Tenant's contractors, (ii) damage arising out of or resulting from the negligence or intentional misconduct or misuse by Tenant or its contractors, employees, or agents, or (iii) usual and customary wear and tear. The foregoing shall not limit or restrict the maintenance and repair obligations of Landlord under the other provisions of this Lease, including **Section 6.1**.

Section 4.6. Space Planning Allowance. Landlord shall provide an allowance (the “**Space Planning Allowance**”) to Tenant of up to \$8,440.00 to reimburse Tenant for the architectural and engineering fees incurred by Tenant in preparing an initial space plan for the Premises. Said Space Planning Allowance shall be provided to Tenant not later than thirty (30) days after delivery to Landlord of the initial space plan, along with a copy of the invoice for said architectural and engineering fees.

Section 4.7. General Provisions. Except for the performance of Landlord's Work and the Base Building Work, Landlord has no obligation to perform any work, supply any materials, incur any expense or make any alterations, additions or improvements to the Premises in order to prepare the Premises for Tenant's use and occupancy. Excepting only Landlord's Work and the Base Building Work, Tenant shall, at its own cost and expense (subject only to the funding of the Landlord's Contribution in accordance with and subject to the terms and conditions of this Lease), in accordance with and subject to the terms and provisions of this Lease, perform or cause to be performed the Tenant's Work, shall equip the Premises with all laboratory equipment, trade fixtures and personal property necessary or proper for the conduct of Tenant's business. All of Tenant's Work shall be considered to be an Alteration (as hereinafter defined). Tenant's commencement of business operations in the Premises shall be presumptive evidence, that Tenant has accepted possession of the Premises in its then-current condition, and that at the time such possession was taken, the Premises and the Building were in a good and satisfactory condition as required by this Lease. The foregoing shall not derogate from the obligations of Landlord to complete any Punch-List Items of Landlord's Work, to repair any Latent Defects, or to perform the maintenance and repair obligations of Landlord in accordance with the terms and conditions of this Lease. Neither the review or approval of the Approved Plans by Landlord nor the performance of the Landlord's Work shall constitute a representation or warranty by Landlord that such Approved Plans either are complete or suitable for their intended purpose, it being expressly agreed by Tenant that Landlord assumes no responsibility or liability whatsoever to Tenant or to any other person or entity for such completeness or suitability.

Section 4.8. Construction Representatives. Each party authorizes the other to rely upon all approvals granted and other actions taken by the respective construction representative designated from time to time by such party, or any person hereafter expressly designated in writing in substitution or addition thereof by notice to the party relying thereon. Tenant hereby designates Mike Tomsicek as its construction representative and Landlord hereby designates Rustom A. Cowasjee and Tim Stoll as its construction representatives.

ARTICLE 5

ALTERATIONS

Section 5.1. Tenant's Alterations. (a) Tenant shall not make any alterations, additions, or other physical changes in or about the Premises, or install any fixtures or equipment in or about the Premises (collectively, "**Alterations**"), excepting only Decorative Alterations or Minor Alterations, without Landlord's prior consent in each instance, which consent shall not be unreasonably withheld, conditioned, or delayed if such Alterations (i) are non-structural and do not adversely impact any Building Systems, (ii) affect only the Premises and are not visible from outside of the Building, (iii) are not visible from the first (1st) floor Common Areas, unless they are consistent with the standards of appearance and presentation of similar premises in Comparable Buildings; (iv) do not require a conditional use permit, variance, waiver or other relief from any applicable Requirement (excepting only a conditional use permit for the construction and operation of the Vivarium), (v) do not increase or decrease the rentable area of the Premises, and (vi) comply in all respects with all applicable Requirements. Without limiting the foregoing, laboratory and related research equipment shall be installed only in the Lab Areas of the Premises, except as approved in advance by Landlord.

(b) Prior to making any Alterations (including the Tenant's Work), Tenant, at its expense, shall (i) excepting only for Decorative Alterations, submit to Landlord for its approval, detailed plans and specifications (each, the "**Plans**") for such proposed Alteration, (ii) obtain all permits, approvals and certificates required by any Governmental Authorities for the proposed Alteration, and furnish copies thereof to Landlord, and (iii) furnish to Landlord certificates of worker's compensation insurance (covering all persons to be employed by Tenant, and Tenant's contractors and subcontractors in connection with such Alteration) and commercial general liability (including property damage coverage) insurance and Builder's Risk coverage (as described in **Article 11**) all in such form, with such companies, for such periods and in such amounts as Landlord may reasonably require, naming Landlord, Landlord's Agent, any Lessor and any Mortgagee as additional insureds. The review or approval of the Plans by Landlord shall not constitute a representation or warranty by Landlord that such Plans either are complete or suitable for their intended purpose or comply with applicable Requirements. Landlord assumes no responsibility or liability whatsoever to Tenant or to any other person or entity for such completeness or suitability. In addition, with respect to any Alteration affecting any Building System, Tenant shall submit to Landlord satisfactory evidence that the proposed Alteration has been designed by, or reviewed and approved by, Landlord's designated engineer for the affected Building System. The prior consent of Landlord shall not be required in connection with Decorative Alterations or Minor Alterations performed by Tenant; provided, however, Tenant shall give Landlord not less than five (5) Business Days' notice prior to performing any Decorative Alteration or Minor Alteration, which notice shall contain a description of such Decorative Alteration or Minor Alteration, as applicable. Landlord shall not unreasonably withhold its approval of Plans submitted by Tenant and shall respond to the request of Tenant for such approval within ten (10) Business Days after receipt thereof. If Landlord disapproves said Plans, then concurrent therewith Landlord will specify in writing the reason(s) for such disapproval with sufficient specificity so as to allow Tenant to make such changes as Landlord may reasonably require. If Tenant revises the Plans based on said disapproval by Landlord and resubmits the revised Plans to Landlord, then Landlord shall respond to the request of Tenant for such approval of the revised Plans within five (5) Business Days after receipt thereof. If Landlord does not respond to a request for approval of proposed Plans within said ten (10) or five (5) Business Day period of time (as applicable), then Tenant may elect to submit an Alteration Reminder Notice (as hereinafter defined) to Landlord and if Landlord does not respond to the Alteration Reminder Notice within five (5) Business Days after receipt thereof, then the proposed Alterations shown on said Plans shall be considered to have been

approved by Landlord. An "**Alteration Reminder Notice**" shall mean a written notice delivered by Tenant to Landlord stating the following in capitalized and bold type prominently on the top of the first page of such notice: "**THIS NOTICE IS AN ALTERATION REMINDER NOTICE DELIVERED UNDER THE LEASE. IF LANDLORD DOES NOT RESPOND TO THE PROPOSED PLANS WITHIN FIVE (5) BUSINESS DAYS AFTER RECEIPT OF THIS NOTICE, THEN LANDLORD WILL BE CONSIDERED TO HAVE CONSENTED TO THE PROPOSED ALTERATIONS SHOWN ON THE PREVIOUSLY DELIVERED PLANS.**"

(c) Tenant shall obtain all building permits and other approvals of Governmental Authorities required for all Alterations. In addition, Tenant shall, as and when required, promptly obtain certificates of partial and final approval of such Alterations required by any Governmental Authority. Not later than thirty (30) days after issuance of such permits or approvals, Tenant shall deliver copies thereof to Landlord. In addition, after completion of the respective Alteration, upon request by Landlord, Tenant shall deliver "as-built" Plans for such Alterations prepared on an AutoCAD Computer Assisted Drafting and Design System (or such other system or medium as Landlord may reasonably require), using naming conventions issued by the American Institute of Architects in June, 1990 (or such other naming conventions as Landlord may reasonably require) and magnetic computer media of such record drawings and specifications translated in DFX format or another format acceptable to Landlord.

Section 5.2. Manner and Quality of Alterations. All Alterations shall be performed (a) in a good and workmanlike manner and free from defects, (b) excepting only with regard to Decorative Alterations, substantially in accordance with the Plans approved by Landlord, which approval shall not be unreasonably withheld, conditioned, or delayed, (c) by contractors selected by Tenant and approved by Landlord, and (d) in compliance with all Requirements, the terms of this Lease and all customary construction procedures and regulations adopted from time-to-time by Landlord. Upon request, Landlord will provide Tenant with a list of pre-approved contractors. All equipment shall be installed in locations designed to carry the weight of such equipment, consistent with the structural design of the Building. Tenant shall cause all equipment to be installed in locations and in a fashion to prevent sounds and vibrations therefrom to impact any areas outside of the Premises. All materials and equipment shall be of first quality, and no such materials or equipment (other than Tenant's Property) shall be subject to any lien or other encumbrance.

Section 5.3. Removal of Tenant's Property. Tenant's Property shall remain the property of Tenant and Tenant may remove the same at any time on or before the Expiration Date. By not later than the Expiration Date, Tenant shall, at Tenant's expense, remove all of Tenant's Property from the Premises. In addition, by not later than the Expiration Date, unless otherwise directed by Landlord, Tenant shall, at Tenant's expense, remove any Alterations designated by Landlord as Specialty Alterations and close up any slab penetrations in the Premises (excepting only slab penetrations for Permitted Internal Staircases). Tenant shall repair and restore, in a good and workmanlike manner, any damage to the Premises or the Building arising out of or resulting from the removal by Tenant of any Alterations or Tenant's Property or by the closing of any slab penetrations. If Tenant fails to perform any of its obligations under this **Section 5.3**, then Landlord may elect to perform any such obligations, in which event Tenant shall reimburse Landlord for all actual out-of-pocket costs and expenses incurred by Landlord in connection therewith. Any Alterations or Tenant's Property not removed by the Expiration Date (or earlier termination of this Lease) shall be deemed abandoned and Landlord may retain or remove and dispose of same, and repair and restore any damage caused thereby, at Tenant's cost and without liability or accountability to Tenant. All Tenant's Property and all Alterations remaining in the Premises after the Expiration Date (or earlier termination of this Lease) shall become Landlord's property upon termination of this Lease. Without limiting the foregoing, concurrent with the review of the applicable Plans, Landlord will

notify Tenant as to which of the proposed Alterations constitute Specialty Alterations which Tenant will be required to remove at the expiration of the Term.

Section 5.4. Mechanic's Liens. Tenant, at its expense, shall discharge and release any lien, encumbrance, or charge recorded or filed against the Real Property in connection with any work performed or claimed to have been performed by or on behalf of Tenant, or materials or services furnished or claimed to have been furnished to, Tenant, within ten (10) Business Days after Tenant's receipt of notice thereof. Such discharge shall be affected by payment or filing of a bond in accordance with applicable Requirements.

Section 5.5. Labor Relations. Tenant shall not employ, or permit the employment of, any contractor, mechanic or laborer, or permit any materials to be delivered to or used in the Building, if, in Landlord's sole good faith judgment, such employment, delivery or use will interfere or cause any conflict with other contractors, mechanics or laborers engaged in the construction, maintenance or operation of the Building by Landlord, Tenant or others. If such interference or conflict occurs, upon Landlord's request, Tenant shall cause all contractors, mechanics or laborers causing such interference or conflict to leave the Building immediately.

Section 5.6. Tenant's Costs. Tenant shall reimburse Landlord, within thirty (30) days after delivery of an invoice therefor, for all commercially reasonable out-of-pocket costs, expenses and fees actually incurred by Landlord in connection with Alterations proposed or performed by or on behalf of Tenant from time-to-time during the Term of this Lease (excepting the Landlord's Work), including costs incurred in connection with (a) Landlord's review of the Plans (including review of requests for approval thereof) and/or supervision of performance of the Alteration, and (b) the provision of Building personnel during the performance of any Alteration, to operate elevators or otherwise to facilitate Tenant's Alterations. In addition, if the project costs of any Alteration performed by or on behalf of Tenant (excepting the Landlord's Work) are more than \$250,000.00 in the aggregate, then Tenant shall pay to Landlord, within thirty (30) days after delivery of an invoice therefor, the Construction Administration Fee (as hereinafter defined). The "**Construction Administration Fee**" shall be as follows: (A) with respect to an Alteration performed prior to the fifth (5th) anniversary of the Commencement Date, the Construction Administration Fee shall be an amount equal to the actual costs and expenses incurred by or on behalf of Landlord in connection with the review and supervision of said Alteration, including an allocation of the internal costs and expenses incurred for employees, representatives, and agents of Landlord and/or Landlord's Agent, and out-of-pocket third-party fees, costs and expenses incurred by Landlord in connection therewith, excepting only to the extent such fees, costs and expenses are otherwise included in Operating Expenses; and (B) from and after the fifth (5th) anniversary of the Commencement Date, the Construction Administration Fee for each Alteration shall be calculated as follows: (i) an amount equal to four percent (4%) of the hard construction costs, to the extent the hard construction costs are greater than \$250,000.00 but are equal to or less than \$2,500,000.00; (ii) an amount equal to three and one-half percent (3.5%) of the hard construction costs, to the extent the hard construction costs equal or exceed \$2,500,001.00 but are equal to or less than \$3,500,000.00; (iii) an amount equal to three percent (3%) of the hard construction costs, to the extent the hard construction costs equal or exceed \$3,500,001.00 but are equal to or less than \$4,500,000.00; (iv) an amount equal to two and one-half percent (2.5%) of the hard construction costs, to the extent the hard construction costs equal or exceed \$4,500,001.00 but are equal to or less than \$5,500,000.00; and (v) an amount equal to two percent (2%) of the hard construction costs, to the extent the hard construction costs equal or exceed \$5,500,001.00. At Landlord's request, Tenant shall deliver to Landlord reasonable supporting documentation evidencing the hard construction and soft costs incurred by Tenant in designing and constructing any Alterations.

Section 5.7. Tenant's Equipment. Tenant shall provide notice to Landlord prior to moving any heavy machinery, heavy equipment, freight, bulky matter or fixtures (collectively, "**Equipment**") into or out of the Building. If such Equipment requires special handling, Tenant agrees (a) to employ only persons holding all necessary licenses to perform such work, (b) all work performed in connection therewith shall comply with all applicable Requirements, (c) such work shall be done only during mutually acceptable hours agreed-to by both Landlord and Tenant, and (d) to reimburse Landlord for all commercially reasonable out-of-pocket costs incurred by Landlord in connection therewith.

Section 5.8. Legal Compliance. The approval of Plans, or consent by Landlord to the making of any Alterations, shall not constitute Landlord's representation that such Plans or Alterations comply with any Requirements. Landlord shall not be liable to Tenant or any other party in connection with Landlord's approval of any Plans, or Landlord's consent to Tenant's performing any Alterations. If and to the extent arising out of or resulting from any Alterations made by or on behalf of Tenant, Landlord is required by an order or directive of a Governmental Authority to make any alterations or improvements to any part of the Building in order to comply with an applicable Requirement, Tenant shall pay, as Additional Rent, all costs and expenses incurred by Landlord in connection with such alterations or improvements.

ARTICLE 6

REPAIRS

Section 6.1. Landlord's Repair and Maintenance. Landlord shall operate and, except as provided in **Section 6.2** hereof, perform all necessary repairs and maintenance (both structural and nonstructural) to (i) the roof and all structural elements of the Building, (ii) the Building Systems, (iii) the Common Areas, and (iv) the Common Facilities, in good order, repair and condition, and in conformance with standards applicable to Comparable Buildings. The Common Areas will include an internal pedestrian connection, a ground floor lobby area, the Convenor Space, and the Lobby Café, each of which will be open to and accessible by the public. The basement area of the Building will include a fitness center with lockers and showers and an indoor bicycle room.

Section 6.2. Tenant's Repair and Maintenance. Tenant shall promptly, at its expense and in compliance with **Article 5**, (a) keep and maintain, in good order, condition and repair, consistent with the standards of Comparable Buildings, the Premises and every part thereof, including the exterior and interior portions of all doors, interior windows, fixtures, interior walls, floors, ceilings, signs, all laboratory and research equipment, and all wiring, electrical systems and equipment, and all other equipment and machinery located within and exclusively serving the Premises, and (b) make all nonstructural repairs to the Premises and the fixtures, equipment, machinery, and appurtenances located therein (excluding the Building System, but including all electrical, plumbing, heating, ventilation and air conditioning, sprinklers and life safety systems in and serving the Premises from the point of connection to the Building Systems), as and when needed to preserve the Premises in good working order and condition, except for reasonable wear and tear and damage for which Tenant is not responsible. All damage to the Building or to any portion thereof requiring structural or nonstructural repair caused by or resulting from any act, omission, neglect or improper conduct of a Tenant Party or the moving of Tenant's Property or equipment into, within or out of the Premises by a Tenant Party, shall be repaired at Tenant's expense by (i) Tenant, if the required repairs are nonstructural in nature and do not affect the exterior doors, exterior windows or any Building System, or (ii) Landlord, if the required repairs are structural in nature, affect the exterior doors, exterior windows or any Building System. All Tenant repairs shall be of good quality utilizing new construction materials. The foregoing provisions shall be subject to the waiver of subrogation provisions set forth in **Section 11.2**.

Section 6.3. Restorative Work. Landlord reserves the right to make all changes, alterations, additions, improvements, repairs or replacements to the Building, the Common Facilities, and/or the Building Systems, including changing the arrangement or location of entrances or passageways, doors and doorways, corridors, elevators, stairs, toilets or other Common Areas (collectively, "**Restorative Work**"), as Landlord deems necessary or desirable, and to take all materials into the Premises required for the performance of such Restorative Work provided that (a) the level of any Building service shall not decrease in any material respect from the level required of Landlord in this Lease as a result thereof (other than temporary changes in the level of such services during the performance of any such Restorative Work), (b) Tenant's access to the Premises and Tenant's usual operations in the Premises are not materially impaired, and (c) Landlord provides not less than thirty (30) days prior notice of the commencement of the Restorative Work, which notice shall describe the Restorative Work and the remediation actions to be taken by Landlord in connection therewith. Any access to the Premises by Landlord in connection with the performance of Restorative Work shall be subject to and in accordance with the provisions of **Section 14.1**. There shall be no Rent abatement or allowance to Tenant for a diminution of rental value, no actual or constructive eviction of Tenant, in whole or in part, no relief from any of Tenant's other obligations under this Lease, and no liability on the part of Landlord by reason of business interruptions arising from Landlord, Tenant or others performing, or failing to perform, any Restorative Work.

ARTICLE 7

TAXES, OPERATING EXPENSES AND INSURANCE EXPENSES

Section 7.1. Definitions. For the purposes of this **Article 7**, the following terms shall have the meanings set forth below:

(a) "**Assessed Valuation**" shall mean the amount for which the Real Property is assessed by the City of Boston for the purpose of imposition of Taxes.

(b) "**Controllable Operating Expenses**" shall mean all Operating Expenses, excluding (i) utility and fuel costs and expenses, (ii) increases in security costs and expenses, cleaning costs and expenses, trash and debris removal costs and expenses, each to the extent resulting from general market collective bargaining agreements or other union related labor cost increases, (iii) management fees, (iv) costs and expenses of snow and ice removal, and (v) costs and expenses of additional services performed by Landlord at the request of Tenant (i.e., additional services which are in excess of those which Landlord is obligated to provide as expressly set forth in this Lease, such as re-painting walls and replacing carpet).

(c) "**Insurance Expenses**" shall mean the aggregate of all costs and expenses incurred by Landlord in connection with insuring the Real Property, including all premiums for fire, casualty, liability, worker's compensation, and such other insurance as Landlord may maintain from time to time, consistent with the coverages maintained by prudent owners of Comparable Buildings.

(d) "**Operating Expenses**" shall mean the aggregate of all costs and expenses paid or incurred by or on behalf of Landlord in connection with the operation, management, repair and maintenance of the Real Property, which costs and expenses may include, without limitation, the following: (x) the costs of operation, management, repair and maintenance of the Building Systems and the services provided by Landlord to tenants and occupants of the Building (including the Tenant), and (y) the costs of capital repairs,

improvements or replacements made by Landlord during the Term (i) that are intended in the good faith reasonable judgment of Landlord to effect savings in the operation or maintenance of the Building, or to reduce future Operating Expenses, based on estimates prepared by a qualified independent engineer engaged by or on behalf of Landlord, which estimates and anticipated savings shall be included in the Expense Estimates and Statements of Operating Expenses provided to Tenant pursuant to **Section 7.3(a)**, or (ii) made to comply with a Requirement which first becomes effective after the Commencement Date (whether through adoption, promulgation, application, interpretation, or otherwise) (the capital expenditures described in subsections (i) and (ii) being hereinafter referred to as "**Permitted Capital Expenditures**"). The "annual charge-off" of each such Permitted Capital Expenditure shall be determined by dividing the original cost of the Permitted Capital Expenditure by the number of years of useful life thereof (which useful life shall be determined reasonably by Landlord in accordance with generally accepted accounting principles and practices in effect at the time of the Permitted Capital Expenditure); provided, however, subject to the foregoing clause (i), if Landlord reasonably concludes on the basis of an independent engineering study or analysis that a particular Permitted Capital Expenditure will effect savings in Operating Expenses, including energy related costs, and that such projected savings are anticipated to, on an annual basis ("**Projected Annual Savings**"), exceed the annual depreciation therefor (as determined in accordance with generally accepted accounting principles and practices), then and in such event the amount of depreciation for such Permitted Capital Expenditure shall be increased to be an amount equal to the Projected Annual Savings, and in such circumstance, the increased depreciation (in the amount of the Projected Annual Savings) shall be applicable for such period of time as it would take to fully amortize the cost of the Permitted Capital Expenditure in question. The "annual charge-off" of each such Permitted Capital Expenditure shall be included in Operating Expenses for each calendar year in which such Permitted Capital Expenditure is made, and for each subsequent calendar year. Operating Expenses shall not include any Excluded Expenses.

(e) "**Statement**" shall mean an itemized statement setting forth (i) the Taxes for the Tax Year (or portion thereof), (ii) the Operating Expenses for such calendar year (or portion thereof), and/or (iii) the Insurance Expenses for such calendar year (or portion thereof).

(f) "**Tax Year**" shall mean the twelve (12) month period from July 1 through June 30 (or such other period as hereinafter may be duly adopted by the City of Boston as the fiscal year for real estate tax purposes).

(g) "**Taxes**" shall mean (i) all real estate taxes, assessments, sewer and water rents, rates and charges and other governmental levies, impositions or charges, whether general, special, ordinary, extraordinary, foreseen or unforeseen, which may from time to time be assessed, levied or imposed upon all or any part of the Real Property, (ii) all business improvement district impositions, charges and fees assessed, imposed or payable with respect to all or any part of the Real Property, and (iii) all commercially reasonable expenses (including reasonable attorneys' fees and disbursements and experts' and other witnesses' fees) incurred in seeking abatement of or contesting any of the foregoing or the Assessed Valuation of the Real Property. Taxes shall not include (x) interest or penalties incurred by Landlord as a result of Landlord's late payment of Taxes, (y) franchise, transfer, gift, inheritance, estate, excise, or net income taxes imposed upon Landlord, or (z) costs or expenses included in Operating Expenses. Any special assessment that may be paid in installments, shall be deemed to have been so divided and to be payable in the maximum number of installments permitted by law, and (ii) there shall be deemed included in Taxes for each Tax Year the installments of such assessment becoming payable during such Tax Year, together with interest payable during

such Tax Year on such installments and on all installments thereafter becoming due as provided by law. If at any time the methods of taxation prevailing on the Effective Date shall be altered so that in lieu of or as an addition to the whole or any part of Taxes, there shall be assessed, levied or imposed (1) a tax, assessment, levy, imposition or charge based on the income or rents received from the Real Property whether or not wholly or partially as a capital levy or otherwise, (2) a tax, assessment, levy, imposition or charge measured by or based in whole or in part upon all or any part of the Real Property and imposed upon Landlord, (3) a license fee measured by the rents, or (4) any other tax, assessment, levy, imposition, charge or fee however described or imposed on all or any part of the Real Property, including business improvement district impositions, fees, and charges, then all such taxes, assessments, levies, impositions, charges or fees or the part thereof so measured or based shall be deemed to be included within Taxes.

Section 7.2. Tenant's Tax Payment. (a) Tenant shall pay to Landlord Tenant's Proportionate Share of the Taxes for each Tax Year or portion thereof during the Term ("**Tenant's Tax Payment**") from and after the Rent Commencement Date. For each Tax Year, Landlord shall furnish to Tenant Landlord's reasonable estimate of Tenant's Tax Payment for such Tax Year (the "**Tax Estimate**"). Tenant shall pay to Landlord on the first (1st) day of each month during such Tax Year an amount equal to 1/12 of the Tax Estimate for such Tax Year. If Landlord furnishes a Tax Estimate for a Tax Year subsequent to the commencement thereof, then (i) until the first (1st) day of the month following the month in which the Tax Estimate is furnished to Tenant, Tenant shall pay to Landlord on the first (1st) day of each month an amount equal to the monthly sum payable by Tenant to Landlord under this **Section 7.2** during the last month of the preceding Tax Year; (ii) promptly after the Tax Estimate is furnished to Tenant or together therewith, Landlord shall give notice to Tenant stating whether the installments of Tenant's Tax Estimate previously made for such Tax Year were greater or less than the installments of Tenant's Tax Estimate to be made for such Tax Year in accordance with the Tax Estimate and the amount of any difference, and (x) if there shall be a deficiency, then Tenant shall pay the amount thereof within thirty (30) days after demand therefor, or (y) if there shall have been an overpayment, Landlord shall credit the amount thereof against subsequent payments of Rent due hereunder; and (iii) on the first (1st) day of the month following the month in which the Tax Estimate is furnished to Tenant, and on the first (1st) day of each month thereafter throughout the remainder of such Tax Year, Tenant shall pay to Landlord an amount equal to 1/12 of the Tax Estimate.

(b) As soon as reasonably practicable after Landlord has determined the Taxes for a Tax Year, Landlord shall furnish to Tenant a Statement of Tenant's Tax Payment for such Tax Year. If the Statement shall show that the sums paid by Tenant under **Section 7.2(a)** exceeded the actual amount of Tenant's Tax Payment for such Tax Year, then Landlord shall credit the amount of such excess against subsequent payments of Rent due hereunder. If the Statement for such Tax Year shall show that the sums so paid by Tenant were less than Tenant's Tax Payment for such Tax Year, then Tenant shall pay the amount of such deficiency within thirty (30) days after delivery of the Statement to Tenant. If (i) at the time of delivery of a Statement the Term of this Lease shall have expired, (ii) Tenant shall have vacated and surrendered the Premises, and (iii) the Statement shows that the sums paid by Tenant under **Section 7.2(a)** exceeded the actual amount of Tenant's Tax Payment for such Comparison Year, then the excess amount (if any) shall be applied against the then unpaid Rent or other charges (if any), and the remaining excess after such application, if any, will be paid by the Landlord to Tenant.

(c) Only Landlord may institute proceedings to reduce or abate the Assessed Valuation of the Real Property and Tenant shall not commence any such proceeding without Landlord's prior written consent, excepting only as expressly set forth in this **Section 7.2(c)**. If Landlord receives an abatement or refund of Taxes for any Tax Year, then Landlord shall credit against subsequent payments of Rent due hereunder, an amount equal to Tenant's Proportionate Share of the abatement or refund net of Tenant's Proportionate Share of any expenses incurred by Landlord in achieving such abatement or refund (if and to the extent not previously included in Taxes paid by Tenant), which amount shall not exceed Tenant's Tax Payment paid for such Tax Year. Landlord may elect, but shall not be obligated, to file any application or institute any proceeding seeking an abatement or reduction in Taxes or the Assessed Valuation, and/or to engage in informal discussions with the City of Boston Assessors Office seeking an abatement or reduction in Taxes or the Assessed Valuation. On request of Tenant, Landlord will notify Tenant as to whether Landlord intends to file any such application, institute said procedure, and/or engage in said discussions with the City of Boston Assessors Office. To the extent permitted by applicable Requirements, Tenant shall have the right, at its sole cost and expense, to commence and prosecute a proceeding seeking an abatement or reduction in Taxes or the Assessed Valuation by appropriate proceedings (a "**Tenant Tax Contest**") diligently conducted in good faith, subject to the satisfaction of the following conditions: (i) for the respective Tax Year, Landlord shall have elected not to file an application or institute a proceeding seeking an abatement or reduction in Taxes or the Assessed Valuation, and/or to engage in informal discussions with the City of Boston Assessors Office seeking an abatement or reduction in Taxes or the Assessed Valuation; (ii) no Event of Default shall have occurred and be continuing under this Lease; (iii) the original tenant named herein or a Permitted Transferee is then the tenant under this Lease; (iv) Tenant shall submit not less than thirty (30) days prior notice to Landlord of the commencement of the Tenant Tax Contest; (v) after the commencement thereof, Tenant shall diligently and continuously prosecute the Tenant Tax Contest to completion; (vi) Tenant shall continue to pay Tenant's Tax Payments to Landlord, as and when due, notwithstanding any such Tenant Tax Contest; (vii) Tenant's attorneys, representatives and consultants in any such Tenant Tax Contest shall be subject to Landlord's prior approval, which approval shall not be unreasonably withheld, conditioned, or delayed; and (viii) the date of the initiation of Tenant's Tax Contest shall be not less than twenty-four (24) months prior to the Expiration Date (as the same may have been extended). Landlord will cooperate with Tenant in any such Tenant Tax Contest, including executing any necessary documents, affidavits or other instruments as may be required to contest such taxes, and appearing at hearings or proceedings, provided that any such Tenant Tax Contest shall be at the sole cost and expense of Tenant, Tenant shall reimburse Landlord for all reasonable costs or expenses incurred by Landlord as a result of any such Tenant Tax Contest not later than thirty (30) days after request by Landlord, and Landlord shall not be obligated to incur any liabilities or obligations (excepting only such reimbursed costs and expenses), in connection therewith. Tenant shall not discontinue any such Tenant Tax Contest unless and until Tenant has given to Landlord notice of Tenant's intention to so discontinue the Tenant Tax Contest (a "**Tenant's Tax Contest Discontinuance Notice**"), in which event, Landlord may elect, but shall not be obligated to assume, at Landlord's sole cost and expense, the continued prosecution and conduct of such tax contest by providing notice to Tenant (a "**Landlord's Tax Contest Assumption Notice**") within fifteen (15) days after receipt of Tenant's Tax Contest Discontinuance Notice. If Landlord shall deliver a Landlord's Tax Contest Assumption Notice, then Tenant shall assign and transfer the prosecution of said tax contest to Landlord, and shall cooperate with Landlord in all respects as may be necessary for Landlord's continuation of such tax contest.

(d) Tenant shall be responsible for all personal property taxes assessed against the Premises or the contents thereof, or any occupancy or rent tax now in effect or hereafter enacted and, if such tax is payable by Landlord, Tenant shall pay such amounts to Landlord, within thirty (30) days after Landlord's demand therefor.

(e) Tenant shall be obligated to make Tenant's Tax Payment regardless of whether Tenant may be exempt from the payment of any Taxes as the result of any reduction, abatement or exemption from Taxes granted to Tenant or agreed to by any Governmental Authority, or by reason of Tenant's diplomatic or other tax exempt status.

Section 7.3. Tenant's Operating Payment. (a) Tenant shall pay to Landlord Tenant's Proportionate Share of the Operating Expenses for each calendar year or portion thereof during the Term ("**Tenant's Operating Payment**") from and after the Rent Commencement Date. For each calendar year, Landlord shall furnish to Tenant Landlord's reasonable estimate of Tenant's Operating Payment for such calendar year (the "**Expense Estimate**"). Tenant shall pay to Landlord on the first (1st) day of each month during such calendar year an amount equal to 1/12 of the Expense Estimate. If Landlord furnishes an Expense Estimate for a calendar year subsequent to the commencement thereof, then (i) until the first (1st) day of the month following the month in which the Expense Estimate is furnished to Tenant, Tenant shall pay to Landlord on the first (1st) day of each month an amount equal to the monthly sum payable by Tenant to Landlord under this **Section 7.3** during the last month of the preceding calendar year, (ii) promptly after the Expense Estimate is furnished to Tenant or together therewith, Landlord shall give notice to Tenant stating whether the installments of Tenant's Operating Payment previously made for such calendar year were greater or less than the installments of Tenant's Operating Payment to be made for such calendar year in accordance with the Expense Estimate and the amount of any difference, and (x) if there shall be a deficiency, Tenant shall pay the amount thereof within thirty (30) days after demand therefor, or (y) if there shall have been an overpayment, Landlord shall credit the amount thereof against subsequent payments of Rent due hereunder, and (iii) on the first (1st) day of the month following the month in which the Expense Estimate is furnished to Tenant, and on the first (1st) day of each month thereafter throughout the remainder of such calendar year, Tenant shall pay to Landlord an amount equal to 1/12 of the Expense Estimate. . Landlord will not be entitled to collect more than one hundred percent (100%) of the Operating Expenses actually incurred by Landlord in any calendar year; provided, however, to the extent permitted to be included in Operating Expenses pursuant to the provisions of this Lease, Landlord shall be permitted to include the Carryover Expenses (as hereinafter defined) and the amortized amount of the Permitted Capital Expenditures in the applicable calendar year(s).

(b) Promptly after the expiration of each calendar year, Landlord shall furnish to Tenant a Statement of Tenant's Operating Payment for the immediately preceding calendar year. Each such Statement shall include a line-item detail of the Operating Expenses for such calendar year. If the Statement shows that the sums paid by Tenant under **Section 7.3(a)** exceeded the actual amount of Tenant's Operating Payment for such calendar year, then Landlord shall credit the amount of such excess against subsequent payments of Rent due hereunder. If the Statement shows that the sums so paid by Tenant were less than Tenant's Operating Payment for such calendar year, then Tenant shall pay the amount of such deficiency within ten (10) Business Days after delivery of the Statement to Tenant. If (i) at the time of delivery of a Statement the Term of this Lease shall have expired, (ii) Tenant shall have vacated and surrendered the Premises, and (iii) the Statement shows that the sums paid by Tenant under **Section 7.3(a)** exceeded the actual amount of Tenant's Operating Payment for such Comparison Year, then the excess amount (if any) shall be applied against the then unpaid Rent or other charges (if any), and the remaining excess after such application, if any, will be paid by the Landlord to Tenant.

(c) Notwithstanding the foregoing, for purposes of calculating Tenant's Operating Payment, the components of Operating Expenses which constitute Controllable Operating Expenses shall not increase by more than five percent (5%) per calendar year on a compounding and cumulative basis over the Term of this Lease, i.e., the amount of Controllable Operating Expenses for each calendar year during the Term that occurs after the first calendar year during the Term of this Lease shall not exceed the Controllable Operating Expenses Cap (as hereinafter defined) for said calendar year. The "**Controllable Operating Expenses Cap**" for the second calendar year shall be an amount equal to one hundred five (105%) percent of the amount of Controllable Operating Expenses for the first calendar year. The "**Controllable Operating Expenses Cap**" for each subsequent calendar year shall be an amount equal to one hundred five (105%) percent of the Controllable Operating Expenses Cap for the immediately preceding calendar year. Notwithstanding anything contained herein to the contrary, if, by operation of the Controllable Operating Expenses Cap, Landlord is unable to collect the entire amount which would otherwise have been payable by Tenant as Tenant's proportionate share of increases in Operating Expenses with respect to any particular calendar year (such amount in excess of the Controllable Expenses Cap, the "**Carryover Expenses**"), then, for purposes of calculating Tenant's proportionate share of increases in Operating Expenses for any subsequent years of the Term, Landlord shall have the right to add the Carryover Expenses to the Operating Expenses for such subsequent years until the entire amount of the Carryover Expenses have been so applied, provided that in no event shall the Operating Expenses for any such subsequent calendar year, including any Carryover Expenses, if applicable, be increased by more than the amount of the Controllable Operating Expenses Cap for such calendar year.

By way of example and not in limitation, the following is a calculation of the Controllable Expenses Cap: If the Controllable Operating Expenses for the first calendar year are \$100,000.00, then the Controllable Operating Expenses Cap for the immediately succeeding five (5) calendar years would be calculated as follows: (i) for the second calendar year, the Controllable Operating Expenses Cap would be \$105,000.00 (i.e., $105\% \times \$100,000.00 = \$105,000.00$); (ii) for the third calendar year, the Controllable Operating Expenses Cap would be \$110,250.00 (i.e., $105\% \times \$105,000.00 = \$110,250.00$); (iii) for the fourth calendar year the Controllable Operating Expenses Cap would be \$115,762.50 (i.e., $105\% \times \$110,250.00 = \$115,762.50$); for the fifth calendar year, the Controllable Operating Expenses Cap would be \$121,550.62 (i.e., $105\% \times \$115,762.50 = \$121,550.62$); and for the sixth calendar year, the Controllable Operating Expenses Cap would be \$127,628.16 (i.e., $105\% \times \$121,550.62 = \$127,628.16$).

(d) Landlord shall, not less than thirty (30) days prior to the Commencement Date, and thereafter, not less than thirty (30) days' prior to the commencement of each calendar year during the Term, provide Tenant with its estimated budget for Operating Expenses and Insurance Expenses for such calendar year, which budget shall separately identify detailed line-items of expenses, including those which constitute Controllable Expenses. Landlord and Tenant shall engage in a good faith discussion and consultation with respect to such budget for Operating Expenses and Tenant's comments with respect thereto. Both parties will meet as often as reasonably practicable to review and discuss said budget. As part of the budget discussions, Tenant may suggest alternative services and service providers and/or request the removal of certain line items. In addition to the foregoing annual process, upon Tenant's written request from time to time, Landlord shall meet with representatives of Tenant to discuss the current and upcoming budgets and Landlord's plans for operation, and upcoming maintenance and repair, of the Building. With respect to service contracts exceeding \$50,000.00 per calendar year, Landlord shall either (i) solicit competitive bids from not less than three (3) qualified service providers (providing services of a quality and standard consistent with the

quality and standards of the Building) and shall deliver a copy of each bid to Tenant, or (ii) notify Tenant that Landlord has not elected to bid such contracts along with Landlord's reasonable good faith opinion, with reasonable detail, that the price and service provider for such contract in the estimated budget satisfies Landlord's obligations for such service. After consulting with Tenant on any bids provided, Landlord will select the lowest qualified bid received, unless Landlord has a reasonable good faith basis not to do so and provides such basis to Tenant.

Section 7.4. Tenant's Insurance Payment. (a) Tenant shall pay to Landlord Tenant's Proportionate Share of the Insurance Expenses for each calendar year or portion thereof during the Term ("**Tenant's Insurance Payment**") from and after the Rent Commencement Date. For each calendar year, Landlord shall furnish to Tenant Landlord's reasonable estimate of Tenant's Insurance Payment for such calendar year (the "**Insurance Expense Estimate**"). Tenant shall pay to Landlord on the first (1st) day of each month during such calendar year an amount equal to 1/12 of the Insurance Expense Estimate. If Landlord furnishes an Insurance Expense Estimate for a calendar year subsequent to the commencement thereof, then (i) until the first (1st) day of the month following the month in which the Insurance Expense Estimate is furnished to Tenant, Tenant shall pay to Landlord on the first (1st) day of each month an amount equal to the monthly sum payable by Tenant to Landlord under this **Section 7.4** during the last month of the preceding calendar year, (ii) promptly after the Insurance Expense Estimate is furnished to Tenant or together therewith, Landlord shall give notice to Tenant stating whether the installments of Tenant's Insurance Payment previously made for such calendar year were greater or less than the installments of Tenant's Insurance Payment to be made for such calendar year in accordance with the Insurance Expense Estimate, and (x) if there shall be a deficiency, Tenant shall pay the amount thereof within thirty (30) days after demand therefor, or (y) if there shall have been an overpayment, Landlord shall credit the amount thereof against subsequent payments of Rent due hereunder, and (iii) on the first (1st) day of the month following the month in which the Insurance Expense Estimate is furnished to Tenant, and on the first (1st) day of each month thereafter throughout the remainder of such calendar year, Tenant shall pay to Landlord an amount equal to 1/12 of the Insurance Expense Estimate.

(b) Promptly after the expiration of each calendar year, Landlord shall furnish to Tenant a Statement of Tenant's Insurance Payment for the immediately preceding calendar year. If the Statement shows that the sums paid by Tenant under **Section 7.4(a)** exceeded the actual amount of Tenant's Insurance Payment for such calendar year, then Landlord shall credit the amount of such excess against subsequent payments of Rent due hereunder. If the Statement shows that the sums so paid by Tenant were less than Tenant's Insurance Payment for such calendar year, then Tenant shall pay the amount of such deficiency within ten (10) Business Days after delivery of the Statement to Tenant. If (i) at the time of delivery of a Statement the Term of this Lease shall have expired, (ii) Tenant shall have vacated and surrendered the Premises, and (iii) the Statement shows that the sums paid by Tenant under **Section 7.4(a)** exceeded the actual amount of Tenant's Insurance Payment for such Comparison Year, then the excess amount (if any) shall be applied against the then unpaid Rent or other charges (if any), and the remaining excess after such application, if any, will be paid by the Landlord to Tenant.

Section 7.5. Non-Waiver; Disputes. (a) Landlord's failure to render any Statement on a timely basis with respect to any calendar year or Tax Year (as applicable) shall not prejudice Landlord's right to thereafter render a Statement with respect to such calendar year or Tax Year (as applicable) or any subsequent calendar year or Tax Year (as applicable), nor shall the rendering of a Statement prejudice Landlord's right to thereafter render a corrected Statement for that calendar year or Tax Year (as applicable); provided, however, Landlord may not issue a corrected Statement with respect to any calendar year or Tax Year (as applicable) later than eighteen (18) months after the expiration of such calendar year or Tax Year (as applicable).

(b) Each Statement sent to Tenant shall constitute an account stated between Landlord and Tenant and shall be conclusively binding upon Tenant unless Tenant (i) pays to Landlord when due the amount set forth in such Statement, without prejudice to Tenant's right to audit such Statement, and (ii) within one hundred eighty (180) days after such Statement is delivered, sends a written notice to Landlord objecting to such Statement and stating that Tenant will audit the records concerning said Statement. Tenant and all auditors, representatives, contractors, agents, and other third parties involved on behalf of Tenant in any review, audit or dispute concerning Operating Expenses, Insurance Expenses or Taxes shall execute and deliver to Landlord a confidentiality agreement, in form and substance reasonably satisfactory to Landlord and Tenant, whereby such parties agree not to disclose to any third party any of the information obtained in connection with such review. Tenant agrees that Tenant will not employ, in connection with any review, audit or dispute under this Lease, any person or entity who is to be compensated in whole or in part, on a contingency fee basis. If Tenant satisfies the foregoing conditions precedent, then Tenant may review or audit the Operating Expenses, Insurance Expenses, or Taxes (as applicable) for the subject calendar year or Tax Year (as applicable). If the parties are unable to resolve any dispute as to the correctness of such Statement within thirty (30) days following the review or audit performed by Tenant, then either party may refer the issues raised by such review or audit to a nationally recognized public accounting firm selected by Landlord and reasonably acceptable to Tenant, and the decision of such accountants shall be conclusively binding upon Landlord and Tenant. If said accountants shall determine that Tenant shall have made any payment in excess of the amount properly due hereunder, such excess amount shall be refunded to Tenant by Landlord promptly after said accountants shall have rendered their decision and if such accountants shall determine that Tenant shall have underpaid the amount properly due hereunder such under-payment shall be paid by Tenant to Landlord promptly after said accountants shall have rendered their decision. Tenant shall pay the fees and expenses relating to the audit and dispute procedure, unless such accountants determine that Landlord overstated Operating Expenses, Insurance Expenses or Taxes (as applicable) by more than three percent (3%) for such calendar year or Tax Year (as applicable), in which case Landlord shall pay the reasonable out-of-pocket fees and expenses incurred by Tenant for the audit conducted by Tenant and said third-party accountant. Except as provided in this **Section 7.5**, Tenant shall have no right whatsoever to dispute by judicial proceeding or otherwise the accuracy of any Statement.

Section 7.6. Proration. If the Rent Commencement Date is not January 1 or July 1 (as applicable), then any Additional Rent under this Article 7 for the calendar year or Tax Year (as applicable) in which the Rent Commencement Date occurs shall be apportioned based on the number of days in the applicable calendar year or Tax Year (as applicable). If the Expiration Date occurs on a date other than December 31 or June 30 (as applicable), any Additional Rent under this **Article 7** for the calendar year or Tax Year (as applicable) in which such Expiration Date occurs shall be apportioned on the basis of the number of days in the respective calendar year or Tax Year (as applicable). Upon the expiration or earlier termination of this Lease, any Additional Rent under this **Article 7** shall be adjusted or paid within thirty (30) days after submission of the Statement for the last calendar year or Tax Year (as applicable).

Section 7.7. Survival. The provisions of this **Article 7** shall survive the expiration or earlier termination of this Lease.

ARTICLE 8

REQUIREMENTS OF LAW

Section 8.1. Tenant's Compliance. Tenant, at its expense, shall comply and shall cause the Premises to comply with all Requirements applicable to the Premises and/or the use or occupancy of the Premises by Tenant; provided, however, Tenant shall not be obligated to perform structural alterations to the Building or alterations to the Building Systems, unless the application of such Requirements arises out of or results from (i) the specific manner and nature of Tenant's use or occupancy of the Premises (as distinguished from general office, laboratory, or research and development uses), (ii) Alterations made by Tenant, or (iii) a breach by Tenant of any provisions of this Lease. Any such repairs or alterations shall be made at Tenant's expense (1) by Tenant in compliance with **Article 5** if such repairs or alterations are nonstructural and do not affect any Building System or any areas outside of the Premises, or (2) by Landlord if such repairs or alterations are structural or affect any Building System or any areas outside of the Premises. If Tenant obtains knowledge of any failure to comply with any Requirements applicable to the Premises, Tenant shall give Landlord prompt notice thereof. Without limitation, within the Premises, Tenant shall be responsible for compliance with the applicable provisions of the ADA. Tenant shall not permit any condition within the Premises that would (i) invalidate or conflict with Landlord's insurance policies, (ii) violate applicable rules, regulations and guidelines of the City of Boston fire department, fire insurance rating organization or any other Governmental Authority, (iii) cause an increase in the premiums of fire insurance for the Building over that payable with respect to Comparable Buildings, or (iv) result in Landlord's insurance companies' refusing to insure the Building or any property therein in amounts and against risks comparable to those insured against by prudent owners of Comparable Buildings, as reasonably determined by Landlord. If fire insurance premiums increase as a result of Tenant's failure to comply with the provisions of this **Section 8.1**, then Tenant shall promptly cure such failure and shall reimburse Landlord for the increased fire insurance premiums paid by Landlord as a result of such failure by Tenant. Tenant's use of the PH neutralization system for the Building shall be subject to and in accordance with all applicable Requirements, including the conditions of the MWRA Permit, as well as all Rules and Regulations concerning the PH neutralization system adopted by Landlord from time-to-time. Tenant shall not introduce any substances or materials into the PH neutralization system (i) in violation of the MWRA Permit, (ii) in violation of Requirements, or (iii) that would interfere with the proper functioning of the PH neutralization system.

Section 8.2. Landlord's Compliance. Landlord shall cause the Common Facilities to comply with all Requirements applicable to the Building which are not the obligation of Tenant, to the extent that non-compliance (i) would impair Tenant's use and occupancy of the Premises for the Permitted Uses, (ii) would adversely restrict Tenant's access to the Premises, (iii) would adversely affect the provision of Building services to be provided by Landlord to Tenant pursuant to this Lease, or (iv) would create an unsafe or hazardous situation in the Premises and/or the Common Areas. Subject to the limitations set forth in clauses (i) through (iv) above, Landlord shall have the right to contest in good faith any alleged violation of applicable Requirements, including the right to apply for and obtain a waiver or deferment of compliance, the right to assert any and all defenses allowed at law or in equity, and the right to appeal any decisions, judgments or rulings to the fullest extent permitted by applicable Requirements. Without limitation, Landlord shall obtain and maintain the MWRA Permit.

Section 8.3. Fire and Life Safety; Sprinkler. Tenant shall maintain in good order, condition and repair all sprinkler, fire-alarm and life-safety systems located in and serving the Premises, from the point of connection to the Building Systems, in accordance with this Lease, the Rules and Regulations and all Requirements. If any modifications and/or alterations are required to be made to such systems, or any additional equipment is required to be supplied in connection with such systems arising out of or resulting from Tenant's particular manner of business operations, or Alterations performed by Tenant, or the location of Tenant's Property (including partitions) within the Premises, then Landlord (to the extent outside of the Premises) or Tenant (to the extent within the Premises) shall make such modifications and/or Alterations, and supply such additional equipment, in either case at Tenant's expense. Tenant shall, at its cost and expense, maintain all fire extinguishers and other moveable life safety equipment in the Premises.

ARTICLE 9

SUBORDINATION

Section 9.1. Subordination and Attornment. (a) This Lease is and shall be subject and subordinate to all Mortgages and Superior Leases, and Tenant shall attorn to such Mortgagee or Lessor, its successors in interest or any purchaser in a foreclosure sale; provided, however, as a condition to Tenant's agreement to subordinate Tenant's interest in this Lease to the lien of any Mortgage and/or any Superior Lease Tenant shall receive from each Mortgagee or Lessor, an agreement (any such agreement, a "**Non-Disturbance Agreement**"), in the standard form customarily employed by such Mortgagee or Lessor (which conforms to the provisions of this **Article 9** and is otherwise reasonably satisfactory to Tenant), pursuant to which such Mortgagee or Lessor shall agree that, if and so long as no Event of Default hereunder shall have occurred and be continuing, the leasehold estate granted to Tenant and the rights of Tenant pursuant to this Lease shall not be terminated, modified, affected or disturbed by any action which such Mortgagee may take to foreclose any such Mortgage or which such Lessor shall take to terminate such Superior Lease, as applicable, and that the successor landlord (whether Mortgagee, its nominee or designee, any purchaser at a foreclosure sale, or such other person, or such person's successors or assigns, or designee, together with the successors and assigns of such successor landlord, "**Successor Landlord**") shall recognize this Lease as being in full force and effect as if it were a direct lease between such Successor Landlord and Tenant upon all of the terms, covenants, conditions and options granted to Tenant under this Lease, except as otherwise provided in **Section 9.1(b)** hereof.

(b) If a Successor Landlord shall succeed to the rights of Landlord under this Lease, whether through possession or foreclosure action or the delivery of a new lease or deed, then Tenant shall attorn to and recognize such Successor Landlord as Landlord under this Lease. The provisions of this **Section 9.1** are self-operative and require no further instruments to give effect hereto; provided, however, Tenant shall promptly execute and deliver any instrument that such Successor Landlord may reasonably request (i) evidencing such attornment, (ii) setting forth the terms and conditions of Tenant's tenancy, and (iii) containing such other terms and conditions as may be required by such Successor Landlord, provided such instrument does not increase the Rent, materially increase Tenant's other obligations or materially and adversely affect Tenant's rights under this Lease. Upon such attornment this Lease shall continue in full force and effect as a direct lease between such Successor Landlord and Tenant upon all of the terms, conditions and covenants set forth in this Lease, except that such Successor Landlord shall not be:

(i) liable for any act or omission of any prior landlord (including, without limitation, the then defaulting Landlord), except that, nothing in the Non-Disturbance Agreement shall relieve Successor Landlord from the obligation to cure any ongoing default of Landlord's management, operation, maintenance, repair and replacement default under this Lease which is continuing on the date on which such succession occurs, provided that (and on the condition that) (i) Successor Landlord received written notice thereof and (ii) Successor Landlord's obligation to cure such default shall be limited solely to performing the ongoing management, operation, maintenance, repair and replacement obligations as required pursuant to the terms of this Lease (and in no event shall Successor Landlord have any other liability or obligation with respect to such default or be liable for any damages in connection therewith);

(ii) subject to any abatement, defense or offsets which Tenant may have against any prior Landlord (including, without limitation, the then defaulting Landlord), except if such abatement or offset (but not defense) is expressly set forth in this Lease, and if such abatement or offset is due to a default by the then landlord, and Lender (and Successor Landlord, as applicable) has received prior written notice and opportunity to cure such default as set forth in the Non-Disturbance Agreement;

(iii) obligated to cure any defaults of any prior landlord (including, without limitation, Landlord) which occurred, or to make any payment to Tenant which was required to be paid by any prior landlord (including, without limitation, Landlord), prior to the date of attornment, except defaults (y) in the ongoing maintenance and repair obligations of Landlord under this Lease and (z) of Landlord's obligations to construct and complete the Base Building Work and Landlord's Work as set forth in **Article 4** of this Lease, provided that, in each case, Mortgagee (and Successor Landlord, as applicable) has received prior written notice and opportunity to cure such default as set forth in the Non-Disturbance Agreement.

(iv) bound by any payment of rent or additional rent which Tenant might have paid for more than one month in advance of the due date under this Lease to any prior Landlord (including, without limitation, the then defaulting Landlord);

(v) bound by any obligation to make any payment to Tenant which was required to be made prior to on the date on which such succession occurs;

(vi) liable, responsible or accountable for any monies deposited with any prior Landlord (including security deposits), whether or not still held by such prior landlord, except to the extent such monies are actually received by Mortgagee or such Successor Landlord (as applicable) for its own account as the landlord under this Lease as security for the performance of Tenant's obligation under this Lease (which deposit shall, nonetheless, be held subject to the provisions of this Lease); or

(vi) bound by any surrender, termination, amendment or modification of this Lease made without the consent of Mortgagee or such Successor Landlord, other than any amendment or modification that memorializes a right or exercise of a unilateral option by Tenant that is expressly set forth in this Lease and that does not require Landlord's consent, determination and/or approval and is otherwise expressly permitted under this Lease.

(c) Tenant shall from time to time and within ten (10) days of request from Landlord, execute and deliver any documents or instruments that may be reasonably required by any Mortgagee or Lessor to confirm any subordination.

Section 9.2. Mortgage or Superior Lease Defaults. Any Mortgagee may elect that this Lease shall have priority over the Mortgage and to subordinate its Mortgage to this Lease. Upon notification to Tenant by such Mortgagee, this Lease shall be deemed to have priority over such Mortgage, regardless of the date of this Lease. In connection with any financing of the Real Property, Tenant shall consent to any reasonable modifications of this Lease requested by any lending institution, provided such modifications do not increase the Rent, materially increase the other obligations, or materially and adversely affect the rights, of Tenant under this Lease.

Section 9.3. Tenant's Termination Right. As long as any Superior Lease or Mortgage exists, Tenant shall not seek to terminate this Lease by reason of any act or omission of Landlord until (a) Tenant shall have given notice of such act or omission to all Lessors and/or Mortgagees, and (b) a reasonable period of time shall have elapsed following the giving of notice of such default and the expiration of any applicable notice or grace periods (unless such act or omission is not capable of being remedied within a reasonable period of time), during which period such Lessors and/or Mortgagees shall have the right, but not the obligation, to remedy such act or omission and thereafter diligently proceed to so remedy such act or omission. If any Lessor or Mortgagee elects to remedy such act or omission of Landlord, Tenant shall not seek to terminate this Lease so long as such Lessor or Mortgagee is proceeding with reasonable diligence to effect such remedy. Notwithstanding anything to the contrary contained in this **Article 9**, in no event shall Mortgagee (or Successor Landlord, as applicable) have more than twelve (12) months after the delivery of any Termination Notice to Mortgagee under **Section 4.5(b)** in order to cure any failure of Landlord to cause the Commencement Date to occur within the time periods provided in **Section 4.5**.

Section 9.4. Provisions. The provisions of this **Article 9** shall (a) inure to the benefit of Landlord, any future owner of the Building or the Real Property, Lessor or Mortgagee and any sublessor thereof, and (b) apply notwithstanding that, as a matter of law, this Lease may terminate upon the foreclosure of any such Superior Lease or Mortgage.

ARTICLE 10

SERVICES

Section 10.1. Electricity. Tenant shall have access to electricity service for the Premises in the capacities (in the aggregate) set forth in the Base Building Work Matrix attached hereto as **Exhibit D-2**. Said electrical service shall be delivered to the common electrical closets servicing each floor of the Building and the Landlord's Work shall include the construction and installation of all wiring and equipment required for the distribution of electrical service from the common electrical closets to the Premises. Tenant shall contract for electricity service directly with the electricity provider which furnishes service to the Building. Tenant shall pay all charges and fees payable to the electricity provider, on a timely basis, and in all events prior to the due date thereof. Tenant shall maintain the meters for such electricity in good working order, condition and repair. If Tenant fails to maintain such meters or to pay such fees and charges on a timely basis, then Landlord may repair or replace such meters and/or pay such fees and charges directly to the electricity provider, in which event Tenant shall reimburse Landlord, as Additional Rent (the "**Electricity Additional Rent**"), for all amounts expended by Landlord in connection therewith within ten (10) days after delivery of an invoice therefor. In addition, with respect to any equipment exclusively serving the Premises that is not connected to a meter billed to Tenant, including equipment located outside of the Premises such as the Rooftop Equipment, Tenant shall pay Landlord all fees and charges for electricity furnished to said equipment, without mark-up by Landlord, as Additional Rent, within thirty (30) days after delivery of an invoice therefor, which shall include copies of the bills received by Landlord from the utility company. Tenant shall at all times comply with the rules and regulations of the utility company supplying electricity to the Building. Tenant shall not install any electrical equipment which, in Landlord's reasonable judgment, would exceed the capacity of the electrical equipment serving the Premises.

Section 10.2. Elevators; Loading Dock. Landlord shall provide passenger elevator service to the Premises, on a 24 hours per day, 7 days per week basis; provided, however, Landlord may reduce the number of elevators in service during times other than ordinary business hours. Landlord shall provide freight elevator service and use of the loading dock for the Building, upon Tenant's prior request, subject to and in accordance with the Rules and Regulations adopted by Landlord from time-to-time. The use by Tenant of the loading dock shall be on a non-exclusive "first come, first serve" basis with other occupants of the Building. If Tenant requests overtime loading dock or freight elevator service, then Tenant shall pay Landlord all fees and charges for such services, as Additional Rent, within thirty (30) days after delivery of an invoice therefor.

Section 10.3. Heating, Ventilation and Air Conditioning. Landlord shall provide heating, ventilation and air-conditioning service ("HVAC") to the Premises in accordance with the HVAC Design Standards set forth in **Exhibit O**. All costs incurred by Landlord to provide HVAC service to the Premises shall be reimbursed by Tenant to Landlord as Additional Rent. Such costs shall include the cost of all utility services used in the operation of the HVAC system(s) providing HVAC service to the Premises. Landlord shall allocate to the Premises a portion of the total amount of such costs incurred with respect to the Building based upon the cubic footage of heated, chilled, and fresh air distributed to the Premises as indicated by the energy management system serving the Building as a percentage of the aggregate cubic footage of heated, chilled, and fresh air distributed in the entire Building for the applicable period of time. Tenant shall pay such costs monthly, together with monthly installments of Fixed Rent, on an estimated basis in amounts from time to time reasonably determined by Landlord. From time to time, and at least annually, Landlord shall deliver to Tenant a reasonably detailed statement setting forth the cubic footage of heated, chilled, and fresh air distributed to the

Premises and the actual amount of such costs for the respective period of time, together with a statement of the amounts previously paid by Tenant on an estimated basis toward such costs as aforesaid. If such statement indicates that the estimated amounts paid by Tenant are less than Tenant's allocable share of the actual amount of such costs for such period of time, then Tenant shall pay the amount of such shortfall to Landlord within thirty (30) days after delivery of such statement. If such statement indicates that Tenant's estimated payments for such period of time exceed the actual amount of such costs for such year, then Landlord shall credit the excess against the next due installment(s) of Additional Rent payable under this **Section 10.3**. Tenant shall be responsible, at its sole cost and expense, for the installation, operation, repair, replacement and removal of any and all supplemental heating and air conditioning equipment serving the Premises, including all air intake and exhaust equipment, units, exhausts, chillers, condensers, compressors, ducts, piping and other equipment required in connection therewith, including all supplemental equipment required for (A) cooling any data center, server rooms and any other similar areas located in the Premises which require cooling in addition to the standard level of cooling provided by Landlord, and (B) specialty exhaust services, including the exhaust for H2 rooms, radiation hoods and isotope hoods, vivarium, and any other special rooms or specialized equipment, and (C) any other specialized purposes.

Section 10.4. Cleaning.

(a) Landlord shall cause the Office Areas to be cleaned, substantially in accordance with the cleaning specifications set forth in **Exhibit I** attached hereto; provided, however, any portions of the Office Areas used for the storage, preparation, service or consumption of food or beverages, as an exhibition area or classroom, for storage, as a shipping room or mail room, for private bathrooms, showers or exercise facilities, as a trading floor, or primarily for operation of computer, data processing, telecommunications, or similar equipment shall be cleaned at Tenant's expense, by Landlord's cleaning contractor, at rates which shall be competitive with rates of other cleaning contractors providing comparable services to Comparable Buildings. Landlord's cleaning contractor and its employees shall have access to the Premises at all times except between 8:00 a.m. and 5:30 p.m. on weekdays which are not Observed Holidays.

(b) Tenant shall, at its sole cost and expense, (i) cause the Lab Areas to be cleaned on a regularly scheduled basis, in a manner reasonably satisfactory to Landlord, (ii) cause the Lab Areas to be exterminated with such frequency and in such manner as to prevent the existence of vermin or other infestation, (iii) cause all portions of the Lab Areas used for the storage, preparation or consumption of food or beverages, if any, to be cleaned daily in a manner reasonably satisfactory to Landlord, and (iv) cause Tenant's garbage and other refuse to be removed from the Premises, at such times and to a location designated by Landlord. Tenant shall be responsible, at its sole cost and expense, for all trash removal services with respect to the Lab Areas and for all biohazard disposal services required in connection with its operations in the Premises. Such services shall be performed by licensed (where required by Requirements), insured and qualified contractors approved by Landlord (which approval shall not be unreasonably withheld, delayed or conditioned) and with sufficient frequency so that the Premises are at all times kept neat and clean. Until removed, Tenant's garbage and trash shall be kept in a neat and orderly condition, properly bagged or in the case of packing boxes and cartons, securely tied. Tenant shall observe such additional customary Rules and Regulations regarding rubbish removal, biohazard disposal, and/or recycling as Landlord may adopt from time to time. Without limitation, if Tenant fails to perform any of the foregoing obligations (and such failure continues after the delivery of required notice and the expiration of applicable grace period), then Landlord may elect, to cause a contractor or contractors engaged by Landlord to perform such obligations in which event Tenant shall reimburse Landlord as Additional Rent for all commercially reasonable costs and expenses incurred by Landlord in connection therewith.

Section 10.5. Water and Sewer Services. Landlord shall provide (i) domestic cold water to the floor of the Building on which the Premises are located, and (ii) hot and cold water in the core lavatories on the floor of the Building on which the Premises are located.

Section 10.6. Trash and Refuse Removal. Landlord shall provide trash and refuse removal services at the Building for ordinary and customary office refuse and rubbish. If and to the extent the volume of the trash and refuse generated by Tenant exceeds the volume of the office trash and refuse customarily generated by tenants of Comparable Buildings, then Tenant shall pay to Landlord, as Additional Rent, Landlord's charges for removal of such excess trash and refuse.

Section 10.7. Telecommunications. Tenant may request that Landlord grant access to the Building to additional telecommunications providers to provide telecommunications services to Tenant and Landlord will exercise good faith efforts to accommodate said requests, at no cost or expense to Landlord or the Building.

Section 10.8. Security Services. Landlord will provide security services for the Building, including electronic monitoring equipment and manned security services provided by trained security personnel, on a twenty-four (24) hour per day, seven (7) day per week basis, consistent with the security services customarily provided by landlords of first-class buildings in Boston, Massachusetts. Tenant may elect to install an access-controlled security system within the Premises; provided, however, any such security system shall be compatible with the Building access control system and shall be subject to the prior approval of Landlord in all respects, which approval will not be unreasonably withheld, conditioned, or delayed. Tenant may also elect to install theft protection security systems in the Premises. The work to install any such security systems shall be considered to be an Alteration for all purposes under this Lease, and shall be performed in accordance with all of the terms and conditions of this Lease, including **Article 5**. Notwithstanding the foregoing, in no event shall Landlord have any liability or obligation to Tenant with respect to security or access to the Premises, or for any claims for loss, injury or damage to persons or property in connection therewith, excepting only to the extent caused by the negligence or willful misconduct of Landlord, or its agents, employees, or contractors. The provisions of this **Section 10.8** shall be subject to the waiver of subrogation provisions of **Section 11.2**.

Section 10.9. Property Management. At all times during the Lease Term, the Building shall be managed in a first-class manner by either Landlord's Agent or an affiliate thereof, or another first-class property manager with experience managing Comparable Buildings. If at any time Tenant reasonably determines that the quality of property management services being provided by the property manager are materially deficient and/or have a material and adverse impact on the use of the Premises by Tenant, Tenant shall provide written notice to Landlord, which notice shall contain details and reasonable back-up information relating to the asserted deficiency in the quality of services sufficient for Landlord to reasonably address Tenant's concerns. Promptly thereafter, Landlord and Tenant shall meet to discuss possible solutions for such asserted deficiency in service, taking into account the nature and extent of such asserted deficiency, and the parties shall reasonably cooperate to implement such solutions.

Section 10.10. Generator. In connection with the performance of the Base Building Work, Landlord shall install the generator (the "**Generator**") which is described in the Base Building Matrix on the roof of the penthouse area on the roof of the Building. As an appurtenance to the Premises, subject to and in accordance with and the provisions of this

Lease, so long as this Lease is in full force and effect, Tenant shall have the right to utilize Tenant's Proportionate Share of the power produced by the Generator. Tenant shall be responsible for the connection of its conduits, wires, pipes and connections to the Generator. The use by Tenant of the Generator shall be subject to the customary Rules and Regulations adopted from time to time by Landlord with respect thereto, and to all applicable Requirements. Any and all work and improvements to be performed by Tenant to installing and replacing conduits and connections between the Generator and the Premises shall be considered to be an Alteration and shall be subject to Landlord's review and prior approval in all respects, which approval will not be unreasonably withheld, conditioned, or delayed. Upon the expiration or termination of the Term of this Lease, upon the request of Landlord, Tenant shall remove all conduits and connections to the Generator, and shall repair any damage resulting from said removal.

Section 10.11. Failure of Tenant to Perform Obligations. If an Event of Default by Tenant shall occur with respect to any of its obligations (including the obligation to pay charges and amounts to a service provider when due and the obligations of maintenance and repair) pursuant to this **Article 10**, then Landlord may elect to perform such obligations (including the payment of any amounts due to a provider of services, or to perform maintenance or repairs), and in such event, Tenant shall reimburse Landlord, as Additional Rent, for all costs and expenses incurred by Landlord in connection therewith, together with an administrative fee equal to ten percent (10%) of such costs and expenses in connection therewith.

Section 10.12. Service Interruptions. Landlord reserves the right to suspend or interrupt any service when necessary, by reason of Unavoidable Delays, accidents or emergencies, or for Restorative Work which, in Landlord's reasonable judgment, is necessary or appropriate until such Unavoidable Delay, accident or emergency shall cease or such Restorative Work is completed, and Landlord shall not be liable for any such suspension or interruption of services. Landlord shall provide Tenant with not less than thirty (30) days' prior notice of any scheduled service interruptions (excepting in the event of emergencies) and to schedule and perform such scheduled interruptions in a manner that will not materially interfere with Tenant's normal operations in the Premises as a result of any such suspension or interruption of service. The exercise of any such right or the occurrence of any such failure by Landlord shall not constitute an actual or constructive eviction, in whole or in part, entitle Tenant to any compensation, abatement or diminution of Rent, relieve Tenant from any of its obligations under this Lease, or impose any liability upon Landlord or Landlord's Agent by reason of inconvenience to Tenant, or interruption of Tenant's business, or otherwise. Landlord shall not be liable in any way to Tenant for any failure, defect or interruption of, or change in the supply, character and/or quantity of electric service furnished to the Premises for any reason except only to the extent caused by the negligence or willful misconduct of Landlord or its agents, employees, or contractors.

Section 10.13. Rent Abatement. Notwithstanding anything to the contrary contained in this Lease, if Tenant is unable despite its good faith commercially diligent efforts to use all or any portion of the Premises for the ordinary conduct of Tenant's business due solely to an interruption of an Essential Service (as hereinafter defined) which Landlord is required to provide hereunder, other than as a result of casualty or condemnation and/or Unavoidable Delay, and such condition continues for a period of longer than three (3) consecutive Business Days after Tenant furnishes a notice to Landlord (the "**Abatement Notice**") identifying the condition and Essential Service which has been interrupted and stating that Tenant's inability to use such portion of the Premises is solely due to such condition, provided that (i) Tenant does not actually use or occupy such portion of the Premises during such three (3) consecutive

Business Day period, and (ii) such condition has not resulted from the negligence or misconduct of Tenant or any Tenant Party, then Fixed Rent, Tenant's Tax Payment, Tenant's Operating Payment, and Tenant's Insurance Payment for the subject portion of the Premises shall be abated on a pro rata per square foot and per diem basis for the period (the "**Abatement Period**") commencing on the fourth (4th) Business Day after Tenant delivers the Abatement Notice to Landlord and ending on the earlier of (x) the date Tenant reoccupies such portion of the Premises, or (y) the date on which such condition is substantially remedied. "**Essential Service**" shall mean the following services, but only to the extent that Landlord is required to provide such services to Tenant pursuant to the terms of this Lease: HVAC service; natural gas service; wastewater treatment service; electrical service; passenger elevator service; and water and sewer service. The foregoing rent abatement shall be the sole and exclusive remedy of Tenant on account of such interruption or lack of service and Landlord shall have no further liabilities or obligations to Tenant on account thereof.

Section 10.14. No Other Services. Except as otherwise expressly provided in this **Article 10**, Landlord shall not be required to furnish any other services to the Premises. The obligations of Landlord which are set forth in this **Article 10** shall be subject to Unavoidable Delays and to the terms and conditions of this Lease, including **Articles 11** and **12**.

ARTICLE 11

INSURANCE; PROPERTY LOSS OR DAMAGE

Section 11.1. Tenant's Insurance. (a) Tenant, at its sole cost and expense, shall obtain and keep in full force and effect during the Term:

(i) a policy of commercial general liability insurance on an occurrence basis against claims for personal injury, bodily injury, death and/or property damage including products and completed operations occurring in or about the Real Property, including blanket broad-form contractual liability coverage, under which Tenant is named as the insured and Landlord and the Insured Parties are named as additional insureds. Such insurance shall provide primary coverage without contribution from any other insurance carried by or for the benefit of the Insured Parties. The minimum limits of liability applying exclusively to the Premises shall be a combined single limit with respect to each occurrence in an amount of not less than \$1,000,000.00, not less than \$2,000,000.00 in the aggregate. In addition, Tenant shall obtain and keep in full force and effect throughout the Term, umbrella or excess liability coverage with minimum limits of not less than \$10,000,000.00; provided, however, Landlord may elect to require Tenant to increase such coverage from time to time to that amount of insurance which in Landlord's reasonable judgment is then being customarily required by landlords of Comparable Buildings. The self-insured retention for such policy shall not exceed \$10,000.00;

(ii) insurance against loss or damage by fire, vandalism, malicious mischief, extended harm and "special form" or "special cause", all risk property insurance policies with extended coverage, insuring (x) Tenant's Property, and (y) all Alterations and improvements installed or constructed in or to the Premises by or on behalf of Tenant from time-to-time (including the Landlord's Work and Tenant's Work), for the full insurable value thereof or replacement cost thereof;

(iii) during the performance of any Alteration, until completion thereof, builder's risk insurance on an "all risk" basis and on a completed value form including a permission to complete and occupy endorsement, for full replacement value covering the interests of Landlord and Tenant (and their respective contractors and subcontractors) in all work incorporated in the Building and all materials and equipment in or about the Premises;

(iv) workers' compensation insurance, as required by law;

(v) business interruption insurance;

(vi) automobile liability insurance for owned, hired and non-owned automobiles, with limits of liability of not less than One Million and 00/100 Dollars (\$1,000,000.00) combined single limit each accident for bodily injury and property damage, naming the Insured Parties as additional insureds; and

(vii) Such other insurance in such amounts and with such coverages as Landlord may reasonably require from time to time, provided that such coverages are consistent with coverages then customarily being required by other landlords of Comparable Buildings.

(b) All insurance required to be carried by Tenant (i) shall contain a provision that (x) no act or omission of Tenant shall affect or limit the obligation of the insurance company to pay the amount of any loss sustained, and (y) shall provide that the insurer shall use endeavor to provide thirty (30) days' prior notice (with an exception for notice of cancellation due to non-payment of premium which shall be ten (10) days), by certified mail, return receipt requested or overnight courier, of any cancellation or material change contrary to the terms of this Lease, and (ii) shall be effected under valid and enforceable policies issued by reputable insurers permitted to do business in the Commonwealth of Massachusetts and rated in Best's Insurance Guide, or any successor thereto as having a Best's Rating of "A-" or better and a Financial Size Category of at least "VIII" or better or, if such ratings are not then in effect, the equivalent thereof or such other financial rating as Landlord may at any time consider appropriate.

(c) By not later than the Commencement Date, and thereafter prior to the expiration of each respective insurance policy, Tenant shall deliver to Landlord a certificate from Tenant's insurance company (on the form currently designated Acord 27 (Evidence of Property Insurance) and Acord 25-S (Certificate of Liability Insurance), or the equivalent, provided that attached thereto is an endorsement to Tenant's commercial general liability policy naming the Insured Parties as additional insureds), which endorsement is at least as broad as ISO policy form "CG2011 Additional Insured – Managers or Lessors of Premises (pre-1999 edition)" and expressly provides coverage for the negligence of the additional insureds.

(d) Landlord will obtain and keep in force during the Term, a policy or policies insuring against loss or damage to the Building caused by peril covered by "all risk" property insurance coverage on a replacement costs basis (which coverage may be pursuant to a blanket policy or policies), provided that in no event shall Landlord insure (i) any of Tenant's Property, or (ii) any Alterations or improvements installed or constructed in or to the Premises by or on behalf of Tenant from time-to-time (including the Landlord's Work and the Tenant's Work). In addition, Landlord shall also maintain a policy of commercial general liability insurance on an occurrence basis insuring against claims for personal injury, bodily injury, death, and/or property damage, including broad-form contractual liability coverage. Subject to the foregoing requirements, all insurance coverages required to be maintained by Landlord under this **Section 11.1(d)** shall be in such amounts, from such companies, and on such other terms and conditions, as Landlord may from time to time reasonably determine, provided that such coverages carried by Landlord shall comply with the requirements of all Mortgagees.

Section 11.2. Waiver of Subrogation. Landlord and Tenant shall each procure an appropriate clause in or endorsement to any property insurance covering the Real Property and personal property, fixtures and equipment located therein, wherein the insurer waives subrogation and consents to a waiver of right of recovery. Landlord and Tenant agree not to make any claim against, or seek to recover from, the other for any loss or damage to its property or the property of others resulting from fire or other hazards, to the extent covered by the property insurance that was required to be carried by that party under the terms of this Lease or, if greater, the insurance coverage actually being carried from time to time by such party. Tenant acknowledges that Landlord shall not carry insurance on, and shall not be responsible for, (i) damage to any Alterations or improvements installed or constructed in or to the Premises from time-to-time (including the Landlord's Work), (ii) Tenant's Property, and (iii) any loss suffered by Tenant due to interruption of Tenant's business.

Section 11.3. Restoration. If the Premises are damaged by fire or other casualty, or if the Building is damaged such that Tenant is deprived of reasonable access to or use and occupancy of the Premises, the damage shall be repaired by Landlord to substantially the condition thereof immediately prior to the damage; provided, however, (i) Landlord shall have no obligation to expend more than the amount of the insurance proceeds actually received by it; (ii) Landlord shall have no obligation to repair or restore (x) Tenant's Property, or (y) any Alterations or improvements installed or constructed in or to the Premises from time-to-time (including the Landlord's Work). Until the restoration of the Premises is Substantially Completed or would have been Substantially Completed but for Tenant Delay, Fixed Rent, Tenant's Tax Payment, Tenant's Operating Payment, and Tenant's Insurance Payment shall be abated in the proportion by which the area of the part of the Premises which is not usable (or accessible) and is not used by Tenant as a result of such fire or other casualty bears to the total area of the Premises. Effective as of the date which is sixty (60) days after the date on which Landlord notifies Tenant of the Substantial Completion of the restoration of the Premises such abatement shall cease and promptly thereafter, Tenant shall, at its expense, repair and restore Tenant's Property and all Alterations to the Premises. Prior to Landlord commencing any restoration work, Tenant shall obtain from all applicable Governmental Authorities all licenses, permits, and approvals that may be required to permit Landlord to enter the Premises and/or to commence any restoration work therein (collectively referred to herein as "**Hazardous Materials Clearances**"). Notwithstanding any provision contained herein to the contrary, if the restoration work to be performed by Landlord is delayed as a result of any failure by Tenant to obtain any required Hazardous Materials Clearances, then any abatement of Rent provided under this Lease in connection with a fire or other casualty shall be tolled and suspended for the period of any such delay, and shall accrue only from and after the date on which Tenant obtains such Hazardous Materials Clearances.

Section 11.4. Landlord's Termination Right. Notwithstanding anything to the contrary contained in **Section 11.3**, if the Building shall be materially damaged (whether or not the Premises are materially damaged), and either (x) the Restoration Notice indicates that more than fifteen (15) months from the date of such damage is required to complete the restoration, or (y) the amount required to pay for the restoration of such damage exceeds the greater of (A) \$5,000,000.00 or (B) the total insurance proceeds received by Landlord, then in any such event Landlord may, not later than sixty (60) days following the date of the damage, terminate this Lease by notice to Tenant. If this Lease is so terminated, then (i) the Term shall expire upon the date such notice is given, as if such date was the expiration date of the Term of this Lease, (ii) Tenant shall vacate the Premises and surrender the same to Landlord, (iii) Tenant's liability for Rent shall cease as of the date of the damage, and (iv) any prepaid Rent for any period after the date of the damage shall be refunded by Landlord to Tenant.

Section 11.5. Tenant's Termination Right. If the Premises and/or the Building (as applicable) are materially damaged, and if Landlord elects to repair and restore the Premises, Landlord shall, within sixty (60) days following the date of the damage, cause a contractor or architect selected by Landlord to deliver a notice (the "**Restoration Notice**") to Tenant of the date by which such contractor or architect estimates the restoration by Landlord will be substantially completed (the "**Estimated Restoration Date**"). If such Estimated Restoration Date, as set forth in the Restoration Notice, is more than fifteen (15) months from the date of such damage, then Tenant shall have the right to terminate this Lease by giving notice (the "**Casualty Termination Notice**") to Landlord not later than thirty (30) days following delivery of the Restoration Notice to Tenant (time being of the essence of the delivery of said Casualty Termination Notice). If Tenant delivers a Casualty Termination Notice within said thirty (30) day period, (a) then this Lease shall be terminated as of the date of the giving of the Casualty Termination Notice, as if such date was the expiration date of the Term of this Lease, (b) Tenant shall vacate the Premises and surrender the same to Landlord, (c) Tenant's liability for Rent shall cease as of the date of delivery of the Casualty Termination Notice, and (d) any prepaid Rent for any period after such termination shall be returned to Tenant.

In addition, if (i) neither Landlord nor Tenant have terminated this Lease pursuant to the provisions of this **Article 11**, and (ii) the restoration of the Building or the Premises (as applicable) has not been substantially completed by the Estimated Restoration Date, then Tenant shall have the right to terminate this Lease within thirty (30) days after the Estimated Restoration Date by delivering a Casualty Termination Notice to Landlord. Unless, within thirty (30) days after receipt of the Casualty Termination Notice the restoration of the Building or the Premises (as applicable) is substantially completed (in which event the termination by Tenant pursuant to this paragraph shall be null and void and this Lease shall remain in full force and effect), then this Lease shall be deemed to have terminated as of the date of the giving of the Casualty Termination Notice in the manner set forth in the second sentence of **Section 11.5**. Time is of the essence of this **Section 11.5**.

Section 11.6. Final 18 Months. Notwithstanding anything to the contrary in this **Article 11**, if any fire or other casualty occurring during the final eighteen (18) months of the Term materially damages the Premises such that more than twenty five percent (25%) of the rentable area of the Premises is not usable for the Permitted Uses, then either Landlord or Tenant may terminate this Lease by notice to the other party within thirty (30) days after the occurrence of such damage (time being of the essence) and this Lease shall expire on the 30th day after the date of such notice.

Section 11.7. Landlord's Liability. None of the Insured Parties shall be liable for any injury or damage to persons or property or interruption of Tenant's business resulting from fire or other casualty, any damage caused by other persons in the Building or by construction of any private, public or quasi-public work, or any latent defect in the Premises or in the Building (except that Landlord shall be required to repair the same to the extent provided in **Article 6**). No penalty shall accrue for delays which may arise by reason of adjustment of insurance on the part of Landlord or Tenant, or for any Unavoidable Delays arising from any repair or restoration of any portion of the Building, provided that Landlord shall use reasonable efforts to minimize interference with Tenant's use and occupancy of the Premises during the performance of any such repair or restoration.

ARTICLE 12

EMINENT DOMAIN

Section 12.1. Taking.

(a) **Total Taking.** If all or substantially all of the Real Property, the Building, or the Premises shall be taken by condemnation or eminent domain (a "**Taking**"), this Lease shall terminate and the Term shall end as of the date of the vesting of title and Rent shall be prorated and adjusted as of such date.

(b) **Partial Taking.** If only a part of the Real Property, the Building, or the Premises is the subject of a Taking then, except as hereinafter provided in this **Article 12**, this Lease shall remain in full force and effect, provided that from and after the date of the vesting of title, Fixed Rent and Tenant's Proportionate Share shall be modified to reflect the reduction of the Premises and/or the Building as a result of such Taking.

(c) **Landlord's Termination Right.** Whether or not the Premises are affected, if part of the Real Property containing more than twenty-five percent (25%) of the area of the Building is the subject of a Taking, then Landlord may terminate this Lease, by notice to Tenant, within sixty (60) days following the date upon which Landlord receives notice of any such Taking, provided that Landlord similarly terminates the leases of the tenants (including Tenant) occupying in the aggregate not less than fifty percent (50%) of the rentable area of the Building occupied immediately prior to such Taking.

(d) **Tenant's Termination Right.** If the part of the Real Property so Taken contains more than thirty percent (30%) of the total area of the Premises occupied by Tenant immediately prior to such Taking, or if, by reason of such Taking, Tenant no longer has reasonable means of access to the Premises, Tenant may terminate this Lease by notice to Landlord given within thirty (30) days following the date upon which Tenant is given notice of such Taking. If Tenant so notifies Landlord, this Lease shall end and expire upon the 30th day following the giving of such notice. If a part of the Premises shall be so Taken and this Lease is not terminated in accordance with this **Section 12.1**, Landlord, without being required to spend more than the net amount it receives as an award, shall restore that part of the Premises not so Taken to a self-contained rental unit substantially equivalent (with respect to character, quality, appearance and services) to that which existed immediately prior to such Taking, excluding Tenant's Property and any improvements or Alterations constructed in or to the Premises by or on behalf of Tenant from time-to-time (including the Landlord's Work), and, if applicable, the Fixed Rent shall be adjusted on a pro rata basis to reflect the resulting reduction in the rentable area of the Premises.

(e) **Apportionment of Rent.** Upon any termination of this Lease pursuant to the provisions of this **Article 12**, Rent shall be apportioned as of, and shall be paid or refunded up to and including, the date of such termination.

Section 12.2. Awards. Upon any Taking, Landlord shall receive the entire award for any such Taking, and Tenant shall have no claim against Landlord or the condemning authority for the value of any unexpired portion of the Term or Tenant's Alterations; and Tenant hereby assigns to Landlord all of its right in and to such award. Nothing contained in this **Article 12** shall be deemed to prevent Tenant from making a separate claim against the condemning authority in a separate proceeding for the then value of any Tenant's Property included in such Taking and for any moving expenses, provided any such award is in addition to, and does not result in a reduction of, the award made to Landlord.

Section 12.3. Temporary Taking. If a temporary Taking of all or any part of the Premises occurs during the Term, then Tenant shall give prompt notice to Landlord and the Term shall not be reduced or affected in any way and Tenant shall continue to pay all Rent payable by Tenant without reduction or abatement and to perform all of its other obligations under this Lease, except to the extent prevented from doing so by the condemning authority, and Tenant shall be entitled to receive any award or payment from the condemning authority for such use.

ARTICLE 13

ASSIGNMENT AND SUBLETTING

Section 13.1. Consent Requirements.

(a) **No Transfers Without Landlord Consent.** Except as expressly set forth in **Section 13.6**, Tenant shall not assign, mortgage, pledge, encumber, or otherwise transfer this Lease, whether by operation of law or otherwise, and shall not sublet, or permit, or suffer the Premises or any part thereof to be used or occupied by others (whether for desk space, mailing privileges or otherwise), without Landlord's express prior written consent in each instance. Any assignment, sublease, mortgage, pledge, encumbrance or transfer in contravention of the provisions of this **Article 13** shall be void and shall constitute an Event of Default.

(b) **Collection of Rent.** If, without Landlord's consent, this Lease is assigned or transferred, or any part of the Premises is sublet or occupied by anyone other than Tenant, or this Lease is encumbered (by operation of law or otherwise), then Landlord may collect rent from the assignee, subtenant or occupant, and apply the net amount collected to the Rent herein reserved. No such collection shall be deemed a waiver of the provisions of this **Article 13**, an acceptance of the assignee, subtenant or occupant as tenant, or a release of Tenant from the performance of Tenant's covenants hereunder, and in all cases Tenant shall remain fully liable for its obligations under this Lease.

(c) **Further Assignment/Subletting.** Landlord's consent to any assignment or subletting shall not relieve Tenant from the obligation to obtain Landlord's consent to any further assignment or subletting. In no event shall any permitted subtenant assign or encumber its sublease or further sublet any portion of its sublet space, or otherwise suffer or permit any portion of the sublet space to be used or occupied by others, without the express prior written consent of Landlord in each instance in accordance with the requirements of this **Article 13**.

Section 13.2. Tenant's Assignment/Sublease Notices. (a) If Tenant desires to assign this Lease or sublet all or any portion of the Premises, then prior to offering the Premises for rent, or listing the Premises (or any part thereof) with a broker, or showing the Premises to a prospective assignee or subtenant, Tenant shall give notice ("**Tenant's Assignment/Sublease Offer Notice**") thereof to Landlord, which shall include the date that Tenant anticipates that the assignment or sublease will become effective or commence. If the proposed transaction is a sublease which, when aggregated with all other subleases, would result in 50% or more of the rentable square footage of the Premises being sublet, then such Tenant's Assignment/Sublease Offer Notice shall be deemed an irrevocable offer from Tenant to Landlord of the right, at Landlord's option, to recapture such space as Tenant proposes to sublease (the "**Proposed Sublease Space**") and to terminate this Lease with respect to such Proposed Sublease Space, upon the terms and conditions hereinafter set forth. Such option may be exercised by notice (a "**Recapture Notice**") from Landlord to Tenant within forty-five (45) days after delivery of Tenant's Assignment/Sublease Offer Notice.

(b) If Landlord exercises its option to recapture the Proposed Sublease Space pursuant to the provisions of this **Section 13.2**, (a) this Lease shall end and expire with respect to such Proposed Sublease Space on the date that such sublease was to commence, provided that such date is in no event earlier than ninety (90) days after the date of the Tenant's Assignment/Sublease Offer Notice unless Landlord agrees to such earlier date, (b) Rent shall be apportioned, paid or refunded as of such date, (c) upon Landlord's request, Tenant shall enter into an amendment of this Lease ratifying and confirming such total or partial termination, and setting forth any appropriate modifications to the terms and conditions of this Lease as a result thereof, and (d) Landlord may elect, in its discretion, to lease the Proposed Sublease Space (or any part thereof) to Tenant's prospective assignee or subtenant. Tenant shall pay all costs to make the Proposed Sublease Space a self-contained rental unit and to install any required Building corridors.

Section 13.3. Consent to Assignment/Subletting. (a) If Landlord does not exercise Landlord's termination option provided under **Section 13.2**, then Landlord shall respond to a request for consent to a proposed sublease or assignment (a "**Tenant's Assignment/Sublease Consent Notice**") not more than twenty (20) days after delivery to Landlord of the following: (i) a copy of the proposed assignment agreement or sublease agreement (as applicable), (ii) a complete statement reasonably detailing the identity of the proposed assignee or subtenant (a "**Transferee**"), the nature of its business and its proposed use of the Premises, (iii) current financial information with respect to the Transferee, including its most recent financial statements, and (iv) such other information Landlord as may reasonably request (time being of the essence of the delivery of the response of Landlord to Tenant's Assignment/Sublease Consent Notice). Provided that no Event of Default then exists, Landlord's consent to the proposed assignment or subletting shall not be unreasonably withheld if the following conditions are satisfied:

(A) in Landlord's reasonable judgment, the proposed Transferee is engaged in a business or activity, and the Premises will be used in a manner, which (1) is in keeping with the then standards of the Building, (2) is for the Permitted Uses, and (3) does not violate any restrictions set forth in this Lease;

(B) the assignee has sufficient financial means to perform all of its obligations under this Lease (taking into consideration the financial means and continuing liability of Tenant under this Lease);

(C) the Transferee shall not be entitled, directly or indirectly, to diplomatic or sovereign immunity, regardless of whether the Transferee agrees to waive such diplomatic or sovereign immunity, and shall be subject to the service of process in, and the jurisdiction of the courts of, the Commonwealth of Massachusetts; and

(D) the Transferee is not a Prohibited Person.

(b) With respect to each sublease or assignment proposed by Tenant:

Landlord;

(i) the form of the proposed assignment or sublease shall be reasonably satisfactory to

(ii) no sublease shall be for a term ending later than one day prior to the Expiration Date;

(iii) no Transferee shall take possession of any part of the Premises, until an executed counterpart of such sublease or assignment has been delivered to Landlord and approved by Landlord as provided in **Section 13.3(c)**;

(iv) if an Event of Default occurs prior to the effective date of any such assignment of this Lease and such Event of Default remains uncured, then Landlord's consent thereto, if previously granted, shall be immediately deemed revoked without further notice to Tenant;

(v) each sublease shall be subject and subordinate to this Lease and to the matters to which this Lease is or shall be subordinate. Tenant and each Transferee shall be deemed to have agreed that upon the occurrence and during the continuation of an Event of Default hereunder, Tenant has hereby assigned to Landlord, and Landlord may, at its option, accept such assignment of, all right, title and interest of Tenant as sublandlord under such sublease. If this Lease terminates prior to the Expiration Date, then such sublease shall terminate and expire concurrent therewith; provided, however, if Landlord elects, in its sole and unfettered discretion, by express written notice to such Transferee, to recognize said sublease, then notwithstanding the termination of this Lease, the sublease shall remain in effect as a direct lease between Landlord and the Transferee, and such Transferee shall attorn to Landlord pursuant to the then executory provisions of such sublease, except that Landlord shall not be (A) liable for any previous act or omission of Tenant under such sublease, (B) subject to any counterclaim, offset, or defense which theretofore accrued to such Transferee against Tenant, (C) bound by any previous modification of such sublease not consented to by Landlord or by any prepayment of more than one month's rent, (D) bound to return such Transferee's security deposit, if any, except to the extent Landlord shall receive actual possession of such deposit and such Transferee shall be entitled to the return of all or any portion of such deposit under the terms of its sublease, or (E) obligated to make any payment to or on behalf of such Transferee, or to perform any alterations or improvements in the sublet space or the Building, or in any way to prepare the subleased space for occupancy, beyond Landlord's obligations under this Lease. The provisions of this **Section 13.3(b)(v)** shall be self-operative, and no further instrument shall be required to give effect to this provision, provided that the Transferee shall execute and deliver to Landlord any instruments Landlord may reasonably request to evidence and confirm such subordination and attornment; and

(vi) Tenant shall, upon demand, reimburse Landlord for all reasonable out-of-pocket expenses incurred by Landlord in connection with each proposed assignment or sublease, including any investigations as to the acceptability of the proposed assignee or subtenant, reviewing any plans and specifications for Alterations proposed to be made in connection therewith, the negotiation of any consent documents for such sublease or assignment, and all legal fees and costs incurred by Landlord in connection therewith; provided, however, with respect to each proposed sublease Tenant shall not be obligated to reimburse Landlord for more than \$5,000.00 on account of such costs and expenses, unless such sublease does not occur in the ordinary course of business (e.g. is in connection with a bankruptcy or reorganization of Tenant) or involves an amendment to this Lease or other additional documentation (other than a customary Landlord's consent to sublease agreement), or if Landlord provides unusual or extraordinary services in connection therewith.

(vii) Each subtenant shall obtain and maintain pollution legal liability insurance, which coverage shall include bodily injury, sickness, disease, death or mental anguish or shock sustained by any person; property damage including physical injury to or destruction of tangible property including the resulting loss of use thereof, clean-up costs, and the loss of use of tangible property that has not been physically injured or destroyed; and defense costs, charges and expenses incurred in the investigation, adjustment or defense of claims for such compensatory damages. Coverage shall apply to both sudden and non-sudden pollution conditions including the discharge, dispersal, release or escape of smoke, vapors, soot, fumes, acids, alkalis, toxic chemicals, liquids or gases, waste materials or other irritants, contaminants or pollutants into or upon land, the atmosphere or any watercourse or body of water. Claims-made coverage is permitted, provided the policy retroactive date is continuously maintained prior to the commencement date of the sublease, and coverage is continuously maintained during all periods in which subtenant occupies the Premises. Coverage shall be maintained with limits of not less than \$1,000,000 per incident with a \$2,000,000 policy aggregate and for a period of two (2) years thereafter.

Section 13.4. Tenant's Failure to Complete. If Landlord does not exercise Landlord's recapture option (if applicable) in connection with a proposed sublease in accordance with the provisions of **Section 13.2** and Tenant fails, within one hundred eighty (180) days after the delivery of Tenant's Assignment/Sublease Offer Notice, to deliver the respective proposed sublease (together with all of the documents and information required to be delivered to Landlord pursuant to **Section 13.3(a)**) then Tenant shall again comply with all of the provisions of **Sections 13.2** and **13.3** prior to entering into a sublease which, when aggregated with all other subleases, would result in 50% or more of the rentable square footage of the Premises being sublet.

Section 13.5. Profits. If Tenant enters into any assignment or sublease permitted hereunder or consented to by Landlord (excepting only assignments or subleases pursuant to **Section 13.6**), Tenant shall, within sixty (60) days of Landlord's consent to such assignment or sublease, deliver to Landlord (a) a list of Tenant's reasonable third-party costs and expenses paid or to be paid in connection with such transaction, including third-party brokerage fees, legal fees, design and construction expenses, improvement allowances, construction administration fees and, in the case of any sublease, any actual costs incurred by Tenant in separately demising the sublet space (collectively, "**Transaction Costs**"), (b) a list of all of Tenant's Property to be transferred to such Transferee, and (c) a schedule setting forth the Alterations theretofore performed in the Premises by or on behalf of Tenant and the amounts paid by Tenant in connection therewith, including the amount of Tenant's Contribution, if any (collectively, the "**Tenant's Alterations Costs**"). The Transaction Costs shall be amortized, on

a straight-line basis, over the term of any sublease. Tenant shall deliver to Landlord evidence of the payment of such Transaction Costs promptly after the same are paid. In consideration of such assignment or subletting, Tenant shall pay to Landlord fifty percent (50%) of any consideration paid to Tenant by the Transferee for or by reason of such assignment or sublease (including sums paid for the sale or rental of Tenant's Property, less the then fair market or rental value thereof, as reasonably determined by Landlord) after first deducting (i) the Transaction Costs, and (ii) the unamortized Tenant's Alterations Costs (i.e., the unamortized portion of the Tenant's Alterations Costs, amortized on a straight-line basis over the Initial Term), or in the event of a sublease of a portion of the Premises, a proportionate share thereof. In connection with an assignment, Tenant shall pay said amounts by not later than the effective date of the assignment. In connection with a sublease, Tenant shall pay said amounts monthly as and when paid by the subtenant to Tenant.

Section 13.6. Permitted Transfers.

(a) **Transfers of Ownership Interests in Tenant.** If Tenant is a legal entity, the transfer (by one or more transfers), directly or indirectly, by operation of law or otherwise, of a majority of the membership interests, or the stock or other beneficial ownership interests in Tenant (collectively "**Ownership Interests**") shall be deemed a voluntary assignment of this Lease and shall constitute a "**transfer**" of this Lease. Without limiting the foregoing, for purposes of this **Article 13**, the term "**transfers**" shall be deemed to include (x) the issuance of new Ownership Interests in Tenant which results in a majority of the Ownership Interests in Tenant being held by a person or entity which is not Guarantor or an Affiliate of Guarantor, and (y) the sale or transfer of all or substantially all of the assets of Tenant in one or more transactions, and/or the merger or consolidation of Tenant into or with another business entity which is not Guarantor or an Affiliate of Guarantor, subject to the provisions of **Section 13.6(b)**. Notwithstanding anything to the contrary, the provisions of this **Article 13** shall not apply to the transfer of Ownership Interests in Tenant if and so long as (i) the Ownership Interests in Tenant or Guarantor are publicly traded on a nationally recognized stock exchange, and (ii) after giving effect to such transfer, (A) Tenant continues to be Controlled by Guarantor or a Qualified Replacement Guarantor, and (B) the Guaranty remains in full force and effect.

(b) **Mergers, Consolidations of Tenant.** Notwithstanding anything to the contrary, the prior consent of Landlord shall not be required with respect to either (a) an assignment of this Lease or a sublease of all or part of the Premises to an Affiliate of Tenant, or (b) an assignment of this Lease or sublease of all of the Premises to a business entity into or with which Tenant is merged or consolidated, or to which all or substantially all of Tenant's assets are transferred, or which acquires all or substantially all of the Ownership Interests in Tenant, as long as, in each instance (i) such transaction was made for a legitimate independent business purpose and not for the sole purpose of transferring this Lease, (ii) in the event of any such assignment of this Lease, Guarantor or a Qualified Replacement Guarantor has a Market Capitalization which is not less than the Market Capitalization of Guarantor as of the Effective Date; (iii) proof satisfactory to Landlord of such Market Capitalization is delivered to Landlord at least ten (10) days prior to the effective date of any such transaction (provided, however, if pursuant to applicable Requirements the Guarantor or the Qualified Replacement Guarantor (as applicable) is prohibited from providing such information concerning Market Capitalization to Landlord ten (10) days prior to the effective date of said transaction, then said information shall be delivered to Landlord as soon thereafter as Guarantor or Qualified Replacement Guarantor (as applicable) is permitted to do so); and (iv) by not later than the effective date of the transaction, either (A) Guarantor reaffirms its obligations and liabilities under the Guaranty and a reasonably satisfactory instrument evidencing said reaffirmation is delivered to Landlord, or (B) a Qualified Replacement Guarantor provides Landlord with a replacement Guaranty,

substantially in the form of **Exhibit N** attached hereto, guaranteeing the obligations and liabilities of Tenant under this Lease. Notwithstanding the foregoing, Tenant shall have no right to assign this Lease or sublease all or any portion of the Premises without Landlord's consent pursuant to this **Section 13.6** if Tenant is not a Permitted Transferee.

A "**Qualified Replacement Guarantor**" shall mean an entity which Controls the successor Tenant and which satisfies the following conditions: (i) the Qualified Replacement Guarantor has a Market Capitalization which is not less than the Market Capitalization of Guarantor as of the Effective Date; (ii) proof satisfactory to Landlord of such Market Capitalization is delivered to Landlord at least ten (10) days prior to the effective date of any such transaction, (iii) the Qualified Replacement Guarantor assumes, affirms and agrees, pursuant to a reasonably satisfactory Guaranty, substantially in the form of **Exhibit N** attached hereto, to guaranty all of the liabilities and obligations of Tenant under this Lease; (iv) the Qualified Replacement Guarantor holds (directly or indirectly) not less than a majority of the ownership interests in Tenant; and (v) the Qualified Replacement Guarantor has not been subject to any petition or proceeding for bankruptcy, reorganization or insolvency proceedings. Upon the delivery of the Guaranty from the Qualified Replacement Guarantor, subject to the satisfaction of the foregoing conditions, (a) the Qualified Replacement Guarantor shall become the "**Guarantor**" for all purposes under this Lease, and (b) the then-current Guarantor shall be automatically released from all liabilities and obligations thereafter arising under the Guaranty. Upon request from Tenant, Landlord shall provide confirmation of said release.

(c) **Permitted Occupants.** Notwithstanding the foregoing, the prior consent of Landlord shall not be required, and Tenant shall not be obligated to deliver a Tenant's Assignment/Sublease Offer Notice or Tenant's Assignment/Sublease Consent Notice, and the provisions of **Section 13.2** shall not apply with respect to, occupancy arrangements with employees of any company, firm or other entity (i) which is an Affiliate of Tenant, (ii) with whom Tenant has a contractual or other relationship providing for cooperative or collaborative research or development work, who is or typically would be located by Tenant in one of its facilities, and/or (iii) in which Tenant has a beneficial interest and which is actively engaged in research activities using technology, techniques and/or equipment developed by or in collaboration with Tenant (collectively, "**Permitted Occupants**") for the use and occupancy of space within the Premises, provided that (a) Tenant does not separately demise such space and the Permitted Occupants utilize, in common with Tenant, common entryways to the Premises as well as shared central services, such as reception, photocopying and the like; (b) the Permitted Occupants shall occupy, in the aggregate, not more than 20% of the rentable area of the Premises; (c) the Permitted Occupants occupy space in the Premises for the Permitted Use and for no other purpose; and (d) if requested by Landlord, Tenant notifies Landlord, in writing, of the identity of any such Permitted Occupants prior to occupancy of the Premises by such Permitted Occupants. If any Permitted Occupants occupy any portion of the Premises as described herein, (i) the Permitted Occupants shall comply with all provisions of this Lease, and a default by any Permitted Occupant shall be deemed a default by Tenant under this Lease; (ii) all notices required to be provided by Landlord under this Lease shall be forwarded only to Tenant in accordance with the terms of this Lease and in no event shall Landlord be required to send any notices to any Permitted Occupants; (iii) in no event shall any use or occupancy of any portion of the Premises by any Permitted Occupant release or relieve Tenant from any of its obligations under this Lease; (iv) the Permitted Occupants shall be deemed to be contractors of Tenant for purposes of Tenant's indemnification obligations set forth in this Lease; and (v) in no event shall the occupancy of any portion of the Premises by Permitted Occupants be deemed to create a landlord/tenant relationship between Landlord and such Permitted Occupants, and, in all instances, Tenant shall be considered the sole tenant under this Lease notwithstanding the occupancy of any portion of the Premises by the Permitted Occupants.

(d) **Applicability.** The limitations set forth in this **Section 13.6** shall apply to Transferee(s) and guarantor(s) of this Lease, if any, and any transfer by any such entity in violation of this **Section 13.6** shall be a transfer in violation of **Section 13.1**.

(e) **Modifications, Takeover Agreements.** Any modification, amendment or extension of a sublease and/or any other agreement by which a landlord of a building other than the Building or its Affiliate agrees to assume the obligations of Tenant under this Lease shall be deemed a sublease for the purposes of **Section 13.1** hereof.

Section 13.7. Binding on Tenant; Indemnification of Landlord. Notwithstanding any assignment or subletting or any acceptance of rent by Landlord from any Transferee, Tenant shall remain fully liable for the payment of all Rent due and for the performance of all the covenants, terms and conditions contained in this Lease on Tenant's part to be observed and performed, and any default under any term, covenant or condition of this Lease by any Transferee or anyone claiming under or through any Transferee shall be deemed to be a default under this Lease by Tenant. Tenant shall indemnify, defend, protect and hold harmless Landlord from and against any and all Losses resulting from any claims that may be made against Landlord by the Transferee or anyone claiming under or through any Transferee or by any brokers or other persons or entities claiming a commission or similar compensation in connection with the proposed assignment or sublease, irrespective of whether Landlord shall give or decline to give its consent to any proposed assignment or sublease, or if Landlord shall exercise any of its options under this **Article 13**.

Section 13.8. Assumption of Obligations. No assignment or transfer shall be effective unless and until (i) the Transferee executes, acknowledges and delivers to Landlord an agreement in form and substance reasonably satisfactory to Landlord whereby the assignee (a) assumes Tenant's obligations under this Lease and (b) agrees that, notwithstanding such assignment or transfer, the provisions of **Section 13.1** hereof shall be binding upon it in respect of all future assignments and transfers; and (ii) Guarantor or a Qualified Replacement Guarantor reaffirms its obligations and liabilities under the Guaranty and a reasonably satisfactory instrument evidencing said reaffirmation is delivered to Landlord not less than ten (10) days prior to the effective date of the transaction.

Section 13.9. Tenant's Liability. The joint and several liability of Tenant, any successors-in-interest of Tenant, and/or Guarantor and the due performance of Tenant's obligations under this Lease shall not be discharged, released or impaired by any agreement or stipulation made by Landlord, or any grantee or assignee of Landlord, extending the time, or modifying any of the terms and provisions of this Lease, or by any waiver or failure of Landlord, or any grantee or assignee of Landlord, to enforce any of the terms and provisions of this Lease.

Section 13.10. Listings in Building Directory. The listing of any name other than that of Tenant on the doors of the Premises, the Building directory or elsewhere shall not vest any right or interest in this Lease or in the Premises, nor be deemed to constitute Landlord's consent to any assignment or transfer of this Lease or to any sublease of the Premises or to the use or occupancy thereof by others. Any such listing shall constitute a privilege revocable in Landlord's discretion by notice to Tenant.

ARTICLE 14

ACCESS TO PREMISES

Section 14.1. Landlord's Access.

(a) Landlord, Landlord's agents and utility service providers servicing the Building may erect, use and maintain concealed ducts, pipes, and conduits in and through the Premises, provided (i) such ducts, pipes and conduits shall be installed above the dropped ceilings, below the floors, and/or in the walls of the Premises, and (ii) such use does not cause the usable area of the Premises to be reduced beyond a de minimis amount. Landlord shall promptly repair any damage to the Premises caused by any work performed pursuant to this **Article 14**.

(b) Landlord, Landlord's Agent, any Lessor or Mortgagee, Landlord's partners and investors, and/or any prospective partner, investor, or Mortgagee, together with their respective agents and representatives, shall have the right to enter the Premises at all reasonable times, upon reasonable notice (which notice may be oral) except in the case of emergency, to examine the Premises, to show the Premises to prospective purchasers, Mortgagees, and/or Lessors, and their respective agents and representatives or others, and to perform Restorative Work to the Premises or the Building, and during the last eighteen (18) months preceding the Expiration Date, to prospective tenants and their respective agents and representatives.

In connection with any such access to the Premises, Landlord will (i) except for routine access such as access for performing recurring obligations such as providing cleaning services, or repair or maintenance services, and except in the case of emergency, provide reasonable (not less than twenty-four (24) hours') advance notice of such entry into the Premises, and (ii) exercise commercially reasonable efforts to minimize disruption to the usual and customary business operations of Tenant in the Premises. In addition, with respect to any access to the Lab Areas, (a) a representative or agent of Tenant shall accompany all such people entering the Lab Areas (and Tenant shall make a representative or agent available on reasonable prior notice), and (b) prior to such entry into the Lab Areas, on request, each such person shall enter into a reasonable customary confidentiality agreement provided by Tenant.

(c) All parts (except surfaces facing the interior of the Premises) of all walls, windows and exterior doors bounding the Premises, all balconies, terraces and roofs adjacent to the Premises, all space in or adjacent to the Premises used for shafts, stacks, stairways, mail chutes, conduits and other mechanical facilities, Building Systems, Common Facilities and Common Areas are not part of the Premises, and Landlord shall have the use thereof and access thereto through the Premises for the purposes of operation, maintenance, alteration and repair of the Building.

Section 14.2. Building Name. Landlord has the right at any time and from time to time to change the name(s), number(s) or designation(s) by which the Building is (or are) commonly known, subject to prior written notice to Tenant and Tenant's prior written approval, which approval shall not be unreasonably withheld, conditioned, or delayed.

Section 14.3. Light and Air. If at any time any windows of the Premises are temporarily darkened or covered over by reason of any Restorative Work, any of such windows are permanently darkened or covered over due to any Requirement or there is otherwise a diminution of light, air or view by another structure which may hereafter be erected (whether or not by Landlord), Landlord shall not be liable for any damages and Tenant shall not be entitled to any compensation or abatement of any Rent, nor shall the same release Tenant from its obligations hereunder or constitute an actual or constructive eviction.

ARTICLE 15

DEFAULT

Section 15.1. Tenant's Defaults. Each of the following events shall be an "Event of Default" hereunder:

(a) Tenant fails to pay when due any payment of Rent within five (5) Business Days following delivery to Tenant of written notice that such payment was not received when due; provided however, that Landlord shall not be obligated to deliver such written notice more than twice in any twelve-month period and upon the third such occurrence in any twelve (12) month period Tenant shall be in default if it fails to pay when due any payment of Rent; or

(b) Tenant fails to pay when due any Tenant's Progress Payment within five (5) Business Days following delivery to Tenant of written notice that such payment was not received when due;

(c) Tenant or any Tenant Party causes a release of Hazardous Materials in violation of any applicable Environmental Law or a release that requires the performance of a response action pursuant to any Environmental Law, and such response action is not completed by the date which is thirty (30) days after notice by Landlord to Tenant thereof, or if such response action is of a nature that it cannot be completed within thirty (30) days, failure by Tenant to commence to such response action within said thirty (30) days, and thereafter diligently prosecute to completion all steps necessary to such response action as soon as practicable thereafter; or

(d) Tenant fails to observe or perform any other term, covenant or condition of this Lease and such failure continues for more than thirty (30) days (ten (10) days with respect to a default under **Article 3**) after notice by Landlord to Tenant of such default, or if such default (other than a default under **Article 3**) is of a nature that it cannot be completely remedied within thirty (30) days, failure by Tenant to commence to remedy such failure within said thirty (30) days, and thereafter diligently prosecute to completion all steps necessary to remedy such default, provided in all events the same is completed within ninety (90) days; or

(e) Tenant fails to timely provide or maintain a Letter of Credit in the then-applicable Letter of Credit Amount, in accordance with the provisions of **Article 28**, or if Landlord draws on the Letter of Credit, and Tenant fails to deposit with Landlord the amount so applied or retained by Landlord, or to provide Landlord with a replacement Letter of Credit (as hereinafter defined), if applicable, within five (5) days after notice by Landlord to Tenant stating the amount applied or retained; or

(f) Tenant files a voluntary petition in bankruptcy or insolvency, or is adjudicated a bankrupt or insolvent, or files any petition or answer seeking any reorganization, liquidation, dissolution or similar relief, or makes an assignment for the benefit of creditors or seeks or consents to or acquiesces in the appointment of any trustee, receiver, liquidator or other similar official for Tenant or for all or any part of Tenant's property; or

(g) a court of competent jurisdiction shall enter an order, judgment or decree appointing a trustee, receiver or liquidator of Tenant, or of the whole or any substantial part of its property, or approving a petition filed against Tenant seeking reorganization or arrangement of Tenant under the bankruptcy laws of the United States, as now in effect or hereafter amended, or any state thereof; and such order, judgment or decree shall not be vacated or set aside or stayed within sixty (60) days from the date of entry thereof.

Upon the occurrence of any one or more of such Events of Default, Landlord may, in addition to all other remedies available at law or in equity, at its sole option, (i) immediately, or at any time after such Event of Default, in accordance with all applicable Requirements, re-enter the Premises or any part thereof, in the name of the whole and repossess the same as of Landlord's former estate, and dispossess Tenant and any other persons or entities from the Premises and remove any and all of their property and effects from the Premises, without being deemed guilty of any manner of trespass and without prejudice to any other rights or remedies, and/or (ii) give to Tenant three (3) days' notice of cancellation of this Lease, in which event this Lease and the Term shall terminate (whether or not the Term shall have commenced) with the same force and effect as if the date set forth in the notice was the Expiration Date stated herein, and Tenant shall then quit and surrender the Premises to Landlord, but Tenant shall remain liable for damages as provided in this **Article 15**. Any notice of cancellation of the Term may be given simultaneously with any notice of default given to Tenant.

Section 15.2. Landlord's Remedies.

(a) **Possession/Reletting.** If any Event of Default occurs and Landlord reenters the Premises or terminates this Lease as aforesaid.

(i) **Surrender of Possession.** Tenant shall quit and surrender the Premises to Landlord.

(ii) **Disposition of Tenant's Property.** In the event of any such termination, entry or re-entry, Landlord shall have the rights to remove and store Tenant's property and that of persons claiming by, through or under Tenant at the sole risk and expense of Tenant and, if Landlord so elects, (x) to sell such property at public auction or private sale and apply the net proceeds to the payment of all sums due to Landlord from Tenant and pay the balance, if any, to Tenant, or (y) to dispose of such property in any manner in which Landlord shall elect, Tenant hereby agreeing to the fullest extent permitted by law that it shall have no right, title or interest in any property remaining in the Premises after such termination, entry or re-entry.

(iii) **Landlord's Reletting.** Landlord, at Landlord's option, may relet all or any part of the Premises from time to time, either in the name of Landlord or otherwise, to such tenant or tenants, for any term ending before, on or after the Expiration Date, at such rental and upon such other conditions (which may include concessions and free rent periods) as Landlord, in its sole discretion, may determine. Landlord shall have no obligation to and shall not be liable for refusal or failure to relet the Premises or any part thereof, or, in the event of any

such reletting, for refusal or failure to collect any rent due upon any such reletting and Tenant hereby waives, to the extent permitted by applicable Requirements, any obligation Landlord may have to mitigate Tenant's damages; and no such refusal or failure shall relieve Tenant of, or otherwise affect, any liability under this Lease. Notwithstanding the foregoing, Landlord will use reasonable efforts to relet the Premises after Tenant vacates the Premises; however, the marketing of the Premises in a manner similar to the manner in which Landlord markets other premises within Landlord's control in the Building shall be deemed to have satisfied Landlord's obligation to use "reasonable efforts." In no event shall Landlord be required to (i) solicit or entertain negotiations with any other prospective tenants for the Premises unless and until Landlord obtains full and complete possession of the Premises, including the final and unappealable legal right to relet the Premises free of any claim of Tenant, (ii) lease the Premises to a tenant whose proposed use, in Landlord's reasonable judgment, will be unacceptable, (iii) relet the Premises prior to leasing any other vacant space in the Building, suitable for the use of the prospective tenant, (iv) lease the Premises for a rental rate less than the current fair market rent then prevailing for similar space in Comparable Buildings, or (v) enter into a lease with any proposed tenant that does not have, in Landlord's reasonable opinion, sufficient financial wherewithal and resources to satisfy its financial obligations under the prospective lease. Landlord shall be entitled to take into account in connection with any such reletting of the Premises all relevant factors which would be taken into account by a sophisticated landlord in securing a replacement tenant for the Premises including the first class quality of the Building, matters of tenant mix, and the financial responsibility of any such replacement tenant. Landlord, at Landlord's option, may make such alterations, decorations and other physical changes in and to the Premises as Landlord, in its sole discretion, considers advisable or necessary in connection with such reletting or proposed reletting. No action or inaction by Landlord in connection with such reletting shall relieve Tenant of any liability under this Lease or otherwise affecting any such liability.

(iv) **Remedies Not Exclusive.** The specified remedies to which Landlord may resort hereunder are not intended to be exclusive of any remedies or means of redress to which Landlord may, at any time, be entitled lawfully and Landlord may invoke any remedy (including the remedy of specific performance) allowed at law or in equity as if specific remedies were not herein provided for.

(v) **Summary Process.** Upon any Event of Default of Tenant, or the expiration or termination of this Lease, Landlord shall have the right of summary process under M.G.L.A. Chapter 239, and/or other applicable statutes, and such other rights to recover possession as permitted by applicable Requirements.

(b) **Tenant's Waiver.** To the maximum extent permitted by law, Tenant, on its own behalf and on behalf of all persons or entities claiming through or under Tenant, including all creditors, hereby waives all rights which Tenant and all such persons or entities might otherwise have under any Requirement (including M.G.L. Chapter 186, Section 11); (i) to redeem, or to re-enter or repossess the Premises, or (ii) to restore the operation of this Lease, after (A) Tenant shall have been dispossessed by judgment or by warrant of any court or judge, (B) any re-entry by Landlord, or (C) any expiration or early termination of the term of this Lease, whether such dispossess, re-entry, expiration or termination shall be by operation of law or pursuant to the provisions of this Lease. The words "**re-enter**," "**re-entry**" and "**re-entered**" as used in this Lease shall not be deemed to be restricted to their technical legal meanings.

(c) **Tenant's Breach.** Upon the breach or threatened breach by Tenant, or any persons or entities claiming through or under Tenant, of any term, covenant or condition of this Lease, Landlord shall have the right to enjoin such breach and to invoke any other remedy allowed at law or in equity as if re-entry, summary process proceedings and other special remedies were not provided in this Lease for such breach. The rights to invoke the remedies set forth above are cumulative and shall not preclude Landlord from invoking any other remedy allowed at law or in equity.

Section 15.3. Landlord's Damages.

(a) **Amount of Damages.** If this Lease and the Term, or Tenant's right to possession of the Premises shall terminate, or Landlord shall re-enter the Premises, as provided in **Section 15.1**, then, in any of such events:

(i) Tenant shall pay to Landlord all items of Rent payable under this Lease by Tenant to Landlord prior to the date of termination or repossession;

(ii) Landlord may retain all monies, if any, paid by Tenant to Landlord, whether as prepaid Rent, a security deposit or otherwise, which monies, to the extent not otherwise applied to amounts due and owing to Landlord, shall be credited by Landlord against any damages payable by Tenant to Landlord;

(iii) Tenant shall pay to Landlord, in monthly installments, on the days specified in this Lease for payment of installments of Fixed Rent, any Deficiency; it being understood that Landlord shall be entitled to recover the Deficiency from Tenant each month as the same shall arise, and no suit to collect the amount of the Deficiency for any month, shall prejudice Landlord's right to collect the Deficiency for any subsequent month by a similar proceeding; and

(iv) whether or not Landlord shall have collected any monthly Deficiency, Tenant shall pay to Landlord, on demand, at the election of Landlord, in lieu of any further Deficiency and as liquidated and agreed final damages, a sum equal to the amount by which the Rent for the period which otherwise would have constituted the unexpired portion of the Term (assuming the Additional Rent during such period to be the same as was payable for the year immediately preceding such termination or re-entry, increased in each succeeding year by 4% (on a compounded basis)) exceeds the then fair and reasonable rental value of the Premises, for the same period (with both amounts being discounted to present value at a rate of interest equal to the Base Rate) less the aggregate amount of Deficiencies theretofore collected by Landlord pursuant to the provisions of **Section 15.3(a)(iii)** for the same period. If, before presentation of proof of such liquidated damages to any court, commission or tribunal, the Premises, or any part thereof, shall have been relet by Landlord for the period which otherwise would have constituted the unexpired portion of the Term, or any part thereof, the amount of rent reserved upon such reletting shall be deemed prima facie, to be the fair and reasonable rental value for the part or the whole of the Premises so relet during the term of the reletting.

(b) **Reletting.** If the Premises, or any part thereof, shall be relet together with other space in the Building, the rents collected or reserved under any such reletting and the expenses of any such reletting shall be equitably apportioned for the purposes of this **Section 15.3**. Tenant shall not be entitled to any rents collected or payable under any reletting, whether or not such rents exceed the Fixed Rent reserved in this Lease. Nothing contained in **Article 15** shall be deemed to limit or preclude the recovery by Landlord from Tenant of the maximum amount allowed to be obtained as damages by any Requirement, or of any sums or damages to which Landlord may be entitled in addition to the damages set forth in this **Section 15.3**.

Section 15.4. Interest and Late Charges. If any payment of Rent is not paid within five (5) Business Days after the date when due, interest shall accrue on such payment, from the date such payment became due until paid at the Interest Rate. Tenant acknowledges that late payment by Tenant of Rent will cause Landlord to incur costs not contemplated by this Lease, the exact amount of such costs being extremely difficult and impracticable to fix. Such costs include, without limitation, processing and accounting charges, and late charges that may be imposed on Landlord by the terms of any note secured by a Mortgage covering the Real Property (or any part thereof). Therefore, in addition to interest, if any amount is not paid when due, a late charge equal to five percent (5%) of such amount shall be assessed, provided, however, that on two (2) occasions during any calendar year of the Term, Landlord shall give Tenant notice of such late payment and Tenant shall have a period of five (5) Business Days thereafter in which to make such payment before any late charge is assessed. Such interest and late charges shall constitute Additional Rent payable by Tenant, and are separate and cumulative and are in addition to and shall not diminish or represent a substitute for any of Landlord's rights or remedies under any other provision of this Lease or otherwise available at law or in equity.

Section 15.5. Other Rights of Landlord. If Tenant fails to pay any Additional Rent when due, Landlord, in addition to any other right or remedy, shall have the same rights and remedies as in the case of a default by Tenant in the payment of Fixed Rent. If Tenant is in arrears in the payment of Rent, Tenant waives Tenant's right, if any, to designate the items against which any payments made by Tenant are to be credited, and Landlord may apply any payments made by Tenant to any items Landlord sees fit, regardless of any request by Tenant.

ARTICLE 16

LANDLORD'S RIGHT TO CURE; FEES AND EXPENSES

If an Event of Default by Tenant occurs under this Lease, then Landlord, without waiving such default, may perform such obligations at Tenant's expense: (a) immediately, and without notice, in the case of emergency or if the default (i) materially interferes with the use by any other occupant of the Building, (ii) materially interferes with the efficient operation of the Building, (iii) results in a violation of any Requirement, or (iv) results or may result in a cancellation of any insurance policy maintained by Landlord, and (b) in any other case if such default continues after ten (10) days from the date Landlord gives notice of Landlord's intention to perform the defaulted obligation. All costs and expenses incurred by Landlord in connection with any such performance by it and all costs and expenses, including reasonable counsel fees and disbursements, incurred by Landlord as a result of any Event of Default by Tenant under this Lease or in any action or proceeding (including any summary process proceeding) brought by Landlord to enforce any obligation of Tenant under this Lease and/or right of Landlord in or to the Premises, or any other such action or proceeding in which Landlord is a party, shall be paid by Tenant to Landlord not later than thirty (30) days after delivery of demand therefor, with

interest thereon at the Interest Rate from the date when due and payable. Except as expressly provided to the contrary in this Lease, all costs and expenses which, pursuant to this Lease are incurred by Landlord and payable to Landlord by Tenant, and all charges, amounts and sums payable to Landlord by Tenant for any property, material, labor, utility or other services which, pursuant to this Lease, attributable directly to Tenant's use and occupancy of the Premises or presence at the Building, or at the request and for the account of Tenant, are provided, furnished or rendered by Landlord, shall become due and payable by Tenant to Landlord within thirty (30) days after receipt of Landlord's invoice for such amount.

ARTICLE 17

NO REPRESENTATIONS BY LANDLORD; LANDLORD'S APPROVAL

Section 17.1. No Representations. Except as expressly set forth herein, Landlord and Landlord's agents have made no warranties, representations, statements or promises with respect to the Building, the Real Property, or the Premises and no rights, easements or licenses are or have been acquired by Tenant by implication or otherwise. Tenant is entering into this Lease after full investigation and is not relying upon any statement or representation made by Landlord not expressly and specifically set forth in this Lease.

Section 17.2. No Money Damages. Wherever in this Lease Landlord's consent or approval is required, if Landlord refuses to grant such consent or approval, whether or not Landlord expressly agreed that such consent or approval would not be unreasonably withheld, Tenant shall not make, and Tenant hereby waives, any claim for money damages (including any claim by way of set-off, counterclaim or defense) based upon Tenant's claim or assertion that Landlord unreasonably withheld or delayed its consent or approval. Tenant's sole remedy shall be an action or proceeding to enforce such provision, by specific performance, injunction or declaratory judgment. In no event shall Landlord be liable for, and Tenant, on behalf of itself and all other Tenant Parties, hereby waives any claim for, any indirect, consequential or punitive damages, including loss of profits or business opportunity, arising under or in connection with this Lease. Excepting only as set forth in **Sections 18.2, 18.3, and/or 27.4**, in no event shall Tenant be liable for and Landlord hereby waives any claim for, any indirect, consequential or punitive damages, arising under or in connection with this Lease, including loss of profits or business opportunity, arising under or in connection with this Lease

Section 17.3. Reasonable Efforts. For purposes of this Lease, except as expressly and specifically set forth herein, "reasonable efforts" by Landlord or Tenant shall not include an obligation to employ contractors or labor at overtime or other premium pay rates or to incur any other overtime costs or additional expenses whatsoever.

ARTICLE 18

END OF TERM

Section 18.1. Expiration. Upon the expiration or other termination of the Term of this Lease, Tenant shall quit and surrender to Landlord the Premises (including all fixed lab benches, fume hoods, electric, plumbing, heating and sprinkling systems, fixtures and outlets, vaults, paneling, molding, shelving, radiator enclosures, cork, rubber, linoleum and composition floors, ventilating, silencing, air conditioning and cooling equipment therein and all other then-remaining components of Landlord's Work, or provided by Landlord or paid for in whole or in part by any allowance provided to Tenant by Landlord under this Lease) vacant, broom clean and in good order and condition, ordinary wear and tear and damage for which Tenant is not responsible under the terms of this Lease excepted, and Tenant shall remove all of Tenant's Property and Rooftop Equipment, all autoclaves and cage washers, Tenant's vivarium, and, in accordance with and subject to the provisions of **Section 5.3**, any Specialty Alterations.

Section 18.2. Decommissioning.

(a) A “**Surrender Plan**” shall mean a detailed plan and narrative description, prepared by a qualified independent certified industrial hygienist engaged by Tenant and reasonably acceptable to Landlord, which describes and outlines in detail the actions proposed to be undertaken by Tenant in connection with the yield-up and surrender of the Premises, as required to cause the Premises to be free of Hazardous Materials and otherwise released for unrestricted use and occupancy at the expiration or earlier termination of this Lease, including such actions as may be necessary to cause the Premises to be decommissioned in accordance with the regulations of the Massachusetts Department of Public Health (the “**MDPH**”) for the control of radiation and to be released for unrestricted use by the Radiation Control Program of the MDPH, as and to the extent applicable. Without limitation, the Surrender Plan shall address the cleaning and removal of all Hazardous Materials from all floors, walls, ceilings, counters, piping, supply lines, waste lines and plumbing in or serving the Premises, and all exhaust or other ductwork in or serving the Premises. The Surrender Plan shall be prepared such that, following its implementation, the Premises and all exhaust and other duct work in the Premises may be reused by a subsequent tenant or disposed of in conformance with all applicable Environmental Laws without incurring additional costs or expenses on account of any Hazardous Materials, or undertaking unusual or special procedures for demolition, disposal, investigation, assessment, cleaning or removal of Hazardous Materials, or requiring notices to or filings with any Governmental Authorities in connection with such Hazardous Materials. The Surrender Plan (i) shall be accompanied by a current list of (A) all local, state and federal licenses, registrations, permits and approvals held by or on behalf of Tenant or any Tenant Party with respect to Hazardous Materials in, on, under, at or about the Premises, and (B) an updated schedule identifying all of Tenant’s Hazardous Materials. The Surrender Plan shall be subject to the review and approval of Landlord and Landlord’s environmental consultant in all respects.

(b) Tenant shall prepare and deliver the proposed Surrender Plan to Landlord for its review and approval not later than sixty (60) days prior to the Expiration Date (or, if applicable, within five (5) business days after any earlier termination of the Term of this Lease). If Landlord or Landlord’s consultant shall request any reasonable or customary revisions to the proposed Surrender Plan, then Tenant shall revise the proposed Surrender Plan and resubmit the proposed Surrender Plan to Landlord for its approval.

(c) On or before the Expiration Date (or within thirty (30) days after any earlier termination of the Term of this Lease), Tenant shall implement the approved Surrender Plan using a contractor approved by Landlord. In connection therewith, Tenant shall, at its sole costs and expense, (i) clean and decommission all interior surfaces of the Premises (including floors, walls, ceilings, and counters), and all piping, supply lines, waste lines, acid neutralization systems and plumbing in and/or exclusively serving the Premises, and all exhausts or other ductwork located in and/or exclusively serving the Premises, in each case to the extent required to remove and remediate any Hazardous Materials or other chemical or biological materials used in the operation of the Premises, (ii) perform or cause to be performed all other actions described in the approved Surrender Plan, and (iii) deliver to Landlord a report prepared by a qualified independent certified industrial hygienist reasonably acceptable to Landlord, confirming that the Premises do not contain any Hazardous Materials and that all of the work contemplated by the approved Surrender Plan has been satisfactorily completed (the “**Decommissioning Closure Report**”). Without limitation, the Decommissioning Closure Report shall also include reasonable detail concerning the clean-up measures taken by Tenant, the clean-up locations, the tests performed by Tenant, and the analytic results. Landlord may elect, subject to

reimbursement by Tenant, to cause Landlord's environmental consultant to inspect the Premises and to perform such additional testing and reviews as may be reasonably necessary to confirm that the Premises are, as of the expiration of the Term (or, if applicable, the date which is thirty (30) days after any earlier termination of this Lease), free of Hazardous Materials and otherwise available for unrestricted use and occupancy as aforesaid. Landlord may elect to deliver the Surrender Plan, the Decommissioning Closure Report and any report by Landlord's environmental consultant with respect to the surrender of the Premises to third parties and such third parties shall be entitled to rely on the Decommissioning Closure Report.

(d) If (i) Tenant fails to prepare timely an acceptable Surrender Plan, or (ii) Tenant fails to submit timely an acceptable Decommissioning Closure Report based on the Surrender Plan approved by Landlord, or (iii) Tenant fails to complete all of the actions contemplated by the approved Surrender Plan, then in any such event Landlord may elect to take any such actions as Landlord may deem reasonable or appropriate to assure that the Premises are surrendered free and clear of Hazardous Materials and in the condition required hereunder (the "**Landlord Remediation Actions**"). Tenant shall reimburse Landlord, as Additional Rent, for all commercially reasonable costs and expenses incurred by Landlord in connection with any such Landlord Remediation Actions. Without limitation, if Tenant remains in possession of the Premises after the Expiration Date or the earlier termination of the Term of this Lease, then the foregoing shall not limit, restrict or prohibit Landlord from exercising any and all available rights and remedies available to Landlord at law or in equity to regain possession of the Premises, including, but not limited to, prosecuting a summary process proceeding; provided, however, whether or not Tenant remains in the Premises after the Term (or the earlier termination of this Lease) or has vacated the Premises by the Expiration Date (or the earlier termination of this Lease), for with respect to each month or portion thereof during the period of time commencing on the Expiration Date (or earlier termination of this Lease) until the earlier of (i) the date on which Landlord elects to take any such Landlord's Remediation Actions, and (ii) the date on which Tenant completes all of the actions contemplated by the Surrender Plan and delivers the Decommissioning Closure Report (in the form required hereunder) to Landlord, Tenant shall pay to Landlord a fee equal to (A) 150% of the monthly Fixed Rent payable under this Lease immediately prior to such termination, plus (B) Tenant's Tax Payment, Tenant's Operating Payment, and Tenant's Insurance Payment attributable to such period of time. If Tenant vacates the Premises prior to completing all of the actions contemplated by the Surrender Plan and to delivering the Decommissioning Closure Report, then unless and until Landlord elects to take Landlord's Remediation Actions, Landlord will provide Tenant with reasonable access to the Premises as required to implement the Surrender Plan.

Section 18.3. Holdover Rent. Any holding over by Tenant after the expiration or earlier termination of the Term shall be treated as a tenancy at sufferance, at the Rent set forth below, and otherwise on the terms and conditions of this Lease. Landlord and Tenant recognize that Landlord's damages resulting from Tenant's failure to timely surrender possession of the Premises may be substantial, may exceed the amount of the Rent payable hereunder, and will be impossible to accurately measure. Accordingly, if possession of the Premises is not surrendered to Landlord by the Expiration Date or sooner termination of this Lease, in addition to any other rights or remedies Landlord may have hereunder or at law, Tenant shall pay to Landlord for each month (or any portion thereof) during which Tenant holds over in the Premises after the Expiration Date or sooner termination of this Lease, a holdover charge calculated as follows: (i) for each day during which Tenant holds over in the Premises after the Expiration Date or sooner termination of this Lease, through and including the day which is thirty (30) days thereafter, a per diem holdover charge calculated at a rate equal to the greater of (x) 150% of the daily Fixed Rent payable under this Lease for the last full calendar month of the Term, plus Tenant's Tax Payment, Tenant's Operating Payment, and Tenant's Insurance Payment for said period of time; or (y) the then-applicable fair market rental value of

the Premises, as reasonably determined by Landlord; and (ii) if Tenant holds over in the Premises for more than thirty (30) days after the Expiration Date or sooner termination of this Lease, a per diem holdover charge calculated at a rate equal to the greater of (x) 200% of the daily Fixed Rent payable under this Lease for the last full calendar month of the Term, plus Tenant's Tax Payment, Tenant's Operating Payment, and Tenant's Insurance Payment for said period of time; or (y) the then-applicable fair market rental value of the Premises, as reasonably determined by Landlord. In addition, if such holding over continues for more than thirty (30) days after the Expiration Date or sooner termination of this Lease, then Tenant shall (x) be liable to Landlord for (1) any payment or rent concession which Landlord may be required to make to any tenant obtained by Landlord for all or any part of the Premises (a "**New Tenant**") in order to induce such New Tenant not to terminate its lease by reason of the holding-over by Tenant, and (2) the loss of the benefit of the bargain if any New Tenant shall terminate its lease by reason of the holding-over by Tenant, and (y) indemnify Landlord against (i) all claims for damages by any New Tenant, and (ii) all consequential, indirect, and special damages incurred by Landlord arising out of or resulting of any such holding-over by Tenant. No holding-over by Tenant, nor the payment to Landlord of the amounts specified above, shall operate to extend the Term hereof. Nothing herein contained shall be deemed to permit Tenant to retain possession of the Premises after the Expiration Date or sooner termination of this Lease, and no acceptance by Landlord of payments from Tenant after the Expiration Date or sooner termination of this Lease shall be deemed to be other than on account of the amount to be paid by Tenant in accordance with the provisions of this **Section 18.3**.

Section 18.4. Survival. Tenant's obligations under this **Article 18** shall survive the expiration or earlier termination of this Lease.

ARTICLE 19

QUIET ENJOYMENT

Provided this Lease is in full force and effect and no Event of Default then exists, Tenant may peaceably and quietly enjoy the Premises without hindrance by Landlord or any person lawfully claiming through or under Landlord, subject to the terms and conditions of this Lease. The foregoing provisions are in lieu of any other covenant of quiet enjoyment, express or implied.

ARTICLE 20

NO SURRENDER; NO WAIVER

Section 20.1. No Surrender or Release. No act or thing done by Landlord or Landlord's agents or employees during the Term shall be deemed an acceptance of a surrender of the Premises, and no provision of this Lease shall be deemed to have been waived by either Landlord or Tenant, unless such waiver is in writing and is signed by the waiving party. Without limitation, the receipt or acceptance by Landlord or Landlord's Agent of the keys to the Premises shall not be deemed an acceptance of a surrender of the Premises or a termination of this Lease.

Section 20.2. No Waiver. The failure of either party to seek redress for violation of, or to insist upon the strict performance of, any covenant or condition of this Lease, or any of the Rules and Regulations, shall not be construed as a waiver or relinquishment for the future performance of such obligations of this Lease or the Rules and Regulations, or of the right to exercise such election but the same shall continue and remain in full force and effect with respect to any subsequent breach, act or omission. The receipt by Landlord of any Rent

payable pursuant to this Lease or any other sums with knowledge of the breach of any covenant of this Lease shall not be deemed a waiver of such breach. No payment by Tenant or receipt by Landlord of a lesser amount than the monthly Rent herein stipulated shall be deemed to be other than a payment on account of the earliest stipulated Rent, or as Landlord may elect to apply such payment, nor shall any endorsement or statement on any check or any letter accompanying any check or payment as Rent be deemed an accord and satisfaction, and Landlord may accept such check or payment without prejudice to Landlord's right to recover the balance of such Rent or pursue any other remedy provided in this Lease.

ARTICLE 21

WAIVER OF TRIAL BY JURY; COUNTERCLAIM

Section 21.1. Jury Trial Waiver. LANDLORD AND TENANT HEREBY WAIVE TRIAL BY JURY IN ANY ACTION, PROCEEDING OR COUNTERCLAIM BROUGHT BY EITHER PARTY AGAINST THE OTHER ON ANY MATTERS IN ANY WAY ARISING OUT OF OR CONNECTED WITH THIS LEASE, THE RELATIONSHIP OF LANDLORD AND TENANT, TENANT'S USE OR OCCUPANCY OF THE PREMISES, OR THE ENFORCEMENT OF ANY REMEDY UNDER ANY STATUTE, EMERGENCY OR OTHERWISE.

Section 21.2. Waiver of Counterclaim. If Landlord commences any summary proceeding against Tenant, Tenant will not interpose any counterclaim of any nature or description in any such proceeding (unless failure to interpose such counterclaim would preclude Tenant from asserting in a separate action the claim which is the subject of such counterclaim), and will not seek to consolidate such proceeding with any other action which may have been or is thereafter brought in any other court by Tenant.

ARTICLE 22

NOTICES

Except as otherwise expressly provided in this Lease, all consents, notices, demands, requests, approvals or other communications given under this Lease shall be in writing and shall be deemed sufficiently given or rendered if delivered by hand (provided a signed receipt is obtained) or if sent by registered or certified mail (return receipt requested) or by a nationally recognized overnight delivery service making receipted deliveries, addressed to Landlord and Tenant as set forth in **Article 1**, and to any Mortgagee or Lessor who shall require copies of notices and whose address is provided to Tenant, or to such other address(es) as Landlord, Tenant or any Mortgagee or Lessor may designate as its new address(es) for such purpose by notice given to the other in accordance with the provisions of this **Article 22**. Any such approval, consent, notice, demand, request or other communication shall be deemed to have been given on the date of receipted delivery, refusal to accept delivery or when delivery is first attempted but cannot be made due to a change of address for which no notice is given or three (3) Business Days after it shall have been mailed as provided in this **Article 22**, whichever is earlier.

ARTICLE 23

RULES AND REGULATIONS

Tenant and all Tenant Parties shall observe and comply with the Rules and Regulations, as supplemented or amended from time to time. Landlord reserves the right, from time to time, to adopt additional commercially reasonable Rules and Regulations and to amend the Rules and Regulations then in effect. In the event of any conflict or inconsistency between this Lease and such Rules and Regulations, the terms of this Lease shall govern and control.

ARTICLE 24

BROKER

Landlord has retained Landlord's Broker as leasing agent in connection with this Lease and Landlord will be solely responsible for any fees that may be payable to Landlord's Broker. Landlord agrees to pay a commission to Tenant's Broker pursuant to a separate agreement between Landlord and Tenant's Broker. Each of Landlord and Tenant represents and warrants to the other that neither it nor its agents have dealt with any broker in connection with this Lease other than Landlord's Broker and Tenant's Broker. Each of Landlord and Tenant shall indemnify, defend, protect and hold the other party harmless from and against any and all Losses which the indemnified party may incur by reason of any claim of or liability to any broker, finder or like agent (other than Landlord's Broker and Tenant's Broker) arising out of any dealings claimed to have occurred between the indemnifying party and the claimant in connection with this Lease, and/or the above representation being false.

ARTICLE 25

INDEMNITY

Section 25.1. Tenant's Indemnity. Excepting only to the extent otherwise provided in M.G.L. Chapter 186, Section 15. Tenant shall indemnify, defend, protect and hold harmless each of the Indemnitees from and against any and all Losses, resulting from any claims (i) against the Indemnitees arising from any the negligence or willful misconduct of any of the Tenant Parties, (ii) against the Indemnitees arising from any accident, injury or damage to any person or to the property of any person and occurring in the Premises or the areas of the Building with respect to which Tenant is granted exclusive rights, and (iii) against the Indemnitees resulting from any breach, violation or nonperformance of any covenant, condition or agreement of this Lease on the part of Tenant to be fulfilled, kept, observed or performed.

Section 25.2. Landlord's Indemnity. Landlord shall indemnify, defend and hold harmless Tenant from and against all Losses incurred by Tenant arising from any accident, injury or damage to any person or the property of any person in or about the Common Areas (specifically excluding the Premises) to the extent caused by the negligence or willful misconduct of Landlord or its employees or agents.

Section 25.3. Defense and Settlement. If any claim, action or proceeding is made or brought against any party entitled to indemnification hereunder, then such party shall provide prompt notice thereof to the indemnifying party and thereafter, upon demand, the indemnifying party, at its sole cost and expense, shall resist or defend such claim, action or proceeding in the Indemnitee's name (if necessary), by attorneys approved by the party entitled to indemnification

hereunder, which approval shall not be unreasonably withheld (attorneys for the insurer of the indemnifying party shall be deemed approved for purposes of this **Section 25.3**). Notwithstanding the foregoing, an Indemnitee may retain its own attorneys to participate or assist in defending any claim, action or proceeding involving potential liability in excess of the amount available under its liability insurance for such claim and the indemnifying party shall pay the reasonable fees and disbursements of such attorneys. If the indemnifying party fails to diligently defend or if there is a legal conflict or other conflict of interest, then the Indemnitee may retain separate counsel at the indemnifying party's expense. Notwithstanding anything herein contained to the contrary, the indemnifying party may direct the Indemnitee to settle any claim, suit or other proceeding provided that (a) such settlement shall involve no obligation on the part of the Indemnitee other than the payment of money, (b) any payments to be made pursuant to such settlement shall be paid in full exclusively by the indemnifying party at the time such settlement is reached, (c) such settlement shall not require the Indemnitee to admit any liability, and (d) the Indemnitee shall have received an unconditional release from the other parties to such claim, suit or other proceeding. In addition, the Indemnitee shall not settle any such claim, suit or other proceeding without the consent of the indemnifying party to the terms of such settlement, unless the Indemnitee waives or releases any further liability of the indemnifying party with respect thereto.

ARTICLE 26

MISCELLANEOUS

Section 26.1. Delivery. The submission of drafts of this document for examination and negotiation does not constitute an offer to lease, or the acceptance of an offer to lease, or a reservation of or option for, the Premises. This Lease shall not be binding upon Landlord or Tenant unless and until Landlord shall have executed and delivered a fully executed copy of this Lease to Tenant.

Section 26.2. Transfer of Real Property. Landlord's obligations under this Lease shall not be binding upon any Landlord (including the Landlord originally named in this Lease) after the sale, conveyance, assignment or transfer (collectively, a "**Transfer**") by such Landlord of its interest in the Building or the Real Property, as the case may be, and in the event of any such Transfer, such Landlord shall be entirely freed and released of and from all covenants, liabilities and obligations of Landlord hereunder arising from and after the date of Transfer, and the transferee of Landlord's interest (or that of such subsequent Landlord) in the Building and/or the Real Property, as the case may be, shall be deemed to have assumed all obligations under this Lease arising from and after the date of Transfer.

Section 26.3. Limitation on Liability. Notwithstanding any provision contained in this Lease to the contrary, the liability of Landlord for its obligations under this Lease shall be limited to the interests of Landlord in the Real Property (including insurance awards, condemnation proceeds, and undistributed rents arising from the Real Property). In no event shall any partner, member, manager, shareholder, director, officer, principal, employee, agent, or owner of Landlord, direct or indirect, disclosed or undisclosed, be personally liable for any debts, liabilities or obligations of Landlord, or for any claims against Landlord, arising out of or resulting from this Lease. Any such debts, obligations, liabilities or claims shall be satisfied solely out of the interests of Landlord in the Real Property (including insurance awards, condemnation proceeds, and undistributed rents arising from the Real Property). In no event shall any personal judgment be sought or obtained against any partner, member, manager, shareholder, director, officer, principal, employee, agent, or owner of Landlord, direct or indirect, disclosed or undisclosed (collectively, the "**Parties**").

Section 26.4. Rent. All amounts payable by Tenant to or on behalf of Landlord under this Lease, whether or not expressly denominated Fixed Rent, Tenant's Tax Payment, Tenant's Operating Payment, Tenant's Insurance Payment, Additional Rent or Rent, shall constitute rent for the purposes of Section 502(b)(6) of the United States Bankruptcy Code.

Section 26.5. Entire Document. This Lease (including any Schedules and Exhibits referred to herein and all supplementary agreements provided for herein) contains the entire agreement between the parties and all prior negotiations and agreements are merged into this Lease. All of the Schedules and Exhibits attached hereto are incorporated in and made a part of this Lease, provided that in the event of any inconsistency between the terms and provisions of this Lease and the terms and provisions of the Schedules and Exhibits hereto, the terms and provisions of this Lease shall control.

Section 26.6. Governing Law. This Lease shall be governed in all respects by the laws of the Commonwealth of Massachusetts.

Section 26.7. Unenforceability. If any provision of this Lease, or its application to any person or entity or circumstance, shall ever be held to be invalid or unenforceable, then in each such event the remainder of this Lease or the application of such provision to any other person or entity or any other circumstance (other than those as to which it shall be invalid or unenforceable) shall not be thereby affected, and each provision hereof shall remain valid and enforceable to the fullest extent permitted by law.

Section 26.8. Lease Disputes. (a) Landlord and Tenant agree that all disputes arising, directly or indirectly, out of or relating to this Lease, and all actions to enforce this Lease, shall be dealt with and adjudicated in the state courts of the Commonwealth of Massachusetts or the federal courts located in the Commonwealth of Massachusetts and for that purpose hereby expressly and irrevocably submits itself to the jurisdiction of such courts. Landlord and Tenant agree that so far as is permitted under applicable law, this consent to personal jurisdiction shall be self-operative and no further instrument or action, other than service of process in one of the manners specified in this Lease, or as otherwise permitted by law, shall be necessary in order to confer jurisdiction upon it in any such court.

(b) To the extent that Tenant has or hereafter may acquire any immunity from jurisdiction of any court or from any legal process (whether through service or notice, attachment prior to judgment, attachment in aid of execution, execution or otherwise) with respect to itself or its property, Tenant irrevocably waives such immunity in respect of its obligations under this Lease.

Section 26.9. Landlord's Agent. Unless Landlord delivers notice to Tenant to the contrary, Landlord's Agent is authorized to act as Landlord's agent in connection with the performance of this Lease, and Tenant shall be entitled to rely upon correspondence received from Landlord's Agent. Tenant acknowledges that Landlord's Agent is acting solely as agent for Landlord in connection with the foregoing; and neither Landlord's Agent nor any of its direct or indirect partners, members, managers, officers, shareholders, directors, employees, principals, agents or representatives shall have any liability to Tenant in connection with the performance of the obligations of Landlord under this Lease, and Tenant waives any and all claims against any and all of such parties arising out of, or in any way connected with the obligations of Landlord under this Lease, the Building or the Real Property.

Section 26.10. Estoppel. Within ten (10) Business Days following request from Landlord, any Mortgagee or any Lessor, Tenant shall deliver to Landlord a statement executed and acknowledged by Tenant, in form reasonably satisfactory to Landlord, (a) stating the Commencement Date, the Rent Commencement Date and the Expiration Date, and that this Lease is then in full force and effect and has not been modified (or if modified, setting forth all modifications), (b) setting forth the date to which the Fixed Rent and any Additional Rent have been paid, together with the amount of monthly Fixed Rent and Additional Rent then payable, (c) stating whether or not, to the best of Tenant's knowledge, either Tenant and/or Landlord is in default under this Lease, and setting forth the specific nature of all such defaults, if any, (d) stating the amount of the security deposit, if any, under this Lease, (e) stating whether there are any subleases or assignments affecting the Premises, (f) stating the address of Tenant to which all notices and communications under this Lease shall be sent, and (g) confirming any other factual matters reasonably requested by Landlord, such as Mortgagee or such Lessor. Tenant acknowledges that any statement delivered pursuant to this **Section 26.10** may be relied upon by any purchaser or owner of the Real Property or the Building, or all or any portion of Landlord's interest in the Real Property or the Building or any Superior Lease, or by any Mortgagee, or assignee thereof or by any Lessor, or assignee thereof.

Within fifteen (15) Business Days following request from Tenant, Landlord shall deliver to Tenant a statement executed by Landlord stating the Commencement Date, the Rent Commencement Date and the Expiration Date, and certifying (i) that this Lease is then in full force and effect and has not been modified (or if modified, setting forth all such modifications), (ii) setting forth the date to which Fixed Rent and an Additional Rent have been paid, together with the amount of monthly Fixed Rent, Tenant's Tax Payment, Tenant's Operating Payment and Tenant's Insurance Payment then payable by Tenant under this Lease, (iii) stating whether or not, to the knowledge of Landlord, Tenant is then in default under this Lease if so, setting forth the specific nature of all such defaults, (iv) stating the amount of the security deposit, if any, then being held by Landlord under this Lease, (v) setting forth the addresses of Landlord to which notices and communications delivered pursuant to this Lease shall be sent, and (vi) confirming any other factual matters concerning this Lease as may be reasonably requested by Tenant.

Section 26.11. Certain Interpretational Rules. For purposes of this Lease, whenever the words "include", "includes", or "including" are used, they shall be deemed to be followed by the words "without limitation" and, whenever the circumstances or the context requires, the singular shall be construed as the plural, the masculine shall be construed as the feminine and/or the neuter and vice versa. This Lease shall be interpreted and enforced without the aid of any canon, custom or rule of law requiring or suggesting construction against the party drafting or causing the drafting of the provision in question. The captions in this Lease are inserted only as a matter of convenience and for reference and in no way define, limit or describe the scope of this Lease or the intent of any provision hereof.

Section 26.12. Parties Bound. The terms, covenants, conditions and agreements contained in this Lease shall bind and inure to the benefit of Landlord and Tenant and, except as otherwise provided in this Lease, to their respective legal representatives, successors, and assigns. Each term and each provision of this Lease to be performed by the Tenant shall be construed to be both a covenant and a condition.

Section 26.13. Memorandum of Lease. This Lease shall not be recorded; provided, however, at request of either party, Landlord and Tenant shall execute, acknowledge and deliver a notice of lease in recordable form and complying with applicable Massachusetts laws,

and reasonably satisfactory to both Landlord and Tenant. In no event shall such document set forth the rental or other charges payable by Tenant under this Lease; and any such document shall expressly state that it is executed pursuant to the provisions contained in this Lease, and is not intended to vary the terms and conditions of this Lease. Within ten (10) days after the expiration or earlier termination of the Term, Tenant shall enter into such documentation as is reasonably required by Landlord to remove the notice of lease of record.

Section 26.14. Counterparts. This Lease may be executed in two (2) or more counterparts, each of which shall constitute an original, but all of which, when taken together, shall constitute but one instrument.

Section 26.15. Survival. All obligations and liabilities of Landlord or Tenant to the other which accrued before the expiration or other termination of this Lease, and all such obligations and liabilities which by their nature or under the circumstances can only be, or by the provisions of this Lease may be, performed after such expiration or other termination, shall survive the expiration or other termination of this Lease. Without limiting the generality of the foregoing, the rights and obligations of the parties with respect to any indemnity under this Lease, and with respect to any Rent and any other amounts payable under this Lease, shall survive the expiration or other termination of this Lease.

Section 26.16. Inability to Perform. This Lease and the obligation of Tenant to pay Rent shall not be affected, impaired or excused by any Unavoidable Delays. Each party shall use reasonable efforts to promptly notify the other party of any Unavoidable Delay which prevents such party from fulfilling any of its obligations under this Lease.

Section 26.17. Landlord Defaults. Landlord shall in no event be in breach or default in the performance of any of Landlord's obligations under this Lease or any warranties or promises hereunder unless Landlord shall have failed to perform such obligations within thirty (30) days, or such additional time as is reasonably required to correct any such default, after notice by Tenant to Landlord properly specifying wherein Landlord has failed to perform any such obligation, provided that Landlord has commenced to cure and thereafter diligently prosecutes such cure to completion. Without limitation, in no event shall Tenant have the right to terminate or cancel this Lease or to withhold rent or to set-off any claim or damages against rent as a result of any default by Landlord or breach by Landlord of its obligations or any warranties or promises hereunder, except in the case of a wrongful eviction of Tenant from the Premises (constructive or actual) by Landlord continuing after notice to Landlord thereof and a reasonable opportunity for Landlord to cure the same as set forth above. In addition, except as expressly and specifically set forth in this Lease, Tenant shall not assert any right to deduct the cost of repairs or any monetary claim against Landlord from Rent thereafter due and payable under this Lease, but shall look solely to the interests of the Landlord in the Real Property for satisfaction of any such claim.

Section 26.18. Work Orders. All requests made by or on behalf of Tenant either (i) for work to be performed by Landlord, or (ii) for services to be provided by Landlord, shall be submitted in accordance with the applicable procedures established from time to time by the Landlord. As of the date of this Lease, the Landlord has established an Angus system for such requests, and all such requests shall be submitted in accordance with the Angus procedures and using the Angus forms.

Section 26.19. Financial Statements.

(a) Tenant shall provide Landlord with its most recent currently available financial statements (which may include consolidated financial statements if separate financial statements for Tenant have not been prepared at such time), at such times as may be requested by Landlord from time-to-time; provided, however, (i) unless an Event of Default occurs under this Lease, Landlord shall not request such financial statements more than once in any twelve (12) month period, and (ii) upon request of Tenant, Landlord shall enter into a customary confidentiality agreement with Tenant with respect to such financial statements.

(b) Tenant shall cause Guarantor to provide Landlord with its most recent current audited financial statements (including balance sheets and income/expense statements), prepared and certified by an independent certified public accountant, at such times as may be requested by Landlord from time-to-time; provided, however, (x) unless an Event of Default occurs under this Lease, Landlord shall not request such financial statements more than once in any calendar year, (y) Tenant shall not be required to cause Guarantor to provide such financial statements to Landlord if at the time of said request Guarantor is a publicly-traded entity and the financial statements of Guarantor are otherwise publicly-available to Landlord, and (z) upon request, if the financial statements of Guarantor are not then publicly available, Landlord shall enter into a customary confidentiality agreement with Guarantor with respect to such financial statements.

Section 26.20. Tax Status of Beneficial Owner. Tenant recognizes and acknowledges that Landlord and/or certain beneficial owners of Landlord may from time to time qualify as real estate investment trusts pursuant to Sections 856 et seq. of the Code ("**Section 856**") or be subject to tax on unrelated business taxable income as defined in the Code ("**UBTI**"), and that avoiding (a) the loss of such status, (b) the receipt of any income derived under any provision of this Lease that does not constitute "rents from real property" (in the case of real estate investment trusts or for purposes of the unrelated business taxable income rules), and (c) the imposition of income, penalty or similar taxes (each an "**Adverse Tax Event**") is of material concern to Landlord and such beneficial owners. In the event that (i) Section 856 is amended, or those portions of the Code of Federal Regulations applicable thereto, or the common law interpretation of, Section 856 shall be materially changed, or the rules and regulations regarding UBTI are materially changed, and (ii) this Lease or any document contemplated hereby could, based on the reasonable advice of tax advisers to Landlord, result in or cause an Adverse Tax Event, Tenant agrees upon written notice from Landlord to reasonably cooperate with Landlord, at Landlord's cost and expense, in negotiating an amendment or modification thereof (provided that said amendment or modification shall neither increase Tenant's obligations nor decrease Tenant's rights under this Lease, except to a de minimus extent) and shall at the request of Landlord execute and deliver such documents reasonably required to effect such amendment or modification. Any amendment or modification pursuant to this **Section 26.20** shall be structured to the minimum extent necessary to reasonably avoid an Adverse Tax Event, and so that the economic results to Landlord and Tenant shall be substantially similar to those set forth in this Lease without regard to such amendment or modification. Without limiting any of Landlord's other rights under this **Section 26.20**, Landlord may elect in writing in its sole discretion to waive the receipt of any amount payable to Landlord hereunder and such written waiver shall constitute an amendment or modification of this Lease with respect to such payment.

ARTICLE 27

HAZARDOUS MATERIALS

Section 27.1. Tenant's Hazardous Materials. Tenant shall not, without the prior written consent of Landlord, bring or permit to be brought to or kept at, in or on the Premises or elsewhere in the Building or the Property any Hazardous Materials, excepting only the types and quantities of Hazardous Materials which are used by Tenant in the ordinary course of Tenant's business and are listed on the schedule attached to this Lease as **Exhibit E ("Tenant's Hazardous Materials")**. All such Hazardous Materials shall be stored and used in appropriate 'control areas', in accordance with all applicable Environmental Laws and prudent practices (including best practices to minimize quantities of stored Hazardous Materials using a "just in time" method of purchasing the same), and with respect to medical waste and so-called "biohazard" materials, good scientific and medical practice. In no event shall Tenant generate, produce, bring upon, use, store or treat any infectious biological micro-organisms or any other Hazardous Materials with a risk category above the level of Biosafety Level 2 as established and described by the Department of Health and Human Services Publication Biosafety in Microbiological and Biomedical Laboratories (Fifth Edition) (as it may be further revised, the "**BMBL**") or such other nationally recognized standards as may be adopted by Landlord from time-to-time. To the extent any Environmental Law establishes maximum quantities of any Hazardous Materials which may be stored, used or brought into the Building without additional licensing, permitting or authorizations therefor, Tenant shall not use, store or bring into the Building quantities in excess of Tenant's Proportionate Share of such Hazardous Materials. Tenant shall assure that all laboratory uses are adequately and properly vented. By not later than the Commencement Date, Tenant shall complete and deliver to Landlord an Environmental Questionnaire (the "**Environmental Questionnaire**") in the form attached to this Lease as **Exhibit H**, for review and approval by Landlord, which approval shall not be unreasonably withheld, conditioned or delayed. On or before each anniversary of the Commencement Date, Tenant shall submit to Landlord for review and approval by Landlord, which approval shall not be unreasonably withheld, conditioned or delayed, the following: (x) an updated Environmental Questionnaire, and (y) an updated schedule listing Tenant's Hazardous Materials. With respect to any Hazardous Material transported, used, stored, or generated in the Premises, Tenant shall (i) not permit any such Hazardous Material to escape, be released or be disposed of outside of the Premises, including in the Common Areas or elsewhere in the Building or the Real Property, and (ii) upon request, provide evidence reasonably satisfactory to Landlord of Tenant's compliance with all applicable Environmental Laws, including copies of all licenses, permits and registrations obtained by Tenant that have not been previously provided to Landlord. Notwithstanding the foregoing, with respect to any of Tenant's Hazardous Materials which Tenant does not properly handle, store or dispose of in compliance with all applicable Environmental Laws, prudent environmental practice and (with respect to medical waste and so-called "biohazard" materials) good scientific and medical practice, the right of Tenant to use such Hazardous Materials in the Premises shall be suspended unless and until Tenant demonstrates to Landlord's reasonable satisfaction that Tenant has implemented appropriate and effective protocols and programs to thereafter properly handle, store or dispose of such material. In order to induce Landlord to waive its otherwise applicable requirement that Tenant maintain insurance in favor of Landlord against liability arising from the presence of radioactive materials in the Premises, and without limiting the foregoing, Tenant hereby represents and warrants to Landlord that at no time during the Term will Tenant bring upon, or permit to be brought upon, the Premises any radioactive materials, of any kind, whatsoever.

Section 27.2. Chemical Safety Program. Tenant shall cause chemical lists and MSDS sheets to be readily available at the entrance to each lab area in the Premises. Tenant shall cause lab operators carrying any lab-related materials to travel only within the Premises, and to and from the common corridors, freight elevator, and loading dock. Without limitation, Landlord may elect, upon reasonable prior notice to Tenant, from time to time, at times which are reasonably acceptable to Tenant, to undertake monitoring and testing in the Building, including, without limitation, monitoring and testing within the Premises, provided that such activities shall be coordinated with Tenant in a manner so as to not materially and adversely affect Tenant's operations and in compliance with the customary confidentiality and security requirements established by Tenant. Landlord and Tenant shall exercise good faith reasonable efforts to cooperate with each other in connection with all such testing activities. Tenant shall establish and maintain a satisfactory chemical safety program, administered by a licensed, qualified individual in accordance with the requirements of the MWRA, the City of Boston and all other applicable Governmental Authorities. Tenant shall be solely responsible for all costs incurred in connection with such chemical safety program. Tenant shall provide Landlord with such documentation as Landlord may reasonably require evidencing Tenant's compliance with the requirements of (i) the MWRA and any other applicable Governmental Authority with respect to such chemical safety program, and (ii) this **Section 27.2**.

Section 27.3. Testing, Inspection Reports. Landlord may elect, from time to time, to inspect the Premises for compliance with applicable Environmental Laws and the terms and conditions of this **Article 27**. If and to the extent as a result of such testing Tenant is determined to have caused any release or discharge of a Hazardous Material at, in, on, under or upon the Property, then Tenant shall reimburse Landlord, as Additional Rent, for all out of pocket costs incurred by Landlord in connection therewith. Tenant shall execute all such affidavits, certifications and other documents, as may be reasonably requested by Landlord from time to time concerning the presence of Hazardous Materials at, in or, on or under the Premises, the Building or the Property arising out of or resulting from the operations of Tenant. From time to time during the term of this Lease, Tenant shall provide Landlord with such evidence of Tenant's compliance with the terms of this **Article 27** as Landlord may reasonably request. Landlord may elect, from time-to-time, to commission a report (each, a "**Landlord's Inspection Report**") prepared by a licensed environmental engineer or certified industrial hygienist based on an inspection of the Premises, and setting the current condition of the Premises with respect to the use, storage and disposal of Hazardous Materials. If any time a Landlord's Inspection Report indicates that there has been a breach by Tenant of the terms or conditions of this **Article 27**, then (x) Tenant shall reimburse Landlord for the commercially reasonable costs and expenses of such Landlord's Report, within thirty (30) days after demand therefor, as Additional Rent, and (y) Tenant shall promptly remedy such breach, and shall submit reasonably satisfactory confirmation of such remedy to Landlord.

Section 27.4. Hazardous Materials Indemnity; Remediation. (a) Tenant hereby covenants and agrees to indemnify, defend and hold the Indemnitees harmless from and against any and all Losses arising out of or resulting from any contamination of, or exacerbation of the contamination of, any part of the Building, the Real Property, or any other adjacent or nearby property, or any exacerbation of any contamination of any part of the Real Property or any part thereof, or any other adjacent or nearby property, which contamination or exacerbation, as the case may be, arises out of or results from (i) the discharge, transport, use, presence, generation, or disposal of Hazardous Material in the Premises arising out of, resulting from or in connection with, the operations of Tenant in the Premises, or (ii) any default or breach by Tenant of its obligations under this **Article 27**. This indemnification shall include all costs incurred in connection with any investigation of site conditions, any cleanup, remedial, removal or restoration work or any other response action required by any Governmental Authority in connection with any Hazardous Material present in the soil, soil vapor, or ground water at, on or under, or any indoor air in, the Building.

(b) Landlord agrees that if (i) Hazardous Materials subsequently are discovered to have been in the Building as of the Commencement Date, and as of the Commencement Date such substances or materials were deemed pursuant to applicable Requirements to constitute Hazardous Materials requiring the abatement and/or removal thereof pursuant to then-current industry customs and practices, and applicable Requirements, or (ii) such substances or materials are released, stored, used, disposed of, introduced or brought in or into the Premises by Landlord or Landlord's Agent, then the Landlord shall be responsible for the abatement and/or removal thereof in accordance with then-current industry customs and practices, and applicable Requirements, at the sole cost and expense of Landlord. During the Term of this Lease, Landlord will not release, use, or dispose of Hazardous Materials in the Building, excepting only such materials and substances as (i) are stored or used in accordance with all applicable Requirements, and (ii) are ordinarily and customarily used or located in Comparable Buildings. Notwithstanding the foregoing, in no event shall Landlord have any responsibilities, liabilities, or obligations with respect to Hazardous Materials (A) which may be released, used or disposed of by any person other than Landlord or Landlord's Agent or their respective employees or contractors, or (B) which may be released, stored, used, disposed of, introduced or brought in or into the Premises after the Commencement Date, excepting only to the extent such Hazardous Materials are released, stored, used, disposed of, introduced or brought in or into the Premises by Landlord or Landlord's Agent.

(c) Without limiting the obligations set forth in Section 27.4(a) above, if any Hazardous Material is in, on, under, at or about the Building or the Real Property arising out of, resulting from or in connection with, the operations of Tenant in the Premises, and said Hazardous Material results in any contamination of any part of the Building, the Real Property or any part thereof, or any adjacent or nearby property that requires the performance of any response action pursuant to any Environmental Law, then Tenant shall, at Tenant's sole cost and expense promptly take all actions as are necessary to reduce such Hazardous Material to amounts below any applicable "reportable quantity", any applicable reportable concentration and any other applicable standard set forth in any Environmental Law such that (i) no further response actions, (ii) no Activity and Use Limitation (as that term is defined in the Massachusetts Contingency Plan, 310 CMR 40.0000 et seq. (the "**MCP**")), and (iii) no Condition (as that term is defined in the MCP) is or are required ("**Tenant's Remediation**"). Each Tenant's Remediation shall be subject to the prior approval of Landlord in all respects.

(d) Without limiting any other rights and remedies of Landlord on account thereof, if Tenant fails to complete Tenant's Remediation prior to the Expiration Date or any earlier termination of the Term, then:

(i) Unless and until the completion of Tenant's Remediation (as evidenced by the certification by an acceptable Licensed Site Professional (as such term is defined by the MCP (the "**Remediation Completion Date**")), Tenant shall pay to Landlord, with respect to the portion of the Premises which reasonably cannot be occupied by a new tenant until completion of Tenant's Remediation, (A) Fixed Rent in an amount equal to 150% of the greater of (1) the Fair Market Value of such portion of the Premises (determined in substantial accordance with the process described in **Section 29.2** below), and (2) Fixed Rent attributable to such portion of the Premises in effect immediately prior to the end of the Term, and (B) additional rent on account of Operating Expenses and Taxes; and

(ii) Tenant shall continue to be responsible and liable for Tenant's Remediation and shall complete Tenant's Remediation as soon as reasonably practicable, in accordance with all Environmental Laws. If Tenant does not diligently pursue completion of Tenant's Remediation, Landlord may elect to (A) assume control of the performance of Tenant's Remediation, in which event Tenant shall reimburse Landlord for all costs and expenses incurred by Landlord in connection therewith, which may include substituting Landlord as the party identified on any governmental filings as the party performing such Tenant's Remediation, or (B) require Tenant to maintain responsibility and liability for Tenant's Remediation, in which event Tenant shall complete Tenant's Remediation as soon as reasonably practicable in accordance with all Environmental Laws.

Section 27.5. Disclosures. Prior to introducing any Hazardous Material into any part of the Premises other than customary cleaning and maintenance supplies, Tenant shall deliver to Landlord the following information with respect thereto: (a) a description of the proposed handling, storage, use and disposal procedures to be adopted by Tenant; (b) all plans or disclosures and/or emergency response plans which Tenant has prepared, including Tenant's spill response plan, and all plans which Tenant is required to supply to any Governmental Authority pursuant to any Environmental Laws; and (c) other information reasonably requested by Landlord.

Section 27.6. Survival. The provisions of this **Article 27** shall survive the expiration or termination of this Lease.

ARTICLE 28

LETTER OF CREDIT

Section 28.1. Letter of Credit. Concurrent with the execution of this Lease, Tenant shall deliver to Landlord a Letter of Credit (as hereinafter defined) in the amount of the Letter of Credit Amount specified in the Basic Lease Information, as security for the faithful performance and observance by Tenant of the terms, covenants and conditions of this Lease. Tenant covenants and agrees to maintain the Letter of Credit in the Letter of Credit Amount throughout the Term of this Lease. The Letter of Credit shall be in the form of a clean, irrevocable, non-documentary and unconditional letter of credit (the "**Letter of Credit**") issued by and drawable upon a commercial bank (the "**Issuing Bank**"), which is satisfactory to Landlord and which satisfies both the Minimum Rating Agency Threshold (as hereinafter defined) and the Minimum Capital Threshold (as hereinafter defined). The "**Minimum Rating Agency Threshold**" shall mean that the Issuing Bank has outstanding unsecured, uninsured and unguaranteed senior long-term indebtedness that is then rated (without regard to qualification of such rating by symbols such as "+" or "-" or numerical notation) "Baa" or better by Moody's Investors Service, Inc. and/or "BBB" or better by Standard & Poor's Rating Services, or a comparable rating by a comparable national rating agency designated by Landlord in its discretion. The "**Minimum Capital Threshold**" shall mean that the Issuing Bank has combined capital, surplus and undivided profits of not less than \$2,000,000,000. Landlord hereby approves Silicon Valley Bank as the Issuing Bank. The Letter of Credit shall (a) name Landlord as beneficiary, (b) have a term of not less than one year, (c) permit multiple drawings, (d) be fully transferable by Landlord without the payment of any fees or charges by Landlord, and (e) otherwise be in form and content satisfactory to Landlord. If upon any transfer of the Letter of Credit, any fees or charges shall be so imposed, then such fees or charges shall be payable solely by Tenant and the Letter of Credit shall so specify. The Letter of Credit shall provide that it shall be deemed automatically renewed, without amendment, for consecutive periods of one (1) year each thereafter during the Term. The Letter of Credit (as extended) shall not expire prior to the date which is sixty (60) days after the Expiration Date (as extended). If the Issuing Bank does not renew the Letter of Credit upon the expiration thereof, then the Issuing Bank shall send duplicate notices (the "**Non-Renewal Notices**") to Landlord by certified mail, return receipt requested (one of which shall be addressed "Attention, Chief Legal Officer" and the other of which shall be addressed "Attention, Chief Financial Officer") not less than sixty (60) days next preceding the then expiration date of the Letter of Credit stating that the Issuing Bank has elected not to renew the Letter of Credit. The Issuing Bank shall agree with all drawers, endorsers and bona fide holders that drafts drawn under and in compliance with the terms of the Letter of Credit will be duly honored upon presentation to the Issuing Bank. The Letter of Credit shall be issued pursuant to, and shall be subject in all respects to, the Uniform Customs and Practice for Documentary Credits ISP 98, International Chamber of Commerce Practices Publication No. 590 (1998 Revision).

Section 28.2. Application of Security. If (a) an Event of Default by Tenant occurs under this Lease, or (b) Landlord receives a Non-Renewal Notice, or (c) Tenant files a voluntary petition under any Federal or state bankruptcy or insolvency code, law or proceeding, then Landlord shall have the right by sight draft to draw, at its election, all or a portion of the proceeds of the Letter of Credit and thereafter hold, use, apply, or retain the whole or any part of such proceeds, as the case may be, (x) to the extent required for the payment of any Rent or any other sum as to which Tenant is in default including (i) any sum which Landlord may expend or may be required to expend by reason of such Event of Default, and/or (ii) any damages to

which Landlord is entitled pursuant to this Lease, whether such damages accrue before or after summary proceedings or other reentry by Landlord, and/or (y) as a cash security deposit, unless and until, in the case of clause (c) above, Tenant delivers to Landlord a substitute Letter of Credit which meets the requirements of this **Article 28**. If Landlord applies or retains any part of the proceeds of the Letter of Credit, or cash security, then Tenant, not later than five (5) Business Days after demand therefor, shall amend the Letter of Credit or deliver an additional Letter of Credit which satisfies the requirements of this **Article 28** in the amount so applied or retained such that Landlord shall have a Letter of Credit (or Letters of Credit) in the Letter of Credit Amount on hand at all times during the Term. If Tenant shall comply with all of the terms, covenants and conditions of this Lease, then the Letter of Credit or then- remaining balance of the cash security, as the case may be, shall be returned to Tenant promptly after (x) the Expiration Date, (y) the surrender and yield-up of possession of the Premises to Landlord in the manner required by this Lease, and (z) the curing of any outstanding Events of Default under this Lease.

Section 28.3. Transfer. The Letter of Credit shall also provide that Landlord, its successors and assigns, may, at any time and without notice to Tenant and without first obtaining Tenant's consent thereto, transfer (one or more times) all or any portion of its interest in and to the Letter of Credit to the holder of any mortgage upon the Building or the successor landlord in connection with a transfer of the Building, from or as a part of the assignment by Landlord of its rights and interests in and to this Lease. In the event of a transfer of Landlord's interest in the Building, Landlord shall transfer the Letter of Credit, in whole or in part, to the transferee and thereupon Landlord shall without any further agreement between the parties, be released by Tenant from all liability therefor. The provisions of this **Section 28.3** shall apply to every transfer or assignment of the whole or any portion of said Letter of Credit to a new landlord. In connection with any such transfer of the Letter of Credit by Landlord, Tenant shall, at Tenant's sole cost and expense, execute and submit to the Issuing Bank such applications, documents and instruments as may be necessary to effectuate such transfer, and Tenant shall be responsible for paying the Bank's transfer and processing fees in connection therewith.

Section 28.4. Maintenance of Letter of Credit by Tenant. If, as a result of any drawing by Landlord on the Letter of Credit, the amount of the Letter of Credit shall be less than the Letter of Credit Amount, Tenant shall, within five (5) days thereafter, provide Landlord with additional letter(s) of credit in an amount equal to the deficiency, and any such additional letter(s) of credit shall comply with all of the provisions of this **Article 28**. Tenant further covenants and warrants that it will neither assign nor encumber the Letter of Credit or any part thereof and that neither Landlord nor its successors or assigns will be bound by any such assignment, encumbrance, attempted assignment or attempted encumbrance.

Section 28.5. Landlord's Right to Draw Upon Letter of Credit. The use, application or retention of the Letter of Credit, or any portion thereof, by Landlord shall not prevent Landlord from exercising any other right or remedy provided by this Lease or by any applicable law, it being intended that Landlord shall not first be required to proceed against the Letter of Credit, and shall not operate as a limitation on any recovery to which Landlord may otherwise be entitled. Tenant agrees not to interfere in any way with payment to Landlord of the proceeds of the Letter of Credit, either prior to or following a "draw" by Landlord of any portion of the Letter of Credit, regardless of whether any dispute exists between Tenant and Landlord as to Landlord's right to draw upon the Letter of Credit. No condition or term of this Lease 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. Tenant agrees and acknowledges that (a) the Letter of Credit constitutes a separate and independent contract

between Landlord and the Issuing Bank, (b) Tenant is not a third party beneficiary of such contract, (c) Tenant has no property interest whatsoever in the Letter of Credit or the proceeds thereof, and (d) in the event Tenant becomes a debtor under any chapter of the Bankruptcy Code, neither Tenant, any trustee, nor Tenant's bankruptcy estate shall have any right to restrict or limit Landlord's claim and/or rights to the Letter of Credit and/or the proceeds thereof by application of Section 502(b)(6) of the U. S. Bankruptcy Code or otherwise.

Section 28.6. Issuing Bank. If, at any time or from time to time, Landlord determines that an Issuing Bank (i) no longer satisfies the Minimum Rating Agency Threshold, (ii) no longer satisfies the Minimum Capital Threshold, (iii) has been seized or closed by the Federal Reserve Board, the Federal Deposit Insurance Corporation, the Office of the Comptroller of the Currency, or another governmental or regulatory agency or authority, (iv) has become insolvent, or (v) is unwilling or unable to honor the Letter of Credit or to perform its obligations to honor a draw upon the Letter of Credit, then within five (5) Business Days after demand, Tenant shall deliver to Landlord a replacement Letter of Credit, issued by a replacement Issuing Bank which satisfies the Minimum Rating Agency Threshold and the Minimum Capital Threshold and otherwise satisfies the requirement of this **Article 28**.

Section 28.7. Reduction of Letter of Credit. For purposes hereof, (i) the "**Letter of Credit Reduction Conditions**" shall mean the following: (i) no Event of Default shall have occurred during the immediately preceding twelve (12) months, (ii) the original Tenant named herein or a Permitted Transferee is the tenant under this Lease, and (iii) both this Lease and the Guaranty are in full force and effect. For purposes hereof, the "**Letter of Credit Amount**" shall mean the following amounts: (i) during the period of time from the Effective Date through the day immediately preceding the third (3rd) anniversary of the Rent Commencement Date (both dates inclusive), the "**Initial Letter of Credit Amount**" shall mean \$10,540,000.00; (ii) during the period of time from the third (3rd) anniversary of the Rent Commencement Date through the day immediately preceding the sixth (6th) anniversary of the Rent Commencement Date (both dates inclusive), the "**Second Letter of Credit Amount**" shall mean \$7,026,666.64; and (iii) during the period of time from the sixth (6th) anniversary of the Rent Commencement Date through the Expiration Date, the "**Third Letter of Credit Amount**" shall mean \$3,513,333.32.

Effective as of third (3rd) anniversary of the Rent Commencement Date, provided that the Letter of Credit Reduction Conditions are satisfied, the Letter of Credit Amount shall be reduced from the Initial Letter of Credit Amount to the Second Letter of Credit Amount. Effective as of sixth (6th) anniversary of the Rent Commencement Date, provided that (i) the Letter of Credit Reduction Conditions are satisfied, and (ii) Guarantor has a Market Capitalization which is not less than the Market Capitalization of Guarantor as of the Effective Date, the Letter of Credit Amount shall be reduced from the Second Letter of Credit Amount to the Third Letter of Credit Amount. Each such reduction in the amount of the Letter of Credit shall be effected as follows: Tenant shall either (x) deliver to Landlord a proposed consent to amendment to the Letter of Credit, which amendment shall be reasonably acceptable to the Landlord in all respects, reducing the amount of the Letter of Credit to the then-applicable Letter of Credit Amount, or (y) deliver to Landlord a replacement Letter of Credit in the amount of the then-applicable Letter of Credit Amount, which replacement Letter of Credit shall in all respects comply with all of the requirements of this **Article 28**. Within thirty (30) days after delivery of either the proposed consent to an amendment to the Letter of Credit or proposed replacement Letter of Credit, Landlord will either (A) execute such consent in accordance with the terms thereof, or provide its reasonable objections to such proposed consent or amendment, or (B) consent to the cancellation of the existing Letter of Credit and to the exchange of the replacement Letter of Credit for such existing Letter of Credit.

ARTICLE 29

EXTENSION TERMS

Section 29.1. Extension Terms. (a) Subject to the terms and conditions of this **Article 29**, Tenant shall have the right to extend the Term for the Extension Premises (as hereinafter defined) for two (2) successive extension terms (each, a **"Extension Term,"** the **"First Extension Term"** and the **"Second Extension Term"**, respectively) of five (5) years each. The First Extension Term shall commence on the day immediately following the expiration of the Initial Term (the **"First Extension Term Commencement Date"**) and shall expire on the day immediately preceding the fifth (5th) anniversary of the First Extension Term Commencement Date or such earlier date as this Lease may terminate pursuant to any of the terms and conditions of this Lease. The Second Extension Term shall commence on the fifth (5th) anniversary of the First Extension Term Commencement Date (the **"Second Extension Term Commencement Date"**), and shall expire on the day immediately preceding the fifth (5th) anniversary of the Second Extension Term Commencement Date or such earlier date as this Lease may terminate pursuant to any of the terms and conditions of this Lease. The right of Tenant to extend the Term for each Extension Term shall be subject to, and the respective Extension Term shall commence only if, all of the following conditions precedent are satisfied: (a) Tenant delivers notice (the **"Extension Notice"**) to Landlord of Tenant's exercise of such extension right not earlier than twenty-seven (27) months and not later than eighteen (18) months prior to the First Extension Term Commencement Date or the Second Extension Term Commencement Date, as applicable, (b) at the time of the exercise of such right, no Event of Default shall have occurred and be continuing hereunder, and (c) Tenant occupies not less than sixty percent (60%) of the rentable area of the Premises at the time the respective Extension Notice is given. Time is of the essence with respect to the giving of each Extension Notice. Upon the giving of each such Extension Notice, the Term of this Lease shall be extended for the respective Extension Term with the same force and effect as if such Extension Term had originally been included in the Term. Each Extension Term shall be upon all of the agreements, terms, covenants and conditions of this Lease, except that the Fixed Rent shall be determined as provided in **Section 29.2**, and after the exercise of the option with respect to the Second Extension Term, Tenant shall have no further right to extend the Term. Upon the commencement of each respective Extension Term, (A) the respective Extension Term shall be added to and become part of the Term, (B) any reference in this Lease to the "Term", the "term of this Lease" or any similar expression shall be deemed to include the respective Extension Term, and (C) the expiration of the respective Extension Term shall become the Expiration Date. Any termination, cancellation or surrender of the entire interest of Tenant under this Lease at any time during the Term shall terminate the foregoing rights of extension of Tenant hereunder.

- (b) Each extension option shall be exercised, at Tenant's option, with respect to either (i) the entire Premises then demised under this Lease, or (ii) contiguous complete floors of the Premises containing not less than fifty percent (50%) of the rentable area of the Premises, which are either the highest contiguous complete floors then constituting part of the Premises or the lowest contiguous complete floors then constituting part of the Premises. Tenant shall specify in the Extension Notice the portion of the Premises to be included in the Extension Premises and the Extension Surrender Space (as hereinafter defined); provided, however, if Tenant does not identify the Extension Surrender Space in the Extension Notice, then Tenant will be considered to have elected to have extended the Term of this Lease for the entire Premises then demised under this Lease. The portion of the Premises as to which Tenant exercises the extension option pursuant to clause (i) or (ii) above is referred to herein as

the “**Extension Premises**”, and the portion of the Premises as to which Tenant does not exercise the extension option pursuant to clause (ii) above (together with a proportionate share of the Rooftop Areas, and the areas on the first floor and lower level of the Building used for storage and waste storage and removal) is referred to herein as the “**Extension Surrender Space**.”

- (c) If Tenant exercises an extension option for less than the entire Premises, then on the date immediately preceding the first day of the applicable Extension Term, Tenant shall surrender to Landlord possession of the Extension Surrender Space, free and clear of all occupants, vacant and free of any lien or encumbrance created by Tenant or persons claiming by, through or under Tenant, and otherwise in the condition required in accordance with the provisions of this Lease, including, without limitation, **Section 5.3 and Section 18.3**. On the date immediately preceding the first day of the Extension Term (such date, the “**Extension Surrender Date**”), Tenant’s lease of the Extension Surrender Space shall end and expire, and Tenant’s estate in and possession of the Extension Surrender Space shall terminate and be extinguished as if the Extension Surrender Date was the Expiration Date with respect thereto. Effective as of the Extension Surrender Date, the Fixed Rent, Tenant’s Proportionate Share, all other amounts payable under this Lease which are calculated based on the area of the Premises, and the number of Garage Parking Passes and Offsite Parking Passes provided to Tenant, each shall be adjusted to reflect the removal of such Extension Surrender Premises from the Premises. If Tenant fails to surrender to Landlord possession of the Extension Surrender Space on the Extension Surrender Date in the condition required hereunder, then Tenant shall be in holdover in the Extension Surrender Space and Landlord shall have the right to exercise any of Landlord’s rights and remedies at law and in equity (including, pursuant to **Section 18.3** of this Lease) on account thereof.

Section 29.2. Extension Term Rent. The annual Fixed Rent payable during the Extension Term shall be equal to the then-applicable annual Fair Market Value (as hereinafter defined) of the Extension Premises as of commencement of the Extension Term (the “**Calculation Date**”). “**Fair Market Value**” shall mean the fair market annual rental value of the Extension Premises as of the Calculation Date for a term equal to the Extension Term, based on comparable space in the Building and in Comparable Buildings, including all of Landlord’s services provided for in this Lease, and with the Extension Premises considered as vacant, and in “as is” condition existing on the Extension Term Commencement Date. The calculation of Fair Market Value shall also be adjusted to take into account all relevant factors. Landlord shall advise Tenant (the “**Rent Notice**”) of Landlord’s determination of Fair Market Value not later than thirty (30) days after delivery by Tenant of the Extension Notice. If Tenant disputes Landlord’s determination of Fair Market Value, then Tenant shall give notice (a “**Dispute Notice**”) to Landlord of such dispute within ten (10) Business Days after delivery of the Rent Notice and the parties do not resolve such dispute within thirty (30) days after the delivery of the Dispute Notice, then either party may, by delivery of a notice (an “**Arbitration Notice**”) to the other party, submit said dispute concerning the Fair Market Value to arbitration in accordance with **Section 29.3**. Time is of the essence of the giving of said Dispute Notice. Failure on the part of Tenant to timely submit a Dispute Notice shall constitute a waiver of the right of Tenant to dispute the Fair Rental Value determined by Landlord, and in such event the Fixed Rent for the Extension Term shall be as set forth in the Rent Notice. If the Fixed Rent payable during the Extension Term is not determined prior to the Extension Term Commencement Date, then Tenant shall pay Fixed Rent in an amount equal to the Fair Market Value for the Premises as determined by Landlord (the “**Interim Rent**”). Upon final determination of the Fixed Rent for the Extension Term, Tenant shall commence paying such Fixed Rent as so determined, and within thirty (30) days after such determination Tenant shall pay any deficiency in prior payments of

Fixed Rent or, if the Fixed Rent as so determined shall be less than the Interim Rent, Tenant shall be entitled to a credit against the next succeeding installments of Fixed Rent in an amount equal to the difference between each installment of Interim Rent and the Fixed Rent as so determined which should have been paid for such installment until the total amount of the over payment has been recouped.

Section 29.3. Arbitration. If either party (the “Initiating Party”) delivers an Arbitration Notice to the other party (the “Receiving Party”), then the Fair Market Value shall be determined by arbitration as follows:

(1) In its Arbitration Notice, the Initiating Party shall specify the name and address of the person to act as the arbitrator on Initiating Party’s behalf. The arbitrator shall be a commercial real estate appraiser with the M.A.I. designation from the American Institute of Real Estate Advisors, with at least 10 years full-time commercial real estate appraisal experience who is familiar with the Fair Market Value of first-class laboratory, research and development, and office space in the Seaport/South Boston, Massachusetts area. Within ten (10) Business Days after receipt of the Arbitration Notice, the Receiving Party shall give notice to the Initiating Party specifying the name and address of the person designated by the Receiving Party to act as arbitrator on its behalf, which arbitrator shall be similarly qualified. If the Receiving Party fails to notify the Initiating Party of the appointment of its arbitrator within such ten (10) Business Day period, and such failure continues for five (5) Business Days after the Initiating Party delivers a second notice to the Receiving Party, then the arbitrator appointed by the Initiating Party shall be the arbitrator to determine the Fair Market Value for the Premises.

(2) If two arbitrators are chosen pursuant to **Subsection 29.3(1)**, the arbitrators so chosen shall meet within ten (10) Business Days after the second arbitrator is appointed and shall seek to reach agreement on Fair Market Value. If within twenty (20) Business Days after the second arbitrator is appointed the two arbitrators are unable to reach agreement on Fair Market Value then the two arbitrators shall appoint a third arbitrator, who shall be a competent and impartial person with qualifications similar to those required of the first two arbitrators pursuant to **Subsection 29.3(1)**. If they are unable to agree upon such appointment within five (5) Business Days after expiration of such twenty (20) Business Day period, the third arbitrator shall be selected by the parties themselves. If the parties do not agree on the third arbitrator within five (5) Business Days after expiration of the foregoing five (5) Business Day period, then either party, on behalf of both, may request appointment of such a qualified person by the Boston Office of the American Arbitration Association. The third arbitrator shall decide the dispute, if it has not been previously resolved, by following the procedures set forth in **Subsection 29.3(3)**. Each party shall pay the fees and expenses of its respective arbitrator and both shall share the fees and expenses of the third arbitrator. Attorneys’ fees and expenses of counsel and of witnesses for the respective parties shall be paid by the respective party engaging such counsel or calling such witnesses.

(3) Fair Market Value shall be fixed by the third arbitrator in accordance with the following procedures. Concurrently with the appointment of the third arbitrator, each of the arbitrators selected by the parties shall state, in writing, his or her determination of the Fair Market Value supported by the reasons therefor. The third arbitrator shall have the right to consult experts and competent authorities for factual information or evidence pertaining to a determination of Fair Market Value, but any such determination shall be

made in the presence of both parties with full right on their part to cross-examine. The third arbitrator shall conduct such hearings and investigations as he or she deem appropriate and shall, within ten (10) Business Days after being appointed, select which of the two proposed determinations most closely approximates his or her determination of Fair Market Value. The third arbitrator shall have no right to propose a middle ground or any modification of either of the two proposed determinations. The determination he or she chooses as that most closely approximating his or her determination of the Fair Market Value shall constitute the decision of the third arbitrator and shall be final and binding upon the parties. The third arbitrator shall render the decision in writing with counterpart copies to each party. The third arbitrator shall have no power to add to or modify the provisions of this Lease. Promptly following receipt of the third arbitrator's decision, the parties shall enter into an amendment to this Lease evidencing the extension of the Term for the Extension Term and confirming the Fixed Rent for the Extension Term, but the failure of the parties to do so shall not affect the effectiveness of the third arbitrator's determination.

(4) In the event of a failure, refusal or inability of any arbitrator to act, his or her successor shall be appointed by him or her, but in the case of the third arbitrator, his or her successor shall be appointed in the same manner as that set forth herein with respect to the appointment of the original third arbitrator.

ARTICLE 30

PARKING

Section 30.1. Parking Passes. During the Term of this Lease, (i) Landlord will provide (or will cause the operator of the Garage to provide) thirty-five (35) parking passes (the "**Garage Parking Passes**") for use in the Garage, and (ii) Landlord will provide Tenant (or cause to be provided to Tenant) the Offsite Parking Pass Allotment (as hereinafter defined) of parking passes (the "**Offsite Parking Passes**") for use in a nearby off-site parking facility. The "**Offsite Parking Pass Allotment**" shall be a number of parking passes which is not less than one hundred fifty (150) parking passes (the "**Minimum Offsite Parking Pass Allotment**") and not more than two hundred fifty (250) parking passes (the "**Maximum Offsite Parking Pass Allotment**"), as elected by Tenant. Prior to the Commencement Date, Tenant shall notify Landlord and the owner and/or operator of the respective garage facility as to how many Offsite Parking Passes (but in no event less the Minimum Offsite Parking Pass Allotment or more than the Maximum Offsite Parking Pass Allotment) Tenant elects to receive. Thereafter, from time-to-time during the Term, Tenant may elect to increase or reduce the number of Offsite Parking Passes received by it (but in no event to less the Minimum Offsite Parking Pass Allotment, in the aggregate, or more than the Maximum Offsite Parking Pass Allotment, in the aggregate) by providing not less than ninety (90) days prior notice of such increase or reduction to Landlord and the owner and/or operator of the respective garage facility. The provisions of this **Section 30.1** are subject to the provisions of **Section 29.1(c)**

Section 30.2. Offsite Parking Passes. In satisfaction of the obligation to provide the Offsite Parking Passes, concurrent with the execution of this Lease, Tenant has entered into an agreement granting Tenant the rights to Offsite Parking Passes at the nearby parking facility commonly known as the Channel Center Garage (the "**Channel Center Garage**") located at 116 West First Street in Boston, Massachusetts; provided, however, (x) if at any time during the Term of this Lease, the Offsite Parking Passes are not provided to Tenant for use in the Channel Center Garage (whether in connection with the demolition of the Channel Center

Garage, or as a result of a breach or default by the owner or representative of the Channel Center Garage, or otherwise), excepting only if as a result of a breach or default by Tenant, then in lieu of providing the Offsite Parking Passes for use in the Channel Center Garage, commencing on the date on which such Offsite Parking Passes for use in the Channel Center Garage are no longer provided to Tenant, Landlord shall provide Tenant (or cause to be provided to Tenant), Offsite Parking Passes (in the amount of the Maximum Offsite Parking Pass Allotment) for use in a substitute parking facility (or substitute parking facilities) located within a one-half (1/2) mile radius of the Building. The Offsite Parking Passes provided to Tenant for use in said substitute parking facility (or substitute parking facilities) are referred to herein as the "**Substitute Offsite Parking Passes.**" In such event, if Landlord fails to provide Substitute Offsite Parking Passes in the amount of the Maximum Offsite Parking Pass Allotment, then Tenant shall be entitled to an Offsite Parking Pass Abatement (as hereinafter defined) on a per diem basis for the period of time commencing on the day on which Tenant no longer is provided with Substitute Offsite Parking Passes in the amount of the Maximum Offsite Parking Pass and expiring on the date Tenant is provided with Substitute Offsite Parking Passes in the amount of the Maximum Offsite Parking Pass Allotment. The "**Offsite Parking Pass Abatement**" shall be an abatement of the the Fixed Rent payable by Tenant under this Lease, which abatement shall be in an amount equal to (x) ten percent (10%) of the then-current monthly Fixed Rent payable by Tenant under this Lease, multiplied by a fraction (y) the numerator of which is (i) the Maximum Offsite Parking Pass Allotment minus the number of Substitute Offsite Parking Passes actually provided to Tenant, and (z) the denominator of which is the Maximum Offsite Parking Pass Allotment. The foregoing rent abatement shall be the sole and exclusive remedy of Tenant on account of such failure or inability to provide (or cause to be provided) the Substitute Offsite Parking Passes and Landlord shall have no further liabilities or obligations to Tenant on account thereof.

Section 30.3. Charges for Parking Passes. Tenant shall be responsible for payment of all fees, charges, and expenses payable for all such parking passes, including both the Garage Parking Passes and the Offsite Parking Passes, and Landlord shall have no liabilities or obligations with respect to such fees, charges and expenses. Tenant shall pay to Landlord, as Additional Rent, a monthly charge for all of the Garage Parking Passes, which charge shall be at the prevailing fair market rate for parking passes in parking facilities in Comparable Buildings, as reasonably determined by the operator of the Garage from time to time. Said rate payable for the Garage Parking Passes shall be subject to adjustment not more frequently than once in each calendar year. Tenant shall be responsible for payment of all fees, charges and expenses payable to the owner or operator of the Channel Center Garage or substitute parking facility (or substitute parking facilities), in accordance with the respective agreements between Tenant and such owner or operator.

Section 30.4. Risk of Loss, Damage. The parking passes shall be used only for parking duly registered and operating private passenger motor vehicles owned and operated by Tenant or its employees, or any permitted occupant of the Premises. The parking passes shall not be transferable, except in connection with a permitted sublease or other occupancy agreement of the Premises or an assignment or other transfer of this Lease. Except to the extent otherwise provided in M.G.L. Chapter 186, Section 15, or to the extent caused by the negligence or willful misconduct of the operator of the Garage, the Channel Center Garage, or the substitute parking facility (or facilities), as applicable, neither the operator of the respective facility nor Landlord shall be liable for any loss, injury or damage to persons using the Garage or motor vehicles or other property therein, and, to the fullest extent permitted by law, the use of the respective facility shall be at the sole risk of Tenant and its employees. Without limitation, neither the operator of the respective facility nor Landlord shall not be responsible for money,

jewelry, motor vehicles or other personal property lost in or stolen from the Garage regardless of whether such loss or theft occurs when the respective facility or other areas therein are locked or otherwise secured against entry, except to the extent caused by the negligence or willful misconduct of Landlord or the operator of the respective facility, as applicable.

Section 30.5. Rules and Regulations. Landlord or the operator of the Respective facility, as applicable, may from time to time, in accordance with the terms and conditions of **Article 23**, promulgate rules and regulations regarding the respective parking facility, the parking passes and the use thereof, including rules and regulations controlling the flow of traffic to and from various parking areas, the angle and direction of parking and the like. Tenant shall comply with and cause its employees to comply with all such rules and regulations. If Tenant's employees fail to comply with such rules and regulations, and such failure continues for more than thirty (30) days after notice thereof from Landlord or the operator of the respective parking facility, as applicable, then Landlord or the operator of the respective parking facility, as applicable, may elect to revoke the rights of the subject employee to use respective parking passes.

Section 30.6. Storage. Tenant shall not store or permit its employees to store any motor vehicles in the respective parking facility without the prior written consent of Landlord and the operator of the respective parking facility. Except for emergency repairs, Tenant and its employees shall not perform any repair work on any motor vehicles while located in the respective parking facility.

Section 30.7. Closure. Landlord and the operator of the respective parking facility shall have the right to temporarily close the respective parking facility or certain areas therein in order to perform repairs, maintenance and improvements in and to the respective parking facility. In connection with any such closure of the respective parking facility, Landlord will, except in the case of emergency, provide reasonable advance notice of any such closure of the respective parking facility.

ARTICLE 31

PATRIOT ACT

Section 31.1. Patriot Act. As an inducement to Landlord to enter into this Lease, Tenant hereby represents and warrants that: (i) Tenant is not, nor is it owned or Controlled directly or indirectly by, any person, group, entity or nation named on any list issued by the Office of Foreign Assets Control of the United States Department of the Treasury ("**OFAC**") pursuant to Executive Order 13224, the Uniting and Strengthening America by Providing Appropriate Tools Required to Intercept and Obstruct Terrorism Act of 2001 (Public Law No. 107-56, 115 Stat. 272), as the same may be amended, modified or supplemented from time-to-time, or any similar list or any Requirement any Executive Order of the President of the United States as a terrorist, "Specially Designated National and Blocked Person" or other banned or blocked person (any such person, group, entity or nation being hereinafter referred to as a "**Prohibited Person**"); (ii) Tenant is not (nor is it owned, Controlled, directly or indirectly, by any person, group, entity or nation which is) acting directly or indirectly for or on behalf of any Prohibited Person; and (iii) neither Tenant (nor any person, group, entity or nation which owns or Controls Tenant, directly or indirectly) has conducted or will conduct business or has engaged or will engage in any transaction or dealing with any Prohibited Person, including any assignment of this Lease or any subletting of all or any portion of the Premises or the making or receiving of any contribution or funds, goods or services to or for the benefit of a Prohibited

Person. In connection with the foregoing, it is expressly understood and agreed that (x) any breach by Tenant of the foregoing representations and warranties shall be an Event of Default, and (y) the representations and warranties contained in this **Article 31** shall be continuing in nature and shall survive the expiration or earlier termination of this Lease.

ARTICLE 32

EXTERIOR BUILDING SIGNS

As an appurtenance to the Premises, in accordance with and subject to the provisions of this **Article 32**, subject to approval by all applicable Governmental Authorities, so long as (i) this Lease is in full force and effect, (ii) no Event of Default then exists, and (iii) the original Tenant named in this Lease leases not less than 140,000 square feet of rentable area in the Building, then Tenant may elect, at Tenant's sole cost and expense, to construct, erect, and maintain an exterior sign (the "Exterior Building Sign") on the exterior façade of the Building, identifying Tenant as an occupant of the Building. The approved locations of Tenant's Exterior Building Signage are depicted on the plan attached hereto as **Exhibit K**. Said Exterior Building Sign (including the size, location, design, materials, colors and appearance thereof) shall be subject to the prior review and commercially reasonable approval of Landlord in all respects. Tenant shall, at its sole cost and expense, prepare all plans and specifications relating to the Exterior Building Sign installed by Tenant, obtain all permits and approvals from all applicable Governmental Authorities required in connection with the Exterior Building Sign, if any, and pay all costs and expenses of constructing, installing, maintaining, repairing, replacing, and removing the Exterior Building Sign. The Exterior Building Sign shall be removed by Tenant concurrent with the expiration or earlier termination of the Term of this Lease, and Tenant shall restore the areas where the Exterior Building Sign had been installed to their condition prior to the installation of such signs, subject to commercially reasonable wear and tear. Landlord shall have no obligations or liabilities with respect to the design of the Exterior Building Sign, the obtaining of any required permits or approvals with respect thereto, or the construction, installation, maintenance, repair or replacement thereof, all of which shall be at the sole risk, and sole cost and expense of Tenant. Tenant shall maintain and repair the Exterior Building Sign installed by Tenant in first-class order, condition and repair, at its sole cost and expense, in accordance with all applicable Laws.

As an appurtenance to the Premises, in accordance with and subject to the provisions of this **Article 32**, subject to approval by all applicable Governmental Authorities, so long as (i) this Lease is in full force and effect, and (ii) no Event of Default then exists, then Landlord will install signs identifying Tenant at the entrances to the Building and on the primary feature wall of the lobby on the first (1st) floor of the Building. Renderings of said entrance signs and feature wall signs are depicted on the Plan of Tenant's Entrance/Lobby Feature Wall signage attached hereto as **Exhibit L**.

ARTICLE 33

TENANT SELF-HELP

Section 33.1. Repair Notice. If Landlord fails to perform any of its maintenance or repair obligations under this Lease and said failure materially and adversely impacts the occupancy of the Premises by Tenant, then Tenant shall have the right to notify Landlord thereof (a "**Repair Notice**"), in which event Landlord shall perform such maintenance or repair (i) within five (5) Business Days following Landlord's receipt of the Repair Notice with respect to any Emergency Repair (defined below), and (ii) within thirty (30) days following Landlord's receipt of the Repair Notice with respect to any Adverse Condition Repair (defined below); provided, however, that if such Repairs cannot despite commercially reasonable efforts be completed within the foregoing time periods, Landlord shall have an additional commercially reasonable period of time within which to perform such Repairs, provided that Landlord has commenced such repairs within the applicable periods of time set forth above and thereafter diligently and continuously pursues the completion of such Repairs. For purposes hereof, "**Emergency Repairs**" shall mean any repairs which Landlord is obligated to perform under this Lease and which are necessary to relieve a situation which threatens the physical well-being of persons or damage to property in the Premises or materially and adversely affects the research or experiments conducted by Tenant in the Premises. For purposes hereof, "**Adverse Condition Repairs**" shall mean any repairs (other than Emergency Repairs) which Landlord is obligated to perform under this Lease and which are necessary to relieve a situation which adversely and materially impairs Tenant's use or occupancy of the Premises. Emergency Repairs and Adverse Condition Repairs sometimes are referred to herein collectively as "**Repairs.**"

Section 33.2. Repair Dispute Notice. If Landlord reasonably and in good faith disputes that Landlord is obligated under the terms of this Lease to perform any such requested Repairs, then Landlord shall deliver written notice thereof to Tenant (a "**Repair Dispute Notice**") within three (3) Business Days after receipt of the Repair Notice, in which event Tenant may not exercise its Self-Help Right (defined below). In lieu thereof, either Landlord or Tenant may elect to submit such dispute to resolution in accordance with the Dispute Resolution Procedure. If Landlord or Tenant elects to submit such dispute to resolution in accordance with the Dispute Resolution Procedure and it is determined upon final completion of such proceeding that Landlord is obligated under this Lease to perform such Repairs, then Landlord (a) shall reimburse Tenant for all costs and expenses incurred by Tenant in connection with said Dispute Resolution Procedure, and (b) shall (i) within two (2) Business Days following the determination of such Dispute Resolution Procedure with respect to an Emergency Repair and (ii) within five (5) Business Days following the determination of such Dispute Resolution Procedure with respect to an Adverse Condition Repair, commence such Repair and thereafter diligently pursue such Repair to completion. If it is determined upon final completion of such arbitration that Landlord is not obligated to perform such Repairs, then Tenant shall reimburse Landlord, as Additional Rent, for all costs and expenses incurred by Landlord in connection with said arbitration proceeding.

Section 33.3. Self-Help Right. If either (x) Landlord has not commenced (and thereafter diligently pursued completion thereof) any such requested Repair within the applicable time period set forth in **Section 33.1**, unless Landlord has submitted a Repair Dispute Notice as aforesaid, or (y) if Landlord timely submits a Repair Dispute Notice and it is determined upon the final completion of the Dispute Resolution Procedure that Landlord is

obligated under this Lease to perform such Repairs, and thereafter Landlord has not commenced (and thereafter diligently pursued completion thereof) any such requested Repair within the applicable time period set forth in **Section 33.2**, then at any time thereafter prior to the commencement of such Repair by Landlord, Tenant shall have the right (the "**Self-Help Right**") to undertake such actions as may be reasonably necessary to perform such Repairs; provided, however, (a) in no event shall any Repairs performed by Tenant adversely affect the structure of the Building or any Building Systems; (b) the insurance and indemnity provisions set forth in **Article 11 and Article 25** shall apply to Tenant's performance of such Repairs; (c) Tenant shall perform all such Repairs in accordance with all applicable Requirements; (d) Tenant shall retain to effect such Repairs only reputable and qualified contractors and suppliers as are duly licensed and, with respect to Repairs to the Building Systems and/or the structural elements of the Building (including the roof), only those contractors approved by Landlord in the Building for such work (without limitation, Landlord will provide Tenant with the names of the then-approved contractors for the roof and/or applicable Building System upon after request therefor); (e) Tenant shall effect such Repairs in good and workmanlike manner, consistent with the standards of the Building; (f) Tenant shall use new or like new materials; and (g) Tenant shall use diligent efforts to minimize interference with or impact on other occupants of the Building. Promptly following completion of any Repairs undertaken by Tenant pursuant to the provisions of this **Section 33.3**, Tenant shall deliver a detailed invoice of the work completed, the materials used and the costs and expenses thereof. Upon completion of such Repairs and the delivery of said invoice by Tenant, Landlord shall promptly reimburse Tenant for all reasonable actual out-of-pocket costs incurred by Tenant in connection with the performance of such Repairs, or (B) afford Tenant a credit against the next installment payment(s) of Fixed Rent payable under this Lease in amount equal to the reasonable actual out-of-pocket costs incurred by Tenant in connection with the performance of such Repairs. If Tenant submits a valid and proper invoice for the reasonable actual out-of-pocket expenses incurred in performing such Repairs, and all of the conditions thereto as set forth above have been timely, fully and completely satisfied in full, and Landlord has not delivered a written objection thereto as aforesaid, and Landlord shall fail timely to pay or provide a rent credit for the uncontested amount and such failure shall continue for thirty (30) days after Tenant provides a written notice to Landlord which expressly and specifically identifies such failure to pay the amount requested, then Tenant shall have the right to set-off such unpaid amount against the next monthly installments of Fixed Rent payable under this Lease.

ARTICLE 34

DISPUTE RESOLUTION PROCEDURE

Wherever this Lease provides for a dispute to be resolved by the procedure (the "**Dispute Resolution Procedure**") provided for in this **Article 34**, such dispute shall, at either party's option, be settled and finally determined by arbitration in the City of Boston, Massachusetts in accordance with the following provisions of this **Article 34**. Within ten (10) Business Days next following the giving of any notice by Landlord or Tenant stating that it wishes such dispute to be so determined, Landlord and Tenant shall each give notice to the other setting forth the name and address of an arbitrator designated by the party giving such notice. If either party shall fail to give notice of such designation within said ten (10) Business Days, then the arbitrator chosen by the other side shall make the determination alone. The two arbitrators shall designate a third arbitrator within five (5) Business Days after the designation of the second arbitrator. If the two arbitrators shall fail to agree upon the designation of a third arbitrator within such five (5) Business Day period, then either party may apply to the office of the American Arbitration Association located in the City of Boston for the designation of such

third arbitrator in accordance with the Commercial Arbitration Rules of such Association. If such office is unable or refuses to act within 10 Business Days, then either party may apply to any court having jurisdiction for the designation of such third arbitrator. Each arbitrator shall (i) be an independent third party and not affiliated with either party, (ii) shall not have worked for or have been employed by either party within the immediately preceding three (3) years, and (iii) have appropriate (and not less than ten (10) years) experience in the Boston area in a calling relating to the matter as to which arbitration is being sought. The three (3) arbitrators shall conduct such hearings as they deem appropriate, making their determination in writing and giving notice to Landlord and Tenant of their determination as soon as practicable, and if possible, within five (5) Business Days after the designation of the third arbitrator; the concurrence of or, in the event no two of the arbitrators shall render a concurrent determination, then the determination of the third arbitrator designated shall be binding upon Landlord and Tenant, subject only to the applicable provisions of the Massachusetts Uniform Arbitration Act (M.G.L. c. 251). Each party shall pay its own counsel fees and expenses, if any, in connection with any arbitration under this **Article 34** (unless the arbitrators shall have awarded counsel fees and expenses to the prevailing party upon a finding of bad faith by the other party), including the expenses and fees of any arbitrator selected by it in accordance with the provisions of this **Article 34**, and the parties shall share all other expenses and fees of any such arbitration. The arbitrators shall be bound by the provisions of this Lease, and shall not add to, subtract from or otherwise modify such provisions

ARTICLE 35

ELECTRONIC SIGNATURES

This Lease may be executed by electronic signature, which shall be considered as an original signature for all purposes and shall have the same force and effect as an original signature. Without limitation, in addition to electronically produced signatures, "electronic signature" shall include electronically scanned and transmitted versions (e.g., via PDF and/or DocuSign) of an original signature. This Lease may be executed in multiple counterparts (which counterparts may be executed and delivered by PDF, DocuSign, or another file sent by email) which shall together constitute a single document. Any executed counterpart of this Lease delivered by PDF, DocuSign or another file sent by email shall be equally effective as an original counterpart for all purposes.

(signatures on following page)

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

IN WITNESS WHEREOF, Landlord and Tenant have executed this Lease as of the day and year first above written.

LANDLORD:

105 W FIRST STREET OWNER, L.L.C.,
a Delaware limited liability company

By: /s/ Daniel Beldegrun
Name: Dan Beldegrun
Its: CEO

TENANT:

CRISPR THERAPEUTICS, INC.,
a Delaware corporation

By: /s/ Samarth Kulkarni
Name: Samarth Kulkarni
Its: CEO

[Signature Page to CRISPR Lease]

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

EXHIBIT A

FLOOR PLANS OF THE PREMISES

[***]

A-1

EXHIBIT B

DEFINITIONS

ADA: Collectively, the Americans with Disabilities Act (42 U.S.C. § 12101 et seq.) and the regulations and guidelines promulgated thereunder, as the same may be amended, modified, and supplemented from time-to-time; and, the rules and regulations of the Massachusetts Architectural Access Board (M.G.L. c. 22, § 13A, et seq.; 521 C.M.R. 1.00 et seq.), as the same may be amended, modified, and supplemented from time-to-time; and, any law, code or regulation promulgated by a Governmental Authority of similar import.

Affiliate: With respect to any person or entity, any other person or entity that, directly or indirectly (through one of more intermediaries), Controls, is Controlled by, or is under common Control with, such first person or entity.

Base Rate: The annual rate of interest publicly announced from time to time by Bank of America, N.A., or its successor, in New York, New York as its “**base rate**” (or such other term as may be used by Bank of America, N.A., from time to time, for the rate presently referred to as its “**base rate**”).

Building Systems: The PH neutralization system installed by Landlord in the Building, the Generator, the mechanical, electrical, plumbing, sanitary, sprinkler, heating, ventilation and air conditioning, security, life-safety, elevator and other service systems or facilities of the Building up to the point of connection of localized distribution to the Premises (excluding, however, supplemental HVAC systems of tenants, sprinklers and the horizontal distribution systems within and servicing the Premises and by which mechanical, electrical, plumbing, sanitary, heating, ventilating and air conditioning, security, life-safety and other service systems are distributed from the base Building risers, feeders, panelboards, etc. for provision of such services to the Premises).

Business Days: All days, excluding Saturdays, Sundays and Observed Holidays.

Code: The Internal Revenue Code of 1986, as amended, and the regulations promulgated thereunder, as amended.

Common Areas: The lobby areas of the Building, the Lobby Café, the Convenor Space, plaza and sidewalk areas located on the Real Property, and other similar areas of general access, the Garage, elevator lobbies, restrooms, and other similar facilities located on the Real Property and serving the Building.

Common Facilities: All common areas and facilities serving the Building, including all air-conditioning and mechanical areas, the central plant and systems (including ventilating fans and fan rooms) furnishing heating, ventilating and air conditioning to the Building, all areas containing equipment or enclosing pipes, ducts or shafts, utility distribution systems and electrical transformers, closets, equipment rooms and switchgear, emergency generators and oil tanks therefor, the common corridors, lobbies and stairways, loading docks, the PH neutralization system, the air intake and exhaust systems, the Garage, the interior publicly accessible space included as part of the Building (such as the lobby areas), management offices for the Building, turn-around areas, mechanical and electrical areas and facilities, the area of the covered space located along the perimeter of the Building, and the other public sidewalks, stairways and plazas.

Comparable Buildings: First-class laboratory, research and development, and office buildings of comparable age and quality in the Boston, Massachusetts area.

Control, Controlled By, or Under Common Control With: (i)(a) The ownership, directly or indirectly, of more than 50% of the voting stock of a corporation, or (b) in the case of any person or entity which is not a corporation, the ownership, directly or indirectly, of more than 50% of the beneficial ownership interest in such person or entity, or (ii) in the case of any such person or entity, the possession, directly or indirectly, of the power to direct or cause the direction of the management and policies of such corporation, person or entity.

COVID-19 Delays: Delays arising out of or resulting from the COVID-19 pandemic, including, without limitation, federal, state and locally-declared states of emergency and government mandated closures of, and limitations and restrictions on, businesses and/or construction activities, quarantines, travel bans, and supply chain interruptions. COVID-19 Delays shall not be considered to be Unavoidable Delays.

Decorative Alterations: Decorative alterations such as painting, wall coverings and floor coverings which (i) are non-structural and do not affect any Building Systems, (ii) affect only the Premises and are not visible from outside of the Premises or the Building, (iii) do not require a conditional use permit, variance, waiver or other relief from any applicable Requirement, (iv) do not affect the fixed laboratory benches or fume hoods in the Premises, and (v) comply in all respects with all applicable Requirements.

Deficiency: The difference between (a) the Fixed Rent and Additional Rent for the period which otherwise would have constituted the unexpired portion of the Term (assuming the Additional Rent for each year thereof to be the same as was payable for the year immediately preceding such termination or re-entry), and (b) the net amount, if any, of rents collected under any reletting effected pursuant to the provisions of this Lease for any part of such period (after first deducting from such rents all expenses incurred by Landlord in connection with the termination of this Lease, Landlord's re-entry upon the Premises and such reletting, including repossession costs, brokerage commissions, attorneys' fees and disbursements, and alteration costs).

Environmental Laws: All laws, statutes, ordinances, rules and regulations of any local, state or federal governmental authority having jurisdiction concerning environmental, health and safety matters, including the following: the Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended, 42 U.S.C. §9601, et seq.; the Hazardous Materials Transportation Act, as amended, 49 U.S.C. §1801, et seq.; the Federal Water Pollution Control Act, as amended, 33 U.S.C. §1251, et seq.; the Federal Resource Conservation and Recovery Act, as amended, 42 U.S.C. §6901, et seq.; the Safe Drinking Water Act, as amended, 42 U.S.C. §300, et seq.; the Toxic Substances Control Act, as amended, 15 U.S.C. §2601, et seq.; the Federal Hazardous Substances Control Act, as amended, 15 U.S.C. §1261, et seq.; the Occupational Safety and Health Act, as amended, 29 U.S.C. §651, et seq.; Massachusetts General Laws, Chapters 21C, 21D and 21E; all rules, codes and requirements of the Massachusetts Department of Environmental Protection; and the rules and regulations promulgated under any of the foregoing, as such laws, rules and regulations may be amended from time to time.

Excluded Expenses: (a) Taxes; (b) franchise or income taxes imposed upon Landlord; (c) principal, interest, or any other financing or refinancing costs on any mortgages, deeds of trust, or any penalties or late charges relating thereto; (d) leasing commissions; (e) the cost of tenant installations and decorations incurred in connection with preparing space for any Building tenant, including workletters and concessions; (f) rent under Superior Leases, excepting items included in Operating Expenses, Taxes and/or Insurance Expenses; (g) management fees to the extent in excess of 3% of the gross rentals and other revenues collected for the Real Property (excluding management fees and utilities paid by Tenant); (h) wages, salaries and benefits paid to any persons above the grade of Building Manager and their immediate supervisor; (i) legal and accounting fees relating to (A) disputes with tenants, prospective tenants or other occupants of the Building, (B) disputes with purchasers, prospective purchasers, mortgagees or prospective mortgagees of the Building or the Real Property or any part of either, or (C) negotiations of leases, contracts of sale or mortgages; (j) costs that are reimbursed out of insurance, warranty or condemnation proceeds, or which are reimbursable by Tenant or other tenants of the Building other than pursuant to an expense escalation clause; (k) costs in the nature of penalties or fines; (l) costs for services, supplies or repairs (other than management fees) paid to any Affiliate of Landlord in excess of costs that would be payable in an "arm's length" or unrelated situation for comparable services, supplies or repairs; (m) allowances, concessions or other costs and expenses of improving or decorating any demised or demisable space in the Building; (n) appraisal, advertising and promotional expenses in connection with leasing of the Building; (o) any costs or expenses (including fines, interest, penalties and legal fees) arising out of Landlord's failure to timely pay Operating Expenses or Taxes; (p) costs incurred in connection with the removal, encapsulation or other treatment of asbestos or any other Hazardous Materials (classified as such on the Effective Date) existing at the Real Property as of the date hereof; (q) capital expenditures which are not Permitted Capital Expenditures; (r) costs relating to the repair, maintenance and operation of the Garage; (s) Taxes; (t) reserves; (u) all costs associated with Landlord's political contributions, voluntary civic contributions or voluntary charitable contributions and/or membership fees; (v) dues payable to industry associations or organizations to the extent in excess of \$2,500.00 per calendar year; (w) costs and expenses incurred to comply with any violation of Requirements in effect and applicable to the Building on the Commencement Date; (x) depreciation; (y) cost of any work or services performed for any facility other than the Building or Real Property; (z) cost of initial cleaning and rubbish removal from the Building or the Real Property to be performed before final completion of the Building or tenant space; (aa) cost of initial landscaping of the Building or the Real Property; (bb) cost of the initial stock of tools and equipment for operation, repair and maintenance of the Building or the Real Property; (cc) cost of acquiring sculptures, paintings and other works of art; (dd) costs related to public transportation, transit or vanpools, except to the extent that Tenant shall elect to participate in the service to which such costs relate; (ee) asset management fees; (ff) costs and expenses of operating the Lobby Café; (gg) Insurance Expenses; or (hh) costs and expenses of organizing and maintaining the Landlord entity.

Flex Areas: The areas of the Premises shown as "lab flex" on the floor plans attached to this Lease as **Exhibit C**.

Garage: The parking garage located beneath and comprising a part of the Building.

Governmental Authority: The United States of America, the City of Boston, the Commonwealth of Massachusetts, ISD, or any political subdivision, agency, department, commission, board, bureau or instrumentality of any of the foregoing, now existing or hereafter created, having jurisdiction over the Real Property.

Hazardous Materials: Any substances or materials considered or defined as “hazardous”, “toxic”, “contaminant” or “pollutant” or words or phrases of similar import under any Environmental Law, including asbestos, oil or any hazardous, radioactive or toxic substance, material or waste or petroleum derivative which is or becomes regulated by any Environmental Law, including live organisms, viruses and fungi, medical waste and any so-called “biohazard” materials”; and any materials on the right to know list of the Occupational Safety and Health Administration.

HVAC System: The Building System designed to provide heating, ventilation and air conditioning.

Indemnitees: Landlord, Landlord’s Agent, each Mortgagee and Lessor, and each of their respective direct and indirect partners, officers, shareholders, directors, members, managers, trustees, beneficiaries, employees, principals, contractors, servants, agents, and representatives.

Initial Term: The period of time commencing on the Commencement Date and expiring on the Expiration Date (without giving effect to any Renewal Term).

ISD: The City of Boston Inspectional Services Department.

Insured Parties: Landlord, Landlord’s Agent, and any Lessors and Mortgagees whose names have been furnished to Tenant.

Lab Areas: The areas of the Premises shown as “lab” on the floor plans attached to this Lease as **Exhibit C**.

Latent Defects: Material defects in the Landlord’s Work or the Base Building Work (as applicable) which defects are not, despite the exercise of commercially reasonable efforts by Tenant, susceptible of being detected (and are not detected) at the time of delivery of the Premises to Tenant.

Lease Year: The first Lease Year shall commence on the Rent Commencement Date and shall end on the last day of the calendar month preceding the month in which the first anniversary of the Rent Commencement Date occurs. Each succeeding Lease Year shall commence on the day following the end of the preceding Lease Year and shall extend for twelve (12) consecutive months; provided, however, that the last Lease Year shall expire on the Expiration Date.

Lessor: A lessor under a Superior Lease.

Losses: Any and all losses, liabilities, damages, claims, judgments, fines, suits, demands, costs, interest and expenses of any kind or nature (including reasonable attorneys’ fees and disbursements) incurred in connection with any claim, proceeding or judgment and the defense thereof, and including all costs of repairing any damage to the Premises or the Building or the appurtenances of any of the foregoing to which a particular indemnity and hold harmless agreement applies.

Market Capitalization: The total dollar market value of a publicly traded company’s outstanding shares of stock, calculated by multiplying the total number of such company’s outstanding shares by the current market price of one (1) share.

Measurement Method: A modified BOMA International Standard Method for Measuring Floor Area in Office Buildings 2017 which aligns with the Boston/Cambridge market standard for lab building measurement, calculated in accordance with the Modified BOMA measurement dated July 10, 2020 for the Building which has been prepared by Landlord and provided to Tenant prior to the Effective Date.

Minor Alterations: Alterations in the Premises which (i) cost less than \$100,000.00 in the aggregate, (ii) are non-structural and do not adversely impact any Building Systems, (iii) affect only the Premises and are not visible from outside of the Building, (iv) are not visible from the first (1st) floor Common Areas, unless they are consistent with the standards of appearance and presentation of similar premises in Comparable Buildings; (v) do not require a conditional use permit, variance, waiver or other relief from any applicable Requirement (excepting only a conditional use permit for the construction and operation of the Vivarium), (vi) do not increase or decrease the rentable area of the Premises, and (vii) comply in all respects with all applicable Requirements

Mortgage(s): Any mortgage, trust indenture or other financing document which may now or hereafter encumber or otherwise affect the Premises, the Real Property and/or the Building or any Superior Lease and the leasehold interest created thereby, and all renewals, extensions, supplements, amendments, modifications, consolidations and replacements thereof or thereto, substitutions therefor, and advances made thereunder.

Mortgagee(s): Any mortgagee, trustee or other holder of a Mortgage.

MWRA: The Massachusetts Water Resources Authority.

MWRA Permit: A wastewater treatment operator permit issued by the MWRA for the operation of the PH neutralization system for the Building.

Observed Holidays: New Years' Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day plus days observed by the Commonwealth of Massachusetts, the City of Boston, and the labor unions servicing the Building as holidays.

Office Areas: The areas of the Premises shown as "office" on the floor plans attached to this Lease as **Exhibit C**.

Permitted Internal Staircases: Internal staircases within the Premises which (i) do not adversely impact the structural elements of the Building, (ii) do not require a conditional use permit, variance, waiver or other relief from any applicable Requirement, (iii) do not materially decrease the rentable area of the Premises, and (iv) comply in all respects with all applicable Requirements.

Permitted Transferee: An assignee of the interest of Tenant under this Lease which acquires said interest either (i) pursuant to an assignment approved by Landlord in accordance with the provisions of **Article 13**, or (ii) pursuant to an assignment for which the consent of Landlord is not required pursuant to the provisions of **Section 13.6**.

Prohibited Innovation Area Use: Any of the following: (i) use of the Innovation Area principally and/or primarily for accounting and administrative offices; (ii) use of the Innovation Area principally and/or primarily for conference center and/or meeting room facilities; (iii) use of the Innovation Area principally and/or primarily as a data center or computer room; (iv) use of the Innovation Area principally and/or primarily for classrooms or training rooms; (v) use of the Innovation Area principally and/or primarily for storage; (vi) use of the Innovation Area principally and/or primarily for retail uses; or (vii) use of the Innovation Area principally and/or primarily for uses that are open to the general public.

Prohibited Use: Any use or occupancy of the Premises that in Landlord's reasonable judgment would: (a) cause damage to the Building or any equipment, facilities or other systems therein; (b) impair the appearance of the Building; (c) interfere with the efficient and economical maintenance, operation and repair of the Premises or the Building or the equipment, facilities or systems thereof; (d) adversely affect any service provided to, and/or the use and occupancy by, any Building tenant or occupants; (e) not comply with applicable Requirements; or (f) constitute a nuisance or cause harmful air emissions, laboratory odors or noises. Prohibited Use also includes the use of any part of the Premises for: (i) the manufacturing of biotechnology or pharmaceutical products, (ii) the use of any radioactive materials, of any kind whatsoever, (iii) a restaurant or bar; (iv) the preparation, consumption, storage, manufacture or sale of food or beverages (except in connection with vending machines and/or warming kitchens installed for the use of Tenant's employees only; (v) the business of printing; (vi) a school or classroom (excepting only for employees, customers and consultants of Tenant); (vii) lodging or sleeping; (viii) the operation of retail facilities (meaning a business whose primary patronage arises from the generalized solicitation of the general public to visit Tenant's offices in person without a prior appointment) of a savings and loan association or retail facilities of any financial, lending, securities brokerage or investment activity; (ix) a payroll office; (x) a barber, beauty or manicure shop; (xi) an employment agency or similar enterprise; (xii) offices of any Governmental Authority, any foreign government, or any agency or department of the foregoing; (xiii) the manufacture, retail sale, storage of merchandise or auction of merchandise, goods or property of any kind to the general public which could reasonably be expected to create a volume of pedestrian traffic substantially in excess of that normally encountered in first-class laboratory, research and development and office buildings; (xiv) the rendering of patient on-site medical, dental or other therapeutic or diagnostic services; or (xv) any illegal purposes or any activity constituting a nuisance.

Related Entity: A business entity which Controls, is Controlled by, or is under Common Control with, the original tenant named herein.

Requirements: All present and future laws, rules, orders, ordinances, regulations, statutes, requirements, codes and executive orders, extraordinary and ordinary of (i) all Governmental Authorities, including the Zoning Code of the City of Boston; the ADA and any law of like import, and all rules, regulations and government orders with respect thereto, and any of the foregoing relating to Hazardous Materials, environmental matters, public health and safety matters, and landmarks protection, and (ii) any applicable fire rating bureau or other body exercising similar functions, affecting the Real Property or the maintenance, use or occupation thereof, or any street, avenue or sidewalk comprising a part of or in front thereof or any vault in or under the same.

Rules and Regulations: The rules and regulations annexed to and made a part of this Lease as **Exhibit F**, as they may be modified from time to time by Landlord, in accordance with the provisions of this Lease.

Specialty Alterations: Alterations which are reasonably determined by Landlord to be inconsistent with the standards of customary first-class research, laboratory and animal science facilities in the Boston, Massachusetts area, such as kitchens, executive bathrooms, raised computer floors, vaults, staircases which are not Permitted Internal Staircases, slab penetrations, conveyors, and other Alterations of a similar character. Without limitation, laboratory equipment shall not automatically constitute Specialty Alterations.

Superior Lease(s): Any ground or underlying lease of the Real Property or any part thereof heretofore or hereafter made by Landlord and all renewals, extensions, supplements, amendments, modifications, consolidations, and replacements thereof.

Tenant Delay: Any delay which results from any act or omission of any Tenant Party, including delays due to changes in or additions to, or interference with any work to be done by Landlord, or delays by Tenant in submission of information approving working drawings or plans or estimates or giving authorizations or approvals.

Tenant Party: Tenant and any subtenants or occupants of the Premises and their respective agents, contractors, subcontractors, employees, invitees or licensees.

Tenant's Property: Tenant's moveable fixtures and moveable partitions, telephone and other equipment, telecommunications data and other cabling, computer systems, trade fixtures, furniture, modular furniture, partitions, furnishings, Rooftop Equipment, animals, and other items of personal property which are removable without material damage to the Building.

Unavoidable Delays: Either party's inability to fulfill or delay in fulfilling any of its obligations under this Lease expressly or impliedly to be performed by such party or such party's inability to make or delay in making any repairs, additions, alterations, improvements or decorations or such party's inability to supply or delay in supplying any equipment or fixtures, if such party's inability or delay arises out of or results from any cause beyond such party's reasonable control, including, without limitation, any of the following: (a) acts of God; (b) flood, tsunami, fire, earthquake, explosion, hurricane and other natural disaster and weather event; (c) disease, pestilence, epidemic, pandemic, quarantine or other public health emergency; (d) war, invasion, hostilities (whether war is declared or not), terrorist threat or act, riot or other civil unrest; (e) order of a governmental authority or law; (f) embargo or blockade; (g) action by any Governmental Authority; (h) national or regional emergency; (i) strike, labor stoppage or slowdown or other labor disturbance; (j) shortage of adequate power or transportation services or facilities; and (k) shortage of labor, materials or fuel, or a disruption of a supply chain; provided, however (i) in no event shall financial inability be deemed to be or be a cause of an Unavoidable Delay, and (ii) in no event shall any Unavoidable Delay in any way affect, reduce or abate the obligation of Tenant timely to pay all Rent and other charges payable by Tenant pursuant to the terms of this Lease. Notice of the occurrence of any such Unavoidable Delay shall be given by the claiming party to the other party not more than five (5) days after the party acquires actual knowledge of the Unavoidable Delay or the circumstances giving rise to the Unavoidable Delay.

*** Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

EXHIBIT C

PLANS SHOWING OFFICE AREAS, LAB AREAS, AND FLEX AREAS

C-1

*** Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

EXHIBIT D-1

SCHEDULE OF BASE BUILDING WORK PLANS

D-1-1

*** Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

EXHIBIT D-2

BASE BUILDING WORK MATRIX

D-2-1

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

EXHIBIT D-3

LANDLORD'S WORK- DESIGN NARRATIVE

[***]

D-3-1

*** Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

EXHIBIT E

SCHEDULE OF TENANT'S HAZARDOUS MATERIALS

E-1

*** Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

EXHIBIT F

RULES AND REGULATIONS

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

EXHIBIT G

FORM OF COMMENCEMENT DATE AGREEMENT

[***]

G-1

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

EXHIBIT H

FORM OF ENVIRONMENTAL QUESTIONNAIRE

[***]

H-1

*** Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

EXHIBIT I

CLEANING SPECIFICATIONS

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EXHIBIT J

PLAN OF ROOFTOP/PENTHOUSE ROOFTOP AREAS

J-1

*** Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

EXHIBIT K

PLAN OF APPROVED LOCATIONS OF TENANT'S EXTERIOR BUILDING SIGNAGE

*** Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

EXHIBIT L

PLAN OF TENANT'S ENTRANCE/LOBBY FEATURE WALL SIGNS

L-1

*** Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

EXHIBIT M

CONSTRUCTION SCHEDULE FOR LANDLORD'S WORK

M-1

*** Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

EXHIBIT N

FORM OF GUARANTY

N-1

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

EXHIBIT O

HVAC DESIGN STANDARDS

[***]

O-1

CERTIFICATIONS

I, Samarth Kulkarni, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of CRISPR Therapeutics AG;
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(s) 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(s) 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: July 27, 2020

By: /s/ Samarth Kulkarni
Samarth Kulkarni
Chief Executive Officer
(Principal Executive Officer)

CERTIFICATIONS

I, Michael Tomsicek, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of CRISPR Therapeutics AG;
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(s) 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(s) 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: July 27, 2020

By: /s/ Michael Tomsicek

Michael Tomsicek

Chief Financial Officer

(Principal Financial and Accounting Officer)

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 CRISPR Therapeutics AG (the "Company") for the period ended June 30, 2020 as filed with the Securities and Exchange Commission on or about the date hereof (the "Report"), the undersigned officers of the Company 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 his or her 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/ Samarth Kulkarni

Samarth Kulkarni
Chief Executive Officer
(Principal Executive Officer)

July 27, 2020

/s/ Michael Tomsicek

Michael Tomsicek
Chief Financial Officer
(Principal Financial and Accounting Officer)

July 27, 2020