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 March 31, 2023

OR

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

Commission file number 001-39725

Maravai LifeSciences Holdings, Inc.

(Exact name of registrant as specified in its charter)

Delaware	**85-2786970**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)
10770 Wateridge Circle, Suite 200 **San Diego, California**	**92121**
(Address of principal executive offices)	(Zip code)

Registrant's telephone number, including area code: (858) 546-0004

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

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Class A common stock, $0.01 par value	MRVI	The Nasdaq Stock Market LLC

Securities registered pursuant to section 12(g) of the Act: None

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

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

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

Large accelerated filer	☒	Accelerated filer	☐
Non-accelerated filer	☐	Smaller reporting company	☐
		Emerging growth company	☐

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

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

As of May 2, 2023, 131,888,718 shares of the registrant's Class A common stock were outstanding and 119,094,026 shares of the registrant's Class B common stock were outstanding.

TABLE OF CONTENTS

	Page
Forward-Looking Statements	3
PART I - FINANCIAL INFORMATION	
Item 1. Financial Statements	
Condensed Consolidated Balance Sheets as of March 31, 2023 (unaudited) and December 31, 2022	5
Condensed Consolidated Statements of Operations for the Three Months Ended March 31, 2023 and 2022 (unaudited)	6
Condensed Consolidated Statements of Comprehensive (Loss) Income for the Three Months Ended March 31, 2023 and 2022 (unaudited)	7
Condensed Consolidated Statements of Changes in Stockholders' Equity for the Three Ended March 31, 2023 and 2022 (unaudited)	8
Condensed Consolidated Statements of Cash Flows for the Three Months Ended March 31, 2023 and 2022 (unaudited)	9
Notes to Condensed Consolidated Financial Statements (unaudited)	11
Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations	33
Item 3. Quantitative and Qualitative Disclosures About Market Risk	47
Item 4. Controls and Procedures	48
PART II - OTHER INFORMATION	
Item 1. Legal Proceedings	49
Item 1A. Risk Factors	49
Item 2. Unregistered Sales of Equity Securities and Use of Proceeds	49
Item 3. Defaults Upon Senior Securities	50
Item 5. Other Information	50
Item 6. Exhibits	52
Signatures	53

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This Quarterly Report on Form 10-Q contains "forward-looking statements" within the meaning of the U.S. Private Securities Litigation Reform Act of 1995. All statements other than statements of historical fact included in this report, including, without limitation, statements under the section "Management's Discussion and Analysis of Financial Condition and Results of Operations," are forward-looking statements. Forward-looking statements give our current expectations and projections relating to our financial condition, results of operations, plans, objectives, future performance and business. You can identify forward-looking statements by the fact that they do not relate strictly to historical or current facts. These statements often may include words such as "anticipate," "estimate," "expect," "project," "plan," "intend," "believe," "may," "will," "should," "can have," "likely" and other words and terms of similar meaning. These statements are based upon management's current expectations, assumptions and estimates and are not guarantees of the timing or nature of our future operating or financial performance or other events. All forward-looking statements are subject to risks, uncertainties and other factors that may cause our actual results to differ materially from those that we expected, including:

- The extent and duration of our revenue associated with COVID-19 related products and services are uncertain and are dependent, in important respects, on factors outside of our control.
- Ongoing macroeconomic challenges and changes in economic conditions, including adverse developments affecting banks and financial institutions, follow-on effects of those events and related systemic pressures, could negatively impact, directly or indirectly, our and our customers' current and future business operations and our financial condition, revenue and earnings.
- Certain of our products are used by customers in the production of vaccines and therapies, some of which represent relatively new and still-developing modes of treatment. Unforeseen adverse events, negative clinical outcomes, development of alternative therapies, or increased regulatory scrutiny of these and their financial cost may damage public perception of the safety, utility, or efficacy of these vaccines and therapies or other modes of treatment and may harm our customers' ability to conduct their business. Such events may negatively impact our revenue and have an adverse effect on our performance.
- We are dependent on our customers' spending on and demand for outsourced nucleic acid production and biologics safety testing products and services. A reduction in spending or demand could have a material adverse effect on our business, financial condition, results of operations, cash flows and prospects.
- We compete with life science, pharmaceutical and biotechnology companies who are substantially larger than we are and potentially capable of developing new approaches that could make our products, services and technology obsolete.
- If our products and services do not perform as expected or the reliability of the technology on which our products and services are based is questioned, we could experience lost revenue, delayed or reduced market acceptance of our products and services, increased costs and damage to our reputation.
- Our products are highly complex and are subject to quality control requirements.
- Our commercial success depends on the market acceptance of our life science reagents. Our reagents may not achieve or maintain significant commercial market acceptance.
- Our operating results may fluctuate significantly in the future, which makes our future operating results difficult to predict and could cause our operating results to fall below expectations or any guidance we may provide.
- Ongoing geopolitical instability and the resulting economic disruption may negatively impact our business, operations and financial condition.
- Our acquisitions expose us to risks that could adversely affect our business, and we may not achieve the anticipated benefits of acquisitions of businesses or technologies.
- Product liability lawsuits against us could cause us to incur substantial liabilities, limit sales of our existing products and limit commercialization of any products that we may develop.
- Our acquisitions expose us to risks that could adversely affect our business, and we may not achieve the anticipated benefits of acquisitions of businesses or technologies.
- We depend on a limited number of customers for a high percentage of our revenue. If we cannot maintain our current relationships with customers, fail to sustain recurring sources of revenue with our existing customers, or if we fail to enter into new relationships, our future operating results will be adversely affected.

- We rely on a limited number of suppliers or, in some cases, sole suppliers, for some of our raw materials and may not be able to find replacements or immediately transition to alternative suppliers.
- Our products could become subject to more onerous regulation by the FDA or other regulatory agencies in the future, which could increase our costs and delay or prevent commercialization of our products, thereby materially and adversely affecting our business, financial condition, results of operations, cash flows and prospects.
- If we are unable to obtain, maintain and enforce intellectual property protection for our current or future products, or if the scope of our intellectual property protection is not sufficiently broad, our ability to commercialize our products successfully and to compete effectively may be materially adversely affected.
- If we fail to comply with our obligations under any license agreements, disagree over contract interpretation, or otherwise experience disruptions to our business relationships with our licensors, we could lose intellectual property rights that are necessary to our business.
- Our existing indebtedness could adversely affect our business and growth prospects.
- Our principal asset is our interest in Maravai Topco Holdings, LLC ("Topco LLC"), and, accordingly, we depend on distributions from Topco LLC to pay our taxes and expenses, including payments under a tax receivable agreement with the former owners of Topco LLC (the "Tax Receivable Agreement" or "TRA"). Topco LLC's ability to make such distributions may be subject to various limitations and restrictions.
- Conflicts of interest could arise between our shareholders and Maravai Life Sciences Holdings, LLC ("MLSH 1"), the only other member of Topco LLC, which may impede business decisions that could benefit our shareholders.
- The Tax Receivable Agreement requires us to make cash payments to MLSH 1 and Maravai Life Sciences Holdings 2, LLC ("MLSH 2"), an entity through which certain of our former owners hold their interests in the Company, in respect of certain tax benefits to which we may become entitled, and we expect that the payments we will be required to make will be substantial.
- Our organizational structure, including the Tax Receivable Agreement, confers certain benefits upon MLSH 1 and MLSH 2 that will not benefit the other common shareholders to the same extent as they will benefit MLSH 1 and MLSH 2.
- GTCR, LLC ("GTCR") controls us, and its interests may conflict with ours or yours in the future.
- Provisions of our corporate governance documents could make an acquisition of us more difficult and may prevent attempts by our shareholders to replace or remove our current management, even if beneficial to our shareholders.

We derive many of our forward-looking statements from our operating budgets and forecasts, which are based on many detailed assumptions. While we believe that our assumptions are reasonable, we caution that it is very difficult to predict the impact of known factors, and it is impossible for us to anticipate all factors that could affect our actual results. Important factors that could cause our actual results to differ materially from our expectations or cautionary statements are disclosed under the sections entitled "Risk Factors" and "Management's Discussion and Analysis of Financial Condition and Results of Operations" in our Annual Report on Form 10-K for the year ended December 31, 2022 and in this Quarterly Report on Form 10-Q.

The forward-looking statements included in this report are made only as of the date hereof. We undertake no obligation to update or revise any forward-looking statement as a result of new information, future events or otherwise, except as otherwise required by law.

Part I.

Item 1. Financial Statements and Supplementary Data

MARAVAI LIFESCIENCES HOLDINGS, INC.

CONDENSED CONSOLIDATED BALANCE SHEETS
(in thousands, except par value)
(Unaudited)

	March 31, 2023	December 31, 2022
Assets		
Current assets:		
Cash	$ 628,273	$ 632,138
Accounts receivable, net	56,273	138,624
Inventory	54,819	43,152
Prepaid expenses and other current assets	25,532	25,798
Government funding receivable	616	8,190
Total current assets	765,513	847,902
Property and equipment, net	87,721	52,694
Goodwill	326,569	283,668
Intangible assets, net	241,578	216,663
Deferred tax assets	766,972	765,799
Other assets	127,035	115,589
Total assets	$ 2,315,388	$ 2,282,315
Liabilities and stockholders' equity		
Current liabilities:		
Accounts payable	$ 4,784	$ 5,991
Accrued expenses and other current liabilities	70,065	53,371
Deferred revenue	2,053	3,088
Current portion of payable to related parties pursuant to the Tax Receivable Agreement	42,254	42,254
Current portion of long-term debt	5,440	5,440
Current portion of finance lease obligations	300	—
Total current liabilities	124,896	110,144
Long-term debt, less current portion	521,161	521,997
Finance lease obligations, less current portion	16,569	—
Deferred tax liabilities	8,680	—
Payable to related parties pursuant to the Tax Receivable Agreement, less current portion	677,392	675,956
Other long-term liabilities	66,052	68,975
Total liabilities	1,414,750	1,377,072
Stockholders' equity:		
Class A common stock, $0.01 par value - 500,000 shares authorized; 131,789 and 131,692 shares issued and outstanding as of March 31, 2023 and December 31, 2022, respectively	1,318	1,317
Class B common stock, $0.01 par value - 300,000 shares authorized; 119,094 and 123,669 shares issued and outstanding as of March 31, 2023 and December 31, 2022, respectively	1,191	1,237
Additional paid-in capital	114,309	137,898
Retained earnings	404,699	404,766
Total stockholders' equity attributable to Maravai LifeSciences Holdings, Inc.	521,517	545,218
Non-controlling interest	379,121	360,025
Total stockholders' equity	900,638	905,243
Total liabilities and stockholders' equity	$ 2,315,388	$ 2,282,315

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

MARAVAI LIFESCIENCES HOLDINGS, INC.

CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS
(in thousands, except per share amounts)
(Unaudited)

	Three Months Ended March 31,	
	2023	2022
Revenue	$ 79,025	$ 244,293
Operating expenses:		
Cost of revenue	33,676	40,032
Selling, general and administrative	38,671	33,200
Research and development	4,145	3,695
Total operating expenses	76,492	76,927
Income from operations	2,533	167,366
Other income (expense):		
Interest expense	(11,833)	(2,664)
Interest income	6,045	—
Loss on extinguishment of debt	—	(208)
Change in payable to related parties pursuant to the Tax Receivable Agreement	(1,436)	2,340
Other income	168	7
(Loss) income before income taxes	(4,523)	166,841
Income tax (benefit) expense	(3,175)	19,981
Net (loss) income	(1,348)	146,860
Net (loss) income attributable to non-controlling interests	(1,281)	79,998
Net (loss) income attributable to Maravai LifeSciences Holdings, Inc.	$ (67)	$ 66,862
Net (loss) income per Class A common share attributable to Maravai LifeSciences Holdings, Inc.:		
Basic	$ 0.00	$ 0.51
Diluted	$ 0.00	$ 0.50
Weighted average number of Class A common shares outstanding:		
Basic	131,739	131,489
Diluted	131,739	255,287

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

MARAVAI LIFESCIENCES HOLDINGS, INC.

CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE (LOSS) INCOME
(in thousands)
(Unaudited)

	Three Months Ended March 31,	
	2023	2022
Net (loss) income	$ (1,348)	$ 146,860
Comprehensive (loss) income attributable to non-controlling interests	(1,281)	79,998
Total comprehensive (loss) income attributable to Maravai LifeSciences Holdings, Inc.	$ (67)	$ 66,862

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

MARAVAI LIFESCIENCES HOLDINGS, INC.

CONDENSED CONSOLIDATED STATEMENTS OF CHANGES IN STOCKHOLDERS' EQUITY
(in thousands)
(Unaudited)

	Three Months Ended March 31, 2023							
	Class A Common Stock		Class B Common Stock					
	Shares	Amount	Shares	Amount	Additional Paid-In Capital	Retained Earnings	Non-Controlling Interest	Total Stockholders' Equity
December 31, 2022	131,692	$ 1,317	123,669	$ 1,237	$ 137,898	$ 404,766	$ 360,025	$ 905,243
Effects of Structuring Transactions	—	—	(4,575)	(46)	(26,348)	—	26,392	(2)
Issuance of Class A common stock under employee equity plans, net of shares withheld for employee taxes	97	1	—	—	(496)	—	(445)	(940)
Non-controlling interest adjustment for changes in proportionate ownership in Topco LLC	—	—	—	—	122	—	(122)	—
Stock-based compensation	—	—	—	—	3,133	—	2,854	5,987
Distribution for tax liabilities to non-controlling interest holder	—	—	—	—	—	—	(8,302)	(8,302)
Net loss	—	—	—	—	—	(67)	(1,281)	(1,348)
March 31, 2023	131,789	$ 1,318	119,094	$ 1,191	$ 114,309	$ 404,699	$ 379,121	$ 900,638

	Three Months Ended March 31, 2022							
	Class A Common Stock		Class B Common Stock					
	Shares	Amount	Shares	Amount	Additional Paid-In Capital	Retained Earnings	Non-Controlling Interest	Total Stockholders' Equity
December 31, 2021	131,488	$ 1,315	123,669	$ 1,237	$ 128,386	$ 184,561	$ 229,862	$ 545,361
Issuance of Class A common stock under employee equity plans, net of shares withheld for employee taxes	2	—	—	—	34	—	—	34
Non-controlling interest adjustment for changes in proportionate ownership in Topco LLC	—	—	—	—	(14)	—	14	—
Stock-based compensation	—	—	—	—	1,869	—	1,758	3,627
Distribution for tax liabilities to non-controlling interest holder	—	—	—	—	—	—	(39,889)	(39,889)
Impact of change to deferred tax asset associated with cash contribution to Topco LLC	—	—	—	—	(1,691)	—	—	(1,691)
Net income	—	—	—	—	—	66,862	79,998	146,860
March 31, 2022	131,490	$ 1,315	123,669	$ 1,237	$ 128,584	$ 251,423	$ 271,743	$ 654,302

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

MARAVAI LIFESCIENCES HOLDINGS, INC.

CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(in thousands)
(Unaudited)

	Three Months Ended March 31,	
	2023	2022
Operating activities:		
Net (loss) income	$ (1,348)	$ 146,860
Adjustments to reconcile net (loss) income to net cash provided by operating activities:		
Depreciation	2,080	1,855
Amortization of intangible assets	6,765	5,527
Amortization of right-of-use assets	2,062	1,874
Amortization of deferred financing costs	719	699
Stock-based compensation expense	5,987	3,627
Loss on extinguishment of debt	—	208
Deferred income taxes	(1,520)	13,217
Revaluation of liabilities under the Tax Receivable Agreement	1,436	(2,340)
Other	552	(985)
Changes in operating assets and liabilities:		
Accounts receivable	82,407	(2,217)
Inventory	(3,383)	1,201
Prepaid expenses and other assets	(23,012)	2,517
Accounts payable	(235)	1,950
Accrued expenses and other current liabilities	24,225	(4,062)
Deferred revenue	(1,058)	(6,518)
Other long-term liabilities	(10,603)	(1,109)
Net cash provided by operating activities	85,074	162,304
Investing activities:		
Cash paid for acquisition of a business, net of cash acquired	(69,731)	(238,836)
Purchases of property and equipment	(7,868)	(2,748)
Proceeds from government assistance allocated to property and equipment	8,028	—
Prepaid lease payments on finance lease yet to commence	(159)	—
Net cash used in investing activities	(69,730)	(241,584)
Financing activities:		
Distributions for tax liabilities to non-controlling interests holders	(8,302)	(39,889)
Proceeds from borrowings of long-term debt	—	8,455
Principal repayments of long-term debt	(1,360)	(9,815)
Proceeds from derivative instruments	492	—
Payment of acquisition consideration holdback	(9,706)	—
Shares withheld for employee taxes, net of proceeds from issuance of Class A common stock under employee equity plans	(333)	726
Net cash used in financing activities	(19,209)	(40,523)
Net decrease in cash	(3,865)	(119,803)
Cash, beginning of period	632,138	551,272
Cash, end of period	$ 628,273	$ 431,469
Supplemental cash flow information:		
Cash paid for interest	$ 9,593	$ 1,373

	Three Months Ended March 31,	
	2023	2022
Cash (received) paid for income taxes	$ (521)	$ 914
Supplemental disclosures of non-cash activities:		
Property and equipment included in accounts payable and accrued expenses	$ 1,175	$ 1,742
Property and equipment obtained in exchange for finance lease obligations	$ 17,067	$ —
Prepaid lease payments on finance lease yet to commence included in accounts payable and accrued expenses	$ 20,552	$ —
Accrued receivable for capital expenditures to be reimbursed under a government contract	$ 616	$ —
Right-of-use assets obtained in exchange for new operating lease liabilities	$ 3,931	$ 773
Fair value of contingent consideration liability recorded in connection with acquisition of a business	$ 5,289	$ 7,800
Accrued consideration payable for MyChem acquisition	$ —	$ 10,000

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

MARAVAI LIFESCIENCES HOLDINGS, INC.

NOTES TO THE CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

1. Organization and Significant Accounting Policies

Description of Business

Maravai LifeSciences Holdings, Inc. (the "Company", and together with its consolidated subsidiaries, "Maravai", "we", "us", and "our") provides critical products to enable the development of drugs, therapeutics, diagnostics and vaccines and to support research on human diseases. Our products address the key phases of biopharmaceutical development and include complex nucleic acids for diagnostic and therapeutic applications and antibody-based products to detect impurities during the production of biopharmaceutical products.

The Company is headquartered in San Diego, California, and has two principal businesses: Nucleic Acid Production and Biologics Safety Testing. Our Nucleic Acid Production business manufactures and sells products used in the fields of gene therapy, vaccines, nucleoside chemistry, oligonucleotide therapy and molecular diagnostics, including reagents used in the chemical synthesis, modification, labelling and purification of deoxyribonucleic acid ("DNA") and ribonucleic acid ("RNA"). Our core Nucleic Acid Production offerings include messenger ribonucleic acid ("mRNA"), long and short oligonucleotides, our proprietary CleanCap® capping technology and oligonucleotide building blocks. Our Biologics Safety Testing business sells highly specialized analytical products for use in biologic manufacturing process development, including custom product-specific development antibody and assay development services.

Organization and Organizational Transactions

We were incorporated as a Delaware corporation in August 2020 for the purpose of facilitating an initial public offering ("IPO"). Immediately prior to the IPO, we effected a series of organizational transactions (the "Organizational Transactions"), which, together with the IPO, were completed in November 2020, that resulted in the Company operating, controlling all of the business affairs and becoming the ultimate parent company of Maravai Topco Holdings, LLC ("Topco LLC") and its consolidated subsidiaries. Maravai Life Sciences Holdings, LLC ("MLSH 1"), which is controlled by investment entities affiliated with GTCR, is the only other member of Topco LLC.

The Company is the sole managing member of Topco LLC, which operates and controls TriLink Biotechnologies, LLC ("TriLink"), Glen Research, LLC, MockV Solutions, LLC, Cygnus Technologies, LLC ("Cygnus") and Alphazyme, LLC ("Alphazyme") and their respective subsidiaries.

In connection with the Company's acquisition of Alphazyme (see Note 2), the Company undertook into a series of structuring transactions (the "Structuring Transactions"), including:

- On January 18, 2023, the Company acquired all of the outstanding membership interests in Alphazyme (see Note 2).
- On January 19, 2023, the Company entered into a contribution agreement (the "Contribution Agreement") with Alphazyme Holdings, Inc. ("Alphazyme Holdings"), a wholly-owned subsidiary of the Company, pursuant to which the Company contributed all such membership interests in Alphazyme (the "Alphazyme Membership Interest") to Alphazyme Holdings.
- On January 22, 2023, Alphazyme Holdings entered into a contribution and exchange Agreement (the "Contribution and Exchange Agreement") with Topco LLC, pursuant to which it contributed all of the Alphazyme Membership Interests to TopCo LLC in exchange for 5,059,134 newly-issued LLC Units of Topco LLC at a price per unit of $13.87, which was equal to the 50-day volume-weighted average price of the Company's Class A common stock as calculated on January 18, 2023 (the "Contribution and Exchange").
- Immediately following the Contribution and Exchange, the Company entered into a forfeiture agreement (the "Forfeiture Agreement") with Alphazyme Holdings, TopCo LLC and MLSH 1, a related party, pursuant to which each of the Company (together with Alphazyme Holdings) and MLSH 1 agreed to forfeit 5,059,134 and 4,871,970 LLC Units, respectively, representing 3.7% of the Company's (together with Alphazyme Holdings) and MLSH 1's respective LLC Units of Topco LLC, and an equal number of shares of the Company's Class B common stock, par value $0.01 per share, were forfeited by MLSH 1, in each case for no consideration.

These were considered transactions between entities under common control. As a result, the consolidated financial statements for periods prior to the these transactions have been adjusted to combine the previously separate entities for presentation purposes.

Basis of Presentation

The Company operates and controls all of the business and affairs of Topco LLC, and, through Topco LLC and its subsidiaries, conducts its business. Because we manage and operate the business and control the strategic decisions and day-to-day operations of Topco LLC and also have a substantial financial interest in Topco LLC, we consolidate the financial results of Topco LLC, and a portion of our net (loss) income is allocated to the non-controlling interests in Topco LLC held by MLSH 1.

The accompanying unaudited interim condensed consolidated financial statements include the accounts of the Company and its subsidiaries. All intercompany transactions and accounts between the businesses comprising the Company have been eliminated in the accompanying consolidated financial statements.

Unaudited Interim Condensed Consolidated Financial Statements

The accompanying unaudited condensed consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America ("GAAP") for interim financial information and pursuant to Form 10-Q of Regulation S-X of the Securities and Exchange Commission ("SEC"). Accordingly, they do not include all of the information and footnotes required by GAAP for complete financial statements. These unaudited condensed consolidated financial statements include all adjustments necessary to fairly state the financial position and the results of our operations and cash flows for interim periods in accordance with GAAP. All such adjustments are of a normal, recurring nature. Operating results for the three months ended March 31, 2023 are not necessarily indicative of the results that may be expected for the year ending December 31, 2023 or for any future period.

The condensed consolidated balance sheet presented as of December 31, 2022 has been derived from the audited consolidated financial statements as of that date. The condensed consolidated financial statements and notes are presented as permitted by Form 10-Q and do not contain all information that is included in the annual financial statements and notes thereto of the Company. The condensed consolidated financial statements and notes included in this report should be read in conjunction with the consolidated financial statements and notes included in the Company's Annual Report on Form 10-K for the year ended December 31, 2022 ("2022 Form 10-K") filed with the SEC.

Use of Estimates

The preparation of consolidated financial statements in accordance with GAAP requires the Company to make judgments, estimates and assumptions that affect the reported amounts of assets, liabilities, equity, revenue and expenses, and related disclosures. These estimates form the basis for judgments the Company makes about the carrying values of assets and liabilities that are not readily apparent from other sources. The Company bases its estimates and judgments on historical experience and on various other assumptions that the Company believes are reasonable under the circumstances. These estimates are based on management's knowledge about current events and expectations about actions the Company may undertake in the future. Significant estimates include, but are not limited to, the measurement of right-of-use assets and lease liabilities and related incremental borrowing rate, the payable to related parties pursuant to the Tax Receivable Agreement (as defined in Note 11), the realizability of our net deferred tax assets, and valuation of goodwill and intangible assets acquired in business combinations. Actual results could differ materially from those estimates.

Significant Accounting Policies

A description of the Company's significant accounting policies is included in Note 1 of the Notes to the Consolidated Financial Statements included in its 2022 Form 10-K. Except as noted below, there have been no material changes in the Company's significant accounting policies during the three months ended March 31, 2023.

Revenue Recognition

The Company generates revenue primarily from the sale of products and, to a much lesser extent, services in the fields of nucleic acid production, biologics safety testing and protein detection. Revenue is recognized when control of promised goods or services is transferred to a customer in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. To determine revenue recognition for its arrangements with customers, the Company performs the following five steps: (i) identify the contract(s) with a customer; (ii) identify the performance obligations in the contract; (iii) determine the transaction price; (iv) allocate the transaction price to the performance obligations in the contract; and (v) recognize revenue when (or as) the entity satisfies a performance obligation. The majority of the Company's contracts include only one performance obligation. A performance obligation is a promise in a contract to transfer a distinct good or service to the customer and is defined as the unit of account for revenue recognition. The Company also recognizes revenue from other contracts that may include a combination of products and services, the provision of solely services, or from license fee arrangements which may be associated with the delivery of product. Where there is a combination of products and services, the Company accounts for the promises as individual performance obligations if they are concluded to be distinct. Performance

obligations are considered distinct if they are both capable of being distinct and distinct within the context of the contract. In determining whether performance obligations meet the criteria for being distinct, the Company considers a number of factors, such as the degree of interrelation and interdependence between obligations, and whether or not the good or service significantly modifies or transforms another good or service in the contract. As a practical expedient, we do not adjust the transaction price for the effects of a significant financing component if, at contract inception, the period between customer payment and the transfer of goods or services is expected to be one year or less. Contracts with customers are evaluated on a contract-by-contract basis as contracts may include multiple types of goods and services as described below.

Nucleic Acid Production

Nucleic Acid Production revenue is generated from the manufacture and sale of highly modified, complex nucleic acids products to support the needs of our customers' research, therapeutic and vaccine programs. The primary offering of products includes CleanCap®, mRNA and specialized oligonucleotides. Contracts typically consist of a single performance obligation. We also sell nucleic acid products for labeling and detecting proteins in cells and tissue samples research. The Company recognizes revenue from these products in the period in which the performance obligation is satisfied by transferring control to the customer. Revenue for nucleic acid catalog products is recognized at a single point in time, generally upon shipment to the customer. Revenue for contracts for certain custom nucleic acid products, with an enforceable right to payment and a reasonable margin for work performed to date, is recognized over time, based on a cost-to-cost input method over the manufacturing period. Payments received from customers in advance of manufacturing their products is recorded as deferred revenue until the products are delivered.

Biologics Safety Testing

The Company's Biologics Safety Testing revenue is associated with the sale of bioprocess impurity detection kit products. We also enter into contracts that include custom antibody development, assay development and antibody affinity extraction services. These products and services enable the detection of impurities that occur in the manufacturing of biologic drugs and other therapeutics. The Company recognizes revenue from the sale of bioprocess impurity detection kits in the period in which the performance obligation is satisfied by transferring control to the customer. Custom antibody development contracts consist of a single performance obligation, typically with an enforceable right to payment and a reasonable margin for work performed to date. Revenue is recognized over time based on a cost-to-cost input method over the contract term. Where an enforceable right to payment does not exist, revenue is recognized at a point in time when control is transferred to the customer. Assay development service contracts consist of a single performance obligation. Revenue is recognized at a point in time when a successful antigen test and report is provided to the customer. Affinity extraction services, which generally occur over a short period of time, consist of a single performance obligation to perform the extraction service and provide a summary report to the customer. Revenue is recognized either over time or at a point in time depending on contractual payment terms with the customer.

The Company elected the practical expedient to not disclose the unfulfilled performance obligations for contracts with an original length of one year or less. The Company had no material unfulfilled performance obligations for contracts with an original length greater than one year for any period presented.

The Company accepts returns only if the products do not meet customer specifications, and historically, the Company's volume of product returns has not been significant. Further, no warranties are provided for promised goods and services other than assurance type warranties.

Revenue for an individual contract is recognized at the related transaction price, which is the amount the Company expects to be entitled to in exchange for transferring the products and/or services. The transaction price for product sales is calculated at the contracted product selling price. The transaction price for a contract with multiple performance obligations is allocated to the separate performance obligations on a relative standalone selling price basis. Standalone selling prices for products are determined based on the prices charged to customers, which are directly observable. Standalone selling price of services are mostly based on time and materials. Generally, payments from customers are due when goods and services are transferred. As most contracts contain a single performance obligation, the transaction price is representative of the standalone selling price charged to customers. Revenue is recognized only to the extent that it is probable that a significant reversal of the cumulative amount recognized will not occur in future periods. Variable consideration has not been material to our consolidated financial statements.

Sales taxes

Sales taxes collected by the Company are not included in the transaction price as revenue as they are ultimately remitted to a governmental authority.

Shipping and handling costs

The Company has elected to account for shipping and handling activities related to contracts with customers as costs to fulfill the promise to transfer the associated products. Accordingly, revenue for shipping and handling is recognized at the same time that the related product revenue is recognized.

Contract costs

The Company recognizes the incremental costs of obtaining contracts as an expense when incurred when the amortization period of the assets that otherwise would have been recognized is one year or less. These costs are included in sales and marketing and general and administrative expenses. The costs to fulfill the contracts are determined to be immaterial and are recognized as an expense when incurred.

Contract balances

Contract assets are generated when contractual billing schedules differ from revenue recognition timing and the Company records a contract receivable when it has an unconditional right to consideration. There were no contract asset balances as of March 31, 2023 and December 31, 2022.

Contract liabilities include billings in excess of revenue recognized, such as customer deposits and deferred revenue. Customer deposits, which are included in accrued expenses, are recorded when cash payments are received or due in advance of performance. Deferred revenue is recorded when the Company has unsatisfied performance obligations. Total contract liabilities was $4.8 million as of March 31, 2023 and December 31, 2022. Contract liabilities are expected to be recognized as revenue within the next twelve months.

Disaggregation of revenue

The following tables summarize the revenue by segment and region for the periods presented (in thousands):

	Three Months Ended March 31, 2023		
	Nucleic Acid Production	Biologics Safety Testing	Total
North America	$ 33,415	$ 7,093	$ 40,508
Europe, the Middle East and Africa	4,421	4,571	8,992
Asia Pacific	23,551	5,821	29,372
Latin and Central America	64	89	153
Total revenue	$ 61,451	$ 17,574	$ 79,025

	Three Months Ended March 31, 2022		
	Nucleic Acid Production	Biologics Safety Testing	Total
North America	$ 79,418	$ 7,519	$ 86,937
Europe, the Middle East and Africa	131,350	4,697	136,047
Asia Pacific	12,867	8,328	21,195
Latin and Central America	15	99	114
Total revenue	$ 223,650	$ 20,643	$ 244,293

Total revenue is attributed to geographic regions based on the bill-to location of the transaction. For all periods presented, the majority of our revenue was recognized at a point in time.

Non-Controlling Interests

Non-controlling interests represent the portion of profit or loss, net assets and comprehensive income of our consolidated subsidiaries that is not allocable to the Company based on our percentage of ownership of such entities.

In November 2020, following the completion of the Organizational Transactions, we became the sole managing member of Topco LLC. As of March 31, 2023, we held approximately 52.5% of the outstanding LLC Units of Topco LLC, and MLSH 1 held approximately 47.5% of the outstanding LLC Units of Topco LLC. Therefore, we report non-controlling interests based on the percentage of LLC Units of Topco LLC held by MLSH 1 on the condensed consolidated balance sheet as of March 31, 2023. Income or loss attributed to the non-controlling interest in Topco LLC is based on the LLC Units outstanding during the

period for which the income or loss is generated and is presented on the condensed consolidated statements of operations and condensed consolidated statements of comprehensive income.

MLSH 1 is entitled to exchange its LLC Units of Topco LLC, together with an equal number of shares of our Class B common stock (together referred to as "Paired Interests"), for shares of Class A common stock on a one-for-one basis or, at our election, for cash, from a substantially concurrent public offering or private sale (based on the price of our Class A common stock in such public offering or private sale). As such, future exchanges of Paired Interests by MLSH 1 will result in a change in ownership and reduce or increase the amount recorded as non-controlling interests and increase or decrease additional paid-in-capital when Topco LLC has positive or negative net assets, respectively. For the three months ended March 31, 2023 and 2022, MLSH 1 did not exchange any Paired Interests.

Distributions of $8.3 million and $39.9 million for tax liabilities were made to MLSH 1 during the three months ended March 31, 2023 and 2022, respectively.

Segment Information

The Company operates in two reportable segments. Operating segments are defined as components of an enterprise for which separate financial information is evaluated regularly by the Company's chief operating decision maker ("CODM") in deciding how to allocate resources and assessing performance. The CODM allocates resources and assesses performance based upon discrete financial information at the segment level. All of our long-lived assets are located in the United States.

Accounts Receivable and Allowance for Credit Losses

Accounts receivable primarily consist of amounts due from customers for product sales and services. The Company's expected credit losses are developed using an estimated loss rate method that considers historical collection experience, current conditions, and reasonable and supportable forecasts that affect the collectability of the reported amount. The estimated loss rates are applied to trade receivables with similar risk characteristics such as the length of time the balance has been outstanding, liquidity and financial position of the customer, and the geographic location of the customer. In certain instances, the Company may identify individual accounts receivable assets that do not share risk characteristics with other accounts receivable, in which case the Company records its expected credit losses on an individual asset basis.

As of March 31, 2023 and December 31, 2022, the allowance for credit losses was approximately $2.4 million and $2.2 million, respectively. There were no write-offs of accounts receivable during the three months ended March 31, 2023. There was $0.5 million of recoveries during the three months ended March 31, 2023. Write-offs of accounts receivable and recoveries were not significant during the three months ended March 31, 2022.

Net (Loss) Income per Class A Common Share Attributable to Maravai LifeSciences Holdings, Inc.

Basic net (loss) income per Class A common share attributable to Maravai LifeSciences Holdings, Inc. is computed by dividing net (loss) income attributable to us by the weighted average number of Class A common shares outstanding during the period. Diluted net (loss) income per Class A common share is calculated by giving effect to all potential weighted average dilutive stock options, restricted stock units, and Topco LLC Units, that together with an equal number of shares of our Class B common stock, are convertible into shares of our Class A common stock. The dilutive effect of outstanding awards, if any, is reflected in diluted earnings per share by application of the treasury stock method or if-converted method, as applicable. The Company reported net (loss) income attributable to Maravai LifeSciences Holdings, Inc. for the three months ended March 31, 2023 and 2022.

Government Assistance

The consideration awarded to the Company by the U.S. Department of Defense is outside the scope of the contracts with customers, income tax, funded research and development, and contribution guidance. This is because the awarding entity is not considered to be a customer, the receipt of the funding is not predicated on the Company's income tax position, there are no refund provisions, and the entity is not receiving reciprocal value for their support provided to the Company. The Company's elected policy is to recognize such assistance as a reduction to the carrying amount of the assets associated with the award when it is reasonably assured that the funding will be received as evidenced through the existence of an arrangement, amounts eligible for reimbursement are determinable and have been incurred or paid, the applicable conditions under the arrangement have been met, and collectability of amounts due is reasonably assured.

Fair Value of Financial Instruments

The Company defines fair value as the amount that would be received to sell an asset, or paid to transfer a liability, in an orderly transaction between market participants at the measurement date. The Company follows accounting guidance that has a

three-level hierarchy for fair value measurements based upon the transparency of inputs to the valuation of the asset or liability as of the measurement date. Instruments with readily available actively quoted prices, or for which fair value can be measured from actively quoted prices in an orderly market, will generally have a higher degree of market price transparency and a lesser degree of judgment used in measuring fair value. The three levels of the hierarchy are defined as follows:

Level 1—Observable inputs that reflect quoted prices (unadjusted) for identical assets or liabilities in active markets;

Level 2—Include other inputs that are directly or indirectly observable in the marketplace; and

Level 3—Unobservable inputs which are supported by little or no market activity.

As of March 31, 2023 and December 31, 2022, the carrying value of the Company's current assets and liabilities approximated fair value due to the short maturities of these instruments. The fair values of the Company's long-term debt approximated carrying value, excluding the effect of unamortized debt discount, as it is based on borrowing rates currently available to the Company for debt with similar terms and maturities (Level 2 inputs).

Acquisitions

The Company evaluates mergers, acquisitions and other similar transactions to assess whether or not the transaction should be accounted for as a business combination or an acquisition of assets. The Company first identifies the acquiring entity by determining if the target is a legal entity or a group of assets or liabilities. If control over a legal entity is being evaluated, the Company also evaluates if the target is a variable interest or voting interest entity. For acquisitions of voting interest entities, the Company applies a screen test to determine if substantially all of the fair value of the gross assets acquired is concentrated in a single identifiable asset or group of similar identifiable assets. If the screen test is met, the transaction is accounted for as an acquisition of assets. If the screen is not met, further determination is required as to whether or not the Company has acquired inputs and processes that have the ability to create outputs which would meet the definition of a business.

The Company accounts for its business combinations using the acquisition method of accounting which requires that the assets acquired and liabilities assumed of acquired businesses be recorded at their respective fair values at the date of acquisition. The purchase price, which includes the fair value of consideration transferred, is attributed to the fair value of the assets acquired and liabilities assumed. The purchase price may also include contingent consideration. The Company assesses whether such contingent consideration is subject to liability classification and fair value measurement or meets the definition of a derivative. Contingent consideration liabilities are recognized at their estimated fair value on the acquisition date. Contingent consideration arrangements that are determined to be compensatory in nature are recognized as post combination expense in our condensed consolidated statements of operations ratably over the implied service period beginning in the period it becomes probable such amounts will become payable. The excess of the purchase price of the acquisition over the fair value of the identifiable net assets of the acquiree is recorded as goodwill. The fair value of assets acquired and liabilities assumed in certain cases may be subject to revision based on the final determination of fair value during a period of time not to exceed twelve months from the acquisition date. The results of acquired businesses are included in the Company's consolidated financial statements from the date of acquisition. Transaction costs directly attributable to acquired businesses are expensed as incurred.

Determining the fair value of intangible assets acquired, defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between willing market participants, requires management to use significant judgment, including the selection of valuation methodologies, assumptions about future net cash flows, and discount rates. Each of these factors can significantly affect the value attributed to the identifiable intangible asset acquired in a business combination.

Contingent Consideration

Contingent consideration represents additional consideration that may be transferred to former owners of an acquired entity in the future if certain future events occur or conditions are met. Contingent consideration resulting from the acquisition of a business is recorded at fair value on the acquisition date. Such contingent consideration is re-measured to its estimated fair value at each reporting date with the change in fair value recognized within operating expenses in the Company's condensed consolidated statements of operations. Subsequent changes in the fair value of the contingent consideration are classified as an adjustment to cash flows from operating activities in the condensed consolidated statements of cash flows because the change in fair value is an input in determining net (loss) income. Cash paid in settlement of contingent consideration liabilities are classified as cash flows from financing activities up to the acquisition date fair value with any excess classified as cash flows from operating activities.

Changes in the fair value of contingent consideration liabilities associated with the acquisition of a business can result from updates to assumptions such as the expected timing or probability of achieving customer-related performance targets, specified sales milestones, changes in projected revenue or changes in discount rates. Judgment is used in determining those assumptions

as of the acquisition date and for each subsequent reporting period. Therefore, any changes in the fair value will impact the Company's results of operations in such reporting period, thereby resulting in potential variability in the Company's operating results until such contingencies are resolved.

Concentration of Credit Risk

Financial instruments that potentially subject the Company to significant concentrations of credit risk consist principally of cash and accounts receivable. The Company maintains substantially all of its cash balances at a financial institution that management believes is of high credit-quality and is financially stable. Cash is deposited with major financial institutions in excess of Federal Deposit Insurance Corporation ("FDIC") insurance limits. The Company believes it is not exposed to significant credit risk due to the financial strength of the depository institutions in which the cash is held. The Company provides credit, in the normal course of business, to international and domestic distributors and customers, which are geographically dispersed. The Company attempts to limit its credit risk by performing ongoing credit evaluations of its customers and maintaining adequate allowances for potential credit losses.

The following table summarizes revenue from each of our customers who individually accounted for 10% or more of our total revenue or accounts receivable for the periods presented:

	Revenue		Accounts Receivable, net	
	Three Months Ended March 31,			
	2023	2022	March 31, 2023	December 31, 2022
Nacalai USA, Inc.	20.5 %	*	28.3 %	20.3 %
BioNTech SE	*	40.4 %	*	12.0 %
Pfizer Inc.	*	29.5 %	*	19.2 %
CureVac N.V.	*	*	*	15.7 %

* Less than 10%

For the three months ended March 31, 2023, all of the revenue recorded for Nacalai USA, Inc. was generated by the Nucleic Acid Production Segment. For the three months ended March 31, 2022, substantially all of the revenue recorded for BioNTech SE and Pfizer Inc. was generated by the Nucleic Acid Production segment.

2. Acquisitions

Alphazyme, LLC

On January 18, 2023, the Company completed the acquisition of Alphazyme, LLC ("Alphazyme"), a privately-held original equipment manufacturer ("OEM") provider of custom, scalable, molecular biology enzymes to customers in the genetic analysis and nucleic acid synthesis markets. The acquisition will expand the Company's internal enzyme product portfolio and increase the Company's differentiated mRNA manufacturing services and product offerings. Alphazyme's ability to manufacture custom enzymes allows the Company to expand into near adjacent markets and raise our enzyme vertical.

The Company acquired Alphazyme for a total purchase consideration of $75.4 million, subject to customary post-closing adjustments, including a working capital settlement. The total cash consideration was paid using existing cash on hand. The transaction was accounted for as an acquisition of a business as Alphazyme consisted of inputs and processes applied to those inputs that had the ability to contribute to the creation of outputs.

For the three months ended March 31, 2023, the Company incurred $4.1 million in transaction costs associated with the acquisition of Alphazyme, which were recorded within selling, general and administrative expenses in the condensed consolidated statements of operations.

The acquisition date fair value of consideration transferred to acquire Alphazyme consisted of the following (in thousands):

Cash paid	$	70,147
Fair value of contingent consideration		5,289
Total consideration transferred	$	75,436

Pursuant to the Securities Purchase Agreement (the "Alphazyme SPA") between the Company and sellers of Alphazyme, additional payments to the sellers of Alphazyme are dependent upon meeting or exceeding defined revenue targets during fiscal years 2023 through 2025 (the "Alphazyme Performance Payments"). The Alphazyme SPA provides for a total maximum Alphazyme Performance Payments of $75.0 million. The Alphazyme Performance Payments were recorded as contingent consideration and was included as part of the purchase consideration. The Company estimated the fair value of the Alphazyme Performance Payments contingent consideration based on a Monte-Carlo simulation model which utilized an income approach. The estimated fair value was based on Alphazyme revenue projections, expected payout term, volatility and risk adjusted discount rates which are Level 3 inputs (see Note 4). As of March 31, 2023, there were no significant changes in the estimated fair value of the Performance Payment compared to its acquisition date fair value.

The Alphazyme SPA also provides that the Company will pay certain employees of Alphazyme an additional amount totaling $9.3 million (the "Alphazyme Retention Payments") as of various dates but primarily through December 31, 2025 as long as these individuals continue to be employed by the Company. The Company considers the payment of the Alphazyme Retention Payments as probable and is recognizing compensation expense related to these payments in the post-acquisition period ratably over the service period of approximately three years. For the three months ended March 31, 2023, the Company recorded a total of $0.4 million of compensation expense related to the Alphazyme Retention Payments within operating expenses in the condensed consolidated statements of operations. The compensation expense recognized within cost of revenue, selling, general and administrative expenses, and research and development expenses is individually immaterial.

The estimated fair values and the allocation of total purchase consideration are preliminary, based upon information available at the time of closing as the Company continues to evaluate underlying inputs and assumptions. Accordingly, these provisional values may be subject to adjustments during the measurement period, based upon new information obtained about facts and circumstances that existed at the time of closing.The following table summarizes the estimated fair values of the assets acquired and liabilities assumed at the acquisition date (in thousands):

Cash	$	288
Inventory		7,246
Other current assets		660
Intangible assets, net		31,680
Other assets		5,043
Total identifiable assets acquired		44,917
Current liabilities		(482)
Other long-term liabilities		(11,900)
Total liabilities assumed		(12,382)
Net identifiable assets acquired		32,535
Goodwill		42,901
Net assets acquired	$	75,436

The acquisition was accounted for under the acquisition method of accounting, and therefore, the total purchase price was allocated to the identifiable tangible and intangible assets acquired and the liabilities assumed based on their respective fair values as of the acquisition date. Purchase consideration in excess of the amounts recognized for the net assets acquired was recognized as goodwill. Goodwill is primarily attributable to expanded synergies expected from the acquisition associated with a vertical supply integration. All of the goodwill acquired in connection with the acquisition of Alphazyme was allocated to the Company's Nucleic Acid Production segment. None of the goodwill recognized is expected to be deductible for income tax purposes.

Upon closing of the acquisition, approximately $1.5 million was placed into escrow to cover potential working capital adjustments and approximately $3.0 million was placed into escrow to secure certain representations and warranties pursuant to the terms of the Alphazyme SPA. These amounts are included in the total purchase consideration of $75.4 million. Because these amounts held in escrow are not controlled by the Company, they are not included in the accompanying condensed consolidated balance sheet as of March 31, 2023.

The following table summarizes the estimated fair values of Alphazyme's identifiable intangible assets as of the date of acquisition and their estimated useful lives:

	Estimated Fair Value (in thousands)	Estimated Useful Life (in years)
Trade names	$ 220	5
Developed technology	31,000	12
Customer relationships	460	12
Total	$ 31,680	

The trade name and customer relationship intangible assets are related to Alphazyme's name, customer loyalty and customer relationships. The developed technology intangible asset is related to its unique manufacturing process optimization capability to both scale production and achieve quality standards. The fair value of these intangible assets was based on Alphazyme's projected revenues and was estimated using an income approach, specifically the relief from royalty method for trade names, the multi-period excess earnings method for developed technology, and the distributor method for customer relationships. Under the income approach, an intangible asset's fair value is equal to the present value of future economic benefits to be derived from ownership of the asset. The estimated fair value was developed by discounting future net cash flows to their present value at market-based rates of return utilizing Level 3 inputs. The useful lives for these intangible assets were determined based upon the remaining period for which the assets were expected to contribute directly or indirectly to future cash flows. Key quantitative assumptions used in the determination of fair value of the developed technology intangible included revenue growth rates ranging from 3.0% to 55.0%, a discount rate of 17.8% and an assumed technical obsolescent curve of 5.0%.

The carrying value of the remaining assets acquired or liabilities assumed was estimated to equal their fair values based on their short-term nature. These estimates were based on the assumption that the Company believes to be reasonable; however, actual results may differ from these estimates.

MyChem, LLC

On January 27, 2022, the Company completed the acquisition of MyChem, LLC ("MyChem"), a privately-held San Diego, California-based provider of ultra-pure nucleotides to customers in the diagnostics, pharma, genomics and research markets. The acquisition will vertically integrate the Company's supply chain and expand its product offerings for inputs used in the development of therapeutics and vaccines.

The Company acquired MyChem for a total purchase consideration of $257.9 million, which is inclusive of net working capital adjustments. The total cash consideration was paid using existing cash on hand. The transaction was accounted for as an acquisition of a business as MyChem consisted of inputs and processes applied to those inputs that had the ability to contribute to the creation of outputs.

For the three months ended March 31, 2022, the Company incurred $3.0 million in transaction costs associated with the acquisition of MyChem, which were recorded within selling, general and administrative expenses in the condensed consolidated statements of operations.

The acquisition date fair value of consideration transferred to acquire MyChem consisted of the following (in thousands):

Cash paid [(1)]	$ 240,145
Consideration payable	10,000
Fair value of contingent consideration	7,800
Total consideration transferred	$ 257,945

(1) Represents cash consideration paid at closing of $ 240.0 million and a purchase price adjustment paid in November 2022 of $ 0.1 million.

Pursuant to the Securities Purchase Agreement (the "MyChem SPA") between the Company and sellers of MyChem, additional payments to the sellers of MyChem were dependent upon meeting or exceeding defined revenue targets during fiscal 2022 (the "MyChem Performance Payment"). The MyChem SPA provides for a total maximum MyChem Performance Payment of $40.0 million. The MyChem Performance Payment was recorded as contingent consideration and was included as part of the purchase consideration. The Company estimated the fair value of the MyChem Performance Payment contingent consideration based on a Monte-Carlo simulation model which utilized an income approach. The estimated fair value was based on MyChem revenue

projections, expected payout term, volatility and risk adjusted discount rates which are Level 3 inputs (see Note 4). The performance period applicable to the MyChem Performance Payment ended as of December 31, 2022 and it was determined that none of the defined revenue thresholds were achieved. Consequently, no payment was made to the sellers of MyChem.

The MyChem SPA also provides that the Company will pay to the sellers of MyChem an additional $20.0 million (the "MyChem Retention Payment") as of the second anniversary of the closing of the acquisition date as long as two senior employees who are also the sellers of MyChem continue to be employed by TriLink. The Company considers the payment of the MyChem Retention Payment as probable and is recognizing compensation expense related to this payment in the post-acquisition period ratably over the expected service period of two years. For each of the three months ended March 31, 2023 and 2022, the Company recorded $1.7 million of compensation expense related to the MyChem Retention Payment within research and development expenses in the condensed consolidated statements of operations.

The MyChem SPA further provides that the Company will pay to the sellers of MyChem an additional amount of up to $10.0 million subject to the completion of certain calculations associated with acquired inventory. During the first quarter of 2023, but subsequent to the end of the measurement period, these calculations were completed and a payment of $9.7 million was made by the Company to the sellers. The remaining $0.3 million was recorded as non-cash gain within current year operations.

The following table summarizes the final allocation of the purchase price based upon the fair values of the assets acquired and liabilities assumed at the acquisition date (in thousands):

Cash	$	1,176
Current assets		2,741
Intangible assets, net		123,360
Other assets		8,585
Total identifiable assets acquired		135,862
Current liabilities		(420)
Other long-term liabilities		(8,399)
Total liabilities assumed		(8,819)
Net identifiable assets acquired		127,043
Goodwill		130,902
Net assets acquired	$	257,945

We recorded the preliminary purchase price allocation in the first quarter of 2022. During the fourth quarter of 2022, we recorded measurement period adjustments resulting in an increase to goodwill of $0.1 million and a decrease to other assets and current liabilities of $0.7 million.

The acquisition was accounted for under the acquisition method of accounting, and therefore, the total purchase price was allocated to the identifiable tangible and intangible assets acquired and the liabilities assumed based on their respective fair values as of the acquisition date. Purchase consideration in excess of the amounts recognized for the net assets acquired was recognized as goodwill. Goodwill is primarily attributable to expanded synergies expected from the acquisition associated with a vertical supply integration. There were no tax impacts associated with the acquisition due to the pass-through income tax treatment of MyChem. All of the goodwill acquired in connection with the acquisition of MyChem was allocated to the Company's Nucleic Acid Production segment and is deductible to Topco LLC for income tax purposes.

Upon closing of the acquisition, approximately $1.0 million was placed into escrow to cover potential working capital adjustments and approximately $12.5 million was placed into escrow to secure certain representations and warranties pursuant to the terms of the MyChem SPA. These amounts are included in the total purchase consideration of $257.9 million. The Company released the $1.0 million in escrow and paid out an additional $0.1 million related to net working capital adjustments during the fourth quarter of 2022. During the first quarter of 2023, but subsequent to the end of the measurement period, $12.4 million of the amounts in escrow to secure certain representations and warranties was released to the sellers and the remaining $0.1 million was released to the Company for indemnification of pre-closing liabilities, which was recorded within current year operations.

The following table summarizes the estimated fair values of MyChem's identifiable intangible assets as of the date of acquisition and their estimated useful lives:

	Estimated Fair Value (in thousands)	Estimated Useful Life (in years)
Trade names	$ 460	3
Developed technology	121,000	12
Customer relationships	1,900	12
Total	$ 123,360	

The trade name and customer relationship intangible assets are related to MyChem's name, customer loyalty and customer relationships. The developed technology intangible asset is related to processes and techniques for synthesizing and developing ultra-pure nucleotides. The fair value of these intangible assets was based on MyChem's projected revenues and was estimated using an income approach, specifically the multi-period excess earnings method. Under the income approach, an intangible asset's fair value is equal to the present value of future economic benefits to be derived from ownership of the asset. The estimated fair value was developed by discounting future net cash flows to their present value at market-based rates of return utilizing Level 3 inputs. The useful lives for these intangible assets were determined based upon the remaining period for which the assets were expected to contribute directly or indirectly to future cash flows. Key quantitative assumptions used in the determination of fair value of the developed technology intangible included revenue growth rates ranging from 3.0% to 30.6%, a discount rate of 16.5% and an assumed technical obsolescent curve range of 5.0% to 7.5%.

Pursuant to the terms of the MyChem SPA, the Company recognized an indemnification asset of $8.0 million within other assets, which represented the seller's obligation to reimburse pre-acquisition income tax liabilities assumed in the acquisition and was recorded within other long-term liabilities.

The carrying value of the remaining assets acquired or liabilities assumed was estimated to equal their fair values based on their short-term nature.

3. Goodwill and Intangible Assets

The Company's goodwill of $326.6 million and $283.7 million as of March 31, 2023 and December 31, 2022, respectively, represents the excess of purchase consideration over the fair value of assets acquired and liabilities assumed. As of March 31, 2023, the Company had four reporting units, three of which are contained in the Nucleic Acid Production segment. During the first quarter of 2023, the Company recorded goodwill of $42.9 million in connection with the acquisition of Alphazyme that was completed in January 2023 (see Note 2). As of December 31, 2022, the Company had three reporting units, two of which were contained in the Nucleic Acid Production segment. The Company has not recognized any goodwill impairment in any of the periods presented.

The following table summarizes the activity in the Company's goodwill by segment for the period presented (in thousands):

	Nucleic Acid Production	Biologics Safety Testing	Total
Balance as of December 31, 2022	$ 163,740	$ 119,928	$ 283,668
Acquisition	42,901	—	42,901
Balance as of March 31, 2023	$ 206,641	$ 119,928	$ 326,569

Intangible assets are being amortized on a straight-line basis, which reflects the expected pattern in which the economic benefits of the intangible assets are being obtained, over an estimated useful life ranging from 3 to 14 years.

The following are components of finite-lived intangible assets and accumulated amortization as of the periods presented (in thousands):

	March 31, 2023				
	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount	Estimated Useful Life	Weighted Average Remaining Amortization Period
		(in thousands)		(in years)	(in years)
Trade names	$ 7,800	$ 5,903	$ 1,897	3 - 10	3.5
Patents and developed technology	319,649	91,169	228,480	10 - 14	9.6
Customer relationships	22,313	11,112	11,201	10 - 12	6.5
Total	$ 349,762	$ 108,184	$ 241,578		9.4

	December 31, 2022				
	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount	Estimated Useful Life	Weighted Average Remaining Amortization Period
		(in thousands)		(in years)	(in years)
Trade names	$ 7,580	$ 5,746	$ 1,834	3 - 10	3.5
Patents and developed technology	288,649	85,058	203,591	10 - 14	9.5
Customer relationships	21,853	10,615	11,238	10 - 12	6.5
Total	$ 318,082	$ 101,419	$ 216,663		9.3

During the first quarter of 2023, the Company recorded intangible assets of $31.7 million in connection with the acquisition of Alphazyme that was completed in January 2023 (see Note 2).

The Company recognized $6.1 million and $4.7 million of amortization expense from intangible assets directly linked with revenue-generating activities within cost of revenue in the condensed consolidated statements of operations for the three months ended March 31, 2023 and 2022, respectively.

Amortization expense for intangible assets that are not directly related to sales-generating activities of $0.7 million and $0.8 million was recorded as selling, general and administrative expenses for the three months ended March 31, 2023 and 2022, respectively.

As of March 31, 2023, the estimated future amortization expense for finite-lived intangible assets were as follows (in thousands):

2023 (remaining nine months)	$ 20,591
2024	27,478
2025	27,335
2026	27,098
2027	26,082
Thereafter	112,994
Total estimated amortization expense	$ 241,578

4. Fair Value Measurements

The following tables summarize the Company's financial assets and liabilities that are measured at fair value on a recurring basis by level within the fair value hierarchy as of the periods presented (in thousands):

	Fair Value Measurements as of March 31, 2023			
	Level 1	Level 2	Level 3	Total
Assets				
Interest rate cap	$ —	$ 9,992	$ —	$ 9,992
Liabilities				
Current portion of contingent consideration	$ —	$ —	$ 1,773	$ 1,773
Contingent consideration - non-current	—	—	3,516	3,516
Total liabilities	$ —	$ —	$ 5,289	$ 5,289

	Fair Value Measurements as of December 31, 2022			
	Level 1	Level 2	Level 3	Total
Assets				
Interest rate cap	$ —	$ 11,362	$ —	$ 11,362

Contingent Consideration

In connection with the acquisition of Alphazyme (see Note 2), the Company is required to make contingent payments to the sellers of up to $75.0 million, subject to achieving certain revenue thresholds. The preliminary fair value of the liability for the contingent payments recognized upon the acquisition as part of the purchase accounting opening balance sheet totaled $5.3 million. The preliminary fair value of the contingent consideration was determined using a Monte-Carlo simulation-based model discounted to present value. Assumptions used in this calculation are expected revenue, a discount rate of 17.8% and various probability factors. The ultimate settlement of the contingent consideration could deviate from current estimates based on the actual results of these financial measures. The contingent consideration has three performance payments spanning over three years beginning 2024. This liability is considered to be a Level 3 financial liability that is remeasured each reporting period. Changes in fair value of contingent consideration are recognized as a gain or loss and recorded within change in estimated fair value of contingent consideration in the condensed consolidated statements of operations.

In connection with the acquisition of MyChem (see Note 2), the Company is required to make contingent payments to the sellers of up to $40.0 million, subject to achieving certain revenue thresholds. The preliminary fair value of the liability for the contingent payments recognized upon the acquisition as part of the purchase accounting opening balance sheet totaled $7.8 million. The preliminary fair value of the contingent consideration was determined using a Monte-Carlo simulation-based model discounted to present value. Assumptions used in this calculation are expected revenue, a discount rate of 16.9% and various probability factors. The ultimate settlement of the contingent consideration could deviate from current estimates based on the actual results of these financial measures. The contingent consideration projected year of payment is 2023. This liability is considered to be a Level 3 financial liability that is remeasured each reporting period. Changes in fair value of contingent consideration are recognized as a gain or loss and recorded within change in estimated fair value of contingent consideration in the condensed consolidated statements of operations. During the second quarter of 2022, the Company recorded a $7.8 million decrease in the estimated fair value of contingent consideration. This was due to a change in the estimate associated with MyChem revenue projections reaching thresholds that would trigger a contingent payment per the MyChem SPA. The contingent consideration expired as of December 31, 2022 and the revenue thresholds were not achieved.

The following table provides a reconciliation of liabilities measured at fair value on a recurring basis using significant unobservable inputs (Level 3) for the period presented (in thousands):

	Contingent Consideration
Balance as of December 31, 2021	$ —
Contingent consideration related to the acquisition of MyChem	7,800
Change in estimated fair value of contingent consideration	(7,800)
Balance as of December 31, 2022	—
Contingent consideration related to the acquisition of Alphazyme	5,289
Balance as of March 31, 2023	$ 5,289

5. Balance Sheet Components

Inventory

Inventory consisted of the following as of the periods presented (in thousands):

	March 31, 2023	December 31, 2022
Raw materials	$ 18,342	$ 13,486
Work-in-process	22,174	21,950
Finished goods	14,303	7,716
Total inventory	$ 54,819	$ 43,152

Accrued expenses and other current liabilities

Accrued expenses and other current liabilities consisted of the following as of the periods presented (in thousands):

	March 31, 2023	December 31, 2022
Employee related	$ 20,894	$ 19,873
Accrued construction costs	21,743	473
Accrued interest payable	8,201	7,700
Operating lease liabilities, current portion	6,746	6,269
Professional services	2,860	4,093
Customer deposits	2,753	1,665
Current portion of contingent consideration	1,773	—
Sales and use tax liability	1,065	1,029
Consideration payable (see Note 2)	—	10,000
Other	4,030	2,269
Total accrued expenses and other current liabilities	$ 70,065	$ 53,371

6. Government Assistance

Cooperative Agreement

In May 2022, TriLink entered into a cooperative agreement (the "Cooperative Agreement") with the U.S. Department of Defense, as represented by the Joint Program Executive Office for Chemical, Biological, Radiological and Nuclear Defense on behalf of the Biomedical Advanced Research and Development Authority ("BARDA"), within the U.S. Department of Health and Human Services, to advance the development of domestic manufacturing capabilities and to expand TriLink's domestic production capacity in its San Diego manufacturing campus (the "Flanders San Diego Facility") for products critical to the development and manufacture of mRNA vaccines and therapeutics. The Flanders San Diego Facility consists of two buildings ("Flanders I" and "Flanders II").

Pursuant to certain requirements, BARDA awarded TriLink an amount equal to $38.8 million or 50% of the construction and validation costs budgeted for the Flanders San Diego Facility. The contract period of performance is May 2022 through December 2023, which is the effective date of the Cooperative Agreement through the anticipated date of completion of construction and validation of manufacturing capacity. Amounts reimbursed are subject to audit and may be recaptured by the U.S. Department of Defense in certain circumstances.

The Cooperative Agreement requires the Company to provide the U.S. Government with conditional priority access and certain preferred pricing obligations for a10-year period from the completion of the construction project for the production of a medical countermeasure (or a component thereof) that the Company manufactures in the Flanders San Diego Facility during a declared public health emergency.

During the three months ended March 31, 2023, the Company has received $8.0 million of reimbursements under the Cooperative Agreement, with an equal offset recorded to right-of-use assets associated with Flanders I within property and equipment on the condensed consolidated balance sheet. As of March 31, 2023, the Company has recorded a receivable of $0.6 million, with an equal offset to property and equipment.

7. Leases

All of the Company's facilities, including office, laboratory and manufacturing space, are occupied under long-term non-cancelable lease arrangements with various expiration dates through 2038, some of which include options to extend up to 20 years. The Company does not have any leases that include residual value guarantees.

In January 2023, the Company assumed Alphazyme's existing facility lease in Jupiter, Florida, in connection with the acquisition of Alphazyme (see Note 2). The lease term began in January 2023 and will end in January 2032. The lease is for 10 years with the option to extend forone additional 5-year period.

In February 2023, the Company entered into an agreement to expand the existing Alphazyme facility lease for additional office space. The lease term will run concurrently with and as part of the initial lease term.

In March 2023, the Company's lease for Flanders I commenced. The Company entered into this lease in August 2021 along with Flanders II. The lease is foreleven years with the option to extend for one additional 5-year period. The Company is reasonably certain to execute the renewal option and has, therefore, recognized this as part of its ROU assets and lease liabilities. The lease includes tenant improvement provisions, rent abatement clauses, and escalating rent payments over the life of the lease.

The following table presents supplemental balance sheet information related to the Company's leases as of the periods presented (in thousands):

	Line Item in the Condensed Consolidated Balance Sheets	March 31, 2023	December 31, 2022
Right-of-use assets			
Finance leases	Property and equipment, net	$ 30,313	$ —
Operating leases	Other assets	67,144	63,896
Total right-of-use assets		$ 97,457	$ 63,896
Current lease liabilities			
Finance leases	Current portion of finance lease obligations	$ 300	$ —
Operating leases	Accrued expenses and other current liabilities	6,746	6,269
Total current lease liabilities		$ 7,046	$ 6,269
Non-current lease liabilities			
Finance leases	Finance lease obligations, less current portion	$ 16,569	$ —
Operating leases	Other long-term liabilities	53,579	51,556
Total non-current lease liabilities		$ 70,148	$ 51,556

The components of the net lease costs for the Company's operating leases reflected in the Company's consolidated statements of operations were as follows for the periods presented (in thousands):

	Three Months Ended March 31,	
	2023	2022
Operating lease costs	$ 3,058	$ 1,874
Variable lease costs	985	525
Total lease costs	$ 4,043	$ 2,399

The Company has one finance lease, which did not commence until the end of March 2023, and therefore no finance lease costs are reflected in the Company's consolidated statements of operations during the three months ended March 31, 2023.

The weighted average remaining lease term and weighted average discount rate related to the Company's ROU assets and lease liabilities for its leases were as follows as of the periods presented:

	March 31, 2023	December 31, 2022
Weighted average remaining lease term (in years)		
Finance leases	14.9	
Operating leases	7.8	7.9
Weighted average discount rate		
Finance leases	7.9 %	
Operating leases	6.6 %	6.5 %

Supplemental information concerning the cash flow impact arising from the Company's leases recorded in the Company's consolidated statements of cash flows is detailed in the following table for the periods presented (in thousands):

	Three Months Ended March 31,	
	2023	2022
Cash paid for amounts included in lease liabilities:		
Operating cash flows used for operating leases	$ 2,423	$ 1,498
Non-cash transactions:		
Property and equipment obtained in exchange for finance lease obligations	$ 17,067	$ —
Right-of-use assets obtained in exchange for new operating lease liabilities	3,931	773

As of March 31, 2023, the Company expects that its future minimum lease payments will become due and payable as follows (in thousands):

	Finance Leases	Operating Leases	Total
2023 (remaining nine months)	$ 1,205	$ 7,886	$ 9,091
2024	1,650	10,774	12,424
2025	1,699	10,952	12,651
2026	1,750	10,042	11,792
2027	1,803	8,564	10,367
Thereafter	21,871	34,125	55,996
Total minimum lease payments	$ 29,978	$ 82,343	$ 112,321
Less: interest	(13,109)	(22,018)	(35,127)
Total lease liabilities	$ 16,869	$ 60,325	$ 77,194

As of March 31, 2023, the Company has entered into $18.6 million of contractually binding minimum lease payments for a lease executed but not yet commenced. This amount is excluded from the above tables and relates to Flanders II.

8. Long-Term Debt

Credit Agreement

In October 2020, Maravai Intermediate Holdings, LLC ("Intermediate"), a wholly-owned subsidiary of Topco LLC, along with certain of its subsidiaries (together with Intermediate, the "Borrowers"), entered into a credit agreement (as amended, the "Credit Agreement"), which provides for a term loan facility and a revolving credit facility. In January 2022, the Company entered into an amendment (the "Amendment") to refinance the term loan and to address the planned phase out of London Interbank Offered Rate ("LIBOR"), which was replaced with a Term Secured Overnight Financing Rate ("SOFR") based rate.

The Credit Agreement provides for a $600.0 million term loan facility, maturing October 2027 (the "Tranche B Term Loan"), and a $180.0 million revolving credit facility (the "Revolving Credit Facility").

As of March 31, 2023, the interest rate on the Tranche B Term Loan was 7.63% per annum.

The Credit Agreement also provides for a $20.0 million limit for letters of credit, which remained unused as of March 31, 2023.

Borrowings under the Credit Agreement are unconditionally guaranteed by Topco LLC, together with the existing and future material domestic subsidiaries of Topco LLC (subject to certain exceptions), as specified in the respective guaranty agreements. Borrowings under the Credit Agreement are also secured by a first-priority lien and security interest in substantially all of the assets (subject to certain exceptions) of existing and future material domestic subsidiaries of Topco LLC that are loan parties.

The accounting related to entering into the Amendment was evaluated on a creditor-by-creditor basis to determine whether each transaction should be accounted for as a modification or extinguishment. Certain creditors under the First Lien Term Loan did not participate in this refinancing transaction, were repaid their principal and interest of $8.5 million and ceased being creditors of the Company and the repayment of their related outstanding debt balances has been accounted for as an extinguishment of debt. Proceeds of borrowings from new lenders of $8.5 million were accounted for as a new debt financing. The Company recorded a loss on extinguishment of debt of $0.2 million in the accompanying condensed consolidated statements of operations during the first quarter of 2022. For the remainder of the creditors, this transaction was accounted for as a modification because the change in present value of cash flows between the two term loans before and after the transaction was less than 10% on a creditor-by-creditor basis. As part of the refinancing, the Company incurred $0.9 million of various costs, of which an insignificant amount was related to an original issuance discount, and were all capitalized in the accompanying balance sheet within long-term debt and are subject to amortization over the term of the refinanced debt as an adjustment to interest expense using the effective interest method.

We also incurred $0.3 million of financing-related fees related to the Revolving Credit Facility. As of March 31, 2023, unamortized debt issuance costs totaled $2.0 million and are recorded as assets within other assets on the accompanying condensed consolidated balance sheet as there is no balance outstanding related to the Revolving Credit Facility.

Commencing with the fiscal year ended December 31, 2021, and each fiscal year thereafter, the Credit Agreement requires that we make mandatory prepayments on the Tranche B Term Loan principal upon certain excess cash flow, subject to certain step-downs based on the Company's first lien net leverage ratio. The mandatory prepayment shall be reduced to 25% or 0% of the calculated excess cash flow if the Company's first lien net leverage ratio was equal to or less than 4.75:1.00 or 4.25:1.00, respectively, however, no prepayment shall be required to the extent excess cash flow calculated for the respective period is equal to or less than $10.0 million. As of March 31, 2023, the Company's first lien net leverage ratio was less than 4.25:1.00. Thus, a mandatory prepayment on the Tranche B Term Loan out of our excess cash flow was not required.

The Credit Agreement contains certain covenants, including, among other things, covenants limiting our ability to incur or prepay certain indebtedness, pay dividends or distributions, dispose of assets, engage in mergers and consolidations, make acquisitions or other investments and make changes to the nature of the business. Additionally, the Credit Agreement also requires us to maintain a certain net leverage ratio. The Company was in compliance with these covenants as of March 31, 2023.

Interest Rate Cap

In the first quarter of 2021, the Company entered into an interest rate cap agreement to manage a portion of its variable interest rate risk on its outstanding long-term debt. The contract, which was effective March 31, 2021, entitles the Company to receive from the counterparty at each calendar quarter end the amount, if any, by which a specified defined floating market rate exceeds the cap strike interest rate, applied to the contract's notional amount of $415.0 million. The floating rate of interest is reset at the end of each three-month period. The contract was set to expire on March 31, 2023.

In May 2022, the Company amended the interest rate cap agreement, effective June 30, 2022, to increase the contract's notional amount to $500.0 million and to extend the maturity date to January 19, 2025. Additionally, the floating rate option changed from a LIBOR-based rate to a SOFR-based rate. Other provisions remained unchanged as a result of the amendment. Premiums paid to amend the interest rate cap agreement were immaterial.

The interest rate cap agreement has not been designated as a hedging relationship and has been recognized on the condensed consolidated balance sheet at fair value of $10.0 million within other assets with changes in fair value recognized within interest expense in the condensed consolidated statements of operations.

The Company's long-term debt consisted of the following as of the periods presented (in thousands):

	March 31, 2023	December 31, 2022
Tranche B Term Loan	$ 537,200	$ 538,560
Unamortized debt issuance costs	(10,599)	(11,123)
Total long-term debt	526,601	527,437
Less: current portion	(5,440)	(5,440)
Total long-term debt, less current portion	$ 521,161	$ 521,997

There were no balances outstanding on the Company's Revolving Credit Facility as of March 31, 2023 and December 31, 2022.

As of March 31, 2023, the aggregate future principal maturities of the Company's debt obligations for each of the next five years, based on contractual due dates, were as follows (in thousands):

2023 (remaining nine months)	$ 4,080
2024	5,440
2025	5,440
2026	5,440
2027	516,800
Total long-term debt	$ 537,200

9. Net (Loss) Income Per Class A Common Share Attributable to Maravai LifeSciences Holdings, Inc.

Basic net (loss) income per Class A common share has been calculated by dividing net (loss) income for the period, adjusted for net (loss) income attributable to non-controlling interests, by the weighted average number of Class A common shares outstanding during the period. Diluted net (loss) income per Class A common share gives effect to potentially dilutive securities by application of the treasury stock method or if-converted method, as applicable. Diluted net (loss) income per Class A common share attributable to the Company is computed by adjusting the net (loss) income and the weighted average number of Class A common shares outstanding to give effect to potentially diluted securities. In computing the diluted net loss per share for the three months ended March 31, 2023, potentially dilutive Class A common shares were excluded from the diluted loss per share calculation because of their anti-dilutive effect.

The following table presents the computation of basic and diluted net (loss) income per Class A common share attributable to the Company for the periods presented (in thousands, except per share amounts):

	Three Months Ended March 31,	
	2023	2022
Numerator:		
Net (loss) income	$ (1,348)	$ 146,860
Less: loss (income) attributable to common non-controlling interests	1,281	(79,998)
Net (loss) income attributable to Maravai LifeSciences Holdings, Inc.—basic	(67)	66,862
Net (loss) income effect of dilutive securities:		
Effect of dilutive employee stock purchase plan ("ESPP"), restricted stock units ("RSUs") and stock options	—	31
Effect of the assumed conversion of Class B common stock	—	61,070
Net (loss) income attributable to Maravai LifeSciences Holdings, Inc.—diluted	$ (67)	$ 127,963
Denominator:		
Weighted average Class A common shares outstanding—basic	131,739	131,489
Weighted average effect of dilutive securities:		
Effect of dilutive ESPP, RSUs and stock options	—	129
Effect of the assumed conversion of Class B common stock	—	123,669
Weighted average Class A common shares outstanding—diluted	131,739	255,287
Net (loss) income per Class A common share attributable to Maravai LifeSciences Holdings, Inc.:		
Basic	$ 0.00	$ 0.51
Diluted	$ 0.00	$ 0.50

Shares of Class B common stock do not share in the earnings or losses of the Company and are therefore not participating securities. As such, a separate presentation of basic and diluted net (loss) income per share for Class B common stock under the two-class method has not been presented.

The following table presents potentially dilutive securities excluded from the computation of diluted net (loss) income per share for the periods presented because their effect would have been anti-dilutive for the periods presented (in thousands):

	Three Months Ended March 31,	
	2023	2022
RSUs	3,195	—
Stock options	4,528	2,049
Shares estimated to be purchased under the ESPP	26	53
Shares of Class B common stock	131,789	—
Total	139,538	2,102

Shares underlying contingently issuable awards that have not met the necessary conditions as of the end of a reporting period are not included in the calculation of diluted net (loss) income per share of Class A common stock attributable to the Company for that period. The Company had contingently issuable PSUs outstanding that did not meet the market and performance conditions as of March 31, 2023 and, therefore, were excluded from the calculation of diluted net (loss) income per share of Class A common stock attributable to the Company. The maximum number of potentially dilutive Class A common shares that could be issued upon vesting for such awards was insignificant as of March 31, 2023. These amounts were also excluded from the potentially dilutive securities in the table above. The Company had no contingently issuable PSUs outstanding as of March 31, 2022.

10. Income Taxes

We are subject to U.S. federal and state income taxes with respect to our allocable share of any taxable income or loss of Topco LLC, as well as any stand-alone income or loss we generate. Topco LLC is organized as a limited liability company and treated as a partnership for federal tax purposes and generally does not pay income taxes on its taxable income in most jurisdictions. Instead, Topco LLC's taxable income or loss is passed through to its members, including us.

The following table summarizes the Company's income tax (benefit) expense and effective tax rate for the periods presented (in thousands, except percentages):

	Three Months Ended March 31,	
	2023	2022
(Loss) income before income taxes	$ (4,523)	$ 166,841
Income tax (benefit) expense	$ (3,175)	$ 19,981
Effective tax rate	70.2 %	12.0 %

The Company's effective tax rate of 70.2% for the three months ended March 31, 2023 differed from the U.S. federal statutory rate of 21.0%, primarily due to (loss) income associated with the non-controlling interest and a change in tax (benefit) expense due to adjustments to the deferred tax asset for our investment in Topco LLC which is expected to be recovered at higher state tax rates.

The Company's effective tax rate of 12.0% three months ended March 31, 2022 differed from the U.S. federal statutory rate of 21.0%, primarily due to income associated with the non-controlling interest.

Tax Distributions to Topco LLC's Owners

Topco LLC is subject to an operating agreement put in place at the date of the Organizational Transactions ("LLC Operating Agreement"). The LLC Operating Agreement has numerous provisions related to allocations of income and loss, as well as timing and amounts of distributions to its owners. This agreement also includes a provision requiring cash distributions enabling its owners to pay their taxes on income passing through from Topco LLC. These tax distributions are computed based on an assumed income tax rate equal to the sum of (i) the maximum combined marginal federal and state income tax rate applicable to an individual and (ii) the net investment income tax. The assumed income tax rate currently totals 46.7%, which may increase to 54.1% in certain cases where the qualified business income deduction is unavailable.

In addition, under the tax rules, Topco LLC is required to allocate taxable income disproportionately to its unit holders. Because tax distributions are determined based on the holder of LLC Units who is allocated the largest amount of taxable income on a per unit basis, but are made pro rata based on ownership, Topco LLC is required to make tax distributions that, in the aggregate, will likely exceed the amount of taxes Topco LLC would have otherwise paid if it were taxed on its taxable income at the assumed income tax rate. Topco LLC is subject to entity level taxation in certain states and certain of its subsidiaries are subject to entity level U.S. and foreign income taxes. As a result, the accompanying condensed consolidated statements of operations include income tax expense related to those states and to U.S. and foreign jurisdictions where Topco LLC or any of our subsidiaries are subject to income tax.

During the three months ended March 31, 2023, Topco LLC paid tax distributions of $17.4 million to its owners, including $9.1 million to us. During the three months ended March 31, 2022, Topco LLC paid tax distributions of $82.3 million to its owners, including $42.4 million to us.

As of March 31, 2023, no amounts for tax distributions had been accrued as such payments were made during the period.

11. Related Party Transactions

MLSH 1's majority owner is GTCR, LLC ("GTCR"). The Company's Executive Chairman of the Board, Chief Financial Officer ("CFO") and General Counsel are executives of MLSH 1 and MLSH 2.

Payable to Related Parties Pursuant to the Tax Receivable Agreement

We are a party to a Tax Receivable Agreement ("TRA") with MLSH 1 and MLSH 2. The TRA provides for the payment by us to MLSH 1 and MLSH 2, collectively, of 85% of the amount of certain tax benefits, if any, that we actually realize, or in some circumstances are deemed to realize, as a result of the Organizational Transactions, IPO and any subsequent purchases or exchanges of LLC Units of Topco LLC. Based on our current projections of taxable income, and before deduction of any

specially allocated depreciation and amortization, we anticipate having enough taxable income to utilize most of these tax benefits.

As of March 31, 2023, our liability under the TRA is $719.6 million, payable to MLSH 1 and MLSH 2, representing approximately 85% of the calculated tax savings we anticipate being able to utilize in future years. During the three months ended March 31, 2023, the Company recognized a loss of $1.4 million on TRA liability adjustment reflecting a change in the tax benefit obligation attributable to a change in the expected tax benefit. The remeasurement was primarily due to changes in our estimated state apportionment and the corresponding change of our estimated state tax rate.

During the three months ended March 31, 2023 and 2022, no payments were made to MLSH 1 or MLSH 2 pursuant to the TRA.

Contribution, Exchange and Forfeiture Agreement with MLSH 1

In January 2023, the Company undertook Structuring Transactions and executed Contribution, Contribution and Exchange, and Forfeiture Agreements with MLSH 1 (see Note 1).

Topco LLC Operating Agreement

MLSH 1 is party to the LLC Operating Agreement put in place at the date of the Organizational Transactions. This agreement includes a provision requiring cash distributions enabling its owners to pay their taxes on income passing through from Topco LLC. During the three months ended March 31, 2023 and 2022, the Company made distributions of $8.3 million and $39.9 million respectively, for tax liabilities to MLSH 1 under this agreement.

12. Segments

The Company's financial performance is reported in two segments. A description of each segment follows:

- *Nucleic Acid Production*: focuses on the manufacturing and sale of highly modified nucleic acids products to support the needs of customers' research, therapeutic and vaccine programs. This segment also provides research products for labeling and detecting proteins in cells and tissue samples.
- *Biologics Safety Testing*: focuses on manufacturing and selling biologics safety and impurity tests and assay development services that are utilized by our customers in their biologic drug manufacturing spectrum.

The Company has determined that adjusted earnings before interest, tax, depreciation and amortization ("Adjusted EBITDA") is the profit or loss measure that the CODM uses to make resource allocation decisions and evaluate segment performance. Adjusted EBITDA assists management in comparing the segment performance on a consistent basis for purposes of business decision-making by removing the impact of certain items that management believes do not directly reflect the core operations and, therefore, are not included in measuring segment performance. The Company defines Adjusted EBITDA as net (loss) income before interest, taxes, depreciation and amortization, certain non-cash items and other adjustments that we do not consider in our evaluation of ongoing operating performance from period to period. Corporate costs, net of eliminations, are managed on a standalone basis and are not allocated to segments.

The following schedule includes revenue and adjusted EBITDA for each of the Company's reportable operating segments (in thousands). We have revised our presentation for the prior period below to remove the presentation of Total Adjusted EBITDA and reconcile the total of our reportable segments' measure of profit or loss to (loss) income before income taxes in addition to net (loss) income, and removed corporate costs, net of eliminations from total reportable segments' adjusted EBITDA and included such amounts in the reconciliation to (loss) income before income taxes. Additionally, we have revised our prior

year's presentation of our total reportable segments' revenue, in which we removed intersegment eliminations from our total reportable segment's revenue.

	Three Months Ended March 31,	
	2023	2022
Revenue:		
Nucleic Acid Production	$ 61,451	$ 223,650
Biologics Safety Testing	17,574	20,643
Total reportable segments' revenue	$ 79,025	$ 244,293
Segment adjusted EBITDA:		
Nucleic Acid Production	$ 27,873	$ 182,799
Biologics Safety Testing	13,746	16,532
Total reportable segments' adjusted EBITDA	41,619	199,331
Reconciliation of total reportable segments' adjusted EBITDA to (loss) income before income taxes		
Amortization	(6,765)	(5,527)
Depreciation	(2,080)	(1,855)
Interest expense	(11,833)	(2,664)
Interest income	6,045	—
Corporate costs, net of eliminations	(17,821)	(12,339)
Other adjustments:		
Acquisition integration costs	(2,464)	(4,779)
Stock-based compensation	(5,987)	(3,627)
Merger and acquisition related expenses	(3,291)	(1,188)
Financing costs	—	(1,037)
Tax Receivable Agreement liability adjustment	(1,436)	2,340
Other	(510)	(1,814)
(Loss) income before income taxes	(4,523)	166,841
Income tax benefit (expense)	3,175	(19,981)
Net (loss) income	$ (1,348)	$ 146,860

There was no intersegment revenue during each of the three months ended March 31, 2023 and 2022. Any intersegment sales and the related gross margin on inventory recorded at the end of the period are eliminated for consolidation purposes. Internal selling prices for intersegment sales are consistent with the segment's normal retail price offered to external parties. There was no commission expense recognized for intersegment sales for the three months ended March 31, 2023 and 2022.

The Company does not allocate assets to its reportable segments as they are not included in the review performed by the CODM for purposes of assessing segment performance and allocating resources.

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

You should read the following discussion and analysis of financial condition and results of operations together with our condensed consolidated financial statements and related notes included elsewhere in this Quarterly Report on Form 10-Q and the audited consolidated financial statements and notes thereto included in our Annual Report on Form 10-K for the year ended December 31, 2022, as filed with the Securities and Exchange Commission. This discussion and analysis reflects our historical results of operations and financial position and contains forward-looking statements that involve risks and uncertainties. Our actual results could differ materially from those discussed in or implied by these forward-looking statements. Factors that could cause or contribute to such differences include, but are not limited to, those discussed in the section titled "Risk Factors" in our Annual Report on Form 10-K for the year ended December 31, 2022. Please also see the section titled "Special Note Regarding Forward-Looking Statements." We were incorporated in August 2020 and, pursuant to the Organizational Transactions described in Note 1 to our condensed consolidated financial statements, became a holding company whose principal asset is a controlling equity interest in Topco LLC. As the sole managing member of Topco LLC, we operate and control the business and affairs of Topco LLC and its subsidiaries. Accordingly, we consolidate Topco LLC in our consolidated financial statements and report a non-controlling interest related to the portion of Topco LLC not owned by us. Because the Organizational Transactions were considered transactions between entities under common control, the consolidated financial statements for periods prior to the Organizational Transactions and the initial public offering have been adjusted to combine the previously separate entities for presentation purposes. Unless otherwise noted or the context otherwise requires, references in this Quarterly Report on Form 10-Q to "we," "us" or "our" refer to Maravai LifeSciences Holdings, Inc. and its subsidiaries.

Overview

We are a leading life sciences company providing critical products to enable the development of drug therapies, diagnostics, novel vaccines and support research on human diseases. Our customers include the top global biopharmaceutical companies ranked by research and development expenditures according to industry consultants, and many other emerging biopharmaceutical and life sciences research companies, as well as leading academic research institutions and *in vitro* diagnostics companies. Our products address the key phases of biopharmaceutical development and include complex nucleic acids for diagnostic and therapeutic applications, antibody-based products to detect impurities during the production of biopharmaceutical products, and products to detect the expression of proteins in tissues of various species.

We have and will continue to build a transformative life sciences products company by acquiring businesses and accelerating their growth through capital infusions and industry expertise. Biomedical innovation is dependent on a reliable supply of reagents in the fields of nucleic acid production, biologics safety testing and protein labeling. From inventive startups to the world's leading biopharmaceutical, vaccine, diagnostics and gene and cell therapy companies, these customers turn to us to solve their complex discovery challenges and help them streamline and scale their supply chain needs beginning from research and development through clinical trials to commercialization.

Our primary customers are biopharmaceutical companies who are pursuing novel research and product development programs. Our customers also include a range of government, academic and biotechnology institutions.

As of March 31, 2023, we employed a team of over 650 employees, approximately 18% of whom have advanced degrees. We primarily utilize a direct sales model for our sales to our customers in North America. Our international sales, primarily in Europe and Asia Pacific, are sold through a combination of third-party distributors as well as via a direct sales model. The percentage of our total revenue derived from customers in North America was 51.3% and 35.6% for the three months ended March 31, 2023 and 2022, respectively.

We generated revenue of $79.0 million and $244.3 million for the three months ended March 31, 2023 and 2022, respectively.

Total revenue by segment was $61.5 million in Nucleic Acid Production and $17.6 million in Biologics Safety Testing for the three months ended March 31, 2023. Total revenue by segment was $223.7 million in Nucleic Acid Production and $20.6 million in Biologics Safety Testing for the three months ended March 31, 2022.

We focus a substantial portion of our resources supporting our core business segments. We are actively pursuing opportunities to expand our customer base both domestically and internationally by fostering strong relationships with both existing and new customers and distributors. Our management team has experience working with biopharmaceutical, vaccine, diagnostics and gene and cell therapy companies as well as academic and research scientists. We also intend to continue making investments in our overall infrastructure and business segments to support our growth. We incurred aggregate selling, general and administrative expenses of $38.7 million and $33.2 million for the three months ended March 31, 2023 and 2022, respectively.

Our research and development efforts are geared towards supporting our customers' needs. We incurred research and development expenses of $4.1 million and $3.7 million for the three months ended March 31, 2023 and 2022, respectively. We

intend to continue to invest in research and development and new products and technologies to support our customers' needs for the foreseeable future.

Recent Developments

Acquisition

In January 2023, we completed the acquisition of Alphazyme, LLC ("Alphazyme"), a privately-held original equipment manufacturer ("OEM") provider of custom, scalable, molecular biology enzymes to customers in the genetic analysis and nucleic acid synthesis markets, for a total purchase consideration of $75.4 million. As a result of the acquisition, we own all the outstanding interest in Alphazyme. Our consolidated results of operations for the three months ended March 31, 2023 include the operating results of Alphazyme from the acquisition date. See Note 2 to the condensed consolidated financial statements contained in Part I, Item 1 of this Quarterly Report on Form 10-Q.

Trends and Uncertainties

COVID-19 Related Revenue Trends and Uncertainties

Since the start of the COVID-19 pandemic in early 2020, our results of operations and cash flows have substantially benefited from the strong demand for COVID-19 related products and services, including our proprietary CleanCap® analogs and highly modified RNA products, particularly mRNA. We estimate that revenue from COVID-19 related products and services represented approximately 20.1% and 70.8% of our total revenues for the three months ended March 31, 2023 and 2022, respectively. However, we expect that the second quarter of 2022 represented the highest revenue quarter for revenue attributable to our COVID-19 related products and services, with substantial declines in COVID-19 related revenue expected in the future. In addition to the general market trend of reduced demand for COVID-19 related products and services as the pandemic subsides, our COVID-19 related revenue for 2023 may be negatively impacted by unused inventory of our products that our customers have on hand. We are unable to estimate the impact of this unused inventory on future demand given that our customers generally have not provided us with detailed inventory data. Our longer-term revenue prospects for COVID-19 related products are highly uncertain but are expected to be substantially less than pandemic highs. The factors that could influence longer-term COVID-19 related revenue include: the emergence, duration and intensity of new virus variants; competition faced by our customers from other COVID-19 vaccine manufacturers or developers of alternative treatments; the availability and administration of pediatric and booster vaccinations, vaccine supply constraints, vaccine hesitancy and the effectiveness of vaccines against new virus strains; and the U.S. economy and global economy, including impacts resulting from supply chain constraints, labor market shortages and inflationary pressures. This contraction in COVID-19 related demand will significantly decrease our revenue and cash flow, which in turn could have a material adverse impact on our operating results and financial condition in the future.

Other Trends and Uncertainties

Biopharmaceutical customers are increasingly relying on outside parties to provide important inputs and services for their clinical research and manufacturing, a development driving growth for suppliers with unique capabilities and the ability to manufacture at an appropriate scale to support customer programs. We believe that suppliers like ourselves, with this rare combination of capabilities, proprietary products and the required investment in manufacturing and quality systems, are benefiting from rapid growth as biopharmaceutical customers seek to partner with a small number of trusted suppliers. In addition to the continued trend toward outsourcing, several market developments are driving increased growth, in our addressable market segments, including: (i) pivot toward mRNA vaccines driven in part by the success of mRNA COVID-19 vaccines; (ii) rapid growth in development of cell and gene therapies; (iii) large and growing pipeline of protein-based therapeutics; and (iv) rise in molecular diagnostics driven by COVID-19.

Our Biologics Safety Testing business continues to see headwinds from business in Asia, seeing impacts from the ongoing COVID-19 pandemic lock-downs in China and our ongoing decisions not to ship into Russia.

How We Assess Our Business

We consider a variety of financial and operating measures in assessing the performance of our business. The key measures we use to determine how our business is performing are revenue and Adjusted EBITDA.

Adjusted EBITDA is a non-GAAP financial measure that we define as net (loss) income adjusted for interest expense, provision for income taxes, depreciation, amortization and stock-based compensation expenses. Adjusted EBITDA reflects further adjustments to eliminate the impact of certain items, including certain non-cash and other items, that we do not consider

representative of our ongoing operating performance. We also present Adjusted Free Cash Flow, which is a non-GAAP measure that we define as Adjusted EBITDA less capital expenditures.

Management uses Adjusted EBITDA to evaluate the financial performance of our business and the effectiveness of our business strategies. We present Adjusted EBITDA and Adjusted Free Cash Flow because we believe they are frequently used by analysts, investors and other interested parties to evaluate companies in our industry and they facilitate comparisons on a consistent basis across reporting periods. Further, we believe they are helpful in highlighting trends in our operating results because they exclude items that are not indicative of our core operating performance. Adjusted EBITDA is also a component of the financial covenant under our credit agreement that governs our ability to access more than $63.0 million in aggregate letters of credit and available borrowings under our revolving credit facility. In addition, if we borrow more than $63.0 million, we are required to maintain a specified net leverage ratio. See *"Liquidity and Capital Resources—Sources of Liquidity—Debt Covenants"* below for a discussion of this financial covenant.

Adjusted EBITDA and Adjusted Free Cash Flow have limitations as analytical tools and you should not consider them in isolation or as substitutes for analysis of our results as reported under GAAP. We may in the future incur expenses similar to the adjustments in the presentation of Adjusted EBITDA. In particular, we expect to incur meaningful share-based compensation expense in the future. Other limitations include that Adjusted EBITDA and Adjusted Free Cash Flow do not reflect:

- all expenditures or future requirements for capital expenditures or contractual commitments;
- changes in our working capital needs;
- provision for income taxes, which may be a necessary element of our costs and ability to operate;
- the costs of replacing the assets being depreciated, which will often have to be replaced in the future;
- the non-cash component of employee compensation expense; and
- the impact of earnings or charges resulting from matters we consider not to be reflective, on a recurring basis, of our ongoing operations.

In addition, Adjusted EBITDA and Adjusted Free Cash Flow may not be comparable to similarly titled measures used by other companies in our industry or across different industries.

Components of Results of Operations

Revenue

Our revenue consists primarily of product revenue and, to a much lesser extent, service revenue. We generated total consolidated revenue of $79.0 million and $244.3 million for the three months ended March 31, 2023 and 2022, respectively, through the following segments: (i) Nucleic Acid Production and (ii) Biologics Safety Testing.

Nucleic Acid Production Segment

Our Nucleic Acid Production segment focuses on the manufacturing and sale of highly modified nucleic acids products to support the needs of customers' research, therapeutic and vaccine programs. This segment also provides research products for labeling and detecting proteins in cells and tissue samples.

Biologics Safety Testing Segment

Our Biologics Safety Testing segment focuses on manufacturing and selling biologics safety and impurity tests and assay development services that are utilized by our customers in their biologic drug manufacturing activities.

Cost of Revenue

Cost of revenue associated with our products primarily consists of manufacturing related costs incurred in the production process, including personnel and related costs, stock-based compensation expense, inventory write-downs, costs of materials, labor and overhead, packaging and delivery costs and allocated costs, including facilities, information technology, depreciation and amortization of intangibles. Cost of revenue associated with our services primarily consists of personnel and related costs, stock-based compensation expense, cost of materials and allocated costs, including facilities and information technology costs. Costs of services were not material for the three months ended March 31, 2023 and 2022.

Operating Expenses

Selling, General and Administrative

Our selling, general and administrative expenses primarily consist of salaries, benefits and stock-based compensation expense for our employees in our commercial sales functions, marketing, executive, accounting and finance, legal and human resource functions as well as travel expenses, professional services fees, such as consulting, audit, tax and legal fees, general corporate costs and allocated costs, including facilities, information technology and amortization of intangibles.

We expect that our selling, general and administrative expenses will continue to increase, primarily due to increased headcount and an expanding facilities footprint to support anticipated long-term growth in the business, costs incurred in increasing our presence globally, and increases in marketing activities to drive awareness and adoption of our products and services.

Research and Development

Research and development costs primarily consist of salaries, benefits, stock-based compensation expense, outside contracted services, cost of supplies, in-process research and development costs from asset acquisitions and allocated facilities costs for employees engaged in research and development of products and services. We expense all research and development costs in the period in which they are incurred. Payment made prior to the receipt of goods or services to be used in research and development are recognized as prepaid assets until the goods are received or services are rendered.

We expect that our research and development costs to fluctuate in future periods as we continue our research and development efforts, including meeting our customers' needs. These costs may fluctuate from period to period due to the timing and scope of our development activities.

Other Income (Expense)

Interest Expense

Interest expense consists of interest costs and the related amortization of the debt discount and deferred issuance costs on our outstanding debt. Interest expense also consists of changes in the fair value of our interest rate cap agreement.

Interest Income

Interest income consists of interest earned on our cash balances held at financial institutions.

Loss on Extinguishment of Debt

Loss on extinguishment of debt represent the write-off of remaining unamortized debt discount and deferred issuance costs on previously outstanding debt when we engage in refinancing activities.

Change in Payable to Related Parties Pursuant to the Tax Receivable Agreement

The Tax Receivable Agreement liability adjustment reflects changes in the Tax Receivable Agreement liability recorded in our condensed consolidated balance sheets primarily due to changes in our estimated state apportionment and the corresponding change of our estimated state tax rate.

Income Tax Expense

As a result of our ownership of LLC Units in Topco LLC, we are subject to U.S. federal, state and local income taxes with respect to our allocable share of any taxable income of Topco LLC and will be taxed at the prevailing corporate tax rates.

Non-Controlling Interests

Non-controlling interests represent the portion of profit or loss, net assets and comprehensive income or loss of our consolidated subsidiaries that is not allocable to the Company based on our percentage of ownership of such entities. Income or loss attributed to the non-controlling interests is based on the LLC Units outstanding during the period and is presented on the condensed consolidated statements of operations. As of March 31, 2023, we held approximately 52.5% of the outstanding LLC Units of Topco LLC, and MLSH 1 held approximately 47.5% of the outstanding LLC Units of Topco LLC.

Results of Operations

The results of operations presented below should be reviewed in conjunction with the condensed consolidated financial statements and notes included elsewhere in this Quarterly Report on Form 10-Q. For information with respect to recent accounting pronouncements that are of significance or potential significance to us, see Note 1 to the condensed consolidated financial statements contained in Part I, Item 1 of this Quarterly Report on Form 10-Q.

	Three Months Ended March 31,		
	2023	2022	Change
	(in thousands, except per share amounts)		
Revenue	$ 79,025	$ 244,293	(67.7)%
Operating expenses:			
Cost of revenue [1]	33,676	40,032	(15.9)%
Selling, general and administrative [1]	38,671	33,200	16.5 %
Research and development [1]	4,145	3,695	12.2 %
Total operating expenses	76,492	76,927	(0.6)%
Income from operations	2,533	167,366	(98.5)%
Other income (expense), net	(7,056)	(525)	*
(Loss) income before income taxes	(4,523)	166,841	(102.7)%
Income tax (benefit) expense	(3,175)	19,981	(115.9)%
Net (loss) income	$ (1,348)	$ 146,860	(100.9)%
Net (loss) income attributable to non-controlling interests	(1,281)	79,998	(101.6)%
Net (loss) income attributable to Maravai LifeSciences Holdings, Inc.	$ (67)	$ 66,862	(100.1)%
Net (loss) income per Class A common share attributable to Maravai LifeSciences Holdings, Inc.:			
Basic	$ 0.00	$ 0.51	
Diluted	$ 0.00	$ 0.50	
Weighted average number of Class A common shares outstanding:			
Basic	131,739	131,489	
Diluted	131,739	255,287	
Non-GAAP measures:			
Adjusted EBITDA	$ 23,798	$ 186,992	
Adjusted Free Cash Flow	$ 22,653	$ 184,244	

* Not meaningful

(1) Includes stock-based compensation expense as follows (in thousands, except percentages):

	Three Months Ended March 31,		
	2023	2022	Change
Cost of revenue	$ 1,339	$ 823	62.7 %
Selling, general and administrative	4,202	2,633	59.6 %
Research and development	446	171	160.8 %
Total stock-based compensation expense	$ 5,987	$ 3,627	65.1 %

Revenue

Consolidated revenue by segment was as follows for the periods presented (in thousands, except percentages):

	Three Months Ended March 31,			Percentage of Revenue	
	2023	2022	Change	2023	2022
Nucleic Acid Production	$ 61,451	$ 223,650	(72.5)%	77.8 %	91.5 %
Biologics Safety Testing	17,574	20,643	(14.9)%	22.2 %	8.5 %
Total revenue	$ 79,025	$ 244,293	(67.7)%	100.0 %	100.0 %

Total revenue was $79.0 million for the three months ended March 31, 2023 compared to $244.3 million for the three months ended March 31, 2022, representing a decrease of $165.3 million, or 67.7%.

Nucleic Acid Production revenue decreased from $223.7 million for the three months ended March 31, 2022 to $61.5 million for the three months ended March 31, 2023, representing a decrease of $162.2 million, or 72.5%. The decrease in Nucleic Acid Production revenue was primarily driven by decreased revenue from our proprietary CleanCap analogs as demand decreased from COVID-19 vaccine manufacturers. For the three months ended March 31, 2023, we estimate that approximately $15.9 million, or 55.1%, of our $28.9 million CleanCap revenue was a result of customer demand attributable to COVID-19 vaccines or other COVID-19 related commercial products or developmental programs. For the three months ended March 31, 2022, we estimate that approximately $172.9 million, or 94.1%, of our $183.8 million CleanCap revenue was a result of customer demand attributable to COVID-19 vaccines or other COVID-19 related commercial products or developmental programs.

Biologics Safety Testing revenue decreased from $20.6 million for the three months ended March 31, 2022 to $17.6 million for the three months ended March 31, 2023, representing a decrease of $3.1 million, or 14.9%. The decrease from the prior period was primarily due post-COVID inventory normalization by some customers and an ongoing slow return to work in China, which continued to impact demand for our HCP ELISA kits.

Segment Information

Management has determined that adjusted earnings before interest, tax, depreciation and amortization is the profit or loss measure used to make resource allocation decisions and evaluate segment performance. Adjusted EBITDA assists management in comparing the segment performance on a consistent basis for purposes of business decision-making by removing the impact of certain items that management believes do not directly reflect the core operations and, therefore, are not included in measuring segment performance. We define Adjusted EBITDA as net (loss) income before interest, taxes, depreciation and amortization, certain non-cash items and other adjustments that we do not consider in our evaluation of ongoing operating performance from period to period. Corporate costs, net of eliminations, are managed on a standalone basis and are not allocated to segments.

We do not allocate assets to our reportable segments as they are not included in the review performed by our Chief Operating Decision Maker for purposes of assessing segment performance and allocating resources.

As of March 31, 2023, all of our long-lived assets were located within the United States.

The following schedule includes revenue and adjusted EBITDA for each of our reportable operating segments (in thousands). We have revised our presentation for the prior period below to remove the presentation of Total Adjusted EBITDA and reconcile the total of our reportable segments' measure of profit or loss to (loss) income before income taxes, in addition to net (loss) income, and removed corporate costs, net of eliminations from total reportable segments' adjusted EBITDA and included such amounts in the reconciliation to (loss) income before income taxes. Additionally, we have revised our prior year's

presentation of our total reportable segments' revenue, in which we removed intersegment eliminations from our total reportable segment's revenue.

	Three Months Ended March 31,	
	2023	2022
Revenue:		
Nucleic Acid Production	$ 61,451	$ 223,650
Biologics Safety Testing	17,574	20,643
Total reportable segments' revenue	$ 79,025	$ 244,293
Segment adjusted EBITDA:		
Nucleic Acid Production	$ 27,873	$ 182,799
Biologics Safety Testing	13,746	16,532
Total reportable segments' adjusted EBITDA	41,619	199,331
Reconciliation of total reportable segments' adjusted EBITDA to (loss) income before income taxes		
Amortization	(6,765)	(5,527)
Depreciation	(2,080)	(1,855)
Interest expense	(11,833)	(2,664)
Interest income	6,045	—
Corporate costs, net of eliminations	(17,821)	(12,339)
Other adjustments:		
Acquisition integration costs	(2,464)	(4,779)
Stock-based compensation	(5,987)	(3,627)
Merger and acquisition related expenses	(3,291)	(1,188)
Financing costs	—	(1,037)
Tax Receivable Agreement liability adjustment	(1,436)	2,340
Other	(510)	(1,814)
(Loss) income before income taxes	(4,523)	166,841
Income tax (benefit) expense	3,175	(19,981)
Net (loss) income	$ (1,348)	$ 146,860

There was no intersegment revenue during each of the three months ended March 31, 2023 and 2022. Any intersegment sales and the related gross margin on inventory recorded at the end of the period are eliminated for consolidation purposes. Internal selling prices for intersegment sales are consistent with the segment's normal retail price offered to external parties. There was no commission expense recognized for intersegment sales for each of the three months ended March 31, 2023 and 2022.

Non-GAAP Financial Measures

Adjusted EBITDA

A reconciliation of net (loss) income to adjusted EBITDA, which is a non-GAAP measure, is set forth below (in thousands):

	Three Months Ended March 31,	
	2023	2022
Net (loss) income	$ (1,348)	$ 146,860
Add:		
Amortization	6,765	5,527
Depreciation	2,080	1,855
Interest expense	11,833	2,664
Interest income	(6,045)	—
Income tax (benefit) expense	(3,175)	19,981
EBITDA	10,110	176,887
Acquisition integration costs [1]	2,464	4,779
Stock-based compensation [2]	5,987	3,627
Merger and acquisition related expenses [3]	3,291	1,188
Financing costs [4]	—	1,037
Tax Receivable Agreement liability adjustment [5]	1,436	(2,340)
Other [6]	510	1,814
Adjusted EBITDA	$ 23,798	$ 186,992

(1) Refers to incremental costs incurred to execute and integrate completed acquisitions, and retention payments in connection with these acquisitions.

(2) Refers to non-cash expense associated with stock-based compensation.

(3) Refers to diligence, legal, accounting, tax and consulting fees incurred associated with acquisitions that were pursued but not consummated.

(4) Refers to transaction costs related to the refinancing of our long-term debt that are not capitalizable.

(5) Refers to the adjustment of the Tax Receivable Agreement liability primarily due to changes in our estimated state apportionment and the corresponding change of our estimated state tax rate.

(6) For the three months ended March 31, 2023, refers to severance payments, legal settlement amounts, inventory step-up charges in connection with the acquisition of Alphazyme, LLC, and other non-recurring costs. For the three months ended March 31, 2022, refers to the loss recognized during the period associated with certain working capital and other adjustments for the sale of Vector Laboratories, Inc., which was completed in September 2021, and the loss incurred on extinguishment of debt.

Adjusted Free Cash Flow

Adjusted Free Cash Flow, which is a non-GAAP measure that we define as Adjusted EBITDA less capital expenditures, is set forth below for the periods presented (in thousands):

	Three Months Ended March 31,	
	2023	2022
Adjusted EBITDA	$ 23,798	$ 186,992
Capital expenditures [1]	(1,145)	(2,748)
Adjusted Free Cash Flow	$ 22,653	$ 184,244

(1) We define capital expenditures as: (i) purchases of property and equipment which are included in cash flows from investing activities, offset by government funding received; and (ii) construction costs determined to be lessor improvements recorded as prepaid lease payments and right-of-use assets, offset by government funding received. We revised our capital expenditures definition in the quarter ended March 31, 2023 to exclude the portions in accounts payable and accrued expenses.

Operating Expenses

Operating expenses included the following for the periods presented (in thousands, except percentages):

	Three Months Ended March 31,			Percentage of Revenue	
	2023	2022	Change	2023	2022
Cost of revenue	$ 33,676	$ 40,032	(15.9)%	42.6 %	16.4 %
Selling, general and administrative	38,671	33,200	16.5 %	48.9 %	13.6 %
Research and development	4,145	3,695	12.2 %	5.3 %	1.5 %
Total operating expenses	$ 76,492	$ 76,927	(0.6)%	96.8 %	31.5 %

* Not meaningful

Cost of Revenue

Cost of revenue decreased by $6.4 million from $40.0 million for the three months ended March 31, 2022 to $33.7 million for the three months ended March 31, 2023, or 15.9%. The decrease in cost of revenue was primarily attributable to a decrease in direct product costs of $10.3 million driven by decreased revenues. This was partially offset by an increase in inventory reserve of $2.2 million as a result of lower projected manufacturing demand, and an increase in amortization expense of $1.2 million driven by newly acquired intangible assets.

Gross profit decreased by $158.9 million from $204.3 million for the three months ended March 31, 2022 to $45.3 million for the three months ended March 31, 2023. The decrease in the gross profit margin as a percentage of sales was primarily attributable to a decrease in volume and unfavorable product mix shift, an increase in personnel costs, an increase in reserve for excess and obsolete inventory, and an increase in amortization expense for newly acquired intangible assets.

Selling, General and Administrative

Selling, general and administrative expenses increased by $5.5 million from $33.2 million for the three months ended March 31, 2022 to $38.7 million for the three months ended March 31, 2023, or 16.5%. The increase was primarily driven by an $8.8 million increase in personnel costs driven by additional headcount to support the Company's anticipated long-term growth. This was partially offset by a decrease of $1.7 million in corporate expenses primarily driven by lower insurance costs and allowance for credit losses, and a $1.3 million decrease in professional service fees including audit fees and non-employee stock-based compensation expense.

Research and Development

Research and development expenses increased by $0.5 million from $3.7 million for the three months ended March 31, 2022 to $4.1 million for the three months ended March 31, 2023, or 12.2%. The increase was primarily driven by a $0.3 million increase in personnel costs relating to the Company's increased research and development efforts, and a $0.3 million increase in supplies and materials driven by increased headcount. These were partially offset by a decrease of $0.2 million in services fees primarily driven by contracted studies done in the prior year period.

Other Income (Expense)

Other income (expense) included the following for the periods presented (in thousands, except percentages):

	Three Months Ended March 31,			Percentage of Revenue	
	2023	2022	Change	2023	2022
Interest expense	$ (11,833)	$ (2,664)	344.2 %	(15.0)%	(1.1)%
Interest income	6,045	—	*	7.7 %	— %
Loss on extinguishment of debt	—	(208)	*	— %	(0.1)%
Change in payable to related parties pursuant to the Tax Receivable Agreement	(1,436)	2,340	(161.4)%	(1.8)%	1.0 %
Other expense	168	7	*	0.2 %	0.0 %
Total other expense	$ (7,056)	$ (525)	*	(8.9)%	(0.2)%

* Not meaningful

Other expense was $0.5 million for the three months ended March 31, 2022 compared to $7.1 million for the three months ended March 31, 2023, representing an increase of $6.5 million. The increase in expense was primarily attributable to a $9.2 million increase in interest expense driven by higher interest rates in the current year, including a $4.1 million change in fair value of the interest rate cap agreement. The increase was further driven by a $3.8 million change in gain (loss) recognized related to the payable to related parties pursuant to the Tax Receivable Agreement as a result of changes in our estimated state income tax apportionment and the corresponding change of our estimated state income tax rate. These increases were partially offset by a $6.0 million increase in interest income for interest earned on our new demand deposits held at financial institutions.

Relationship with GTCR, LLC ("GTCR")

As of March 31, 2023, investment entities affiliated with GTCR collectively controlled approximately 56% of the voting power of our common stock, which enables GTCR to control the vote of all matters submitted to a vote of our shareholders and to control the election of members of the Board and all other corporate decisions.

We made distributions of $8.3 million and $39.9 million during the three months ended March 31, 2023 and 2022, respectively, for tax liabilities to MLSH 1, which is controlled by GTCR and is the only holder of LLC Units other than us and our wholly-owned subsidiaries.

We are also a party to the Tax Receivable Agreement, or TRA, with MLSH 1, which is primarily owned by GTCR, and MLSH 2 (see Note 11 to the condensed consolidated financial statements contained in Part I, Item 1 of this Quarterly Report on Form 10-Q). The TRA provides for the payment by us to MLSH 1 and MLSH 2, collectively, of 85% of the amount of tax benefits, if any, that we actually realize, or in some circumstances are deemed to realize, from exchanges of LLC Units (together with the corresponding shares of Class B common stock) for Class A common stock, as a result of (i) certain increases in the tax basis of assets of Topco LLC and its subsidiaries resulting from purchases or exchanges of LLC Units, (ii) certain tax attributes of the entities acquired from MLSH 1 and MLSH 2 in connection with the Organizational Transactions, Topco LLC and subsidiaries of Topco LLC that existed prior to the IPO, and (iii) certain other tax benefits related to our entering into the TRA, including tax benefits attributable to payments that we make under the TRA (collectively, the "Tax Attributes"). Payment obligations under the TRA are not conditioned upon any Topco LLC unitholders maintaining a continued ownership interest in us or Topco LLC, and the rights of MLSH 1 and MLSH 2 under the TRA are assignable. There is no stated term for the TRA, and the TRA will continue until all tax benefits have been utilized or expired unless we exercise our right to terminate the TRA for an agreed-upon amount.

No payments were made to MLSH 1 or MLSH 2 pursuant to the TRA during the three months ended March 31, 2023. As of March 31, 2023, our liability under the TRA was $719.6 million.

Liquidity and Capital Resources

Overview

We have financed our operations primarily from cash flow from operations, borrowings under long-term debt agreements and, to a lesser extent, the sale of our Class A common stock.

As of March 31, 2023, we had cash of $628.3 million and retained earnings of $404.7 million. We had a net loss of $1.3 million for the three months ended March 31, 2023. We also had positive cash flows from operations of $85.1 million for the three months ended March 31, 2023.

We have relied on revenue derived from product and services sales, and equity and debt financings to fund our operations to date.

Our principal uses of cash have been to fund operations, acquisitions and capital expenditures, as well as to make tax distributions to MLSH 1, make TRA payments to MLSH 1 and MLSH 2 and make interest payments and mandatory principal payments on our long-term debt.

We plan to utilize our existing cash on hand, together with cash generated from operations, primarily to fund our commercial and marketing activities associated with our products and services, continued research and development initiatives, and ongoing investments into our manufacturing facilities to create efficiencies and build capacity. We believe our cash on hand, cash generated from operations and continued access to our credit facilities, will be sufficient to satisfy our cash requirements over the next 12 months and beyond.

As a result of our ownership of LLC Units in Topco LLC, the Company is subject to U.S. federal, state and local income taxes with respect to its allocable share of any taxable income of Topco LLC and is taxed at the prevailing corporate tax rates. In addition to tax expenses, we also will incur expenses related to our operations and we will be required to make payments under the TRA with MLSH 1 and MLSH 2. Due to the uncertainty of various factors, we cannot precisely quantify the likely tax benefits we will realize as a result of LLC Unit exchanges and the resulting amounts we are likely to pay out to LLC Unitholders of Topco LLC pursuant to the TRA; however, we estimate that such payments may be substantial. Assuming no changes in the relevant tax law, and that we earn sufficient taxable income to realize all tax benefits that are subject to the TRA, we expect that future payments under the TRA relating to the purchase by the Company of LLC Units from MLSH 1 and the tax attributes to be approximately $719.6 million and to range over the next 14 years from approximately $42.3 million to $63.3 million per year and to decline thereafter. Future payments in respect of subsequent exchanges or financings would be in addition to these amounts and are expected to be substantial. The foregoing numbers are estimates and the actual payments could differ materially. We expect to fund these payments using cash on hand and cash generated from operations.

As a result of a change of control, material breach, or our election to terminate the TRA early, (1) we could be required to make cash payments to MLSH 1 and MLSH 2 that are greater than the specified percentage of the actual benefits we ultimately realize in respect of the tax benefits that are subject to the TRA, and (2) we will be required to make an immediate cash payment equal to the present value of the anticipated future tax benefits that are the subject of the TRA, which payment may be made significantly in advance of the actual realization, if any, of such future tax benefits. In these situations, our obligations under the TRA could have a material adverse effect on our liquidity and could have the effect of delaying, deferring or preventing certain mergers, asset sales, other forms of business combinations, or other changes of control. There can be no assurance that we will be able to adequately finance our payment obligations under the TRA.

In addition to payments to be made under the TRA, we are also required to make tax distributions to MLSH 1 pursuant to the LLC Operating Agreement for the portion of income passing through to them from Topco LLC. We made distributions of $8.3 million and $39.9 million during the three months ended March 31, 2023 and 2022, respectively, for tax liabilities to MLSH 1 under this agreement.

Credit Agreement

The Credit Agreement among Intermediate, Cygnus and TriLink, as the borrowers, Topco LLC, as holdings, the lenders from time-to-time party thereto and Morgan Stanley Senior Funding, Inc., as administrative and collateral agent (as amended, supplemented or otherwise modified, the "Credit Agreement"), provides us with a term-loan facility (the "Term Loan") totaling $600.0 million and a revolving credit facility (the "Revolving Credit Facility") of $180.0 million for letters of credit and loans to be used for working capital and other general corporate financing purposes. Borrowings under the Credit Agreement are unconditionally guaranteed by Topco LLC, along with the existing and future material domestic subsidiaries of Topco LLC (subject to certain exceptions) as specified in the respective guaranty agreements, and are secured by a lien and security interest in substantially all of the assets of existing and future material domestic subsidiaries of Topco LLC that are loan parties.

In January 2022, the Company entered into an amendment (the "Amendment") to refinance the term loan and to address the planned phase out of London Interbank Offered Rate ("LIBOR"), which is replaced with a Term Secured Overnight Financing Rate ("SOFR") based rate.

Commencing with the fiscal year ended December 31, 2021, and each fiscal year thereafter, the Credit Agreement requires that we make mandatory prepayments on the Tranche B Term Loan principal out of certain excess cash flow, subject to certain step-downs based on the Company's first lien net leverage ratio. The mandatory prepayment shall be reduced to 25% or 0% of the calculated excess cash flow if the Company's first lien net leverage ratio was equal to or less than 4.75:1.00 or 4.25:1.00,

respectively; however, no prepayment is required to the extent excess cash flow calculated for the respective period is equal to or less than $10.0 million. As of March 31, 2023, our first lien net leverage ratio was less than 4.25:1.00. Thus, a mandatory prepayment on the Tranche B Term Loan out of excess cash flow was not required.

Debt Covenants

The Credit Agreement includes financial covenants. One financial covenant is a consolidated first lien coverage ratio measured as of the last day of each fiscal quarter. Another financial covenant requires that, if as of the end of any fiscal quarter the aggregate amount of letters of credit obligations and borrowings under the Revolving Credit Facility outstanding as of the end of such fiscal quarter (excluding cash collateralized letters of credit obligations and letter of credit obligations in an aggregate amount not in excess of $5.0 million at any time outstanding exceeds 35% of the aggregate amount of all Revolving Credit Commitments in effect as of such date, then the net leverage ratio of Intermediate may not be greater than 8.00 to 1.00. For purposes of this covenant, the net leverage ratio is calculated by dividing outstanding first lien indebtedness (net of cash) by Adjusted EBITDA over the preceding four fiscal quarters.

The Credit Agreement also contains negative and affirmative covenants in addition to the financial covenants, including covenants that restrict our ability to, among other things, incur or prepay certain indebtedness, pay dividends or distributions, dispose of assets, engage in mergers and consolidations, make acquisitions or other investments, and make changes in the nature of the business. The Credit Agreement contains certain events of default, including, without limitation, nonpayment of principal, interest or other obligations, violation of the covenants, insolvency, court ordered judgments and certain changes of control. The Credit Agreement also requires the Company to provide audited consolidated financial statements to the lenders no later than 120 days after year-end.

As of March 31, 2023, we were in compliance with these covenants.

As of March 31, 2023, the interest rate on the Tranche B Term Loan was 7.63%.

Tax Receivable Agreement

We are a party to the TRA with MLSH 1 and MLSH 2. The TRA provides for the payment by us to MLSH 1 and MLSH 2, collectively, of 85% of the amount of certain tax benefits, if any, that we actually realize, or in some circumstances are deemed to realize, as a result of the Organizational Transactions, IPO and any subsequent purchases or exchanges of LLC Units of Topco LLC. Based on our current projections of taxable income, and before deduction of any specially allocated depreciation and amortization, we anticipate having enough taxable income to utilize most of these tax benefits.

As of March 31, 2023, our liability under the TRA was $719.6 million, representing 85% of the calculated tax savings we anticipated being able to utilize in future years. We may record additional liabilities under the TRA when LLC Units are exchanged in the future and as our estimates of the future utilization of the Tax Attributes, net operating losses and other tax benefits change. We expect to make payments under the TRA, to the extent they are required, within 125 days after the extended due date of our U.S. federal income tax return for such taxable year. Interest on such payment will begin to accrue from the due date (without extensions) of such tax return at a rate of LIBOR plus 100 basis points. Any late payments will continue to accrue interest at LIBOR plus 500 basis points until such payments are made.

The payment obligations under the TRA are obligations of Maravai LifeSciences Holdings, Inc. and not of Topco LLC. Although the actual timing and amount of any payments that may be made under the TRA will vary, we expect that the aggregate payments that we will be required to make to MLSH 1 and MLSH 2 will be substantial. Any payments made by us under the TRA will generally reduce the amount of overall cash flow that might have otherwise been available to us or to Topco LLC and, to the extent that we are unable to make payments under the TRA for any reason, the unpaid amounts will be deferred and will accrue interest until paid by us. We anticipate funding ordinary course payments under the TRA from cash flow from operations of Topco LLC and its subsidiaries, available cash and/or available borrowings under the Credit Agreement.

Cash Flows

The following table summarizes our cash flows for the periods presented (in thousands):

	Three Months Ended March 31,	
	2023	2022
Net cash provided by (used in):		
Operating activities	$ 85,074	$ 162,304
Investing activities	(69,730)	(241,584)
Financing activities	(19,209)	(40,523)
Net decrease in cash	$ (3,865)	$ (119,803)

Operating Activities

Net cash provided by operating activities for the three months ended March 31, 2023 was $85.1 million, which was primarily attributable to a net cash inflow from the change in our operating assets and liabilities of $68.3 million, non-cash depreciation and amortization of $8.8 million, non-cash amortization of right-of-use assets of $2.1 million, non-cash amortization of deferred financing costs of $0.7 million, non-cash stock-based compensation of $6.0 million, and non-cash loss on the revaluation of liabilities under the TRA of $1.4 million. These were partially offset by a net loss of $1.3 million and non-cash deferred income taxes of $1.5 million.

Net cash provided by operating activities for the three months ended March 31, 2022 was $162.3 million, which was primarily attributable to a net income of $146.9 million, non-cash depreciation and amortization of $7.4 million, non-cash amortization of right-of-use assets of $1.9 million, non-cash amortization of deferred financing costs of $0.7 million, non-cash stock-based compensation of $3.6 million and non-cash deferred income taxes of $13.2 million. These were partially offset by a non-cash gain on the revaluation of liabilities under the TRA of $2.3 million and a net cash outflow from the change in our operating assets and liabilities of $8.2 million.

Investing Activities

Net cash used in investing activities for the three months ended March 31, 2023 was $69.7 million, which was primarily comprised of the net cash consideration paid for the acquisition of Alphazyme and net cash outflows of $7.9 million for property and equipment purchases, offset by government funding of $8.0 million.

Net cash used in investing activities for the three months ended March 31, 2022 was $241.6 million, which was primarily comprised of $238.8 million for the net cash consideration paid for the acquisition of MyChem and net cash outflows of $2.7 million for property and equipment purchases.

Financing Activities

Net cash used in financing activities for the three months ended March 31, 2023 was $19.2 million, which was primarily attributable to a $9.7 million payment of acquisition consideration holdback relating to the acquisition of MyChem, $8.3 million of distributions for tax liabilities to non-controlling interest holders, required pursuant to the terms of the LLC Operating Agreement, and $1.4 million of principal repayments of long-term debt.

Net cash used in financing activities for the three months ended March 31, 2022 was $40.5 million, which was primarily attributable to $39.9 million of distributions for tax liabilities to non-controlling interest holders, required pursuant to the terms of the LLC Operating Agreement.

Capital Expenditures

Capital expenditures for the three months ended March 31, 2023 totaled $1.1 million, which is net of government funding of $8.0 million. Capital expenditures, including costs incurred for lessor improvements, for the year ending December 31, 2023 are projected to be in the range of $57.0 million to $67.0 million, which is net of anticipated government funding of $4.3 million. This primarily includes new facility construction costs recorded as prepaid lease payments and equipment purchases for the Flanders San Diego Facility.

Contractual Obligations and Commitments

The following table summarizes our contractual obligations and commitments as of March 31, 2023 (in thousands):

	Payments due by period				
	Total	1 year	2 - 3 years	4 - 5 years	5+ years
Operating leases [1]	$ 74,545	$ 10,559	$ 21,680	$ 18,136	$ 24,170
Finance leases [2]	18,323	1,614	3,374	3,580	9,755
Debt obligations [3]	537,200	5,440	10,880	520,880	—
TRA payments [4]	719,646	42,254	86,482	89,160	501,750
Unconditional purchase obligations [5]	4,377	1,077	3,300	—	—
Other commitments [6]	18,625	1,640	3,430	3,639	9,916
Total	$ 1,372,716	$ 62,584	$ 129,146	$ 635,395	$ 545,591

(1) Represents operating lease payment obligations, excluding any renewal options we are reasonably certain to execute and have recognized as lease liabilities. See Note 7 to the condensed consolidated financial statements contained in Part I, Item 1 of this Quarterly Report on Form 10-Q for additional information.

(2) Represents finance lease payment obligations excluding any renewal options we are reasonably certain to execute and have recognized as lease liabilities. See Note 7 to the condensed consolidated financial statements contained in Part I, Item 1 of this Quarterly Report on Form 10-Q for additional information.

(3) Represents long-term debt principal maturities, excluding interest. See Note 8 to the condensed consolidated financial statements contained in Part I, Item 1 of this Quarterly Report on Form 10-Q for additional information.

(4) Reflects the estimated timing of TRA payments as of March 31, 2023. Such payments could be due later than estimated depending on the timing of our use of the underlying tax attributes. See Note 11 to the condensed consolidated financial statements contained in Part I, Item 1 of this Quarterly Report on Form 10-Q for additional information regarding our liability under the TRA.

(5) Represents firm purchase commitments to our suppliers.

(6) Represents the estimated timing and amounts of lease payments for Flanders II that is under construction.

Tax distributions are required under the terms of the Topco LLC Agreement. See Note 10 to the condensed consolidated financial statements contained in Part I, Item 1 of this Quarterly Report on Form 10-Q for additional information regarding tax distributions.

Commencing with the fiscal year ended December 31, 2021, and each fiscal year thereafter, the Credit Agreement requires that we make mandatory prepayments of the Term Loan principal upon certain excess cash flow, subject to certain step-downs based on our first lien net leverage ratio. The mandatory prepayment shall be reduced to 25% or 0% of the calculated excess cash flow if the first lien net leverage ratio was equal to or less than 4.75:1.00 or 4.25:1.00, respectively; however, no prepayment shall be required to the extent excess cash flow calculated for the respective period is equal to or less than $10.0 million. As of March 31, 2023, our first lien net leverage ratio was less than 4.25:1.00.

In connection with our acquisition of MyChem, we may be required to make certain payments of $20.0 million to its sellers as of the second anniversary of the closing of the acquisition date as long as the sellers of MyChem continue to be employed by TriLink. We cannot, at this time, determine when or if the related targets will be achieved or whether the events triggering the commencement of payment obligations will occur. Therefore, such payments were not included in the table above. See Note 2 to the condensed consolidated financial statements contained in Part I, Item 1 of this Quarterly Report on Form 10-Q for additional details.

In connection with our acquisition of Alphazyme, we may be required to make certain payments to its sellers and certain employees. We may be required to make additional payments of up to $75.0 million to the sellers of Alphazyme dependent upon meeting or exceeding defined revenue targets during fiscal years 2023 through 2025. We may also be required to make certain payments of $9.3 million to its sellers and certain employees as of various dates but primarily through December 31, 2025 as long as these individuals continue to be employed by the Company. We cannot, at this time, determine when or if the related targets will be achieved or whether the events triggering the commencement of payment obligations will occur. Therefore, such payments were not included in the table above. See Notes 2 and 4 to the condensed consolidated financial statements contained in Part I, Item 1 of this Quarterly Report on Form 10-Q for additional details.

Critical Accounting Policies and Estimates

The discussion and analysis of our financial condition and results of operations are based upon our interim condensed consolidated financial statements, which have been prepared in accordance with U.S. generally accepted accounting principles. The preparation of these condensed consolidated financial statements requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, revenue, expenses and related disclosures in the consolidated financial statements. Our estimates are based on historical experience and on various other assumptions that we believe are reasonable under the circumstances, the results of which form the basis for making judgments about the carrying value of assets and liabilities that are not readily apparent from other sources. Actual results could differ from these estimates under different assumptions or conditions, and any such difference may be material. For a discussion of how these and other factors may affect our business, financial condition or results of operations, see "Item 1A. Risk Factors" in our Annual Report on Form 10-K for the fiscal year ended December 31, 2022.

The critical accounting estimates that we believe affect our more significant judgments and estimates used in the preparation of our condensed consolidated financial statements presented in this report are described in Management's Discussion and Analysis of Financial Condition and Results of Operations and in the Notes to the Consolidated Financial Statements included in our Annual Report on Form 10-K for fiscal year ended December 31, 2022. Except as noted below, there have been no material changes to our critical accounting policies or estimates from those set forth in our Annual Report on Form 10-K for the fiscal year ended December 31, 2022.

Recognition of Intangible Assets as Part of a Business Combination

We account for our business combinations using the acquisition method of accounting which requires that the assets acquired and liabilities assumed of acquired businesses be recorded at their respective fair values at the date of acquisition. The purchase price, which includes the fair value of consideration transferred, is attributed to the fair value of the assets acquired and liabilities assumed. The excess of the purchase price of the acquisition over the fair value of the identifiable net assets of the acquiree is recorded as goodwill.

Determining the fair value of intangible assets acquired requires management to use significant judgment and estimates, including the selection of valuation methodologies, assumptions about future net cash flows, discount rates and market participants. Each of these factors can significantly affect the value attributed to the identifiable intangible asset acquired in a business combination.

We generally utilize a discounted cash flow method under the income approach to estimate the fair value of identifiable intangible assets acquired in a business combination. For the acquisition of Alphazyme, LLC, the estimated fair value of the developed technology intangible asset was based on the multi-period excess earnings method. The estimated fair value was developed by discounting future net cash flows to their present value at market-based rates of return. We selected the assumptions used in the financial forecasts using historical data, supplemented by current and anticipated market conditions, estimated revenue growth rates, management's plans, and guideline companies. Some of the more significant assumptions inherent in estimating the fair value of this intangible asset included revenue growth rates ranging from 3.0% to 55.0%, a discount rate of 17.8% and an assumed technical obsolescent curve of 5.0%.

The use of alternative estimates and assumptions could increase or decrease the estimated fair value and amounts allocated to identifiable intangible assets acquired and future amortization expense as well as goodwill.

Recent Accounting Pronouncements

For a description of the expected impact of recent accounting pronouncements, if any, see Note 1 to the condensed consolidated financial statements contained in Part I, Item 1 of this Quarterly Report on Form 10-Q.

Item 3. Quantitative and Qualitative Disclosures About Market Risk

Interest Rate Risk

As of March 31, 2023, our primary exposure to interest rate risk was associated with our variable rate long-term debt. Borrowings under our Credit Agreement bear interest at a rate equal to the Base Rate plus a margin of 2.00%, with respect to each Base Rate-based loan, or the Term SOFR (Secured Overnight Financing Rate) plus a margin of 3.00% with respect to each Term SOFR-based loan, subject in each case to an applicable Base Rate or Term SOFR floor (see Note 8 to the condensed consolidated financial statements contained in Part I, Item 1 of this Quarterly Report on Form 10-Q). Interest rates can fluctuate for a number of reasons, including changes in the fiscal and monetary policies or geopolitical events or changes in general economic conditions. This could adversely affect our cash flows.

As of March 31, 2023, we have an interest rate cap agreement in place to hedge a portion of our variable interest rate risk on our outstanding long-term debt. The agreement has a contract notional amount of $500.0 million and entitles us to receive from the counterparty at each calendar quarter end the amount, if any, by which a specified floating market rate exceeds the cap strike interest rate. The floating interest rate is reset at the end of each three-month period. The contract expires on January 19, 2025.

We had $537.2 million of outstanding borrowings under our Tranche B Term Loan and no outstanding borrowings under our Revolving Credit Facility as of March 31, 2023. For the three months ended March 31, 2023, the effect of a hypothetical 100 basis point increase or decrease in overall interest rates would have changed our interest expense by approximately $1.3 million.

We had cash of $628.3 million as of March 31, 2023. Our cash is held in demand deposits and is not subject to market risk.

Foreign Currency Risk

All of our revenue is denominated in U.S. dollars. Although approximately 48.7% of our revenue for the three months ended March 31, 2023 was derived from international sales, primarily in Europe and Asia Pacific, none of these sales are denominated in local currency. The majority of our expenses are generally denominated in the currencies in which they are incurred, which is primarily in the United States. As we expand our presence in international markets, to the extent we are required to enter into agreements denominated in a currency other than the U.S. dollar, results of operations and cash flows may increasingly be subject to fluctuations due to changes in foreign currency exchange rates and may be adversely affected in the future due to changes in foreign currency exchange rates. To date, we have not entered into any hedging arrangements with respect to foreign currency risk. As our international operations grow, we will continue to reassess our approach to manage our risk relating to fluctuations in currency rates.

Item 4. Controls and Procedures

Evaluation of Disclosure Controls and Procedures

Under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, we evaluated the effectiveness of our disclosure controls and procedures pursuant to Rule 13a-15(e) and 15(d)-15(e) under the Securities Exchange Act of 1934, as amended (the "Exchange Act"), as of the end of the period covered by this Quarterly Report on Form 10-Q. Our disclosure controls and procedures are designed to ensure that information required to be disclosed in the reports we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms, and that such information is accumulated and communicated to our management, including the Chief Executive Officer and the Chief Financial Officer, to allow timely decisions regarding required disclosures. Any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objective, and management necessarily applies its judgment in evaluating the cost-benefit relationship of possible controls and procedures. Based on that evaluation, our Chief Executive Officer and Chief Financial Officer have concluded that our disclosure controls and procedures were effective at a reasonable assurance level as of March 31, 2023.

Changes in Internal Control over Financial Reporting

There have been no changes in our internal control over financial reporting, as such term is defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act, during the three months ended March 31, 2023 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Part II.

Item 1. Legal Proceedings

From time to time, we may be involved in various legal proceedings and subject to claims that arise in the ordinary course of business. Although the results of litigation and claims are inherently unpredictable and uncertain, we are not currently a party to any legal proceedings the outcome of which, if determined adversely to us, are believed to, either individually or taken together, have a material adverse effect on our business, operating results, cash flows or financial condition. Regardless of the outcome, litigation has the potential to have an adverse impact on us because of defense and settlement costs, diversion of management resources, and other factors.

Item 1A. Risk Factors

Other than the addition of the risk factor set forth below to "Risk Factors—Risks Related to our Business and Strategy," there have been no material changes to the risk factors disclosed under the heading "Risk Factors" in our most recent Annual Report on Form 10-K.

Risks Related to Our Business and Strategy

Adverse developments affecting the banking system and financial institutions, including bank failures, could adversely affect our and our customers' current and projected business operations and our financial condition and results of operations.

Concerns have recently emerged with respect to the financial condition of a number of banking organizations in the U.S. and abroad in the wake of the closures of Silicon Valley Bank ("SVB"), Signature Bank, Credit Suisse and First Republic Bank. The closures of SVB, Signature Bank, Credit Suisse and First Republic Bank have resulted in market disruption and volatility, a tightening of the credit markets and exposed potential vulnerabilities and systemic risk in the banking sector, including legal uncertainties. Future adverse developments vis-à-vis other banks and financial institutions or the broader financial services industry could lead to further liquidity shortages, impede our or our customers' and vendors' access to working capital, result in less favorable commercial financing terms, and create additional economic uncertainty.

Although we do not hold cash deposits or securities at, nor do we have a lending relationship or other business with, Credit Suisse, SVB, Signature Bank, First Republic Bank or any other regional bank, some of our customers and vendors have or had deposits with such banks. If other banks and financial institutions that we or our customers and vendors have banking and business relationships with enter receivership or become insolvent in the future due to the financial conditions affecting the banking system and financial markets, there are no assurances that we or our customers' or vendors' will have full access to their deposits or other sources of liquidity, such as committed credit facilities, nor is it possible to predict that any such bank or financial institution will be able to obtain required liquidity from other banks, government institutions or by acquisition.

While we have taken precautionary measures to mitigate the risk of potential loss related to our corporate banking relationships, such as migrating certain deposit account balances to Institutional Insured Liquid Deposits and utilizing nightly sweeps to U.S. government and treasury money market funds, a significant portion of our daily accessible domestic cash deposits reside in accounts that exceed the current FDIC insurance limits.

If we or our customers and vendors experience a decline in available funding or access to our cash and liquidity resources it could, among other risks, have an adverse impact on our ability to meet our financial obligations, operating expenses, or fulfil our other obligations. Any of these impacts, or any other impacts resulting from the factors described above or other related or similar factors not described above, could have material adverse impacts on our and our customers' and vendors' current and/or projected business operations, as well as our financial condition and results of operations.

Item 2. Unregistered Sales of Equity Securities

During the quarter ended March 31,2023, we had the following unregistered securities transaction:

On January 18, 2023, the Company acquired all of the outstanding membership interests in Alphazyme LLC ("Alphazyme"). On January 19, 2023, the Company entered into a Contribution Agreement with Alphazyme Holdings, Inc., a wholly owned subsidiary of the Company ("Alphazyme Holdings"), pursuant to which the Company contributed all such membership interests in Alphazyme (the "Alphazyme Membership Interest") to Alphazyme Holdings. On January 22, 2023, Alphazyme Holdings entered into a Contribution and Exchange Agreement with Topco LLC, pursuant to which it contributed all of the Alphazyme Membership Interests to Topco LLC in exchange for 5,059,134 newly-issued LLC Units (the "Common Units") of Topco LLC at a price per unit of $13.87, which was equal to the 50-day volume-weighted average price of the Company's Class A common

stock as calculated on January 18, 2023 (the "Contribution and Exchange"). Immediately following the Contribution and Exchange, the Company entered into a Forfeiture Agreement with Alphazyme Holdings, Topco LLC and MLSH 1, a related party, pursuant to which each of the Company (together with Alphazyme Holdings) and MLSH 1 agreed to forfeit 5,059,134 and 4,871,970 LLC Units, respectively, representing 3.7% of the Company's (together with Alphazyme Holdings) and MLSH 1's respective LLC Units of Topco LLC, and an equal number of shares of the Company's Class B common stock, par value $0.01 per share, were forfeited by MLSH 1, in each case for no consideration. The Company's acquisition of Alphazyme allowed the Company to utilize excess cash that had accumulated as a result of quarterly tax distributions it has received from Topco LLC. The Contribution and Exchange Agreement enabled the Company to contribute Alphazyme to Topco LLC where the Company's other business segments reside, to align with our business objectives in a structurally and tax efficient manner.

The Common Units issued to the Company in connection with the Contribution Agreement were issued in reliance on an exemption from registration pursuant to Section 4(a)(2) of the Securities Act of 1933.

Item 3. Defaults Upon Senior Securities

None.

Item 5. Other Information

On May 8, 2023, the Company entered into an agreement (each, an "A&R Employment Agreement") with each of Carl Hull, William "Trey" Martin, III, Kevin Herde, Peter Leddy, Ph.D. and Christine Dolan (the "Executives"), which amends and restates each Executive's employment agreement with the Company to incorporate changes to certain of the severance benefits to which the Executives will be entitled in connection with a termination of employment without Cause or for Good Reason (as applicable), both absent and in connection with a Change in Control (as defined in each A&R Employment Agreement), as summarized below.

Pursuant to the A&R Employment Agreement for each of Messrs. Hull, Martin, and Herde and Dr. Leddy, the Executive's severance benefits will be amended and restated to provide that upon a termination of employment without Cause or for Good Reason: (i) absent a Change in Control (a "Non-CIC Termination"), the Executive's severance entitlements will include (a) earned and unpaid annual bonus for the calendar year ending prior to the date of termination (the "Earned Bonus Severance"), (b) continued payment of base salary in substantially equal installments in accordance with the Company's regular payroll practices (the "Base Salary Severance") for a period of 12 months, (c) a pro-rata target annual bonus for the year in which termination occurs, calculated based on the number of days the Executive was employed during such yea (the "Pro-Rata Bonus Severance") and (d) subject to the Executive's timely election of continuation coverage under COBRA, payment of the COBRA premiums for the Executive and the Executive's eligible dependents, if any, (the "COBRA Severance") for a period of 12 months, and (ii) that occurs during the 24-month period following a Change in Control (a "CIC Termination"), the Executive's severance entitlements will include (a) the Earned Bonus Severance, (b) the Base Salary Severance for a period of 24 months, (c) the Pro-Rata Bonus Severance, (d) an amount equal to two times the greatest of the Executive's (x) target annual bonus for the fiscal year of the Executive's termination of employment, (y) the calculation of an annual bonus based on (A) Executive's base salary and annual bonus target in place at the time of the Change in Control and (B) the average of the Company performance achievement percentage applied to calculate annual bonuses under the Company's annual bonus program with respect to the two fiscal years prior to the fiscal year in which the termination occurs and (z) the annualized amount accrued with respect to the Executive's annual bonus for the fiscal year in which termination occurs, payable in substantially equal installments over 24 months in accordance with the Company's regular payroll practices (the "Bonus Severance") and (e) the COBRA Severance for a period of 18 months.

Pursuant to Ms. Dolan's A&R Employment Agreement, Ms. Dolan's severance benefits will be amended and restated to provide that (i) upon a termination of employment without Cause absent a Change in Control, Ms. Dolan's severance entitlements will include: (a) the Earned Bonus Severance, (b) Base Salary Severance for a period of 12 months, (c) the Pro-Rata Bonus Severance and (d) the COBRA Severance for a period of 12 months, and (ii) pursuant to a CIC Termination without Cause or for Good Reason, Ms. Dolan's severance entitlements will include: (v) the Earned Bonus Severance, (w) the Base Salary Severance for a period of 24 months, (x) the Pro-Rata Bonus Severance, (y) the Bonus Severance and (z) the COBRA Severance for a period of 18 months.

Pursuant to the A&R Employment Agreement for each of Messrs. Hull, Martin and Herde and Dr. Leddy, the term "Good Reason" that applies in the context of a Non-CIC Termination is amended and restated to include any of the following, in each case, without the Executive's prior consent: (a) any action by the Company or Employer (as defined in the applicable A&R Employment Agreement) which results in a material reduction in the Executive's authority, duties or responsibilities, (b) a material reduction in the Executive's base salary or target annual bonus or (c) the relocation of the Executive's principal office or place of work to a location that would cause an increase by more than 35 miles in the one-way commuting distance from the

Executive's principal personal residence to the principal office or business location at which the Executive is then required to perform services.

Pursuant to the A&R Employment Agreement for each of the Executives, the term "Good Reason" that applies in the context of a CIC Termination is amended and restated to include any of the following, in each case, without the Executive's prior consent: (a) any action by the Company or Employer which results in a material reduction in the Executive's title, status, authority, duties or responsibilities (in each case consistent with the Executive's current title), (b) a reduction in the Executive's base salary, target annual bonus or the target grant date value of the Executive's annual equity award (in relation to the target for such Executive's most recent annual equity award prior to the Change in Control or, if no such award, the target for such award for the Company executive most similarly situated to the Executive) or (c) the relocation of the Executive's principal office or place of work to a location that would cause an increase by more than 35 miles in the one-way commuting distance from the Executive's principal personal residence at the time of the Change in Control to the principal office or business location at which the Executive is then required to perform services.

Except as otherwise described herein, the terms and conditions of the A&R Employments Agreements are generally consistent with those contained in the prior employment agreements entered into with each of the Executives.

The foregoing is not a complete description of the parties' rights and obligations under the A&R Employment Agreements and is qualified in its entirety by reference to the full text and terms of the A&R Employment Agreements, which are each attached hereto as Exhibit 10.2, Exhibit 10.3, Exhibit 10.4, Exhibit 10.5 and Exhibit 10.6 and incorporated herein by reference.

Item 6. Exhibits

Exhibit Number	Description
3.1	Amended and Restated Certificate of Incorporation of Maravai LifeSciences Holdings, Inc. dated November 19, 2020 (incorporated by reference to Exhibit 3.1 to Maravai Life Sciences Holdings, Inc.'s Form 8-K filed on November 25, 2020)
3.2	Amended and Restated Bylaws of Maravai LifeSciences Holdings, Inc. dated November 19, 2020 (incorporated by reference to Exhibit 3.2 to Maravai Life Sciences Holdings, Inc.'s Form 8-K filed on November 25, 2020).
10.1+*	Employment Agreement by and among Maravai LifeSciences Holdings, Inc., Maravai Intermediate Holdings, LLC, and Peter M. Leddy Ph.D., dated as of June 27, 2022.
10.2+‡*	Amended and Restated Employment Agreement by and among Maravai LifeSciences Holdings, Inc., Maravai Intermediate Holdings, LLC and Carl W. Hull, dated as of May 8, 2023.
10.3+‡	Amended and Restated Employment Agreement by and among Maravai LifeSciences Holdings, Inc., Maravai Intermediate Holdings, LLC and William "Trey" Martin, III, dated as of May 8, 2023.
10.4+‡	Amended and Restated Employment Agreement by and among Maravai LifeSciences Holdings, Inc., Maravai Intermediate Holdings, LLC and Kevin Herde, dated as of May 8, 2023.
10.5+‡	Amended and Restated Employment Agreement by and among Maravai LifeSciences Holdings, Inc., Maravai Intermediate Holdings, LLC and Peter M. Leddy, Ph.D., dated as of May 8, 2023.
10.6+‡	Amended and Restated Employment Agreement by and among Maravai LifeSciences Holdings, Inc., Cygnus Technologies, LLC, MLSC Holdings, LLC and Christine Dolan, dated as of May 8, 2023.
31.1	Certification of the Chief Executive Officer pursuant to Exchange Act Rules 13a-14(a) and 15d-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002, filed herewith.
31.2	Certification of the Chief Financial Officer pursuant to Exchange Act Rules 13a-14(a) and 15d-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002, filed herewith.
32.1**	Certification of the Chief Executive Officer pursuant to 18 U.S. C. Section 1350.
32.2**	Certification of the Chief Financial Officer pursuant to 18 U.S.C. Section 1350.
101.INS	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	XBRL Taxonomy Extension Schema Document.
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document.
101.DEF	XBRL Extension Definition Linkbase Document.
101.LAB	XBRL Taxonomy Label Linkbase Document.
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document.
104	Cover Page Interactive Data File (formatted as Inline XBRL and contained in exhibit 101)

+ Indicates a management contract or compensatory plan or agreement.

* Exhibits and schedules have been omitted pursuant to Item 601(a)(5) of Regulation S-K and will be provided on a supplemental basis to the Securities and Exchange Commission upon request.

‡ Certain portions of this Exhibit that constitute confidential information have been redacted in accordance with Item 601(b)(10) of Regulation S-K.

** The certifications furnished in Exhibits 32.1 and 32.2 hereto are deemed to accompany this Quarterly Report on Form 10-Q and will not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, except to the extent that the registrant specifically incorporates it by reference.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this Quarterly Report on Form 10-Q to be signed on its behalf by the undersigned, thereunto duly authorized.

Maravai LifeSciences Holdings, Inc.

By:	/s/ Kevin Herde
Name:	Kevin Herde
Title:	Chief Financial Officer

Date: May 9, 2023

EMPLOYMENT AGREEMENT

THIS EMPLOYMENT AGREEMENT (this "Agreement") is signed as of June 21, 2022, and effective as of June 27, 2022 (the "Effective Date"), by and among Maravai LifeSciences Holdings, Inc., a Delaware corporation (" Parent"), Maravai Intermediate Holdings, LLC, a Delaware limited liability company ("Employer"), and Peter M. Leddy ("Executive"). Capitalized terms used but not otherwise defined shall have the meanings set forth in Section 4.

NOW, THEREFORE, in consideration of the mutual covenants contained in this Agreement and other good and valuable consideration, the receipt and sufficiency of which are acknowledged, the parties to this Agreement agree as follows:

1. Employment. Employer agrees to employ Executive, and Executive accepts such employment, for the period beginning on the Effective Date and ending upon his separation pursuant to Section 1(f) (the "Employment Period").

(a) Position and Duties.

(i) During the Employment Period, Executive shall serve as Executive Vice President and Chief Administrative Officer of Parent and shall have the normal duties, responsibilities and authority implied by such position, which shall include human resources, DEI (diversity, equity and inclusion initiatives), ESG (environmental, social and governance initiatives), facilities, security functions of Parent and its Subsidiaries:, and such other activities as are reasonably directed by the Chief Executive Officer of Parent, subject in each case to the power of the Chief Executive Officer of Parent to expand, limit or otherwise alter such duties, responsibilities, positions and authority and to otherwise override actions of officers.

(ii) Executive shall report to the Chief Executive Officer of Parent, and Executive shall devote his best efforts and his full business time and attention to the business and affairs of Parent, Employer and the other Subsidiaries of Parent; provided, that during the Employment Period, Executive shall be entitled to (A) serve, with the prior written consent of the Chief Executive Officer, on corporate, civic or charitable boards or committees, (B) deliver lectures and fulfill speaking engagements and (C) manage personal investments, so long as, with respect to clauses (B) and (C), such activities do not interfere substantially with the performance of Executive's responsibilities to Parent or Employer under this Agreement.

(b) Salary, Bonus and Benefits. Commencing on the Effective Date and continuing until a Separation, Employer will pay Executive a base salary at a rate of $450,000 per annum (the "Annual Base Salary"). The Annual Base Salary shall be reviewed annually by the board of directors of Parent (the "Board") or its Compensation Committee. For each fiscal year of Employer ending during the Employment Period, Executive shall be eligible for an annual bonus with a target amount equal to $315,000 for 2022 and 70% of the Annual Base Salary in subsequent years (such amount, the "Annual Bonus"), as determined by the Board based upon the performance of Executive and the achievement by Parent, Employer and the other Subsidiaries of Parent of financial, operating and other objectives set by the Board. Each Annual Bonus, if any, shall be paid as soon as administratively feasible after the Board (or a committee thereof) certifies whether the performance targets for the applicable year have been achieved but in no event later than March 15 following the end of such year. Subject to Section 1(f), no Annual Bonus, if any, or any portion thereof, shall be payable for any year unless Executive remains continuously employed by Employer from the Effective Date through the last day of such year. In addition, during the Employment Period, Executive will be entitled to such other benefits as are approved by the Board and made generally available to all senior management of Parent and Employer.

(c) Sign-on Bonus: Employer will pay Executive a cash sign-on bonus of $100,000 (the " Sign-on Bonus") as soon as administratively practicable following the Effective Date, in accordance with Employer's regularly-schedule payroll practices. If Executive's employment is terminated due to Executive's resignation without Good Reason before the one-year anniversary of the Effective Date, Executive shall repay Employer 100% of this Sign-on Bonus. If Executive is required to repay the Sign-on Bonus and the law of the state of Executive's primary employment allows a deduction from final pay,

Executive authorizes a deduction from Executive's final paycheck for any unearned Sign-on Bonus to the fullest extent allowed by law. If there is any balance owing or if state law does not allow a deduction from Executive' final pay, Executive agrees to repay the unearned Sign-on Bonus within 30 days of Executive's final day of employment.

(d) Primary Work Location: Executive's primary work location shall initially be in Scottsdale, Arizona, but Executive will be required to travel as required by his duties, including travel to the Company's offices in San Diego, California, and Leland, North Carolina, and the Company shall pay the expenses of such travel as set forth in the Company's Travel and Expense Policy. In the future, at the direction of the Company's Chief Executive Officer, the Company may require Executive to maintain a residence in San Diego, California. Following such requirement and contingent upon Executive's establishment of such residence and timely submission of related documentation to Employer, Employer will provide Executive a reasonable monthly housing allowance for a period of one year, the amount of which shall be determined in good faith by Parent's Chief Executive Officer.

(e) Equity Awards. Following the Effective Date, the Board (or a committee thereof) will grant Executive the following equity awards pursuant to, and subject to the terms and conditions of, Parent's 2020 Omnibus Incentive Plan and associated award agreements: (i) non-qualified stock options that vest over a four year period with an approximate grant date fair value of $1,750,000 (with the final number of shares subject to such non-qualified stock options determined using the 20 trading day volume-weighted average price of Parent's Class A common stock on the grant date), and (ii) restricted stock units that vest over a three year period with an approximate grant date fair value of $1,750,000 (with the final number of restricted stock units granted determined using the 20 trading day volume-weighted average price of Parent's Class A common stock on the grant date).

(f) Separation. The Employment Period will continue until (x) Executive's resignation, death or Disability or (y) the Board terminates Executive's employment with or without Cause. Executive shall have the right to terminate Executive's employment with Employer without Good Reason and for any other reason, or no reason at all, upon 30 days' advance written notice to Employer; provided, however, that if Executive has provided notice to Employer of Executive's termination of employment, Employer may determine, in its sole discretion, that such termination shall be effective on any date before the effective date of termination provided in such notice (and, if such earlier date is so required, then it shall not change the basis for Executive's termination of employment nor be construed or interpreted as a termination of employment by the Board without Cause) and any requirement to continue salary or benefits shall cease as of such earlier date.

(i) Payment Upon Separation. If Executive's employment is terminated by resignation of Executive with Good Reason pursuant to clause (x) above or by the Board without Cause pursuant to clause (y) above, then, in addition to any accrued but unpaid Annual Base Salary and benefits (the "Accrued Amounts"), (A) Executive will be entitled to any earned but unpaid Annual Bonus pursuant to Section 1(b) and (B) during the one-year period commencing on the date of Separation and ending on the 12 month anniversary of the date of the Separation (the "Severance Period"), (I) Employer shall pay to Executive an aggregate amount equal to 100% of his Annual Base Salary, payable in substantially equal installments on Employer's regular salary payment dates as in effect on the date of the Separation, and (II) if Executive is eligible to and does elect continuation coverage under Employer's health benefit plan pursuant to the provisions of Section 4980B of the Code, then Employer shall reimburse to Executive the premiums paid for such coverage by Executive during the portion of the Severance Period of which Executive is eligible for and elects such continuation coverage under Employer's health benefit plan, provided that such reimbursements shall not be made in the event an excise tax under Section 4980D of the Code would be imposed on Employer as a result.

(ii) Payment Upon Separation following a Change in Control. If, during the period commencing upon a Change in Control (as defined below) and ending on the 12 month anniversary of such Change in Control, Executive's employment is terminated by resignation of Executive with Good Reason or by Parent or Employer (or their respective successors) without Cause, then, in addition to the Accrued Amounts, (A) Executive will be entitled to any earned but unpaid Annual Bonus pursuant to Section 1(b) and (B) during the one-year period commencing

on the date of Separation and ending on the 12 month anniversary of the date of Separation (the "CIC Severance Period"), (I) Employer shall pay to Executive an aggregate amount equal to 100% of his Annual Base Salary plus an amount equal to the target Annual Bonus, subject to Section 1(g), payable in substantially equal installments on Employer's regular salary payment dates as in effect on the date of the Separation , and (II) if Executive is eligible to and does elect continuation coverage under Employer's health benefit plan pursuant to the provisions of Section 4980B of the Code, then Employer shall reimburse to Executive the premiums paid for such coverage by Executive during the portion of the CIC Severance Period of which Executive is eligible for and elects such continuation coverage under Employer's health benefit plan, provided that such reimbursements shall not be made in the event an excise tax under Section 4980D of the Code would be imposed on Employer as a result.

(iii) Release Agreement. Notwithstanding anything herein to the contrary, (A) Executive shall not be entitled to receive any payments or other benefits pursuant to this Section 1(f) (other than the Accrued Amounts) unless Executive has timely executed and delivered to Employer a general release and separation agreement in form prepared by Employer (a "Release Agreement") (and such Release Agreement shall become in full force and effect and not been timely revoked as may be permitted by its terms), which Release Agreement shall be delivered by Executive on or prior to the Release Expiration Date (as defined below) and (B) Executive shall be entitled to receive such payments only so long as Executive has not breached any of the provisions of such Release Agreement or Section 2 or Section 3.

(g) Code Section 409A. The intent of the parties is that payments and benefits under this Agreement comply with or otherwise be exempt from Internal Revenue Code Section 409A and any regulations and guidance (collectively "Code Section 409A") and, accordingly, to the maximum extent permitted, this Agreement shall be interpreted to be either exempt from or in compliance therewith. In no event whatsoever shall Parent or Employer be liable for any additional tax, interest or penalty that may be imposed on the Executive by Code Section 409A or damages for failing to comply with Code Section 409A. Notwithstanding any other payment schedule provided to the contrary, if the Executive is deemed on the date of termination to be a "specified employee" within the meaning of that term under Code Section 409A(a)(2)(B), then any payment under this Section 1 that is considered deferred compensation under Code Section 409A payable on account of a "separation from service" shall not be made until the date which is the earlier of (i) the expiration of the six-month period measured from the date of such "separation from service" of Executive, and (ii) the date of Executive's death (the "Delay Period") to the extent required under Code Section 409A. Upon the expiration of the Delay Period, all payments delayed pursuant to this Section 1(g) shall be paid to the Executive in a lump sum, and all remaining payments due under this Agreement shall be paid or provided in accordance with the normal payment dates specified for them herein. A termination of employment shall not be deemed to have occurred for purposes of any provision of this Agreement providing for the payment of any amounts or benefits upon or following a termination of employment unless such termination is also a "separation from service" from Parent and Employer within the meaning of Code Section 409A and, for purposes of any such provision of this Agreement, references to a "termination," "termination of employment" or like terms shall mean "separation from service." Notwithstanding anything to the contrary in this Agreement, to the extent that any payments of "nonqualified deferred compensation" (within the meaning of Code Section 409A) due under this Agreement as a result of Executive's termination of employment are subject to Executive's execution and delivery of a Release Agreement, (A) if Executive fails to execute the Release Agreement on or prior to the Release Expiration Date (as defined below) or timely revokes his acceptance of the Release Agreement thereafter, he shall not be entitled to any payments or benefits otherwise conditioned on the Release Agreement, and (B) in any case where the date of termination of employment and the Release Expiration Date fall in two separate taxable years, any payments required to be made to Executive that are conditioned on the Release Agreement and are treated as "nonqualified deferred compensation" (within the meaning of Code Section 409A) shall be made in the later taxable year. For purposes of this Section 1(g) "Release Expiration Date" shall mean the date that is 21 days following the date of Executive's termination of employment, or, in the event that Executive's termination of employment is "in connection with an exit incentive or other employment termination program" (as such phrase is defined in the Age Discrimination in Employment Act of 1967), the date that is 45 days following the date of Executive's termination of employment. To the extent that any payments of nonqualified deferred compensation (within the meaning of Code Section 409A) due under this

Agreement as a result of Executive's termination of employment are delayed pursuant to this Section 1(g), such amounts shall be paid in a lump sum on the first payroll date following the date that Executive executes and does not revoke the Release Agreement (and the applicable revocation period has expired) or, in the case of any payments subject to clause (B) of this Section 1(g), on the first payroll period to occur in the subsequent taxable year, if later. To the extent, if any, that the aggregate amount of the installments of the severance payment that would otherwise be paid pursuant to Section 1(f) after March 15 of the calendar year following the calendar year in which the Separation occurs (the "Applicable March 15") exceeds the maximum exemption amount under Treasury Regulation Section 1.409A-1(b)(9)(iii)(A), then such excess shall be paid to Executive in a lump sum on the Applicable March 15 (or the first business day preceding the Applicable March 15 if the Applicable March 15 is not a business day) and the installments of the severance payment payable after the Applicable March 15 shall be reduced by such excess (beginning with the installment first payable after the Applicable March 15 and continuing with the next succeeding installment until the aggregate reduction equals such excess). For purposes of Code Section 409A, the Executive's right to receive any installment payment pursuant to this Agreement shall be treated as a right to receive a series of separate and distinct payments. In no event shall any payment under this Agreement that constitutes "deferred compensation" for purposes of Code Section 409A be subject to offset by any other amount unless otherwise permitted by Code Section 409A.

(h) Certain Excise Taxes. If Executive is a "disqualified individual" (as defined in Section 280G(c) of the Code), and the separation payments and benefits provided for in this Agreement, together with any other payments and benefits which such Executive has the right to receive from Parent or any of its Affiliates, would constitute a "parachute payment" (as defined in Section 280G(b)(2) of the Code), then the payments provided for in this Agreement shall be either (a) reduced (but not below zero) so that the present value of such total amounts and benefits received by Executive from the Parent and its Affiliates will be one dollar less than three times Executive's "base amount" (as defined in Section 280G(b)(3) of the Code) and so that no portion of such amounts and benefits received by Executive shall be subject to the excise tax imposed by Section 4999 of the Code or (b) paid in full, whichever produces the better net after-tax position to Executive (taking into account any applicable excise tax under Section 4999 of the Code and any other applicable taxes). The determination as to whether any such reduction in the amount of the payments provided hereunder is necessary shall be made by Parent in good faith. If a reduced payment is made and through error or otherwise that payment, when aggregated with other payments and benefits from Parent (or its Affiliates) used in determining if a "parachute payment" exists, exceeds one dollar less than three times Executive's base amount, then Executive shall immediately repay such excess to Parent (or its Affiliates) upon notification that an overpayment has been made. Nothing in this Section 1(e) shall require Parent or Employer to be responsible for, or have any liability or obligation with respect to, Executive's excise tax liabilities under Section 4999 of the Code.

2. Confidential Information

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(a) Obligation to Maintain Confidentiality. Executive acknowledges that the information, observations and data (including trade secrets) obtained by him during the course of his employment with Employer prior to and after the Effective Date concerning the business or affairs of Parent, Employer and their respective Subsidiaries and Affiliates ("Confidential Information") are the property of Parent, Employer or such Subsidiaries and Affiliates, including information concerning acquisition opportunities in or reasonably related to Parent's and Employer's business or industry of which Executive becomes aware during the Employment Period. Therefore, Executive agrees that he will not disclose to any unauthorized Person or use for his own account any Confidential Information without the Board's written consent, unless and to the extent that the Confidential Information, (i) becomes generally known to and available for use by the public other than as a result of Executive's acts or omissions to act or (ii) is required to be disclosed pursuant to any applicable law or court order. Executive shall deliver to Employer at a Separation, or at any other time Employer may request, all memoranda, notes, plans, records, reports, computer tapes, printouts and software and other documents and data (and copies thereof) relating to the Confidential Information, Work Product (as defined below) or the business of Parent, Employer and their respective Subsidiaries and Affiliates (including all acquisition prospects, lists and contact information) which he may then possess or have under his control.

(b) Protection of Trade Secrets. Executive acknowledges and agrees with Employer that Executive's services to Employer and to Parent and their respective Subsidiaries and Affiliates require the use of Confidential Information and trade secret information (including any formula, pattern, compilation, program, device, method, technique or process) that Employer, Parent or their respective Subsidiaries and Affiliates have made reasonable efforts to keep confidential and that derives independent economic value, actual or potential, from not being generally known to the public or to other persons who can obtain economic value from its disclosure or use ("Trade Secrets"). Executive further acknowledges and agrees that Employer, Parent and such Subsidiaries and Affiliates would be irreparably harmed if Executive were to provide similar services requiring the use of such Trade Secrets.

(c) Ownership of Property. Executive acknowledges that all discoveries, concepts, ideas, inventions, innovations, improvements, developments, methods, processes, programs, designs, analyses, drawings, reports, patent applications, copyrightable work and mask work (whether or not including any confidential information) and all registrations or applications related thereto, all other proprietary information and all similar or related information (whether or not patentable) that relate to Parent, Employer or any of their respective Subsidiaries or Affiliates engaging in Parent Business or an anticipated business in which Parent, Employer or any of their respective Subsidiaries or Affiliates have a bona fide interest or expectancy relating to the acquisition of a business by Parent, Employer or any of their respective Subsidiaries, research and development, or existing or future products or services and that are conceived, developed, contributed to, made, or reduced to practice by Executive (either solely or jointly with others) while employed by Parent, Employer or any of their respective Subsidiaries or Affiliates (including any of the foregoing that constitutes any proprietary information or records) ("Work Product") belong to Parent, Employer or such Subsidiary or Affiliate, and Executive hereby assigns, and agrees to assign, all of the above Work Product to Parent, Employer or to such Subsidiary or Affiliate. Any copyrightable work prepared in whole or in part by Executive in the course of his work for any of the foregoing entities shall be deemed a "work made for hire" under the copyright laws, and Parent, Employer or such Subsidiary or Affiliate shall own all rights therein. To the extent that any such copyrightable work is not a "work made for hire," Executive assigns and agrees to assign to Parent, Employer or such Subsidiary or Affiliate all right, title, and interest, including without limitation, copyright in and to such copyrightable work. Executive shall promptly disclose such Work Product and copyrightable work to the Board and perform all actions reasonably requested by the Board (whether during or after the Employment Period), to establish and confirm Parent's, Employer's or such Subsidiary's or Affiliate's ownership (including assignments, consents, powers of attorney, and other instruments); provided, that Parent shall reimburse Executive for his reasonable and documented out-of-pocket expenses in connection therewith.

(d) Third Party Information. Executive understands that Parent, Employer and their respective Subsidiaries and Affiliates will receive from third parties confidential or proprietary information ("Third Party Information") subject to a duty on Parent's, Employer's and their respective Subsidiaries and Affiliates' part to maintain the confidentiality of such information and to use it only for certain limited purposes. During the Employment Period and thereafter, and without in any way limiting the provisions of Section 2(a), Executive will hold Third Party Information in the strictest confidence and will not disclose to anyone (other than personnel and consultants of Parent, Employer or their respective Subsidiaries and Affiliates who need to know such information in connection with their work for Parent, Employer or their respective Subsidiaries and Affiliates) or use, except in connection with his work for Parent, Employer or their respective Subsidiaries and Affiliates, Third Party Information unless expressly authorized by a member of the Board (other than Executive) in writing.

(e) Use of Information of Prior Employers. During the Employment Period, Executive will not improperly use or disclose any confidential information or trade secrets, if any, of any former employers or any other Person to whom Executive has an obligation of confidentiality, and will not bring onto the premises of Parent, Employer or any of their respective Subsidiaries or Affiliates any unpublished documents or any property belonging to any former employer or any other Person to whom Executive has an obligation of confidentiality unless consented to in writing by the former employer or Person. Executive will use in the performance of his duties only information which is (i) generally known and used by persons with training and experience comparable to Executive's and which is (x) common knowledge in the industry or (y) is otherwise legally in the public domain, (ii) otherwise provided or developed by Parent, Employer or any of their respective Subsidiaries or Affiliates or (iii) in the case of

materials, property or information belonging to any former employer or other Person to whom Executive has an obligation of confidentiality, approved for such use in writing by such former employer or Person. In furtherance of the foregoing, concurrently with the execution of this Agreement, Executive shall execute and deliver to Employer a certificate in the form of Exhibit A attached.

(f) Whistleblower Protections. No provision of this Agreement will be interpreted so as to impede Executive (or any other individual) from reporting possible violations of federal law or regulation to any governmental agency or entity, including but not limited to the Department of Justice, the Securities and Exchange Commission, the Congress, and any Inspector General of any United States federal agency, or making other disclosures under the whistleblower provisions of federal law or regulation. Executive does not need the prior authorization of Parent or Employer to make any such reports or disclosures, and Executive will not be required to notify Parent or Employer that such reports or disclosures have been made.

(g) Trade Secrets. An individual will not be held criminally or civilly liable under any federal or state trade secret law for the disclosure of a trade secret that (i) is made (A) in confidence to a federal, state, or local government official, either directly or indirectly, or to an attorney, and (B) solely for the purpose of reporting or investigating a suspected violation of law; or (ii) is made in a complaint or other document filed in a lawsuit or other proceeding, if such filing is made under seal. Nothing in this Agreement is intended to conflict with 18 U.S.C. § 1833(b) or create liability for disclosures of trade secrets that are expressly allowed by 18 U.S.C. § 1833(b). Accordingly, the parties to this Agreement have the right to disclose in confidence trade secrets to federal, state, and local government officials, or to an attorney, for the sole purpose of reporting or investigating a suspected violation of law. The parties also have the right to disclose trade secrets in a document filed in a lawsuit or other proceeding, but only if the filing is made under seal and protected from public disclosure.

3. Noncompetition and Nonsolicitation. Executive acknowledges that in the course of his employment with Employer he will become familiar with Trade Secrets and with other confidential information concerning Parent, Employer and their respective Subsidiaries and that his services will be of special, unique and extraordinary value to Parent, Employer and their respective Subsidiaries. Therefore, Executive agrees that:

(a) Noncompetition. During the Employment Period, Executive shall not engage in any business activity other than for the benefit of the Parent, Employer or any of their respective Subsidiaries.

(b) Nonsolicitation. During the Employment Period and for one year thereafter, other than in good faith in the best interests of the Parent, Employer or any of their respective Subsidiaries, Executive shall not directly or indirectly through another entity (i) induce or attempt to induce any employee of Parent, Employer or any of their respective Subsidiaries to leave the employ of Parent, Employer or such Subsidiary, or in any way interfere with the relationship between Parent, Employer or any of their respective Subsidiaries and any employee thereof or (ii) hire any employee of Parent, Employer or any of their respective Subsidiaries or, hire any former employee of Parent, Employer or any of their respective Subsidiaries within one year after such person ceased to be an employee of Parent, Employer or any of their respective Subsidiaries.

(c) Enforcement. If, at the time of enforcement of Section 2 or this Section 3, a court holds that the restrictions stated are unreasonable under circumstances then existing, the parties agree that the maximum duration, scope or geographical area reasonable under such circumstances shall be substituted for the stated period, scope or area and that the court shall be allowed to revise the restrictions contained to cover the maximum duration, scope and area permitted by law. Because Executive's services are unique and because Executive has access to confidential information, the parties agree that money damages would be an inadequate remedy for any breach of this Agreement. Therefore, in the event of a breach or threatened breach of this Agreement, any party and/or their respective successors or assigns may, in addition to other rights and remedies existing in their favor, subject to Section 6(g), apply to any court of competent jurisdiction for specific performance and/or injunctive or other relief in order to enforce, or prevent any violations of, the provisions hereof.

(d) Additional Acknowledgments. Executive acknowledges that the provisions of this Section 3 are in consideration of: (i) employment with Employer and (ii) additional good and valuable consideration as set forth in this Agreement. In addition, Executive agrees and acknowledges that the restrictions contained in Section 2 and this Section 3 do not preclude Executive from earning a livelihood, nor do they unreasonably impose limitations on Executive's ability to earn a living. In addition, Executive acknowledges (A) that the business of Parent, Employer and their respective Subsidiaries will be conducted throughout the United States and other jurisdictions where Parent, Employer or any of their respective Subsidiaries conduct business during the Employment Period, (B) notwithstanding the state of organization or principal office of Parent, Employer or any of their respective Subsidiaries, or any of their respective executives or employees (including Executive), it is expected that Parent, Employer and their respective Subsidiaries will have business activities and have valuable business relationships within its industry throughout the United States and other jurisdictions where Parent, Employer or any of their respective Subsidiaries conduct business during the Employment Period, and (C) as part of his responsibilities, Executive will be traveling throughout the United States and other jurisdictions where Parent, Employer or any of their respective Subsidiaries conduct business during the Employment Period in furtherance of Employer's business and its relationships. Executive agrees and acknowledges that the potential harm to Parent, Employer and their respective Subsidiaries of the non-enforcement of any provision of Section 2 or this Section 3 outweighs any potential harm to Executive of its enforcement by injunction or otherwise. The covenants contained in each of Sections 2(a), 2(b), 2(c), 2(d), 2(e), 3(a) and 3(b) may be enforced independently and without any one or more of such sections limiting the provisions of any one or more of the other of such sections. Executive acknowledges that he has carefully read this Agreement and consulted with legal counsel of his choosing regarding its contents, has given careful consideration to the restraints imposed upon Executive by this Agreement and is in full accord as to their necessity for the reasonable and proper protection of confidential and proprietary information of Parent, Employer and their respective Subsidiaries now existing or to be developed in the future. Executive expressly acknowledges and agrees that each and every restraint imposed by this Agreement is reasonable with respect to subject matter, time period and geographical area.

GENERAL PROVISIONS

4. Definitions.

"Affiliate" of any particular Person means any other Person controlling, controlled by, or under common control with such particular Person, where "control" means the possession, directly or indirectly, of the power to direct the management and policies of a Person whether through the ownership of voting securities, by contract, or otherwise.

"Cause" means (a) the commission of a felony, (b) willful conduct tending to bring Parent, Employer or any of their respective Subsidiaries into substantial public disgrace or disrepute, (c) substantial and repeated failure to perform duties of the office held by Executive as reasonably directed by the Board and/or the Chief Executive Officer of Parent, (d) gross negligence or willful misconduct with respect to Parent, Employer or any of their respective Subsidiaries, including any other act or omission involving significant and willful dishonesty or fraud with respect to Parent, Employer or any of their respective Subsidiaries or any of their respective customers or suppliers, or (e) any material breach of Sections 2 or 3 or Section 1(a)(ii) (but only with respect the requirement of such Section 1(a)(ii) that Executive devote his full business time and attention to the business and affairs of Parent, Employer and their Subsidiaries). In each case above the burden of proving such action or omission is a "Cause" event shall be with Employer. In the event of an alleged breach of section (c), Employer shall give Executive written notice with thirty (30) days to cure. In addition, Employer agrees it will permit Executive an opportunity to be heard by the Board before reaching a decision concerning any proposed dismissal for Cause.

"Change in Control" has the meaning set forth in Parent's 2020 Omnibus Incentive Plan.

"Code" means the Internal Revenue Code of 1986, as amended.

"Disability" means the disability of Executive caused by any physical or mental injury, illness or incapacity as a result of which Executive is, or is reasonably expected to be, unable to

effectively perform the essential functions of Executive's duties for a substantially continuous period of more than 120 days or for any 180 days (whether or not continuous) within a 365 day period, as determined by the Board in good faith.

"Good Reason" means (a) any action by Parent or Employer which results in a material reduction in Executive's title, status, authority or responsibility as Executive Vice President and Chief Administrative Officer of Parent and Employer, or (b) a reduction in Executive's Annual Base Salary or target Annual Bonus, in each case without the prior written consent of Executive. Notwithstanding anything to the contrary, any assertion by Executive of a termination for Good Reason shall not be effective unless all of the following conditions are satisfied: (A) Executive must provide written notice to Employer of the existence of such condition(s) within sixty (60) days after the initial occurrence of such condition(s); (B) the condition(s) specified in such notice must remain uncorrected for thirty (30) days following Employer's receipt of such written notice; and (C) the date of Executive's termination of employment must occur within sixty (60) days after written notice of the condition(s) specified in such notice. Further, any Change in Control does not and will not in and of itself constitute a breach by Parent or Employer of their obligations under this Agreement, a diminution in the nature or scope of the powers, duties, status, authority or responsibilities of the Executive or "Good Reason" to terminate Executive's employment under this Agreement.

"Governmental Entity" means the United States of America or any other nation, any state or other political subdivision thereof, or any entity exercising executive, legislative, judicial, regulatory or administrative functions of government or any agency or department or subdivision of any governmental authority, including the United States federal government or any state or local government.

"Parent Business" means the business(es) of providing those services or selling those products which Parent, Employer or any of their respective Subsidiaries actually provide or sell.

"Person" means an individual, a partnership, a corporation, a limited liability company, an association, a joint stock company, a trust, a joint venture, an unincorporated organization, any other business entity, or a Governmental Entity.

"Separation" means Executive ceasing to be employed by any of Parent, Employer and their respective Subsidiaries for any reason.

"Subsidiary" means, with respect to any Person, any corporation, limited liability company, partnership, association, or business entity of which if (a) a corporation, a majority of the total voting power of shares of stock entitled (without regard to the occurrence of any contingency) to vote in the election of directors, managers, or trustees thereof is at the time owned or controlled, directly or indirectly, by that Person or one or more of the other Subsidiaries of that Person or a combination thereof, or (b) a limited liability company, partnership, association, or other business entity (other than a corporation), a majority of partnership or other similar ownership interest thereof is at the time owned or controlled, directly or indirectly, by that Person or one or more Subsidiaries of that Person or a combination thereof. For purposes hereof, a Person or Persons shall be deemed to have a majority ownership interest in a limited liability company, partnership, association, or other business entity (other than a corporation) if such Person or Persons shall be allocated a majority of limited liability company, partnership, association, or other business entity gains or losses or shall be or control any managing director or general partner of such limited liability company, partnership, association, or other business entity. References to a "Subsidiary" of any Person shall be given effect only at such times that such Person has one or more Subsidiaries, and, unless otherwise indicated, the term "Subsidiary" refers to a Subsidiary of Parent.

5. Notices. All notices, demands or other communications to be given or delivered under or by reason of the provisions of this Agreement shall be in writing and shall be deemed to have been given when (a) delivered personally to the recipient, (b) sent to the recipient by reputable express courier service with tracking (charges prepaid), (c) mailed to the recipient by certified or registered mail, return receipt requested and postage prepaid, or (d) emailed to the recipient (with hard copy sent to the recipient by reputable overnight courier service (charges prepaid) that same day) if emailed before 5:00

p.m. Chicago, Illinois time on a business day, and otherwise on the next business day. Such notices, demands and other communications shall be sent to the parties at the addresses indicated below:

If to Parent or Employer:

Maravai LifeSciences Holdings, Inc.
10770 Wateridge Circle Suite 200
San Diego, CA 92121
Attention: Chief Executive Officer

with copies to (which shall not constitute notice):

Maravai LifeSciences Holdings, Inc.
10770 Wateridge Circle Suite 200
San Diego, CA 92121
Attention: General Counsel

If to Executive:

Peter M. Leddy
****
****
E-mail:**********

or such other address or to the attention of such other Person as the recipient party shall have specified by previous written notice to the sending party.

6. General Provisions.

(a) Severability. Whenever possible, each provision of this Agreement will be interpreted in such manner as to be effective and valid under applicable law, but if any provision of this Agreement is held to be invalid, illegal or unenforceable in any respect under any applicable law or rule in any jurisdiction, such invalidity, illegality or unenforceability will not affect any other provision or any other jurisdiction, but this Agreement will be reformed, construed and enforced in such jurisdiction as if such invalid, illegal or unenforceable provision had never been contained herein.

(b) Entire Agreement. This Agreement, those documents expressly referred to, embody the complete agreement and understanding among the parties and supersede and preempt any previous understandings, agreements or representations by or among the parties, written or oral, which may have related to the subject matter in any way.

(c) Descriptive Headings; Interpretation; No Strict Construction. The descriptive headings of this Agreement are inserted for convenience only and do not constitute a substantive part of this Agreement. Whenever required by the context, any pronoun used in this Agreement shall include the corresponding masculine, feminine, or neuter forms, and the singular form of nouns, pronouns, and verbs shall include the plural and vice versa. The use of the word "including" in this Agreement shall be by way of example rather than by limitation. Reference to any agreement, document, or instrument means such agreement, document, or instrument as amended or otherwise modified from time to time in accordance with the terms thereof. The use of the words "or," "either," and "any" shall not be exclusive. The parties hereto have participated jointly in the negotiation and drafting of this Agreement. In the event an ambiguity or question of intent or interpretation arises, this Agreement shall be construed as if drafted jointly by the parties, and no presumption or burden of proof shall arise favoring or disfavoring any party by virtue of the authorship of any of the provisions of this Agreement.

(d) Counterparts. This Agreement may be executed in multiple counterparts with the same effect as if all signing parties had signed the same document. All counterparts shall be construed together and constitute the same instrument.

(e) Successors and Assigns. Except as otherwise provided, this Agreement shall bind and inure to the benefit of and be enforceable by Executive, Parent, Employer, and their respective successors and assigns; provided, that the rights and obligations of Executive under this Agreement shall not be assigned or delegated. In the event of Executive's death prior to completion by Parent of all payments due under this Agreement, Parent shall make all such payments to Executive's beneficiary or to Executive's estate as appropriate.

(f) Applicable Law. This Agreement shall be governed by, and construed in accordance with, the laws of the State of California, without giving effect to any choice of law or conflict of law rules or provisions (whether of the State of California or any other jurisdiction) that would cause the application of the laws of any jurisdiction other than the State of California.

(g) Dispute Resolution. Any controversy, dispute or claim arising out of or relating to this Agreement (a " Covered Claim") shall be resolved by binding arbitration to be held in San Diego, California, and shall be administered by JAMS in accordance with the Employment Arbitration Rules & Procedures of JAMS then in effect and subject to JAMS Policy on Employment Arbitration Minimum Standards. Each party shall pay their own costs and expenses (including attorneys' fees and other charges of counsel) incurred in resolving any such Covered Claim; except Employer shall pay the costs of arbitration, and provided, that in the event litigation is required to compel arbitration or to enforce an arbitration award or judgment pursuant to this Agreement, the non-prevailing party in such litigation shall reimburse the costs and expenses (including attorney's fees and other charges of counsel) of the prevailing party. The prevailing party in any arbitration shall be entitled to attorney's fees and costs. Judgment upon the award rendered by the arbitrator(s) may be entered into any court having jurisdiction. The parties agree that any action to compel arbitration pursuant to this Agreement shall be brought in the appropriate California state court, and in connection with such action to compel, the laws of California shall control.

(h) Executive's Cooperation. During the Employment Period and thereafter, Executive shall cooperate with Parent, Employer and their respective Subsidiaries and Affiliates in any disputes with third parties, internal investigation or administrative, regulatory or judicial proceeding as reasonably requested by Parent (including Executive being available to Parent upon reasonable notice for interviews and factual investigations, appearing at Parent's request to give testimony without requiring service of a subpoena or other legal process, volunteering to Parent all pertinent information and turning over to Parent all relevant documents which are or may come into Executive's possession, all at times and on schedules that are reasonably consistent with Executive's other permitted activities and commitments). In the event Parent requires Executive's cooperation in accordance with this paragraph after the Employment Period, Parent shall reimburse Executive for Executive's reasonable time at a rate of $100 per hour and reasonable travel expenses (including lodging and meals, upon submission of receipts).

(i) Remedies. Each of the parties to this Agreement shall have all rights and remedies set forth in this Agreement and all rights and remedies which such Person has been granted at any time under any other agreement or contract and all of the rights which such Person has under any law. Each of the parties to this Agreement will be entitled to enforce its rights under this Agreement specifically, to recover damages and costs caused by any breach of any provision of this Agreement and to exercise all other rights existing in its favor. The parties agree and acknowledge that money damages may not be an adequate remedy for any breach of the provisions of this Agreement and that any party and/or their respective successors and assigns may, in addition to other rights and remedies existing in their favor, but subject to Section 6(g), apply to any court of competent jurisdiction for specific performance and/or injunctive or other relief in order to enforce, or prevent any violations of, the provisions of this Agreement.

(j) Amendment and Waiver. The provisions of this Agreement may be amended and waived only with the prior written consent of Parent, Employer and Executive. No failure by any party to insist upon the strict performance of any covenant, duty, agreement, or condition of this Agreement or to exercise any right or remedy consequent upon a breach shall constitute a waiver of any such breach or any other covenant, duty, agreement, or condition. The waiver by any party of a breach of any covenant, duty, agreement, or condition of this Agreement of any other party shall not operate or be construed as a waiver of any subsequent breach of that provision or any other provision.

(k) Insurance. Parent or Employer, at its discretion, may apply for and procure in its own name and for its own benefit life and/or disability insurance on Executive in any amount or amounts considered available. Executive agrees to cooperate in any medical or other examination, supply any information, and to execute and deliver any applications or other instruments in writing as may be reasonably necessary to obtain and constitute such insurance.

(l) Business Days. If any time period for giving notice or taking action expires on a day which is a Saturday, Sunday or holiday in the state in which Parent's chief executive office is located, the time period shall be automatically extended to the business day immediately following such Saturday, Sunday or holiday.

(m) Tax Withholding. Parent, Employer and their respective Subsidiaries shall be entitled to deduct or withhold from any amounts owing from Parent, Employer or any of their respective Subsidiaries to Executive (including withholding shares or other equity securities in the case of issuances of equity by Parent, Employer or any of their respective Subsidiaries) any federal, state, local or foreign withholding taxes, excise taxes, or employment taxes ("Taxes") imposed with respect to Executive's compensation or other payments from Parent, Employer or any of their respective Subsidiaries or Executive's ownership interest in Parent, including wages, bonuses, distributions, the receipt or exercise of equity options and/or the receipt or vesting of restricted equity, including, without limitation, any of the payments or benefits payable pursuant to Sections 1(b), 1(c), 1(d) and 1(e). In the event any such deductions or withholdings are not made, Executive shall indemnify Parent, Employer and each of their respective Subsidiaries for any amounts paid with respect to any such Taxes, together with any interest, penalties and related expenses thereto; provided, that, Executive shall not be obligated to indemnify Parent pursuant to this Section 6(m) for such interest, penalties or related expenses which are directly caused by the failure of Parent to take necessary action with respect to such deductions and withholdings as it is required by law to take.

(n) Termination. This Agreement (except for the provisions of Sections 1(a) and 1(b)) shall survive a Separation and shall remain in full force and effect after such Separation.

(o) Deemed Resignations. Except as otherwise determined by the Board or as otherwise agreed to in writing by Executive and Parent, Employer or any of their respective Subsidiaries before the termination of Executive's employment with Employer, any termination of Executive's employment shall constitute, as applicable, an automatic resignation of Executive: (i) as an officer of Parent, Employer or any of their respective Subsidiaries; and (ii) from any board of directors or board of managers (or similar governing body) of Parent, Employer or any of their respective Subsidiaries and from the board of directors or board of managers (or similar governing body) of any corporation, limited liability entity, unlimited liability entity or other entity in which Parent, Employer or any of their respective Subsidiaries holds an equity interest and with respect to which board of directors or board of managers (or similar governing body) Executive serves as the designee or other representative of Parent, Employer or any of their respective Subsidiaries. Executive agrees to take any further actions that Parent, Employer or any of their respective Subsidiaries reasonably requests to effectuate or document the foregoing.

(p) Electronic Delivery. This Agreement, the agreements referred to, and each other agreement or instrument entered into in connection with this Agreement, and any amendments, to the extent signed and delivered by means of a photographic, portable document format (.pdf), or similar reproduction of such signed writing using an electronic mail shall be treated in all manner and respects as an original agreement or instrument and shall be considered to have the same binding legal effect as if it were the original signed version thereof delivered in person. At the request of any party or party to any such agreement or instrument, each other party shall re-execute original forms and deliver them to all other parties hereto. No party hereto or to any such agreement or instrument shall raise the use of electronic mail to deliver a signature or the fact that any signature or agreement or instrument was transmitted or communicated through the use of electronic mail as a defense to the formation or enforceability of a contract and each such party forever waives any such defense.

(q) No Third-Party Beneficiaries. Except as expressly provided (including the last sentence of Section 6(e)), no term or provision of this Agreement is intended to be, or shall be, for the

benefit of any Person not a party, and no such other Person shall have any right or cause of action hereunder. Notwithstanding the foregoing, any Subsidiary or Parent or Employer that is not a signatory to this Agreement shall be a third party beneficiary of Executive's obligations under Sections 2, 3, 6(g), 6(h) and 6(p) and shall be entitled to enforce such obligations as if a party hereto.

(r) Directors' and Officers' Insurance. Each of Parent and Employer agree that it shall obtain and maintain in full force and effect during the term of Executive's employment directors' and officers' insurance policies in amounts and with coverages customary for entities of the size and with the type of business of Parent and Employer, respectively.

(s) Clawback. To the extent required by applicable law or any applicable securities exchange listing standards, or as otherwise determined by the Board (or a committee thereof), amounts paid or payable under this Agreement shall be subject to the provisions of any applicable clawback policies or procedures adopted by Parent, Employer or any of their Affiliates or Subsidiaries, which clawback policies or procedures may provide for forfeiture and/or recoupment of amounts paid or payable under this Agreement. Each of Parent, Employer or any of their Affiliates or Subsidiaries reserves the right, without the consent of Executive, to adopt any such clawback policies and procedures, including such policies and procedures applicable to this Agreement with retroactive effect; provided, however, that such clawback policies and procedures shall not apply to compensation paid before the Employment Period.

* * * * *

IN WITNESS WHEREOF, the parties hereto have executed this Employment Agreement as of the date first above written.

MARAVAI LIFESCIENCES HOLDINGS, INC.

By: /s/ Carl W. Hull
Name: Carl W. Hull
Its: CEO

MARAVAI INTERMEDIATE HOLDINGS, LLC

By: /s/ Carl W. Hull
Name: Carl W. Hull
Its: CEO

/s/ Peter M. Leddy
Peter M. Leddy

AMENDED AND RESTATED
EMPLOYMENT AGREEMENT

THIS AMENDED AND RESTATED EMPLOYMENT AGREEMENT (this "Agreement") is effective as of May 8, 2023, by and among Maravai LifeSciences Holdings, Inc., a Delaware corporation ("Parent"), Maravai Intermediate Holdings, LLC, a Delaware limited liability company ("Employer"), and Carl W. Hull (" Executive"). Capitalized terms used but not otherwise defined herein shall have the meanings set forth in Section 4.

WHEREAS, Parent, Employer and Executive previously entered into that certain Employment Agreement with an effective date of November 19, 2020 (the "Prior Effective Date"), as amended on September 29, 2022 and October 28, 2022 (such employment agreement , as amended, the "Prior Agreement").

WHEREAS, the parties to this Agreement desire to amend and restate the Prior Agreement in its entirety to provide for the rights and privileges set forth herein.

NOW, THEREFORE, in consideration of the mutual covenants contained herein and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties to this Agreement hereby agree that the Prior Agreement is hereby amended and restated in its entirety by this Agreement, and hereto further agree as follows:

1. Employment. Employer agrees to continue to employ Executive, and Executive accepts such continued employment, for the period beginning on the Effective Date and ending upon his separation pursuant to Section 1(c) (the "Employment Period").

(a) Position and Duties.

(i) During the Employment Period, Executive shall serve as the interim Chief Executive Officer of Parent and its Subsidiaries (including the Employer and any entities created and/or acquired after the date of this Agreement) and shall have the normal duties, responsibilities and authority implied by such position, which shall include defining Parent's and its Subsidiaries' strategy and business plan, selecting and evaluating other executives of Parent and its Subsidiaries, sourcing and completing acquisitions made by Parent and its Subsidiaries and managing the growth and operations of Parent and its Subsidiaries, and such other activities as are reasonably directed by the board of directors of Parent (the "Board"), including serving on the Board or the board of directors of any Subsidiaries of Parent, subject in each case to the power of the Board to expand, limit or otherwise alter such duties, responsibilities, positions and authority and to otherwise override actions of officers. Parent further agrees to continue to appoint Executive as Chairman of the Board, with all requisite rights, duties and obligations of that position without any additional compensation for such service.

(ii) Executive shall report to the Board, and Executive shall devote his best efforts and his full business time and attention to the business and affairs of Parent, Employer and the other Subsidiaries of Parent; provided, that during the Employment Period, Executive shall be entitled to (A) serve, with the prior written consent of the Board, on corporate, civic or charitable boards or committees, (B) deliver lectures and fulfill speaking engagements and (C) manage personal investments, so long as, with respect to clauses (B) and (C), such activities do not interfere substantially with the performance of Executive's responsibilities to Parent or Employer under this Agreement. Notwithstanding the foregoing, Parent and Employer consent to Executive's service on the board of directors of the Persons set forth on Exhibit A attached hereto (the "Permitted Boards").

(b) Salary, Bonus and Benefits. During the Employment Period, Employer will continue to pay Executive a base salary at a rate of $757,667 per annum (the "Annual Base Salary"). The Annual Base Salary shall be reviewed annually by the Board. For each fiscal year of Employer ending during the Employment Period, including fiscal year 2023, Executive shall be eligible for an annual bonus with a target amount equal to 100% of the Annual Base Salary (such amount, the "Annual Bonus"), as

determined by the Board based upon the performance of Executive and the achievement by Parent, Employer and the other Subsidiaries of Parent of financial, operating and other objectives set by the Board. Each Annual Bonus, if any, shall be paid as soon as administratively feasible after the Board (or a committee thereof) certifies whether the applicable performance targets for the applicable year have been achieved but in no event later than March 15 following the end of such year. Notwithstanding anything in this Section 1(b) to the contrary, no Annual Bonus, if any, or any portion thereof, shall be payable for any year unless Executive remains continuously employed by Employer from the Effective Date through the last day of such year. In addition, during the Employment Period, Executive will be entitled to such other benefits as are approved by the Board and made generally available to all senior management of Parent and Employer.

(c) Separation. The Employment Period will continue until (x) the termination of Executive's employment due to Executive's resignation, death or Disability or (y) the Board terminates Executive's employment with or without Cause. Executive shall have the right to terminate Executive's employment with Employer with or without Good Reason and for any other reason, or no reason at all, upon thirty (30) days' advance written notice to Employer; provided, however, that if Executive has provided notice to Employer of Executive's termination of employment, Employer may determine, in its sole discretion, that such termination shall be effective on any date prior to the effective date of termination provided in such notice (and, if such earlier date is so required, then it shall not change the basis for Executive's termination of employment nor be construed or interpreted as a termination of employment by the Board without Cause) and any requirement to continue salary or benefits shall cease as of such earlier date. Upon Executive's Separation, Employer or Parent shall pay to Executive within 30 days following the date of Separation (or such earlier date as may be required by applicable law), the following: (A) any accrued but unpaid Annual Base Salary through the date of the Separation, (B) reimbursement for any unreimbursed business expenses incurred through the date of the Separation, and (C) any amount or benefit as may be due or payable in accordance with the terms of any Parent or Employer benefit plan or program (collectively, the "Accrued Amounts").

(i) Payment Upon Separation. If Executive's employment is terminated by resignation of Executive with Good Reason or by the Board without Cause, then, in addition to the Accrued Amounts, Executive will be entitled to receive, subject to Section 1(c)(iii) and Section 1(d):

(A) any earned but unpaid Annual Bonus pursuant to Section 1(b) for the fiscal year prior to the fiscal year in which the Separation occurs;

(B) an amount equal to the target Annual Bonus prorated for the number of days worked by Executive for Parent in the calendar year of the Separation;

(C) continued payment of Executive's Annual Base Salary for a period of 12 months following the date of the Separation (the "Non-CIC Severance Period"), payable in substantially equal installments in accordance with Employer's regular payroll practices; and

(D) if Executive is eligible to and timely elects continuation coverage under the Consolidated Omnibus Budget Reconciliation Act of 1985, as amended ("COBRA"), then Employer shall pay Executive's COBRA premiums during the Non-CIC Severance Period; provided, that such payments shall not be made in the event an excise tax under Section 4980D of the Code would be imposed on Employer as a result.

(ii) Payment Upon Separation following a Change in Control. If, during the period commencing upon a Change in Control and ending on the second anniversary of such Change in Control, Executive's employment is terminated by Executive for Good Reason or by Parent or Employer (or their respective successors) without Cause, then, in addition to the Accrued Amounts, and in lieu of the payments and benefits set forth in Section 1(c)(i) above, Executive will be entitled to receive:

(A) any earned but unpaid Annual Bonus pursuant to Section 1(b) for the fiscal year prior to the fiscal year in which the Separation occurs;

(B) an amount equal to the target Annual Bonus prorated for the number of days worked by Executive for Parent in the calendar year of the Separation;

(C) continued payment of Executive's Annual Base Salary for a period of 24 months following the date of Separation (the "CIC Severance Period"), payable in substantially equal installments in accordance with Employer's regular payroll practices;

(D) an amount equal to two times the greatest of (i) Executive's target Annual Bonus for the fiscal year in which the Separation occurs; (ii) the calculation of an Annual Bonus based on (a) Executive's Annual Base Salary and Annual Bonus target in place at the time of the Change in Control and (b) the average of the Company performance achievement percentage applied to calculate annual bonuses under the Parent's annual bonus program with respect to the two fiscal years prior to the fiscal year in which the Separation occurs; and (iii) the annualized amount accrued by Parent in its financial statements as of the date of Separation with respect to Executive's Annual Bonus for the fiscal year in which the Separation occurs, in each case payable in substantially equal installments during the CIC Severance Period in accordance with the Company's regular payroll practices; and

(E) if Executive is eligible to and timely elects continuation coverage under COBRA, then Employer shall pay Executive's COBRA premiums for a period of 18 months following the date of Separation; provided, that such payments shall not be made in the event an excise tax under Section 4980D of the Code would be imposed on Employer as a result.

(iii) Release Agreement. Notwithstanding anything herein to the contrary, (A) Executive shall not be entitled to receive any payments or other benefits pursuant to this Section 1(d) (other than the Accrued Amounts, the " Severance Benefits") unless Executive has timely executed and delivered to Employer a general release and separation agreement in a form prepared by Employer (a "Release Agreement") and such Release Agreement shall become in full force and effect and not been timely revoked as may be permitted by its terms, which Release Agreement shall be delivered by Executive on or before the Release Expiration Date (as defined below) and (B) Executive shall be entitled to receive the Severance Benefits only so long as Executive has not breached any of the provisions of such Release Agreement, this Agreement (including, without limitation, Section 2 or Section 3 herein) or the Invention Assignment Agreement (as defined below). The first payment of the Severance Benefits will include all amounts that otherwise would have been due prior thereto under the terms of this Agreement had such payments commenced immediately upon the effective date of Executive's termination of employment. For purposes of this Agreement, "Release Expiration Date" shall mean the date that is 30 days following the date of Executive's termination of employment, or, in the event that Executive's termination of employment is "in connection with an exit incentive or other employment termination program" (as such phrase is defined in the Age Discrimination in Employment Act of 1967), the date that is 60 days following the date of Executive's termination of employment.

(d) Code Section 409A.

(i) The intent of the parties is that payments and benefits under this Agreement comply with or otherwise be exempt from Internal Revenue Code Section 409A and the regulations and guidance promulgated thereunder (collectively "Code Section 409A") and, accordingly, to the maximum extent permitted, this Agreement shall be interpreted to be either exempt from or in compliance therewith. In no event whatsoever shall Parent or Employer be liable for any additional tax, interest or penalty that may be imposed on the Executive by Code Section 409A or damages for failing to comply with Code Section 409A.

(ii) Notwithstanding any other payment schedule provided herein to the contrary, if the Executive is deemed on the date of termination to be a "specified employee" within the meaning of that term under Code Section 409A(a)(2)(B), then any payment under this Section 1 that is considered deferred compensation under Code Section 409A payable on account of a "separation from service" shall not be made until the date which is the earlier of (i) the expiration of the six (6)-month period measured from the date of such "separation from service" of Executive, and (ii) the date of Executive's death (the "Delay Period") to the extent required under Code Section 409A. Upon the expiration of the Delay Period, all payments delayed pursuant to this Section 1(d)(ii) shall be paid to the Executive in a lump sum, and all remaining payments due under this Agreement shall be paid or provided in accordance with the normal payment dates specified for them herein.

(iii) A termination of employment shall not be deemed to have occurred for purposes of any provision of this Agreement providing for the payment of any amounts or benefits upon or following a termination of employment unless such termination is also a "separation from service" from Parent and Employer within the meaning of Code Section 409A and, for purposes of any such provision of this Agreement, references to a "termination," "termination of employment" or like terms shall mean "separation from service."

(iv) Notwithstanding anything to the contrary in this Agreement, to the extent that any payments of "nonqualified deferred compensation" (within the meaning of Code Section 409A) due under this Agreement as a result of Executive's termination of employment are subject to Executive's execution and delivery of a Release Agreement, in any case where the date of termination of employment and the Release Expiration Date fall in two separate taxable years, any payments required to be made to Executive that are conditioned on the Release Agreement and are treated as "nonqualified deferred compensation" (within the meaning of Code Section 409A) shall be made in the later taxable year, and any such amounts that are delayed pursuant to this Section 1(d)(iv) shall be paid in a lump sum on the first payroll period to occur in the subsequent taxable year.

(v) To the extent, if any, that the aggregate amount of the installments of the severance payment that would otherwise be paid pursuant to Section 1(c) after March 15 of the calendar year following the calendar year in which the Separation occurs (the " Applicable March 15") exceeds the maximum exemption amount under Treasury Regulation Section 1.409A-1(b)(9)(iii)(A), then such excess shall be paid to Executive in a lump sum on the Applicable March 15 (or the first business day preceding the Applicable March 15 if the Applicable March 15 is not a business day) and the installments of the severance payment payable after the Applicable March 15 shall be reduced by such excess (beginning with the installment first payable after the Applicable March 15 and continuing with the next succeeding installment until the aggregate reduction equals such excess). For purposes of Code Section 409A, the Executive's right to receive any installment payment pursuant to this Agreement shall be treated as a right to receive a series of separate and distinct payments.

(vi) Notwithstanding any other provision to the contrary, in no event shall any payment under this Agreement that constitutes "deferred compensation" for purposes of Code Section 409A be subject to offset by any other amount unless otherwise permitted by Code Section 409A.

(e) Certain Excise Taxes. Notwithstanding anything to the contrary in this Agreement, if Executive is a "disqualified individual" (as defined in Section 280G(c) of the Code), and the separation payments and benefits provided for in this Agreement, together with any other payments and benefits which such Executive has the right to receive from Parent or any of its Affiliates, would constitute a "parachute payment" (as defined in Section 280G(b)(2) of the Code), then the payments provided for in this Agreement shall be either (a) reduced (but not below zero) so that the present value of such total amounts and benefits received by Executive from the Parent and its Affiliates will be one dollar less than three times Executive's "base amount" (as defined in Section 280G(b)(3) of the Code) and so that no portion of such amounts and benefits received by Executive shall be subject to the excise tax imposed by Section 4999 of the Code or (b) paid in full, whichever produces the better net after-tax

position to Executive (taking into account any applicable excise tax under Section 4999 of the Code and any other applicable taxes). The determination as to whether any such reduction in the amount of the payments provided hereunder is necessary shall be made by Parent in good faith. If a reduced payment is made and through error or otherwise that payment, when aggregated with other payments and benefits from Parent (or its Affiliates) used in determining if a "parachute payment" exists, exceeds one dollar less than three times Executive's base amount, then Executive shall immediately repay such excess to Parent (or its Affiliates) upon notification that an overpayment has been made. Nothing in this Section 1(e) shall require Parent or Employer to be responsible for, or have any liability or obligation with respect to, Executive's excise tax liabilities under Section 4999 of the Code.

2. Confidential Information

.

(a) Obligation to Maintain Confidentiality. Executive acknowledges that the information, observations and data (including trade secrets) obtained by him during the course of his employment with Employer prior to and after the Prior Effective Date concerning the business or affairs of Parent, Employer and their respective Subsidiaries and Affiliates ("Confidential Information") are the property of Parent, Employer or such Subsidiaries and Affiliates, including information concerning acquisition opportunities in or reasonably related to Parent's and Employer's business or industry of which Executive becomes aware during the Employment Period. Therefore, Executive agrees that he will not disclose to any unauthorized Person or use for his own account any Confidential Information without the Board's written consent, unless and to the extent that the Confidential Information, (i) becomes generally known to and available for use by the public other than as a result of Executive's acts or omissions to act or (ii) is required to be disclosed pursuant to any applicable law or court order. Executive shall deliver to Employer at a Separation, or at any other time Employer may request, all memoranda, notes, plans, records, reports, computer tapes, printouts and software and other documents and data (and copies thereof) relating to the Confidential Information, Work Product (as defined below) or the business of Parent, Employer and their respective Subsidiaries and Affiliates (including all acquisition prospects, lists and contact information) which he may then possess or have under his control.

(b) Protection of Trade Secrets. Executive acknowledges and agrees with Employer that Executive's services to Employer and to Parent and their respective Subsidiaries and Affiliates require the use of Confidential Information and trade secret information (including any formula, pattern, compilation, program, device, method, technique or process) that Employer, Parent or their respective Subsidiaries and Affiliates have made reasonable efforts to keep confidential and that derives independent economic value, actual or potential, from not being generally known to the public or to other persons who can obtain economic value from its disclosure or use ("Trade Secrets"). Executive further acknowledges and agrees that Employer, Parent and such Subsidiaries and Affiliates would be irreparably harmed if Executive were to provide similar services requiring the use of such Trade Secrets.

(c) Ownership of Property. Executive acknowledges that all discoveries, concepts, ideas, inventions, innovations, improvements, developments, methods, processes, programs, designs, analyses, drawings, reports, patent applications, copyrightable work and mask work (whether or not including any confidential information) and all registrations or applications related thereto, all other proprietary information and all similar or related information (whether or not patentable) that relate to Parent, Employer or any of their respective Subsidiaries or Affiliates engaging in Parent Business or an anticipated business in which Parent, Employer or any of their respective Subsidiaries or Affiliates have a bona fide interest or expectancy relating to the acquisition of a business by Parent, Employer or any of their respective Subsidiaries, research and development, or existing or future products or services and that are conceived, developed, contributed to, made, or reduced to practice by Executive (either solely or jointly with others) while employed by Parent, Employer or any of their respective Subsidiaries or Affiliates (including any of the foregoing that constitutes any proprietary information or records) ("Work Product") belong to Parent, Employer or such Subsidiary or Affiliate, and Executive hereby assigns, and agrees to assign, all of the above Work Product to Parent, Employer or to such Subsidiary or Affiliate. Any copyrightable work prepared in whole or in part by Executive in the course of his work for any of the foregoing entities shall be deemed a "work made for hire" under the copyright laws, and Parent, Employer or such Subsidiary or Affiliate shall own all rights therein. To the extent that any such

copyrightable work is not a "work made for hire," Executive hereby assigns and agrees to assign to Parent, Employer or such Subsidiary or Affiliate all right, title, and interest, including without limitation, copyright in and to such copyrightable work. Executive shall promptly disclose such Work Product and copyrightable work to the Board and perform all actions reasonably requested by the Board (whether during or after the Employment Period), to establish and confirm Parent's, Employer's or such Subsidiary's or Affiliate's ownership (including assignments, consents, powers of attorney, and other instruments); provided, that Parent shall reimburse Executive for his reasonable and documented out-of-pocket expenses in connection therewith.

(d) Third Party Information. Executive understands that Parent, Employer and their respective Subsidiaries and Affiliates will receive from third parties confidential or proprietary information ("Third Party Information") subject to a duty on Parent's, Employer's and their respective Subsidiaries and Affiliates' part to maintain the confidentiality of such information and to use it only for certain limited purposes. During the Employment Period and thereafter, and without in any way limiting the provisions of Section 2(a), Executive will hold Third Party Information in the strictest confidence and will not disclose to anyone (other than personnel and consultants of Parent, Employer or their respective Subsidiaries and Affiliates who need to know such information in connection with their work for Parent, Employer or their respective Subsidiaries and Affiliates) or use, except in connection with his work for Parent, Employer or their respective Subsidiaries and Affiliates, Third Party Information unless expressly authorized by a member of the Board (other than Executive) in writing.

(e) Use of Information of Prior Employers. During the Employment Period, Executive will not improperly use or disclose any confidential information or trade secrets, if any, of any former employers or any other Person to whom Executive has an obligation of confidentiality, and will not bring onto the premises of Parent, Employer or any of their respective Subsidiaries or Affiliates any unpublished documents or any property belonging to any former employer or any other Person to whom Executive has an obligation of confidentiality unless consented to in writing by the former employer or Person. Executive will use in the performance of his duties only information which is (i) generally known and used by persons with training and experience comparable to Executive's and which is (x) common knowledge in the industry or (y) is otherwise legally in the public domain, (ii) otherwise provided or developed by Parent, Employer or any of their respective Subsidiaries or Affiliates or (iii) in the case of materials, property or information belonging to any former employer or other Person to whom Executive has an obligation of confidentiality, approved for such use in writing by such former employer or Person. In furtherance of the foregoing, concurrently with the execution of the Prior Agreement, Executive has executed and delivered to Employer a certificate in the form of Exhibit B to the Prior Agreement which, for the avoidance of doubt, remains in full force and effect (the "Certificate") and is incorporated by reference herein.

(f) Continuation of Terms. Notwithstanding anything in this Agreement to the contrary, the parties hereto expressly acknowledge and agree that the terms, conditions, obligations and covenants set forth in this Section 2 are a continuation without interruption, lapse, reprieve, gap or modification of any kind of the terms, conditions, obligations and covenants set forth in Section 8 of the Senior Management Agreement.

(g) Whistleblower Protections. Notwithstanding anything to the contrary contained herein, no provision of this Agreement will be interpreted so as to impede Executive (or any other individual) from reporting possible violations of federal law or regulation to any governmental agency or entity, including but not limited to the Department of Justice, the Securities and Exchange Commission, the Congress, and any Inspector General of any United States federal agency, or making other disclosures under the whistleblower provisions of federal law or regulation. Executive does not need the prior authorization of Parent or Employer to make any such reports or disclosures, and Executive will not be required to notify Parent or Employer that such reports or disclosures have been made.

(h) Trade Secrets. An individual will not be held criminally or civilly liable under any federal or state trade secret law for the disclosure of a trade secret that (i) is made (A) in confidence to a federal, state, or local government official, either directly or indirectly, or to an attorney, and (B) solely for the purpose of reporting or investigating a suspected violation of law; or (ii) is made in a complaint or other document filed in a lawsuit or other proceeding, if such filing is made under seal. Nothing in this

Agreement is intended to conflict with 18 U.S.C. § 1833(b) or create liability for disclosures of trade secrets that are expressly allowed by 18 U.S.C. § 1833(b). Accordingly, the parties to this Agreement have the right to disclose in confidence trade secrets to federal, state, and local government officials, or to an attorney, for the sole purpose of reporting or investigating a suspected violation of law. The parties also have the right to disclose trade secrets in a document filed in a lawsuit or other proceeding, but only if the filing is made under seal and protected from public disclosure.

3. Noncompetition and Nonsolicitation. Executive acknowledges that in the course of his employment with Employer he will become familiar with Trade Secrets and with other confidential information concerning Parent, Employer and their respective Subsidiaries and that his services will be of special, unique and extraordinary value to Parent, Employer and their respective Subsidiaries. Therefore, Executive agrees that:

(a) Noncompetition. Except for Executive's services on the Permitted Boards, during the Employment Period, Executive shall not engage in any business activity other than for the benefit of the Parent, Employer or any of their respective Subsidiaries.

(b) Nonsolicitation. During the Employment Period, other than in good faith in the best interests of the Parent, Employer or any of their respective Subsidiaries, Executive shall not directly or indirectly through another entity (i) induce or attempt to induce any employee of Parent, Employer or any of their respective Subsidiaries to leave the employ of Parent, Employer or such Subsidiary, or in any way interfere with the relationship between Parent, Employer or any of their respective Subsidiaries and any employee thereof, (ii) hire any employee of Parent, Employer or any of their respective Subsidiaries or, hire any former employee of Parent, Employer or any of their respective Subsidiaries within one year after such person ceased to be an employee of Parent, Employer or any of their respective Subsidiaries or (iii) induce or attempt to induce any customer, supplier, licensee or other business relation of Parent, Employer or any of their respective Subsidiaries to cease doing business with Parent, Employer or such Subsidiary or in any way interfere with the relationship between any such customer, supplier, licensee or business relation and Parent, Employer or any such Subsidiary.

(c) Enforcement. If, at the time of enforcement of Section 2 or this Section 3, a court holds that the restrictions stated herein are unreasonable under circumstances then existing, the parties hereto agree that the maximum duration, scope or geographical area reasonable under such circumstances shall be substituted for the stated period, scope or area and that the court shall be allowed to revise the restrictions contained herein to cover the maximum duration, scope and area permitted by law. Because Executive's services are unique and because Executive has access to confidential information, the parties hereto agree that money damages would be an inadequate remedy for any breach of this Agreement. Therefore, in the event of a breach or threatened breach of this Agreement, any party and/or their respective successors or assigns may, in addition to other rights and remedies existing in their favor, subject to Section 6(g), apply to any court of competent jurisdiction for specific performance and/or injunctive or other relief in order to enforce, or prevent any violations of, the provisions hereof.

(d) Additional Acknowledgments. Executive acknowledges that the provisions of this Section 3 are in consideration of: (i) employment with Employer and (ii) additional good and valuable consideration as set forth in this Agreement. In addition, Executive agrees and acknowledges that the restrictions contained in Section 2 and this Section 3 do not preclude Executive from earning a livelihood, nor do they unreasonably impose limitations on Executive's ability to earn a living. In addition, Executive acknowledges (A) that the business of Parent, Employer and their respective Subsidiaries will be conducted throughout the United States and other jurisdictions where Parent, Employer or any of their respective Subsidiaries conduct business during the Employment Period, (B) notwithstanding the state of organization or principal office of Parent, Employer or any of their respective Subsidiaries, or any of their respective executives or employees (including Executive), it is expected that Parent, Employer and their respective Subsidiaries will have business activities and have valuable business relationships within its industry throughout the United States and other jurisdictions where Parent, Employer or any of their respective Subsidiaries conduct business during the Employment Period, and (C) as part of his responsibilities, Executive will be traveling throughout the United States and other jurisdictions where Parent, Employer or any of their respective Subsidiaries conduct business during the Employment Period in furtherance of Employer's business and its relationships. Executive agrees and

acknowledges that the potential harm to Parent, Employer and their respective Subsidiaries of the non-enforcement of any provision of Section 2 or this Section 3 outweighs any potential harm to Executive of its enforcement by injunction or otherwise. The covenants contained in each of Sections 2(a), 2(b), 2(c), 2(d), 2(e), 3(a) and 3(b) may be enforced independently and without any one or more of such sections limiting the provisions of any one or more of the other of such sections. Executive acknowledges that he has carefully read this Agreement and consulted with legal counsel of his choosing regarding its contents, has given careful consideration to the restraints imposed upon Executive by this Agreement and is in full accord as to their necessity for the reasonable and proper protection of confidential and proprietary information of Parent, Employer and their respective Subsidiaries now existing or to be developed in the future. Executive expressly acknowledges and agrees that each and every restraint imposed by this Agreement is reasonable with respect to subject matter, time period and geographical area.

GENERAL PROVISIONS

4. Definitions.

"Affiliate" of any particular Person means any other Person controlling, controlled by, or under common control with such particular Person, where "control" means the possession, directly or indirectly, of the power to direct the management and policies of a Person whether through the ownership of voting securities, by contract, or otherwise.

"Cause" means (a) the commission of a felony, (b) willful conduct tending to bring Parent, Employer or any of their respective Subsidiaries into substantial public disgrace or disrepute, (c) substantial and repeated failure to perform duties of the office held by Executive as reasonably directed by the Board, (d) gross negligence or willful misconduct with respect to Parent, Employer or any of their respective Subsidiaries, including any other act or omission involving significant and willful dishonesty or fraud with respect to Parent, Employer or any of their respective Subsidiaries or any of their respective customers or suppliers, or (e) any material breach of Sections 2 or 3 or Section 1(a)(ii) (but only with respect the requirement of such Section 1(a)(ii) that Executive devote his full business time and attention to the business and affairs of Parent, Employer and their Subsidiaries). In each case above the burden of proving such action or omission is a "Cause" event shall be with Employer. In addition, Employer agrees it will permit Executive an opportunity to be heard by the Board before reaching a decision concerning any proposed dismissal for Cause.

"Change in Control" has the meaning set forth in Parent's 2020 Omnibus Incentive Plan, as it may be amended from time to time.

"Code" means the Internal Revenue Code of 1986, as amended.

"Disability" means the disability of Executive caused by any physical or mental injury, illness or incapacity as a result of which Executive is, or is reasonably expected to be, unable to effectively perform the essential functions of Executive's duties for a substantially continuous period of more than 120 days or for any 180 days (whether or not continuous) within a 365 day period, as determined by the Board in good faith.

"Good Reason" means:

(x) solely with respect to Section 1(c)(i) hereof, without Executive's prior consent: (a) any action by Parent or Employer which results in a material reduction in Executive's authority, duties or responsibilities; (b) a material reduction in Executive's Annual Base Salary or target Annual Bonus; or (c) the relocation of Executive's principal office or place of work to a location that would cause an increase by more than thirty-five (35) miles in the one-way commuting distance from Executive's principal personal residence to the principal office or business location at which Executive is then required to perform services; provided, however, that that Parent, Employer and Executive acknowledge and agree that the changes in Executive's authority, duties, responsibilities, Annual Base Salary and/or Annual Bonus which are contemplated to take effect following Executive's transition from interim Chief Executive Officer to Executive Chairman of the Board (such date, the "Transition Date") shall not, in and of itself,

constitute a breach by Parent or Employer of their obligations under this Employment Agreement or a material reduction in the nature or scope of the authority, duties, responsibilities, Annual Base Salary or Annual Bonus of Executive or give Executive a "Good Reason" to terminate Executive's employment under this Employment Agreement pursuant to the foregoing definition; and

(y) solely with respect to Section 1(c)(ii) hereof, without Executive's prior consent, (a) any action by Parent or Employer which results in a material reduction in Executive's title, status, authority, duties or responsibilities as interim Chief Executive Officer of Parent and Employer (if a Change in Control occurs prior to the Transition Date) or Executive Chairman of the Board (if a Change in Control occurs after the Transition Date), (b) a reduction in Executive's Annual Base Salary, target Annual Bonus or the target grant date value of Executive's annual equity award (in relation to the target for such Executive's most recent annual equity award prior to the Change in Control or, if no such award, the target for such award for the Parent executive most similarly situated to Executive), or (c) the relocation of Executive's principal office or place of work to a location that would cause an increase by more than thirty-five (35) miles in the one-way commuting distance from Executive's principal personal residence at the time of the Change in Control to the principal office or business location at which Executive is then required to perform services.

Notwithstanding anything herein to the contrary, any assertion by Executive of a termination for Good Reason shall not be effective unless all of the following conditions are satisfied: (A) Executive must provide written notice to the Board of the existence of such condition(s) within thirty (30) days after the initial occurrence of such condition(s); (B) the condition(s) specified in such notice must remain uncorrected for thirty (30) days following the Board's receipt of such written notice; and (C) the date of Executive's termination of employment must occur within seventy (70) days after the initial occurrence of the condition(s) specified in such notice. Further and notwithstanding anything herein to the contrary, any Change in Control does not and will not in and of itself constitute a breach by Parent or Employer of their obligations under this Agreement, a diminution in the nature or scope of the powers, duties, status, authority or responsibilities of the Executive or "Good Reason" to terminate Executive's employment under this Agreement.

"Governmental Entity" means the United States of America or any other nation, any state or other political subdivision thereof, or any entity exercising executive, legislative, judicial, regulatory or administrative functions of government or any agency or department or subdivision of any governmental authority, including the United States federal government or any state or local government.

"Parent Business" means the business(es) of providing those services or selling those products which Parent, Employer or any of their respective Subsidiaries actually provide or sell.

"Person" means an individual, a partnership, a corporation, a limited liability company, an association, a joint stock company, a trust, a joint venture, an unincorporated organization, any other business entity, or a Governmental Entity.

"Senior Management Agreement" means that certain Senior Management Agreement by and among Executive, Maravai Life Sciences, Inc., a Delaware corporation, and Maravai Life Sciences Holdings, LLC, a Delaware limited liability company, dated as of March 18, 2014, as amended from time to time.

"Separation" means Executive ceasing to be employed by any of Parent, Employer and their respective Subsidiaries for any reason.

"Subsidiary" means, with respect to any Person, any corporation, limited liability company, partnership, association, or business entity of which if (a) a corporation, a majority of the total voting power of shares of stock entitled (without regard to the occurrence of any contingency) to vote in the election of directors, managers, or trustees thereof is at the time owned or controlled, directly or indirectly, by that Person or one or more of the other Subsidiaries of that Person or a combination thereof, or (b) a limited liability company, partnership, association, or other business entity (other than a

corporation), a majority of partnership or other similar ownership interest thereof is at the time owned or controlled, directly or indirectly, by that Person or one or more Subsidiaries of that Person or a combination thereof. For purposes hereof, a Person or Persons shall be deemed to have a majority ownership interest in a limited liability company, partnership, association, or other business entity (other than a corporation) if such Person or Persons shall be allocated a majority of limited liability company, partnership, association, or other business entity gains or losses or shall be or control any managing director or general partner of such limited liability company, partnership, association, or other business entity. For purposes hereof, references to a "Subsidiary" of any Person shall be given effect only at such times that such Person has one or more Subsidiaries, and, unless otherwise indicated, the term "Subsidiary" refers to a Subsidiary of Parent.

5. Notices. All notices, demands or other communications to be given or delivered under or by reason of the provisions of this Agreement shall be in writing and shall be deemed to have been given when (a) delivered personally to the recipient, (b) sent to the recipient by reputable express courier service (charges prepaid), (c) mailed to the recipient by certified or registered mail, return receipt requested and postage prepaid, or (d) emailed to the recipient (with hard copy sent to the recipient by reputable overnight courier service (charges prepaid) that same day) if emailed before 5:00 p.m. Chicago, Illinois time on a business day, and otherwise on the next business day. Such notices, demands and other communications shall be sent to the parties at the addresses indicated below:

If to Parent or Employer:

Maravai LifeSciences Holdings, Inc.
10770 Wateridge Circle Suite 200
San Diego, CA 92121
Attention: Board of Directors

with copies to (which shall not constitute notice):

Kirkland & Ellis LLP
300 North LaSalle Street
Chicago, Illinois 60654
Attention: Sanford E. Perl, P.C.
Michael H. Weed, P.C.
Daniel A. Guerin, P.C.
Email: sperl@kirkland.com
mweed@kirkland.com
daniel.guerin@kirkland.com

If to Executive:

Carl W. Hull
****
****
E-mail:**********

or such other address or to the attention of such other Person as the recipient party shall have specified by prior written notice to the sending party.

6. General Provisions.

(a) Severability. Whenever possible, each provision of this Agreement will be interpreted in such manner as to be effective and valid under applicable law, but if any provision of this Agreement is held to be invalid, illegal or unenforceable in any respect under any applicable law or rule in any jurisdiction, such invalidity, illegality or unenforceability will not affect any other provision or any other jurisdiction, but this Agreement will be reformed, construed and enforced in such jurisdiction as if such invalid, illegal or unenforceable provision had never been contained herein.

(b) Entire Agreement. This Agreement, those documents expressly referred to herein (including, without limitation, the Certificate), and Employer's Employee Inventions Assignment and Non-Disclosure Agreement that Executive executed as of the Prior Effective Date (the "Invention Assignment Agreement"), embody the complete agreement and understanding among the parties hereto and supersede and preempt any prior understandings, agreements or representations by or among the parties hereto, written or oral, which may have related to the subject matter hereof in any way, including the Senior Management Agreement. In the event of any conflict between the terms of this Agreement and the Invention Assignment Agreement, the terms of the Invention Assignment Agreement shall control.

(c) Descriptive Headings; Interpretation; No Strict Construction. The descriptive headings of this Agreement are inserted for convenience only and do not constitute a substantive part of this Agreement. Whenever required by the context, any pronoun used in this Agreement shall include the corresponding masculine, feminine, or neuter forms, and the singular form of nouns, pronouns, and verbs shall include the plural and vice versa. The use of the word "including" in this Agreement shall be by way of example rather than by limitation. Reference to any agreement, document, or instrument means such agreement, document, or instrument as amended or otherwise modified from time to time in accordance with the terms thereof, and, if applicable, hereof. The use of the words "or," "either," and "any" shall not be exclusive. The parties hereto have participated jointly in the negotiation and drafting of this Agreement. In the event an ambiguity or question of intent or interpretation arises, this Agreement shall be construed as if drafted jointly by the parties hereto, and no presumption or burden of proof shall arise favoring or disfavoring any party by virtue of the authorship of any of the provisions of this Agreement.

(d) Counterparts. This Agreement may be executed in multiple counterparts with the same effect as if all signing parties had signed the same document. All counterparts shall be construed together and constitute the same instrument.

(e) Successors and Assigns. Except as otherwise provided herein, this Agreement shall bind and inure to the benefit of and be enforceable by Executive, Parent, Employer, and their respective successors and assigns; provided, that the rights and obligations of Executive under this Agreement shall not be assigned or delegated. In the event of Executive's death prior to completion by Parent of all payments due under this Agreement, Parent shall make all such payments to Executive's beneficiary or to Executive's estate as appropriate.

(f) Applicable Law. This Agreement shall be governed by, and construed in accordance with, the laws of the State of California, without giving effect to any choice of law or conflict of law rules or provisions (whether of the State of California or any other jurisdiction) that would cause the application of the laws of any jurisdiction other than the State of California.

(g) Dispute Resolution. Any controversy, dispute or claim arising out of or relating to this Agreement (a " Covered Claim") shall be resolved by binding arbitration to be held in San Diego, California, and shall be administered by JAMS in accordance with the Employment Arbitration Rules & Procedures of JAMS then in effect and subject to JAMS Policy on Employment Arbitration Minimum Standards. Each party shall pay their own costs and expenses (including attorneys' fees and other charges of counsel) incurred in resolving any such Covered Claim; provided, that in the event litigation is required to compel arbitration or to enforce an arbitration award or judgment pursuant to this Agreement, the non-prevailing party in such litigation shall reimburse the costs and expenses (including attorney's fees and other charges of counsel) of the prevailing party. Judgment upon the award rendered by the arbitrator(s) may be entered into any court having jurisdiction thereof. The parties hereto agree that any action to compel arbitration pursuant to this Agreement shall be brought in the appropriate California state court, and in connection with such action to compel, the laws of California shall control.

(h) Executive's Cooperation. During the Employment Period and thereafter, Executive shall cooperate with Parent, Employer and their respective Subsidiaries and Affiliates in any disputes with third parties, internal investigation or administrative, regulatory or judicial proceeding as reasonably requested by Parent (including Executive being available to Parent upon reasonable notice for interviews and factual investigations, appearing at Parent's request to give testimony without requiring service of a subpoena or other legal process, volunteering to Parent all pertinent information and turning over to Parent all relevant documents which are or may come into Executive's possession, all at times and

on schedules that are reasonably consistent with Executive's other permitted activities and commitments). In the event Parent requires Executive's cooperation in accordance with this paragraph after the Employment Period, Parent shall reimburse Executive for Executive's reasonable time at a rate of $100 per hour and reasonable travel expenses (including lodging and meals, upon submission of receipts).

(i) Remedies. Each of the parties to this Agreement shall have all rights and remedies set forth in this Agreement and all rights and remedies which such Person has been granted at any time under any other agreement or contract and all of the rights which such Person has under any law. Each of the parties to this Agreement will be entitled to enforce its rights under this Agreement specifically, to recover damages and costs caused by any breach of any provision of this Agreement and to exercise all other rights existing in its favor. The parties hereto agree and acknowledge that money damages may not be an adequate remedy for any breach of the provisions of this Agreement and that any party and/or their respective successors and assigns may, in addition to other rights and remedies existing in their favor, but subject to Section 6(g), apply to any court of competent jurisdiction for specific performance and/or injunctive or other relief in order to enforce, or prevent any violations of, the provisions of this Agreement.

(j) Amendment and Waiver. The provisions of this Agreement may be amended and waived only with the prior written consent of Parent, Employer and Executive. No failure by any party to insist upon the strict performance of any covenant, duty, agreement, or condition of this Agreement or to exercise any right or remedy consequent upon a breach thereof shall constitute a waiver of any such breach or any other covenant, duty, agreement, or condition. The waiver by any party of a breach of any covenant, duty, agreement, or condition of this Agreement of any other party shall not operate or be construed as a waiver of any subsequent breach of that provision or any other provision hereof.

(k) Insurance. Parent or Employer, at its discretion, may apply for and procure in its own name and for its own benefit life and/or disability insurance on Executive in any amount or amounts considered available. Executive agrees to cooperate in any medical or other examination, supply any information, and to execute and deliver any applications or other instruments in writing as may be reasonably necessary to obtain and constitute such insurance.

(l) Business Days. If any time period for giving notice or taking action hereunder expires on a day which is a Saturday, Sunday or holiday in the state in which Parent's chief executive office is located, the time period shall be automatically extended to the business day immediately following such Saturday, Sunday or holiday.

(m) Tax Withholding. Parent, Employer and their respective Subsidiaries shall be entitled to deduct or withhold from any amounts owing from Parent, Employer or any of their respective Subsidiaries to Executive (including withholding shares or other equity securities in the case of issuances of equity by Parent, Employer or any of their respective Subsidiaries) any federal, state, local or foreign withholding taxes, excise taxes, or employment taxes ("Taxes") imposed with respect to Executive's compensation or other payments from Parent, Employer or any of their respective Subsidiaries or Executive's ownership interest in Parent, including wages, bonuses, distributions, the receipt or exercise of equity options and/or the receipt or vesting of restricted equity. In the event any such deductions or withholdings are not made, Executive shall indemnify Parent, Employer and each of their respective Subsidiaries for any amounts paid with respect to any such Taxes, together with any interest, penalties and related expenses thereto; provided, that, Executive shall not be obligated to indemnify Parent pursuant to this Section 6(m) for such interest, penalties or related expenses which are directly caused by the failure of Parent to take necessary action with respect to such deductions and withholdings as it is required by law to take.

(n) Termination. This Agreement (except for the provisions of Sections 1(a) and 1(b)) shall survive a Separation and shall remain in full force and effect after such Separation.

(o) Deemed Resignations. Except as otherwise determined by the Board or as otherwise agreed to in writing by Executive and Parent, Employer or any of their respective Subsidiaries prior to the termination of Executive's employment with Employer, any termination of Executive's employment shall constitute, as applicable, an automatic resignation of Executive: (i) as an officer of

Parent, Employer or any of their respective Subsidiaries; (ii) from the Board; and (iii) from any other board of directors or board of managers (or similar governing body) of Parent, Employer or any of their respective Subsidiaries and from the board of directors or board of managers (or similar governing body) of any corporation, limited liability entity, unlimited liability entity or other entity in which Parent, Employer or any of their respective Subsidiaries holds an equity interest and with respect to which board of directors or board of managers (or similar governing body) Executive serves as the designee or other representative of Parent, Employer or any of their respective Subsidiaries. Executive agrees to take any further actions that Parent, Employer or any of their respective Subsidiaries reasonably requests to effectuate or document the foregoing.

(p) Electronic Delivery. This Agreement, the agreements referred to herein, and each other agreement or instrument entered into in connection herewith or therewith or contemplated hereby or thereby, and any amendments hereto or thereto, to the extent signed and delivered by means of a photographic, portable document format (.pdf), or similar reproduction of such signed writing using an electronic mail shall be treated in all manner and respects as an original agreement or instrument and shall be considered to have the same binding legal effect as if it were the original signed version thereof delivered in person. At the request of any party hereto or to any such agreement or instrument, each other party hereto or thereto shall re-execute original forms thereof and deliver them to all other parties hereto. No party hereto or to any such agreement or instrument shall raise the use of electronic mail to deliver a signature or the fact that any signature or agreement or instrument was transmitted or communicated through the use of electronic mail as a defense to the formation or enforceability of a contract and each such party forever waives any such defense.

(q) No Third-Party Beneficiaries. Except as expressly provided herein (including the last sentence of Section 6(e)), no term or provision of this Agreement is intended to be, or shall be, for the benefit of any Person not a party hereto, and no such other Person shall have any right or cause of action hereunder. Notwithstanding the foregoing, any Subsidiary or Parent or Employer that is not a signatory to this Agreement shall be a third party beneficiary of Executive's obligations under Sections 2, 3, 6(g), 6(h) and 6(o) and shall be entitled to enforce such obligations as if a party hereto.

(r) Directors' and Officers' Insurance . Each of Parent and Employer agree that it shall obtain and maintain in full force and effect during the term of Executive's employment hereunder directors' and officers' insurance policies in amounts and with coverages customary for entities of the size and with the type of business of Parent and Employer, respectively.

(s) Clawback. Notwithstanding any provision of this Agreement to the contrary, Executive acknowledges that the amounts paid or payable under this Agreement shall be subject to (i) the provisions of any applicable clawback policies or procedures adopted by Parent, Employer or any of their Affiliates or Subsidiaries, which clawback policies or procedures may provide for forfeiture and/or recoupment of amounts paid or payable under this Agreement, and (ii) any right or obligation that Employer or Parent may have regarding the clawback of "incentive-based compensation" under Section 10D of the Securities Exchange Act of 1934, as amended, and any applicable rules and regulations promulgated thereunder from time to time by the U.S. Securities and Exchange Commission, the listing standards of any national securities exchange or association on which Parent's securities are listed, or any other applicable law (the "Dodd-Frank Clawback"). Notwithstanding any provision of this Agreement to the contrary, each of Parent, Employer or any of their Affiliates or Subsidiaries reserves the right, without the consent of Executive, to adopt any such clawback policies and procedures, including such policies and procedures applicable to this Agreement with retroactive effect; provided, however, that such clawback policies and procedures shall not apply to compensation paid prior to the Employment Period, except as may be required by the Dodd-Frank Clawback.

* * * * *

IN WITNESS WHEREOF, the parties hereto have executed this Amended and Restated Employment Agreement as of the date first above written.

MARAVAI LIFESCIENCES HOLDINGS, INC.

By: /s/ Pete Leddy, Ph.D.
Name: Pete Leddy, Ph.D.
Its: Chief Administrative Officer

MARAVAI INTERMEDIATE HOLDINGS, LLC

By: /s/ Pete Leddy, Ph.D.
Name: Pete Leddy, Ph.D.
Its: Chief Administrative Officer

/s/ Carl W. Hull
Carl W. Hull

AMENDED AND RESTATED
EMPLOYMENT AGREEMENT

THIS AMENDED AND RESTATED EMPLOYMENT AGREEMENT (this "Agreement") is effective as of May 8, 2023 (the "Effective Date"), by and among Maravai LifeSciences Holdings, Inc., a Delaware corporation (" Parent"), Maravai Intermediate Holdings, LLC, a Delaware limited liability company ("Employer"), and William "Trey" Martin, III (" Executive"). Capitalized terms used but not otherwise defined shall have the meanings set forth in Section 4.

WHEREAS, Parent, Employer and Executive previously entered into that certain Employment Agreement (the " Prior Agreement") with an effective date of September 30, 2022 (the "Prior Effective Date").

WHEREAS, the parties to this Agreement desire to amend and restate the Prior Agreement in its entirety to provide for the rights and privileges set forth herein.

NOW, THEREFORE, in consideration of the mutual covenants contained herein and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties to this Agreement hereby agree that the Prior Agreement is hereby amended and restated in its entirety by this Agreement, and hereto further agree as follows:

1. Employment. Employer agrees to continue to employ Executive, and Executive accepts such continued employment, for the period beginning on the Effective Date and ending upon his separation pursuant to Section 1(e) (the "Employment Period").

(a) Position and Duties.

(i) During the Employment Period, Executive shall serve as President of the Biologics Safety Testing (BST) Operating Division and shall have the normal duties, responsibilities and authority implied by such position, which shall include acting as a key member of the leadership team, and such other activities as are reasonably directed by the Chief Executive Officer of Parent, subject in each case to the power of the Chief Executive Officer of Parent to expand, limit or otherwise alter such duties, responsibilities, positions and authority and to otherwise override actions of officers.

(ii) Executive shall report to the Chief Executive Officer of Parent, and Executive shall devote his best efforts and his full business time and attention to the business and affairs of Parent, Employer and the other Subsidiaries of Parent; provided, that during the Employment Period, Executive shall be entitled to (A) serve, with the prior written consent of the Chief Executive Officer of Parent, on corporate, civic or charitable boards or committees, (B) deliver lectures and fulfill speaking engagements and (C) manage personal investments, so long as, with respect to clauses (B) and (C), such activities do not interfere substantially with the performance of Executive's responsibilities to Parent or Employer under this Agreement.

(iii) Executive's primary work location shall be Employer's corporate headquarters in San Diego, California, and Employee shall be allowed to work remotely from time to time, but is expected to be in San Diego no less than approximately two weeks of every month in the first year of the Employment Period.

(b) Salary, Bonus and Benefits. During the Employment Period, Employer will continue to pay Executive a base salary at a rate of $750,000 per annum (the "Annual Base Salary"). The Annual Base Salary shall be reviewed annually by the Board of Directors (the " Board") or its Compensation Committee. For each fiscal year of Employer ending during the Employment Period, including fiscal year 2023, Executive shall continue to be eligible for an annual bonus with a target amount equal to 125% of the Annual Base Salary (such amount, the "Annual Bonus"), as determined by the Board based upon the performance of Executive and the achievement by Parent, Employer and the other Subsidiaries of Parent of financial, operating and other objectives set by the Board. Each Annual Bonus, if any, shall be paid as soon as administratively feasible after the Board (or a committee thereof)

certifies whether the performance targets for the applicable year have been achieved but in no event later than March 15 following the end of such year. Subject to Section 1(d), no Annual Bonus, if any, or any portion thereof, shall be payable for any year unless Executive remains continuously employed by Employer from the Effective Date through the last day of such year. In addition, during the Employment Period, Executive will be entitled to such other benefits as are approved by the Board and made generally available to all senior management of Parent and Employer.

(c) Reserved.

(d) Reserved.

(e) Separation. The Employment Period will continue until (x) the termination of Executive's employment due to Executive's resignation, death or Disability or (y) the Board terminates Executive's employment with or without Cause. Executive shall have the right to terminate Executive's employment with Employer with or without Good Reason and for any other reason, or no reason at all, upon thirty (30) days' advance written notice to Employer; provided, however, that if Executive has provided notice to Employer of Executive's termination of employment, Employer may determine, in its sole discretion, that such termination shall be effective on any date prior to the effective date of termination provided in such notice (and, if such earlier date is so required, then it shall not change the basis for Executive's termination of employment nor be construed or interpreted as a termination of employment by the Board without Cause) and any requirement to continue salary or benefits shall cease as of such earlier date. Upon Executive's Separation, Employer or Parent shall pay to Executive within 30 days following the date of Separation (or such earlier date as may be required by applicable law), the following: (A) any accrued but unpaid Annual Base Salary through the date of the Separation, (B) reimbursement for any unreimbursed business expenses incurred through the date of the Separation, and (C) any amount or benefit as may be due or payable in accordance with the terms of any Parent or Employer benefit plan or program (collectively, the "Accrued Amounts").

(i) Payment Upon Separation. If Executive's employment is terminated by resignation of Executive with Good Reason or by the Board without Cause, then, in addition to the Accrued Amounts, Executive will be entitled to receive, subject to Section 1(e)(iii) and Section 1(f):

(A) any earned but unpaid Annual Bonus pursuant to Section 1(b) for the fiscal year prior to the fiscal year in which the Separation occurs;

(B) an amount equal to the target Annual Bonus prorated for the number of days worked by Executive for Parent in the calendar year of the Separation;

(C) continued payment of Executive's Annual Base Salary for a period of 12 months following the date of the Separation (the "Non-CIC Severance Period"), payable in substantially equal installments in accordance with Employer's regular payroll practices; and

(D) if Executive is eligible to and timely elects continuation coverage under the Consolidated Omnibus Budget Reconciliation Act of 1985, as amended ("COBRA"), then Employer shall pay Executive's COBRA premiums during the Non-CIC Severance Period; provided, that such payments shall not be made in the event an excise tax under Section 4980D of the Code would be imposed on Employer as a result.

(ii) Payment Upon Separation following a Change in Control. If, during the period commencing upon a Change in Control and ending on the second anniversary of such Change in Control, Executive's employment is terminated by Executive for Good Reason or by Parent or Employer (or their respective successors) without Cause, then, in addition to the Accrued Amounts, and in lieu of the payments and benefits set forth in Section 1(e)(i) above, Executive will be entitled to receive:

(A) any earned but unpaid Annual Bonus pursuant to Section 1(b) for the fiscal year prior to the fiscal year in which the Separation occurs;

(B) an amount equal to the target Annual Bonus prorated for the number of days worked by Executive for Parent in the calendar year of the Separation;

(C) continued payment of Executive's Annual Base Salary for a period of 24 months following the date of Separation (the "CIC Severance Period"), payable in substantially equal installments in accordance with Employer's regular payroll practices;

(D) an amount equal to two times the greatest of (i) Executive's target Annual Bonus for the fiscal year in which the Separation occurs; (ii) the calculation of an Annual Bonus based on (a) Executive's Annual Base Salary and Annual Bonus target in place at the time of the Change in Control and (b) the average of the Company performance achievement percentage applied to calculate annual bonuses under the Parent's annual bonus program with respect to the two fiscal years prior to the fiscal year in which the Separation occurs; and (iii) the annualized amount accrued by Parent in its financial statements as of the date of Separation with respect to Executive's Annual Bonus for the fiscal year in which the Separation occurs, in each case payable in substantially equal installments during the CIC Severance Period in accordance with the Company's regular payroll practices; and

(E) if Executive is eligible to and timely elects continuation coverage under COBRA, then Employer shall pay Executive's COBRA premiums for a period of 18 months following the date of Separation; provided, that such payments shall not be made in the event an excise tax under Section 4980D of the Code would be imposed on Employer as a result.

(iii) Release Agreement. Notwithstanding anything herein to the contrary, (A) Executive shall not be entitled to receive any payments or other benefits pursuant to this Section 1(e) (other than the Accrued Amounts, the " Severance Benefits") unless Executive has timely executed and delivered to Employer a general release and separation agreement in a form prepared by Employer (a "Release Agreement") and such Release Agreement shall become in full force and effect and not been timely revoked as may be permitted by its terms, which Release Agreement shall be delivered by Executive on or before the Release Expiration Date (as defined below) and (B) Executive shall be entitled to receive the Severance Benefits only so long as Executive has not breached any of the provisions of such Release Agreement, this Agreement (including, without limitation, Section 2 or Section 3 herein) or the Invention Assignment Agreement (as defined below). The first payment of the Severance Benefits will include all amounts that otherwise would have been due prior thereto under the terms of this Agreement had such payments commenced immediately upon the effective date of Executive's termination of employment. For purposes of this Agreement, "Release Expiration Date" shall mean the date that is 30 days following the date of Executive's termination of employment, or, in the event that Executive's termination of employment is "in connection with an exit incentive or other employment termination program" (as such phrase is defined in the Age Discrimination in Employment Act of 1967), the date that is 60 days following the date of Executive's termination of employment.

(f) Code Section 409A.

(i) The intent of the parties is that payments and benefits under this Agreement comply with or otherwise be exempt from Internal Revenue Code Section 409A and the regulations and guidance promulgated thereunder (collectively "Code Section 409A") and, accordingly, to the maximum extent permitted, this Agreement shall be interpreted to be either exempt from or in compliance therewith. In no event whatsoever shall Parent or Employer be liable for any additional tax, interest or penalty that may be imposed on the Executive by Code Section 409A or damages for failing to comply with Code Section 409A.

(ii) Notwithstanding any other payment schedule provided herein to the contrary, if the Executive is deemed on the date of termination to be a "specified employee" within the meaning of that term under Code Section 409A(a)(2)(B), then any payment under this Section 1 that is considered deferred compensation under Code Section 409A payable on account of a "separation from service" shall not be made until the date which is the earlier of (i) the expiration of the six (6)-month period measured from the date of such "separation from service" of Executive, and (ii) the date of Executive's death (the "Delay Period") to the extent required under Code Section 409A. Upon the expiration of the Delay Period, all payments delayed pursuant to this Section 1(f)(ii) shall be paid to the Executive in a lump sum, and all remaining payments due under this Agreement shall be paid or provided in accordance with the normal payment dates specified for them herein.

(iii) A termination of employment shall not be deemed to have occurred for purposes of any provision of this Agreement providing for the payment of any amounts or benefits upon or following a termination of employment unless such termination is also a "separation from service" from Parent and Employer within the meaning of Code Section 409A and, for purposes of any such provision of this Agreement, references to a "termination," "termination of employment" or like terms shall mean "separation from service."

(iv) Notwithstanding anything to the contrary in this Agreement, to the extent that any payments of "nonqualified deferred compensation" (within the meaning of Code Section 409A) due under this Agreement as a result of Executive's termination of employment are subject to Executive's execution and delivery of a Release Agreement, in any case where the date of termination of employment and the Release Expiration Date fall in two separate taxable years, any payments required to be made to Executive that are conditioned on the Release Agreement and are treated as "nonqualified deferred compensation" (within the meaning of Code Section 409A) shall be made in the later taxable year, and any such amounts that are delayed pursuant to this Section 1(f)(iv) shall be paid in a lump sum on the first payroll period to occur in the subsequent taxable year.

(v) To the extent, if any, that the aggregate amount of the installments of the severance payment that would otherwise be paid pursuant to Section 1(e) after March 15 of the calendar year following the calendar year in which the Separation occurs (the " Applicable March 15") exceeds the maximum exemption amount under Treasury Regulation Section 1.409A-1(b)(9)(iii)(A), then such excess shall be paid to Executive in a lump sum on the Applicable March 15 (or the first business day preceding the Applicable March 15 if the Applicable March 15 is not a business day) and the installments of the severance payment payable after the Applicable March 15 shall be reduced by such excess (beginning with the installment first payable after the Applicable March 15 and continuing with the next succeeding installment until the aggregate reduction equals such excess). For purposes of Code Section 409A, the Executive's right to receive any installment payment pursuant to this Agreement shall be treated as a right to receive a series of separate and distinct payments.

(vi) Notwithstanding any other provision to the contrary, in no event shall any payment under this Agreement that constitutes "deferred compensation" for purposes of Code Section 409A be subject to offset by any other amount unless otherwise permitted by Code Section 409A.

(g) Certain Excise Taxes. If Executive is a "disqualified individual" (as defined in Section 280G(c) of the Code), and the separation payments and benefits provided for in this Agreement, together with any other payments and benefits which such Executive has the right to receive from Parent or any of its Affiliates, would constitute a "parachute payment" (as defined in Section 280G(b)(2) of the Code), then the payments provided for in this Agreement shall be either (a) reduced (but not below zero) so that the present value of such total amounts and benefits received by Executive from the Parent and its Affiliates will be one dollar less than three times Executive's "base amount" (as defined in Section 280G(b)(3) of the Code) and so that no portion of such amounts and benefits received by Executive shall be subject to the excise tax imposed by Section 4999 of the Code or (b) paid in full, whichever produces the better net after-tax position to Executive (taking into account any applicable excise tax under Section

4999 of the Code and any other applicable taxes). The determination as to whether any such reduction in the amount of the payments provided hereunder is necessary shall be made by Parent in good faith. If a reduced payment is made and through error or otherwise that payment, when aggregated with other payments and benefits from Parent (or its Affiliates) used in determining if a "parachute payment" exists, exceeds one dollar less than three times Executive's base amount, then Executive shall immediately repay such excess to Parent (or its Affiliates) upon notification that an overpayment has been made. Nothing in this Section 1(g) shall require Parent or Employer to be responsible for, or have any liability or obligation with respect to, Executive's excise tax liabilities under Section 4999 of the Code.

2. Confidential Information

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(a) Obligation to Maintain Confidentiality. Executive acknowledges that the information, observations and data (including trade secrets) obtained by him during the course of his employment with Employer prior to and after the Prior Effective Date concerning the business or affairs of Parent, Employer and their respective Subsidiaries and Affiliates ("Confidential Information") are the property of Parent, Employer or such Subsidiaries and Affiliates, including information concerning acquisition opportunities in or reasonably related to Parent's and Employer's business or industry of which Executive becomes aware during the Employment Period. Therefore, Executive agrees that he will not disclose to any unauthorized Person or use for his own account any Confidential Information without the Board's written consent, unless and to the extent that the Confidential Information, (i) becomes generally known to and available for use by the public other than as a result of Executive's acts or omissions to act or (ii) is required to be disclosed pursuant to any applicable law or court order. Executive shall deliver to Employer at a Separation, or at any other time Employer may request, all memoranda, notes, plans, records, reports, computer tapes, printouts and software and other documents and data (and copies thereof) relating to the Confidential Information, Work Product (as defined below) or the business of Parent, Employer and their respective Subsidiaries and Affiliates (including all acquisition prospects, lists and contact information) which he may then possess or have under his control.

(b) Protection of Trade Secrets. Executive acknowledges and agrees with Employer that Executive's services to Employer and to Parent and their respective Subsidiaries and Affiliates require the use of Confidential Information and trade secret information (including any formula, pattern, compilation, program, device, method, technique or process) that Employer, Parent or their respective Subsidiaries and Affiliates have made reasonable efforts to keep confidential and that derives independent economic value, actual or potential, from not being generally known to the public or to other persons who can obtain economic value from its disclosure or use ("Trade Secrets"). Executive further acknowledges and agrees that Employer, Parent and such Subsidiaries and Affiliates would be irreparably harmed if Executive were to provide similar services requiring the use of such Trade Secrets.

(c) Ownership of Property. Executive acknowledges that all discoveries, concepts, ideas, inventions, innovations, improvements, developments, methods, processes, programs, designs, analyses, drawings, reports, patent applications, copyrightable work and mask work (whether or not including any confidential information) and all registrations or applications related thereto, all other proprietary information and all similar or related information (whether or not patentable) that relate to Parent, Employer or any of their respective Subsidiaries or Affiliates engaging in Parent Business or an anticipated business in which Parent, Employer or any of their respective Subsidiaries or Affiliates have a bona fide interest or expectancy relating to the acquisition of a business by Parent, Employer or any of their respective Subsidiaries, research and development, or existing or future products or services and that are conceived, developed, contributed to, made, or reduced to practice by Executive (either solely or jointly with others) while employed by Parent, Employer or any of their respective Subsidiaries or Affiliates (including any of the foregoing that constitutes any proprietary information or records) ("Work Product") belong to Parent, Employer or such Subsidiary or Affiliate, and Executive hereby assigns, and agrees to assign, all of the above Work Product to Parent, Employer or to such Subsidiary or Affiliate. Any copyrightable work prepared in whole or in part by Executive in the course of his work for any of the foregoing entities shall be deemed a "work made for hire" under the copyright laws, and Parent, Employer or such Subsidiary or Affiliate shall own all rights therein. To the extent that any such copyrightable work is not a "work made for hire," Executive hereby assigns and agrees to assign to

Parent, Employer or such Subsidiary or Affiliate all right, title, and interest, including without limitation, copyright in and to such copyrightable work. Executive shall promptly disclose such Work Product and copyrightable work to the Board and perform all actions reasonably requested by the Board (whether during or after the Employment Period), to establish and confirm Parent's, Employer's or such Subsidiary's or Affiliate's ownership (including assignments, consents, powers of attorney, and other instruments); provided, that Parent shall reimburse Executive for his reasonable and documented out-of-pocket expenses in connection therewith.

(d) Third Party Information. Executive understands that Parent, Employer and their respective Subsidiaries and Affiliates will receive from third parties confidential or proprietary information ("Third Party Information") subject to a duty on Parent's, Employer's and their respective Subsidiaries and Affiliates' part to maintain the confidentiality of such information and to use it only for certain limited purposes. During the Employment Period and thereafter, and without in any way limiting the provisions of Section 2(a), Executive will hold Third Party Information in the strictest confidence and will not disclose to anyone (other than personnel and consultants of Parent, Employer or their respective Subsidiaries and Affiliates who need to know such information in connection with their work for Parent, Employer or their respective Subsidiaries and Affiliates) or use, except in connection with his work for Parent, Employer or their respective Subsidiaries and Affiliates, Third Party Information unless expressly authorized by a member of the Board (other than Executive) in writing.

(e) Use of Information of Prior Employers. During the Employment Period, Executive will not improperly use or disclose any confidential information or trade secrets, if any, of any former employers or any other Person to whom Executive has an obligation of confidentiality, and will not bring onto the premises of Parent, Employer or any of their respective Subsidiaries or Affiliates any unpublished documents or any property belonging to any former employer or any other Person to whom Executive has an obligation of confidentiality unless consented to in writing by the former employer or Person. Executive will use in the performance of his duties only information which is (i) generally known and used by persons with training and experience comparable to Executive's and which is (x) common knowledge in the industry or (y) is otherwise legally in the public domain, (ii) otherwise provided or developed by Parent, Employer or any of their respective Subsidiaries or Affiliates or (iii) in the case of materials, property or information belonging to any former employer or other Person to whom Executive has an obligation of confidentiality, approved for such use in writing by such former employer or Person. In furtherance of the foregoing, concurrently with the execution of the Prior Agreement, Executive has executed and delivered to Employer the Support Agreement and Executive Representations Regarding Third Party Confidential Information in the form of Exhibit A to the Prior Agreement which, for the avoidance of doubt, remains in full force and effect (the "Support Agreement") and is incorporated by reference herein.

(f) Whistleblower Protections. No provision of this Agreement will be interpreted so as to impede Executive (or any other individual) from reporting possible violations of federal law or regulation to any governmental agency or entity, including but not limited to the Department of Justice, the Securities and Exchange Commission, the Congress, and any Inspector General of any United States federal agency, or making other disclosures under the whistleblower provisions of federal law or regulation. Executive does not need the prior authorization of Parent or Employer to make any such reports or disclosures, and Executive will not be required to notify Parent or Employer that such reports or disclosures have been made.

(g) Trade Secrets. An individual will not be held criminally or civilly liable under any federal or state trade secret law for the disclosure of a trade secret that (i) is made (A) in confidence to a federal, state, or local government official, either directly or indirectly, or to an attorney, and (B) solely for the purpose of reporting or investigating a suspected violation of law; or (ii) is made in a complaint or other document filed in a lawsuit or other proceeding, if such filing is made under seal. Nothing in this Agreement is intended to conflict with 18 U.S.C. § 1833(b) or create liability for disclosures of trade secrets that are expressly allowed by 18 U.S.C. § 1833(b). Accordingly, the parties to this Agreement have the right to disclose in confidence trade secrets to federal, state, and local government officials, or to an attorney, for the sole purpose of reporting or investigating a suspected violation of law. The parties also have the right to disclose trade secrets in a document filed in a lawsuit or other proceeding, but only if the filing is made under seal and protected from public disclosure.

3. Noncompetition and Nonsolicitation. Executive acknowledges that in the course of his employment with Employer he will become familiar with Trade Secrets and with other confidential information concerning Parent, Employer and their respective Subsidiaries and that his services will be of special, unique and extraordinary value to Parent, Employer and their respective Subsidiaries. Therefore, Executive agrees that:

(a) Noncompetition. During the Employment Period, Executive shall not engage in any business activity other than for the benefit of the Parent, Employer or any of their respective Subsidiaries.

(b) Nonsolicitation. During the Employment Period and for one year thereafter, other than in good faith in the best interests of the Parent, Employer or any of their respective Subsidiaries, Executive shall not directly or indirectly through another entity (i) induce or attempt to induce any employee of Parent, Employer or any of their respective Subsidiaries to leave the employ of Parent, Employer or such Subsidiary, or in any way interfere with the relationship between Parent, Employer or any of their respective Subsidiaries and any employee thereof or (ii) hire any employee of Parent, Employer or any of their respective Subsidiaries or, hire any former employee of Parent, Employer or any of their respective Subsidiaries within one year after such person ceased to be an employee of Parent, Employer or any of their respective Subsidiaries.

(c) Enforcement. If, at the time of enforcement of Section 2 or this Section 3, a court holds that the restrictions stated are unreasonable under circumstances then existing, the parties agree that the maximum duration, scope or geographical area reasonable under such circumstances shall be substituted for the stated period, scope or area and that the court shall be allowed to revise the restrictions contained to cover the maximum duration, scope and area permitted by law. Because Executive's services are unique and because Executive has access to confidential information, the parties agree that money damages would be an inadequate remedy for any breach of this Agreement. Therefore, in the event of a breach or threatened breach of this Agreement, any party and/or their respective successors or assigns may, in addition to other rights and remedies existing in their favor, subject to Section 6(g), apply to any court of competent jurisdiction for specific performance and/or injunctive or other relief in order to enforce, or prevent any violations of, the provisions hereof.

(d) Additional Acknowledgments. Executive acknowledges that the provisions of this Section 3 are in consideration of: (i) employment with Employer and (ii) additional good and valuable consideration as set forth in this Agreement. In addition, Executive agrees and acknowledges that the restrictions contained in Section 2 and this Section 3 do not preclude Executive from earning a livelihood, nor do they unreasonably impose limitations on Executive's ability to earn a living. In addition, Executive acknowledges (A) that the business of Parent, Employer and their respective Subsidiaries will be conducted throughout the United States and other jurisdictions where Parent, Employer or any of their respective Subsidiaries conduct business during the Employment Period, (B) notwithstanding the state of organization or principal office of Parent, Employer or any of their respective Subsidiaries, or any of their respective executives or employees (including Executive), it is expected that Parent, Employer and their respective Subsidiaries will have business activities and have valuable business relationships within its industry throughout the United States and other jurisdictions where Parent, Employer or any of their respective Subsidiaries conduct business during the Employment Period, and (C) as part of his responsibilities, Executive will be traveling throughout the United States and other jurisdictions where Parent, Employer or any of their respective Subsidiaries conduct business during the Employment Period in furtherance of Employer's business and its relationships. Executive agrees and acknowledges that the potential harm to Parent, Employer and their respective Subsidiaries of the non-enforcement of any provision of Section 2 or this Section 3 outweighs any potential harm to Executive of its enforcement by injunction or otherwise. The covenants contained in each of Sections 2(a), 2(b), 2(c), 2(d), 2(e), 3(a) and 3(b) may be enforced independently and without any one or more of such sections limiting the provisions of any one or more of the other of such sections. Executive acknowledges that he has carefully read this Agreement and consulted with legal counsel of his choosing regarding its contents, has given careful consideration to the restraints imposed upon Executive by this Agreement and is in full accord as to their necessity for the reasonable and proper protection of confidential and proprietary information of Parent, Employer and their respective Subsidiaries now existing or to be developed in the

future. Executive expressly acknowledges and agrees that each and every restraint imposed by this Agreement is reasonable with respect to subject matter, time period and geographical area.

GENERAL PROVISIONS

4. Definitions.

"Affiliate" of any particular Person means any other Person controlling, controlled by, or under common control with such particular Person, where "control" means the possession, directly or indirectly, of the power to direct the management and policies of a Person whether through the ownership of voting securities, by contract, or otherwise.

"Cause" means (a) the commission of a felony, (b) willful conduct tending to bring Parent, Employer or any of their respective Subsidiaries into substantial public disgrace or disrepute, (c) substantial and repeated failure to perform duties of the office held by Executive as reasonably directed by the Board and/or the Chief Executive Officer of Parent, (d) gross negligence or willful misconduct with respect to Parent, Employer or any of their respective Subsidiaries, including any other act or omission involving significant and willful dishonesty or fraud with respect to Parent, Employer or any of their respective Subsidiaries or any of their respective customers or suppliers, or (e) any material breach of Sections 2 or 3 or Section 1(a)(ii) (but only with respect the requirement of such Section 1(a)(ii) that Executive devote his full business time and attention to the business and affairs of Parent, Employer and their Subsidiaries). In each case above the burden of proving such action or omission is a "Cause" event shall be with Employer. In the event of an alleged breach of clause (c), Employer shall give Executive written notice with thirty (30) days following the receipt of such notice to cure. In addition, Employer agrees it will permit Executive an opportunity to be heard by the Board before reaching a decision concerning any proposed dismissal for Cause.

"Change in Control" has the meaning set forth in Parent's 2020 Omnibus Incentive Plan, as it may be amended from time to time.

"Code" means the Internal Revenue Code of 1986, as amended.

"Disability" means the disability of Executive caused by any physical or mental injury, illness or incapacity as a result of which Executive is, or is reasonably expected to be, unable to effectively perform the essential functions of Executive's duties, with or without accommodations, for a substantially continuous period of more than 120 days or for any 180 days (whether or not continuous) within a 365 day period, as determined by the Board in good faith.

"Good Reason" means:

(x) solely with respect to Section 1(e)(i) hereof, without Executive's prior consent, (a) any action by Parent or Employer which results in a material reduction in Executive's authority, duties or responsibilities, (b) a material reduction in Executive's Annual Base Salary or target Annual Bonus, or (c) the relocation of Executive's principal office or place of work to a location that would cause an increase by more than thirty-five (35) miles in the one-way commuting distance from Executive's principal personal residence to the principal office or business location at which Executive is then required to perform services; and

(y) solely with respect to Section 1(e)(ii) hereof, without Executive's prior consent, (a) any action by Parent or Employer which results in a material reduction in Executive's title, status, authority, duties or responsibilities as President, BST of Parent and Employer, (b) a reduction in Executive's Annual Base Salary, target Annual Bonus or the target grant date value of Executive's annual equity award (in relation to the target for such Executive's most recent annual equity award prior to the Change in Control or, if no such award, the target for such award for the Parent executive most similarly situated to Executive), or (c) the relocation of Executive's principal office or place of work to a location that would cause an increase by more than thirty-five (35) miles in the one-way commuting distance from Executive's principal personal residence

at the time of the Change in Control to the principal office or business location at which Executive is then required to perform services.

Notwithstanding anything to the contrary, any assertion by Executive of a termination for Good Reason shall not be effective unless all of the following conditions are satisfied: (A) Executive must provide written notice to Employer of the existence of such condition(s) within ninety (90) days after the initial occurrence of such condition(s); (B) the condition(s) specified in such notice must remain uncorrected for thirty (30) days following Employer's receipt of such written notice; and (C) the date of Executive's termination of employment must occur within sixty (60) days after written notice of the condition(s) specified in such notice. Further, any Change in Control does not and will not in and of itself constitute a breach by Parent or Employer of their obligations under this Agreement, a diminution in the nature or scope of the powers, duties, status, authority or responsibilities of the Executive or "Good Reason" to terminate Executive's employment under this Agreement.

"Governmental Entity" means the United States of America or any other nation, any state or other political subdivision thereof, or any entity exercising executive, legislative, judicial, regulatory or administrative functions of government or any agency or department or subdivision of any governmental authority, including the United States federal government or any state or local government.

"Parent Business" means the business(es) of providing those services or selling those products which Parent, Employer or any of their respective Subsidiaries actually provide or sell.

"Person" means an individual, a partnership, a corporation, a limited liability company, an association, a joint stock company, a trust, a joint venture, an unincorporated organization, any other business entity, or a Governmental Entity.

"Separation" means Executive ceasing to be employed by any of Parent, Employer and their respective Subsidiaries for any reason.

"Subsidiary" means, with respect to any Person, any corporation, limited liability company, partnership, association, or business entity of which if (a) a corporation, a majority of the total voting power of shares of stock entitled (without regard to the occurrence of any contingency) to vote in the election of directors, managers, or trustees thereof is at the time owned or controlled, directly or indirectly, by that Person or one or more of the other Subsidiaries of that Person or a combination thereof, or (b) a limited liability company, partnership, association, or other business entity (other than a corporation), a majority of partnership or other similar ownership interest thereof is at the time owned or controlled, directly or indirectly, by that Person or one or more Subsidiaries of that Person or a combination thereof. For purposes hereof, a Person or Persons shall be deemed to have a majority ownership interest in a limited liability company, partnership, association, or other business entity (other than a corporation) if such Person or Persons shall be allocated a majority of limited liability company, partnership, association, or other business entity gains or losses or shall be or control any managing director or general partner of such limited liability company, partnership, association, or other business entity. References to a "Subsidiary" of any Person shall be given effect only at such times that such Person has one or more Subsidiaries, and, unless otherwise indicated, the term "Subsidiary" refers to a Subsidiary of Parent.

5. Notices. All notices, demands or other communications to be given or delivered under or by reason of the provisions of this Agreement shall be in writing and shall be deemed to have been given when (a) delivered personally to the recipient, (b) sent to the recipient by reputable express courier service with tracking (charges prepaid), (c) mailed to the recipient by certified or registered mail, return receipt requested and postage prepaid, or (d) emailed to the recipient (with hard copy sent to the recipient by reputable overnight courier service (charges prepaid) that same day) if emailed before 5:00 p.m. Chicago, Illinois time on a business day, and otherwise on the next business day. Such notices, demands and other communications shall be sent to the parties at the addresses indicated below:

If to Parent or Employer:

Maravai LifeSciences Holdings, Inc.

10770 Wateridge Circle Suite 200
San Diego, CA 92121
Attention: Board of Directors c/o Corporate Secretary

with copies to (which shall not constitute notice):

Maravai LifeSciences Holdings, Inc.
10770 Wateridge Circle Suite 200
San Diego, CA 92121
Attention: General Counsel

If to Executive:

William "Trey" Martin, III
****
****
****
E-mail:**********

or such other address or to the attention of such other Person as the recipient party shall have specified by previous written notice to the sending party (such change of address need not be served by the requirements of this Section 5).

6. General Provisions.

(a) Severability. Whenever possible, each provision of this Agreement will be interpreted in such manner as to be effective and valid under applicable law, but if any provision of this Agreement is held to be invalid, illegal or unenforceable in any respect under any applicable law or rule in any jurisdiction, such invalidity, illegality or unenforceability will not affect any other provision or any other jurisdiction, but this Agreement will be reformed, construed and enforced in such jurisdiction as if such invalid, illegal or unenforceable provision had never been contained herein.

(b) Entire Agreement. This Agreement, those documents expressly referred to herein (including, without limitation, the Support Agreement), Employer's Employee Inventions Assignment and Non-Disclosure Agreement that Executive executed as of the Prior Effective Date (the "Invention Assignment Agreement"), and the Indemnification Agreement by and between Executive and Parent, dated as of September 29, 2022 (the "D&O Indemnification Agreement"), embody the complete agreement and understanding among the parties and supersede and preempt any previous understandings, agreements or representations by or among the parties, written or oral, which may have related to the subject matter in any way. For the avoidance of doubt, should defense or indemnification of Executive become an issue, if there is any conflict between this Employment Agreement, the Support Agreement and the D&O Indemnification Agreement, that document or provision that provides the greatest protection to Executive shall prevail and be the operative agreement or provision. In the event of any conflict between the terms of this Agreement and the Invention Assignment Agreement, the terms of the Invention Assignment Agreement shall control.

(c) Descriptive Headings; Interpretation; No Strict Construction. The descriptive headings of this Agreement are inserted for convenience only and do not constitute a substantive part of this Agreement. Whenever required by the context, any pronoun used in this Agreement shall include the corresponding masculine, feminine, or neuter forms, and the singular form of nouns, pronouns, and verbs shall include the plural and vice versa. The use of the word "including" in this Agreement shall be by way of example rather than by limitation. Reference to any agreement, document, or instrument means such agreement, document, or instrument as amended or otherwise modified from time to time in accordance with the terms thereof. The use of the words "or," "either," and "any" shall not be exclusive. The parties hereto have participated jointly in the negotiation and drafting of this Agreement. In the event an ambiguity or question of intent or interpretation arises, this Agreement shall be construed as if drafted jointly by the parties, and no presumption or burden of proof shall arise favoring or disfavoring any party by virtue of the authorship of any of the provisions of this Agreement.

(d) Counterparts. This Agreement may be executed in multiple counterparts with the same effect as if all signing parties had signed the same document. All counterparts shall be construed together and constitute the same instrument.

(e) Successors and Assigns. Except as otherwise provided, this Agreement shall bind and inure to the benefit of and be enforceable by Executive, Parent, Employer, and their respective successors and assigns; provided, that the rights and obligations of Executive under this Agreement shall not be assigned or delegated. In the event of Executive's death prior to completion by Parent of all payments due under this Agreement, Parent shall make all such payments to Executive's beneficiary or to Executive's estate as appropriate.

(f) Applicable Law. This Agreement shall be governed by, and construed in accordance with, the laws of the State of California, without giving effect to any choice of law or conflict of law rules or provisions (whether of the State of California or any other jurisdiction) that would cause the application of the laws of any jurisdiction other than the State of California.

(g) Dispute Resolution. Any controversy, dispute or claim arising out of or relating to this Agreement (a " Covered Claim") shall be resolved by binding arbitration to be held in San Diego, California, and shall be administered by JAMS in accordance with the Employment Arbitration Rules & Procedures of JAMS then in effect and subject to JAMS Policy on Employment Arbitration Minimum Standards. Each party shall pay their own costs and expenses (including attorneys' fees and other charges of counsel) incurred in resolving any such Covered Claim; except Employer shall pay the costs of arbitration, and provided, that in the event litigation is required to compel arbitration or to enforce an arbitration award or judgment pursuant to this Agreement, the non-prevailing party in such litigation shall reimburse the costs and expenses (including attorney's fees and other charges of counsel) of the prevailing party. The prevailing party in any arbitration shall be entitled to attorney's fees and costs, subject to statutory limitations. Judgment upon the award rendered by the arbitrator(s) may be entered into any court having jurisdiction. The parties agree that any action to compel arbitration pursuant to this Agreement shall be brought in the appropriate California state court, and in connection with such action to compel, the laws of California shall control.

(h) Executive's Cooperation. During the Employment Period and thereafter, Executive shall cooperate with Parent, Employer and their respective Subsidiaries and Affiliates in any disputes with third parties, internal investigation or administrative, regulatory or judicial proceeding as reasonably requested by Parent (including Executive being available to Parent upon reasonable notice for interviews and factual investigations, appearing at Parent's request to give testimony without requiring service of a subpoena or other legal process, volunteering to Parent all pertinent information and turning over to Parent all relevant documents which are or may come into Executive's possession, all at times and on schedules that are reasonably consistent with Executive's other permitted activities and commitments). In the event Parent requires Executive's cooperation in accordance with this paragraph after the Employment Period, Parent shall reimburse Executive for Executive's reasonable time at a rate of $100 per hour and reasonable travel expenses (including lodging and meals, upon submission of receipts).

(i) Remedies. Each of the parties to this Agreement shall have all rights and remedies set forth in this Agreement and all rights and remedies which such Person has been granted at any time under any other agreement or contract and all of the rights which such Person has under any law. Each of the parties to this Agreement will be entitled to enforce its rights under this Agreement specifically, to recover damages and costs caused by any breach of any provision of this Agreement and to exercise all other rights existing in its favor. The parties agree and acknowledge that money damages may not be an adequate remedy for any breach of the provisions of this Agreement and that any party and/or their respective successors and assigns may, in addition to other rights and remedies existing in their favor, but subject to Section 6(g), apply to any court of competent jurisdiction for specific performance and/or injunctive or other relief in order to enforce, or prevent any violations of, the provisions of this Agreement.

(j) Amendment and Waiver. The provisions of this Agreement may be amended and waived only with the prior written consent of Parent, Employer and Executive. No failure by any party to insist upon the strict performance of any covenant, duty, agreement, or condition of this Agreement or to

exercise any right or remedy consequent upon a breach shall constitute a waiver of any such breach or any other covenant, duty, agreement, or condition. The waiver by any party of a breach of any covenant, duty, agreement, or condition of this Agreement of any other party shall not operate or be construed as a waiver of any subsequent breach of that provision or any other provision.

(k) Insurance. Parent or Employer, at its discretion, may apply for and procure in its own name and for its own benefit life and/or disability insurance on Executive in any amount or amounts considered available. Executive agrees to cooperate in any medical or other examination, supply any information, and to execute and deliver any applications or other instruments in writing as may be reasonably necessary to obtain and constitute such insurance.

(l) Business Days. If any time period for giving notice or taking action expires on a day which is a Saturday, Sunday or holiday in the state in which Parent's chief executive office is located, the time period shall be automatically extended to the business day immediately following such Saturday, Sunday or holiday.

(m) Tax Withholding. Parent, Employer and their respective Subsidiaries shall be entitled to deduct or withhold from any amounts owing from Parent, Employer or any of their respective Subsidiaries to Executive (including withholding shares or other equity securities in the case of issuances of equity by Parent, Employer or any of their respective Subsidiaries) any federal, state, local or foreign withholding taxes, excise taxes, or employment taxes ("Taxes") imposed with respect to Executive's compensation or other payments from Parent, Employer or any of their respective Subsidiaries or Executive's ownership interest in Parent, including wages, bonuses, distributions, the receipt or exercise of equity options and/or the receipt or vesting of restricted equity, including, without limitation, any of the payments or benefits payable pursuant to Sections 1(b), 1(c), 1(d), 1(e) and 1(f). In the event any such deductions or withholdings are not made, Executive shall indemnify Parent, Employer and each of their respective Subsidiaries for any amounts paid with respect to any such Taxes, together with any interest, penalties and related expenses thereto; provided, that, Executive shall not be obligated to indemnify Parent pursuant to this Section 6(m) for such interest, penalties or related expenses which are directly caused by the failure of Parent to take necessary action with respect to such deductions and withholdings as it is required by law to take.

(n) Termination. This Agreement (except for the provisions of Sections 1(a) and 1(b)) shall survive a Separation and shall remain in full force and effect after such Separation.

(o) Deemed Resignations. Except as otherwise determined by the Board or as otherwise agreed to in writing by Executive and Parent, Employer or any of their respective Subsidiaries before the termination of Executive's employment with Employer, any termination of Executive's employment shall constitute, as applicable, an automatic resignation of Executive: (i) as an officer of Parent, Employer or any of their respective Subsidiaries; and (ii) from any board of directors or board of managers (or similar governing body) of Parent, Employer or any of their respective Subsidiaries and from the board of directors or board of managers (or similar governing body) of any corporation, limited liability entity, unlimited liability entity or other entity in which Parent, Employer or any of their respective Subsidiaries holds an equity interest and with respect to which board of directors or board of managers (or similar governing body) Executive serves as the designee or other representative of Parent, Employer or any of their respective Subsidiaries. Executive agrees to take any further actions that Parent, Employer or any of their respective Subsidiaries reasonably requests to effectuate or document the foregoing.

(p) Electronic Delivery. This Agreement, the agreements referred to, and each other agreement or instrument entered into in connection with this Agreement, and any amendments, to the extent signed and delivered by means of a photographic, portable document format (.pdf), or similar reproduction of such signed writing using an electronic mail shall be treated in all manner and respects as an original agreement or instrument and shall be considered to have the same binding legal effect as if it were the original signed version thereof delivered in person. At the request of any party or party to any such agreement or instrument, each other party shall re-execute original forms and deliver them to all other parties hereto. No party hereto or to any such agreement or instrument shall raise the use of electronic mail to deliver a signature or the fact that any signature or agreement or instrument was

transmitted or communicated through the use of electronic mail as a defense to the formation or enforceability of a contract and each such party forever waives any such defense.

(q) No Third-Party Beneficiaries. Except as expressly provided (including the last sentence of Section 6(e)), no term or provision of this Agreement is intended to be, or shall be, for the benefit of any Person not a party, and no such other Person shall have any right or cause of action hereunder. Notwithstanding the foregoing, any Subsidiary or Parent or Employer that is not a signatory to this Agreement shall be a third party beneficiary of Executive's obligations under Sections 2, 3, 6(g), 6(h) and 6(p) and shall be entitled to enforce such obligations as if a party hereto.

(r) Directors' and Officers' Insurance . Each of Parent and Employer agree that it shall obtain and maintain in full force and effect during the term of Executive's employment directors' and officers' insurance policies in amounts and with coverages customary for entities of the size and with the type of business of Parent and Employer, respectively.

(s) Clawback. Notwithstanding any provision of this Agreement to the contrary, Executive acknowledges that the amounts paid or payable under this Agreement shall be subject to (i) the provisions of any applicable clawback policies or procedures adopted by Parent, Employer or any of their Affiliates or Subsidiaries, which clawback policies or procedures may provide for forfeiture and/or recoupment of amounts paid or payable under this Agreement, and (ii) any right or obligation that Employer or Parent may have regarding the clawback of "incentive-based compensation" under Section 10D of the Securities Exchange Act of 1934, as amended, and any applicable rules and regulations promulgated thereunder from time to time by the U.S. Securities and Exchange Commission, the listing standards of any national securities exchange or association on which Parent's securities are listed, or any other applicable law (the "Dodd-Frank Clawback"). Notwithstanding any provision of this Agreement to the contrary, each of Parent, Employer or any of their Affiliates or Subsidiaries reserves the right, without the consent of Executive, to adopt any such clawback policies and procedures, including such policies and procedures applicable to this Agreement with retroactive effect; provided, however, that such clawback policies and procedures shall not apply to compensation paid prior to the Employment Period, except as may be required by the Dodd-Frank Clawback.

* * * * *

IN WITNESS WHEREOF, the parties hereto have executed this Amended and Restated Employment Agreement as of the date first above written.

MARAVAI LIFESCIENCES HOLDINGS, INC.

By: /s/ Carl W. Hull
Name: Carl W. Hull
Its: CEO

MARAVAI INTERMEDIATE HOLDINGS, LLC

By: /s/ Carl W. Hull
Name: Carl W. Hull
Its: CEO

EXECUTIVE

/s/ William "Trey" Martin, III
William "Trey" Martin, III

AMENDED AND RESTATED
EMPLOYMENT AGREEMENT

THIS AMENDED AND RESTATED EMPLOYMENT AGREEMENT (this "Agreement") is made as of May 8, 2023, by and among Maravai LifeSciences Holdings, Inc., a Delaware corporation ("Parent"), Maravai Intermediate Holdings, LLC, a Delaware limited liability company ("Employer"), and Kevin Herde ("Executive"). Capitalized terms used but not otherwise defined herein shall have the meanings set forth in Section 4.

WHEREAS, Parent, Employer and Executive previously entered into that certain Employment Agreement (the " Prior Agreement") with an effective date of November 19, 2020 (the "Prior Effective Date").

WHEREAS, the parties to this Agreement desire to amend and restate the Prior Agreement in its entirety to provide for the rights and privileges set forth herein.

NOW, THEREFORE, in consideration of the mutual covenants contained herein and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties to this Agreement hereby agree that the Prior Agreement is hereby amended and restated in its entirety by this Agreement, and hereto further agree as follows:

1. Employment. Employer agrees to continue to employ Executive, and Executive accepts such continued employment, for the period beginning on the Effective Date and ending upon Executive's separation pursuant to Section 1(c) (the "Employment Period").

(a) Position and Duties.

(i) During the Employment Period, Executive shall serve as the Executive Vice President and Chief Financial Officer of Maravai Intermediate Holdings, LLC and shall have the normal duties, responsibilities and authority implied by such position, which shall include responsibility for financing, accounting, treasury and IT operations, defining Parent's and Employer's strategy and business plan, selecting and evaluating other executives of Parent and Employer, sourcing and completing acquisitions made by Parent and Employer and managing the growth and operations of the Company, and such other activities as are reasonably directed by the Chief Executive Officer of Parent or the board of directors of Parent (the "Board"), subject in each case to the power of the Chief Executive Officer of Parent to expand, limit or otherwise alter such duties, responsibilities, positions and authority and to otherwise override actions of officers.

(ii) Executive shall report to the Chief Executive Officer of Parent or such Person's designee, and Executive shall devote Executive's best efforts and Executive's full business time and attention to the business and affairs of Parent, Employer and the other Subsidiaries of Parent; provided, that during the Employment Period, Executive shall be entitled to (A) serve, with the prior written consent of the Board, on corporate, civic or charitable boards or committees, (B) deliver lectures and fulfill speaking engagements and (C) manage personal investments, so long as, with respect to clauses (B) and (C), such activities do not interfere substantially with the performance of Executive's responsibilities to Parent or Employer under this Agreement.

(b) Salary, Bonus and Benefits. During the Employment Period, Employer will continue to pay Executive a base salary at a rate of $476,280 per annum (the "Annual Base Salary"). The Annual Base Salary shall be reviewed annually by the Board. For each fiscal year of Employer ending during the Employment Period, including fiscal year 2023, Executive shall continue to be eligible for an annual bonus with a target amount equal to 70% of the Annual Base Salary (such amount, the "Annual Bonus"), as determined by the Board based upon the performance of Executive and the achievement by Parent, Employer and the other Subsidiaries of Parent of financial, operating and other objectives set by the Board. Each Annual Bonus, if any, shall be paid as soon as administratively feasible after the Board (or a committee thereof) certifies whether the applicable performance targets for the applicable year have been achieved but in no event later than March 15 following the end of such year. Notwithstanding

anything in this Section 1(b) to the contrary, no Annual Bonus, if any, or any portion thereof, shall be payable for any year unless Executive remains continuously employed by Employer from the Effective Date through the last day of such year. In addition, during the Employment Period, Executive will be entitled to such other benefits as are approved by the Board and made generally available to other similarly situated members of senior management of Parent and Employer.

(c) Separation. The Employment Period will continue until (x) the termination of Executive's employment due to Executive's resignation, death or Disability or (y) the Board terminates Executive's employment with or without Cause. Executive shall have the right to terminate Executive's employment with Employer with or without Good Reason and for any other reason, or no reason at all, upon thirty (30) days' advance written notice to Employer; provided, however, that if Executive has provided notice to Employer of Executive's termination of employment, Employer may determine, in its sole discretion, that such termination shall be effective on any date prior to the effective date of termination provided in such notice (and, if such earlier date is so required, then it shall not change the basis for Executive's termination of employment nor be construed or interpreted as a termination of employment by the Board without Cause) and any requirement to continue salary or benefits shall cease as of such earlier date. Upon Executive's Separation, Employer or Parent shall pay to Executive within 30 days following the date of Separation (or such earlier date as may be required by applicable law), the following: (A) any accrued but unpaid Annual Base Salary through the date of the Separation, (B) reimbursement for any unreimbursed business expenses incurred through the date of the Separation, and (C) any amount or benefit as may be due or payable in accordance with the terms of any Parent or Employer benefit plan or program (collectively, the "Accrued Amounts").

(i) Payment Upon Separation. If Executive's employment is terminated by resignation of Executive with Good Reason or by the Board without Cause, then, in addition to the Accrued Amounts, Executive will be entitled to receive, subject to Section 1(c)(iii) and Section 1(d):

(A) any earned but unpaid Annual Bonus pursuant to Section 1(b) for the fiscal year prior to the fiscal year in which the Separation occurs;

(B) an amount equal to the target Annual Bonus prorated for the number of days worked by Executive for Parent in the calendar year of the Separation;

(C) continued payment of Executive's Annual Base Salary for a period of 12 months following the date of the Separation (the "Non-CIC Severance Period"), payable in substantially equal installments in accordance with Employer's regular payroll practices; and

(D) if Executive is eligible to and timely elects continuation coverage under the Consolidated Omnibus Budget Reconciliation Act of 1985, as amended ("COBRA"), then Employer shall pay Executive's COBRA premiums during the Non-CIC Severance Period; provided, that such payments shall not be made in the event an excise tax under Section 4980D of the Code would be imposed on Employer as a result.

(ii) Payment Upon Separation following a Change in Control. If, during the period commencing upon a Change in Control and ending on the second anniversary of such Change in Control, Executive's employment is terminated by Executive for Good Reason or by Parent or Employer (or their respective successors) without Cause, then, in addition to the Accrued Amounts, and in lieu of the payments and benefits set forth in Section 1(c)(i) above, Executive will be entitled to receive:

(A) any earned but unpaid Annual Bonus pursuant to Section 1(b) for the fiscal year prior to the fiscal year in which the Separation occurs;

(B) an amount equal to the target Annual Bonus prorated for the number of days worked by Executive for Parent in the calendar year of the Separation;

(C) continued payment of Executive's Annual Base Salary for a period of 24 months following the date of Separation (the "CIC Severance Period"), payable in substantially equal installments in accordance with Employer's regular payroll practices;

(D) an amount equal to two times the greatest of (i) Executive's target Annual Bonus for the fiscal year in which the Separation occurs; (ii) the calculation of an Annual Bonus based on (a) Executive's Annual Base Salary and Annual Bonus target in place at the time of the Change in Control and (b) the average of the Company performance achievement percentage applied to calculate annual bonuses under the Parent's annual bonus program with respect to the two fiscal years prior to the fiscal year in which the Separation occurs; and (iii) the annualized amount accrued by Parent in its financial statements as of the date of Separation with respect to Executive's Annual Bonus for the fiscal year in which the Separation occurs, in each case payable in substantially equal installments during the CIC Severance Period in accordance with the Company's regular payroll practices; and

(E) if Executive is eligible to and timely elects continuation coverage under COBRA, then Employer shall pay Executive's COBRA premiums for a period of 18 months following the date of Separation; provided, that such payments shall not be made in the event an excise tax under Section 4980D of the Code would be imposed on Employer as a result.

(iii) Release Agreement. Notwithstanding anything herein to the contrary, (A) Executive shall not be entitled to receive any payments or other benefits pursuant to this Section 1(c) (other than the Accrued Amounts, the " Severance Benefits") unless Executive has timely executed and delivered to Employer a general release and separation agreement in a form prepared by Employer (a "Release Agreement") and such Release Agreement shall become in full force and effect and not been timely revoked as may be permitted by its terms, which Release Agreement shall be delivered by Executive on or before the Release Expiration Date (as defined below) and (B) Executive shall be entitled to receive the Severance Benefits only so long as Executive has not breached any of the provisions of such Release Agreement, this Agreement (including, without limitation, Section 2 or Section 3 herein) or the Invention Assignment Agreement (as defined below). The first payment of the Severance Benefits will include all amounts that otherwise would have been due prior thereto under the terms of this Agreement had such payments commenced immediately upon the effective date of Executive's termination of employment. For purposes of this Agreement, "Release Expiration Date" shall mean the date that is 30 days following the date of Executive's termination of employment, or, in the event that Executive's termination of employment is "in connection with an exit incentive or other employment termination program" (as such phrase is defined in the Age Discrimination in Employment Act of 1967), the date that is 60 days following the date of Executive's termination of employment.

(d) Code Section 409A.

(i) The intent of the parties is that payments and benefits under this Agreement comply with or otherwise be exempt from Internal Revenue Code Section 409A and the regulations and guidance promulgated thereunder (collectively "Code Section 409A") and, accordingly, to the maximum extent permitted, this Agreement shall be interpreted to be either exempt from or in compliance therewith. In no event whatsoever shall Parent or Employer be liable for any additional tax, interest or penalty that may be imposed on the Executive by Code Section 409A or damages for failing to comply with Code Section 409A.

(ii) Notwithstanding any other payment schedule provided herein to the contrary, if the Executive is deemed on the date of termination to be a "specified employee" within the meaning of that term under Code Section 409A(a)(2)(B), then any payment under this Section 1 that is considered deferred compensation under Code Section 409A payable on account of a "separation from service" shall not be made until the date which is the earlier of (i) the

expiration of the six (6)-month period measured from the date of such "separation from service" of Executive, and (ii) the date of Executive's death (the "Delay Period") to the extent required under Code Section 409A. Upon the expiration of the Delay Period, all payments delayed pursuant to this Section 1(d)(ii) shall be paid to the Executive in a lump sum, and all remaining payments due under this Agreement shall be paid or provided in accordance with the normal payment dates specified for them herein.

(iii) A termination of employment shall not be deemed to have occurred for purposes of any provision of this Agreement providing for the payment of any amounts or benefits upon or following a termination of employment unless such termination is also a "separation from service" from Parent and Employer within the meaning of Code Section 409A and, for purposes of any such provision of this Agreement, references to a "termination," "termination of employment" or like terms shall mean "separation from service."

(iv) Notwithstanding anything to the contrary in this Agreement, to the extent that any payments of "nonqualified deferred compensation" (within the meaning of Code Section 409A) due under this Agreement as a result of Executive's termination of employment are subject to Executive's execution and delivery of a Release Agreement, in any case where the date of termination of employment and the Release Expiration Date fall in two separate taxable years, any payments required to be made to Executive that are conditioned on the Release Agreement and are treated as "nonqualified deferred compensation" (within the meaning of Code Section 409A) shall be made in the later taxable year, and any such amounts that are delayed pursuant to this Section 1(d)(iv) shall be paid in a lump sum on the first payroll period to occur in the subsequent taxable year.

(v) To the extent, if any, that the aggregate amount of the installments of the severance payment that would otherwise be paid pursuant to Section 1(c) after March 15 of the calendar year following the calendar year in which the Separation occurs (the " Applicable March 15") exceeds the maximum exemption amount under Treasury Regulation Section 1.409A-1(b)(9)(iii)(A), then such excess shall be paid to Executive in a lump sum on the Applicable March 15 (or the first business day preceding the Applicable March 15 if the Applicable March 15 is not a business day) and the installments of the severance payment payable after the Applicable March 15 shall be reduced by such excess (beginning with the installment first payable after the Applicable March 15 and continuing with the next succeeding installment until the aggregate reduction equals such excess). For purposes of Code Section 409A, the Executive's right to receive any installment payment pursuant to this Agreement shall be treated as a right to receive a series of separate and distinct payments.

(vi) Notwithstanding any other provision to the contrary, in no event shall any payment under this Agreement that constitutes "deferred compensation" for purposes of Code Section 409A be subject to offset by any other amount unless otherwise permitted by Code Section 409A.

(e) Certain Excise Taxes. Notwithstanding anything to the contrary in this Agreement, if Executive is a "disqualified individual" (as defined in Section 280G(c) of the Code), and the separation payments and benefits provided for in this Agreement, together with any other payments and benefits which such Executive has the right to receive from Parent or any of its Affiliates, would constitute a "parachute payment" (as defined in Section 280G(b)(2) of the Code), then the payments provided for in this Agreement shall be either (a) reduced (but not below zero) so that the present value of such total amounts and benefits received by Executive from the Parent and its Affiliates will be one dollar less than three times Executive's "base amount" (as defined in Section 280G(b)(3) of the Code) and so that no portion of such amounts and benefits received by Executive shall be subject to the excise tax imposed by Section 4999 of the Code or (b) paid in full, whichever produces the better net after-tax position to Executive (taking into account any applicable excise tax under Section 4999 of the Code and any other applicable taxes). The determination as to whether any such reduction in the amount of the payments provided hereunder is necessary shall be made by Parent in good faith. If a reduced payment is made and through error or otherwise that payment, when aggregated with other payments and benefits from Parent (or its Affiliates) used in determining if a "parachute payment" exists, exceeds one dollar less

than three times Executive's base amount, then Executive shall immediately repay such excess to Parent (or its Affiliates) upon notification that an overpayment has been made. Nothing in this Section 1(e) shall require Parent or Employer to be responsible for, or have any liability or obligation with respect to, Executive's excise tax liabilities under Section 4999 of the Code.

2. Confidential Information.

(a) Obligation to Maintain Confidentiality. Executive acknowledges that the information, observations and data (including trade secrets) obtained by Executive during the course of Executive's employment with Employer prior to and after the Prior Effective Date concerning the business or affairs of Parent, Employer and their respective Subsidiaries and Affiliates ("Confidential Information") are the property of Parent, Employer or such Subsidiaries and Affiliates, including information concerning acquisition opportunities in or reasonably related to Parent's and Employer's business or industry of which Executive becomes aware during the Employment Period. Therefore, Executive agrees that Executive will not disclose to any unauthorized Person or use for Executive's own account any Confidential Information without the Board's written consent, unless and to the extent that the Confidential Information, (i) becomes generally known to and available for use by the public other than as a result of Executive's acts or omissions to act or (ii) is required to be disclosed pursuant to any applicable law or court order. Executive shall deliver to Employer at a Separation, or at any other time Employer may request, all memoranda, notes, plans, records, reports, computer tapes, printouts and software and other documents and data (and copies thereof) relating to the Confidential Information, Work Product (as defined below) or the business of Parent, Employer and their respective Subsidiaries and Affiliates (including all acquisition prospects, lists and contact information) which Executive may then possess or have under Executive's control.

(b) Protection of Trade Secrets. Executive acknowledges and agrees with Employer that Executive's services to Employer and to Parent and their respective Subsidiaries and Affiliates require the use of Confidential Information and trade secret information (including any formula, pattern, compilation, program, device, method, technique or process) that Employer, Parent or their respective Subsidiaries and Affiliates have made reasonable efforts to keep confidential and that derives independent economic value, actual or potential, from not being generally known to the public or to other persons who can obtain economic value from its disclosure or use ("Trade Secrets"). Executive further acknowledges and agrees that Employer, Parent and such Subsidiaries and Affiliates would be irreparably harmed if Executive were to provide similar services requiring the use of such Trade Secrets.

(c) Ownership of Property. Executive acknowledges that all discoveries, concepts, ideas, inventions, innovations, improvements, developments, methods, processes, programs, designs, analyses, drawings, reports, patent applications, copyrightable work and mask work (whether or not including any confidential information) and all registrations or applications related thereto, all other proprietary information and all similar or related information (whether or not patentable) that relate to Parent, Employer or any of their respective Subsidiaries or Affiliates engaging in Parent Business or an anticipated business in which Parent, Employer or any of their respective Subsidiaries or Affiliates have a bona fide interest or expectancy relating to the acquisition of a business by Parent, Employer or any of their respective Subsidiaries, research and development, or existing or future products or services and that are conceived, developed, contributed to, made, or reduced to practice by Executive (either solely or jointly with others) while employed by Parent, Employer or any of their respective Subsidiaries or Affiliates (including any of the foregoing that constitutes any proprietary information or records) ("Work Product") belong to Parent, Employer or such Subsidiary or Affiliate, and Executive hereby assigns, and agrees to assign, all of the above Work Product to Parent, Employer or to such Subsidiary or Affiliate. Any copyrightable work prepared in whole or in part by Executive in the course of Executive's work for any of the foregoing entities shall be deemed a "work made for hire" under the copyright laws, and Parent, Employer or such Subsidiary or Affiliate shall own all rights therein. To the extent that any such copyrightable work is not a "work made for hire," Executive hereby assigns and agrees to assign to Parent, Employer or such Subsidiary or Affiliate all right, title, and interest, including without limitation, copyright in and to such copyrightable work. Executive shall promptly disclose such Work Product and copyrightable work to the Board and perform all actions reasonably requested by the Board (whether during or after the Employment Period), to establish and confirm Parent's, Employer's or such Subsidiary's or Affiliate's ownership (including assignments, consents, powers of attorney, and other

instruments); provided, that Parent shall reimburse Executive for Executive's reasonable and documented out-of-pocket expenses in connection therewith.

(d) Third Party Information. Executive understands that Parent, Employer and their respective Subsidiaries and Affiliates will receive from third parties confidential or proprietary information ("Third Party Information") subject to a duty on Parent's, Employer's and their respective Subsidiaries and Affiliates' part to maintain the confidentiality of such information and to use it only for certain limited purposes. During the Employment Period and thereafter, and without in any way limiting the provisions of Section 2(a), Executive will hold Third Party Information in the strictest confidence and will not disclose to anyone (other than personnel and consultants of Parent, Employer or their respective Subsidiaries and Affiliates who need to know such information in connection with their work for Parent, Employer or their respective Subsidiaries and Affiliates) or use, except in connection with Executive's work for Parent, Employer or their respective Subsidiaries and Affiliates, Third Party Information unless expressly authorized by a member of the Board (other than Executive) in writing.

(e) Use of Information of Prior Employers. During the Employment Period, Executive will not improperly use or disclose any confidential information or trade secrets, if any, of any former employers or any other Person to whom Executive has an obligation of confidentiality, and will not bring onto the premises of Parent, Employer or any of their respective Subsidiaries or Affiliates any unpublished documents or any property belonging to any former employer or any other Person to whom Executive has an obligation of confidentiality unless consented to in writing by the former employer or Person. Executive will use in the performance of Executive's duties only information which is (i) generally known and used by persons with training and experience comparable to Executive's and which is (x) common knowledge in the industry or (y) is otherwise legally in the public domain, (ii) otherwise provided or developed by Parent, Employer or any of their respective Subsidiaries or Affiliates or (iii) in the case of materials, property or information belonging to any former employer or other Person to whom Executive has an obligation of confidentiality, approved for such use in writing by such former employer or Person. In furtherance of the foregoing, concurrently with the execution of the Prior Agreement, Executive has executed and delivered to Employer a certificate in the form of Exhibit A to the Prior Agreement which, for the avoidance of doubt, remains in full force and effect (the "Certificate") and is incorporated by reference herein.

(f) Continuation of Terms. Notwithstanding anything in this Agreement to the contrary, the parties hereto expressly acknowledge and agree that the terms, conditions, obligations and covenants set forth in this Section 2 are a continuation without interruption, lapse, reprieve, gap or modification of any kind of the terms, conditions, obligations and covenants set forth in Section 8 of the Original Senior Management Agreement.

(g) Whistleblower Protections. Notwithstanding anything to the contrary contained herein, no provision of this Agreement will be interpreted so as to impede Executive (or any other individual) from reporting possible violations of federal law or regulation to any governmental agency or entity, including but not limited to the Department of Justice, the Securities and Exchange Commission, the Congress, and any Inspector General of any United States federal agency, or making other disclosures under the whistleblower provisions of federal law or regulation. Executive does not need the prior authorization of Parent or Employer to make any such reports or disclosures, and Executive will not be required to notify Parent or Employer that such reports or disclosures have been made.

(h) Trade Secrets. An individual will not be held criminally or civilly liable under any federal or state trade secret law for the disclosure of a trade secret that (i) is made (A) in confidence to a federal, state, or local government official, either directly or indirectly, or to an attorney, and (B) solely for the purpose of reporting or investigating a suspected violation of law; or (ii) is made in a complaint or other document filed in a lawsuit or other proceeding, if such filing is made under seal. Nothing in this Agreement is intended to conflict with 18 U.S.C. § 1833(b) or create liability for disclosures of trade secrets that are expressly allowed by 18 U.S.C. § 1833(b). Accordingly, the parties to this Agreement have the right to disclose in confidence trade secrets to federal, state, and local government officials, or to an attorney, for the sole purpose of reporting or investigating a suspected violation of law. The parties also have the right to disclose trade secrets in a document filed in a lawsuit or other proceeding, but only if the filing is made under seal and protected from public disclosure.

3. Noncompetition and Nonsolicitation. Executive acknowledges that in the course of Executive's employment with Employer, Executive will become familiar with Trade Secrets and with other confidential information concerning Parent, Employer and their respective Subsidiaries and that Executive's services will be of special, unique and extraordinary value to Parent, Employer and their respective Subsidiaries. Therefore, Executive agrees that:

(a) Noncompetition. During the Employment Period, Executive shall not engage in any business activity other than for the benefit of the Parent, Employer or any of their respective Subsidiaries.

(b) Nonsolicitation. During the Employment Period, other than in good faith in the best interests of the Parent, Employer or any of their respective Subsidiaries, Executive shall not directly or indirectly through another entity (i) induce or attempt to induce any employee of Parent, Employer or any of their respective Subsidiaries to leave the employ of Parent, Employer or such Subsidiary, or in any way interfere with the relationship between Parent, Employer or any of their respective Subsidiaries and any employee thereof, (ii) hire any employee of Parent, Employer or any of their respective Subsidiaries or, hire any former employee of Parent, Employer or any of their respective Subsidiaries within one year after such person ceased to be an employee of Parent, Employer or any of their respective Subsidiaries or (iii) induce or attempt to induce any customer, supplier, licensee or other business relation of Parent, Employer or any of their respective Subsidiaries to cease doing business with Parent, Employer or such Subsidiary or in any way interfere with the relationship between any such customer, supplier, licensee or business relation and Parent, Employer or any such Subsidiary.

(c) Enforcement. If, at the time of enforcement of Section 2 or this Section 3, a court holds that the restrictions stated herein are unreasonable under circumstances then existing, the parties hereto agree that the maximum duration, scope or geographical area reasonable under such circumstances shall be substituted for the stated period, scope or area and that the court shall be allowed to revise the restrictions contained herein to cover the maximum duration, scope and area permitted by law. Because Executive's services are unique and because Executive has access to confidential information, the parties hereto agree that money damages would be an inadequate remedy for any breach of this Agreement. Therefore, in the event of a breach or threatened breach of this Agreement, any party and/or their respective successors or assigns may, in addition to other rights and remedies existing in their favor, subject to Section 6(g), apply to any court of competent jurisdiction for specific performance and/or injunctive or other relief in order to enforce, or prevent any violations of, the provisions hereof.

(d) Additional Acknowledgments. Executive acknowledges that the provisions of this Section 3 are in consideration of: (i) employment with Employer and (ii) additional good and valuable consideration as set forth in this Agreement. In addition, Executive agrees and acknowledges that the restrictions contained in Section 2 and this Section 3 do not preclude Executive from earning a livelihood, nor do they unreasonably impose limitations on Executive's ability to earn a living. In addition, Executive acknowledges (A) that the business of Parent, Employer and their respective Subsidiaries will be conducted throughout the United States and other jurisdictions where Parent, Employer or any of their respective Subsidiaries conduct business during the Employment Period, (B) notwithstanding the state of organization or principal office of Parent, Employer or any of their respective Subsidiaries, or any of their respective executives or employees (including Executive), it is expected that Parent, Employer and their respective Subsidiaries will have business activities and have valuable business relationships within its industry throughout the United States and other jurisdictions where Parent, Employer or any of their respective Subsidiaries conduct business during the Employment Period, and (C) as part of Executive's responsibilities, Executive will be traveling throughout the United States and other jurisdictions where Parent, Employer or any of their respective Subsidiaries conduct business during the Employment Period in furtherance of Employer's business and its relationships. Executive agrees and acknowledges that the potential harm to Parent, Employer and their respective Subsidiaries of the non-enforcement of any provision of Section 2 or this Section 3 outweighs any potential harm to Executive of its enforcement by injunction or otherwise. The covenants contained in each of Sections 2(a), 2(b), 2(c), 2(d), 2(e), 3(a) and 3(b) may be enforced independently and without any one or more of such sections limiting the provisions of any one or more of the other of such sections. Executive acknowledges that Executive has carefully read this Agreement and consulted with legal counsel of Executive's choosing regarding its contents, has given careful consideration to the restraints

imposed upon Executive by this Agreement and is in full accord as to their necessity for the reasonable and proper protection of confidential and proprietary information of Parent, Employer and their respective Subsidiaries now existing or to be developed in the future. Executive expressly acknowledges and agrees that each and every restraint imposed by this Agreement is reasonable with respect to subject matter, time period and geographical area.

GENERAL PROVISIONS

4. Definitions.

"Affiliate" of any particular Person means any other Person controlling, controlled by, or under common control with such particular Person, where "control" means the possession, directly or indirectly, of the power to direct the management and policies of a Person whether through the ownership of voting securities, by contract, or otherwise.

"Cause" means (a) the commission of a felony, (b) willful conduct tending to bring Parent, Employer or any of their respective Subsidiaries into substantial public disgrace or disrepute, (c) substantial and repeated failure to perform duties of the office held by Executive as reasonably directed by the Board and/or the Chief Executive Officer of Parent, (d) gross negligence or willful misconduct with respect to Parent, Employer or any of their respective Subsidiaries, including any other act or omission involving significant and willful dishonesty or fraud with respect to Parent, Employer or any of their respective Subsidiaries or any of their respective customers or suppliers, or (e) any material breach of Sections 2 or 3 or Section 1(a)(ii) (but only with respect the requirement of such Section 1(a)(ii) that Executive devote Executive's full business time and attention to the business and affairs of Parent, Employer and their Subsidiaries). In each case above the burden of proving such action or omission is a "Cause" event shall be with Employer. In addition, Employer agrees it will permit Executive an opportunity to be heard by the Board before reaching a decision concerning any proposed dismissal for Cause.

"Change in Control" has the meaning set forth in Parent's 2020 Omnibus Incentive Plan, as it may be amended from time to time.

"Code" means the Internal Revenue Code of 1986, as amended.

"Disability" means the disability of Executive caused by any physical or mental injury, illness or incapacity as a result of which Executive is, or is reasonably expected to be, unable to effectively perform the essential functions of Executive's duties for a substantially continuous period of more than 120 days or for any 180 days (whether or not continuous) within a 365 day period, as determined by the Board in good faith.

"Good Reason" means:

(x) solely with respect to Section 1(c)(i) hereof, without Executive's prior consent, (a) any action by Parent or Employer which results in a material reduction in Executive's authority, duties or responsibilities , (b) a material reduction in Executive's Annual Base Salary or target Annual Bonus, or (c) the relocation of Executive's principal office or place of work to a location that would cause an increase by more than thirty-five (35) miles in the one-way commuting distance from Executive's principal personal residence to the principal office or business location at which Executive is then required to perform services; and

(y) solely with respect to Section 1(c)(ii) hereof, without Executive's prior consent, (a) any action by Parent or Employer which results in a material reduction in Executive's title, status, authority, duties or responsibilities as Executive Vice President and Chief Financial Officer of Parent and Employer, (b) a reduction in Executive's Annual Base Salary, target Annual Bonus or the target grant date value of Executive's annual equity award (in relation to the target for such Executive's most recent annual equity award prior to the Change in Control or, if no such award, the target for such award for the Parent executive most similarly situated to Executive), or (c) the relocation of Executive's principal office or place of work to a location that

would cause an increase by more than thirty-five (35) miles in the one-way commuting distance from Executive's principal personal residence at the time of the Change in Control to the principal office or business location at which Executive is then required to perform services.

Notwithstanding anything herein to the contrary, any assertion by Executive of a termination for Good Reason shall not be effective unless all of the following conditions are satisfied: (A) Executive must provide written notice to Employer of the existence of such condition(s) within thirty (30) days after the initial occurrence of such condition(s); (B) the condition(s) specified in such notice must remain uncorrected for thirty (30) days following Employer's receipt of such written notice; and (C) the date of Executive's termination of employment must occur within seventy (70) days after the initial occurrence of the condition(s) specified in such notice. Further and notwithstanding anything herein to the contrary, any Change in Control does not and will not in and of itself constitute a breach by Parent or Employer of their obligations under this Agreement, a diminution in the nature or scope of the powers, duties, status, authority or responsibilities of the Executive or "Good Reason" to terminate Executive's employment under this Agreement.

"Governmental Entity" means the United States of America or any other nation, any state or other political subdivision thereof, or any entity exercising executive, legislative, judicial, regulatory or administrative functions of government or any agency or department or subdivision of any governmental authority, including the United States federal government or any state or local government.

"Original Senior Management Agreement" means that certain Senior Management Agreement by and among Employer, Executive and Maravai Life Sciences Holdings, LLC, a Delaware limited liability company (the "Company"), dated as of May 30, 2017, as amended from time to time.

"Parent Business" means the business(es) of providing those services or selling those products which Parent, Employer or any of their respective Subsidiaries actually provide or sell.

"Person" means an individual, a partnership, a corporation, a limited liability company, an association, a joint stock company, a trust, a joint venture, an unincorporated organization, any other business entity, or a Governmental Entity.

"Separation" means Executive ceasing to be employed by any of Parent, Employer and their respective Subsidiaries for any reason.

"Subsidiary" means, with respect to any Person, any corporation, limited liability company, partnership, association, or business entity of which if (a) a corporation, a majority of the total voting power of shares of stock entitled (without regard to the occurrence of any contingency) to vote in the election of directors, managers, or trustees thereof is at the time owned or controlled, directly or indirectly, by that Person or one or more of the other Subsidiaries of that Person or a combination thereof, or (b) a limited liability company, partnership, association, or other business entity (other than a corporation), a majority of partnership or other similar ownership interest thereof is at the time owned or controlled, directly or indirectly, by that Person or one or more Subsidiaries of that Person or a combination thereof. For purposes hereof, a Person or Persons shall be deemed to have a majority ownership interest in a limited liability company, partnership, association, or other business entity (other than a corporation) if such Person or Persons shall be allocated a majority of limited liability company, partnership, association, or other business entity gains or losses or shall be or control any managing director or general partner of such limited liability company, partnership, association, or other business entity. For purposes hereof, references to a "Subsidiary" of any Person shall be given effect only at such times that such Person has one or more Subsidiaries, and, unless otherwise indicated, the term "Subsidiary" refers to a Subsidiary of Parent.

5. Notices. All notices, demands or other communications to be given or delivered under or by reason of the provisions of this Agreement shall be in writing and shall be deemed to have been given when (a) delivered personally to the recipient, (b) sent to the recipient by reputable express courier service (charges prepaid), (c) mailed to the recipient by certified or registered mail, return receipt requested and postage prepaid, or (d) emailed to the recipient (with hard copy sent to the recipient by reputable overnight courier service (charges prepaid) that same day) if emailed before 5:00 p.m. Chicago,

Illinois time on a business day, and otherwise on the next business day. Such notices, demands and other communications shall be sent to the parties at the addresses indicated below:

If to Parent or Employer:

Maravai LifeSciences Holdings, Inc.
10770 Wateridge Circle Suite 200
San Diego, CA 92121
Attention: Board of Directors

with copies to (which shall not constitute notice):

Kirkland & Ellis LLP
300 North LaSalle Street
Chicago, Illinois 60654
Attention: Sanford E. Perl, P.C.
Michael H. Weed, P.C.
Daniel A. Guerin, P.C.
Email: sperl@kirkland.com
mweed@kirkland.com
daniel.guerin@kirkland.com

If to Executive:

Kevin Herde
****
****
E-mail:**********

or such other address or to the attention of such other Person as the recipient party shall have specified by prior written notice to the sending party.

6. General Provisions.

(a) Severability. Whenever possible, each provision of this Agreement will be interpreted in such manner as to be effective and valid under applicable law, but if any provision of this Agreement is held to be invalid, illegal or unenforceable in any respect under any applicable law or rule in any jurisdiction, such invalidity, illegality or unenforceability will not affect any other provision or any other jurisdiction, but this Agreement will be reformed, construed and enforced in such jurisdiction as if such invalid, illegal or unenforceable provision had never been contained herein.

(b) Entire Agreement. This Agreement, those documents expressly referred to herein (including, without limitation, the Certificate), and Employer's Employee Inventions Assignment and Non-Disclosure Agreement that Executive executed as of the Prior Effective Date (the "Invention Assignment Agreement"), embody the complete agreement and understanding among the parties hereto and supersede and preempt any prior understandings, agreements or representations by or among the parties hereto, written or oral, which may have related to the subject matter hereof in any way, including the Original Senior Management Agreement. In the event of any conflict between the terms of this Agreement and the Invention Assignment Agreement, the terms of the Invention Assignment Agreement shall control.

(c) Descriptive Headings; Interpretation; No Strict Construction. The descriptive headings of this Agreement are inserted for convenience only and do not constitute a substantive part of this Agreement. Whenever required by the context, any pronoun used in this Agreement shall include the corresponding masculine, feminine, or neuter forms, and the singular form of nouns, pronouns, and verbs shall include the plural and vice versa. The use of the word "including" in this Agreement shall be by way of example rather than by limitation. Reference to any agreement, document, or instrument means such agreement, document, or instrument as amended or otherwise modified from time to time in accordance

with the terms thereof, and, if applicable, hereof. The use of the words "or," "either," and "any" shall not be exclusive. The parties hereto have participated jointly in the negotiation and drafting of this Agreement. In the event an ambiguity or question of intent or interpretation arises, this Agreement shall be construed as if drafted jointly by the parties hereto, and no presumption or burden of proof shall arise favoring or disfavoring any party by virtue of the authorship of any of the provisions of this Agreement.

(d) Counterparts. This Agreement may be executed in multiple counterparts with the same effect as if all signing parties had signed the same document. All counterparts shall be construed together and constitute the same instrument.

(e) Successors and Assigns. Except as otherwise provided herein, this Agreement shall bind and inure to the benefit of and be enforceable by Executive, Parent, Employer, and their respective successors and assigns; provided, that the rights and obligations of Executive under this Agreement shall not be assigned or delegated. In the event of Executive's death prior to completion by Parent of all payments due under this Agreement, Parent shall make all such payments to Executive's beneficiary or to Executive's estate as appropriate.

(f) Applicable Law. This Agreement shall be governed by, and construed in accordance with, the laws of the State of California, without giving effect to any choice of law or conflict of law rules or provisions (whether of the State of California or any other jurisdiction) that would cause the application of the laws of any jurisdiction other than the State of California.

(g) Dispute Resolution. Any controversy, dispute or claim arising out of or relating to this Agreement (a " Covered Claim") shall be resolved by binding arbitration to be held in San Diego, California, and shall be administered by JAMS in accordance with the Employment Arbitration Rules & Procedures of JAMS then in effect and subject to JAMS Policy on Employment Arbitration Minimum Standards. Each party shall pay their own costs and expenses (including attorneys' fees and other charges of counsel) incurred in resolving any such Covered Claim; provided, that in the event litigation is required to compel arbitration or to enforce an arbitration award or judgment pursuant to this Agreement, the non-prevailing party in such litigation shall reimburse the costs and expenses (including attorney's fees and other charges of counsel) of the prevailing party. Judgment upon the award rendered by the arbitrator(s) may be entered into any court having jurisdiction thereof. The parties hereto agree that any action to compel arbitration pursuant to this Agreement shall be brought in the appropriate California state court, and in connection with such action to compel, the laws of California shall control.

(h) Executive's Cooperation. During the Employment Period and thereafter, Executive shall cooperate with Parent, Employer and their respective Subsidiaries and Affiliates in any disputes with third parties, internal investigation or administrative, regulatory or judicial proceeding as reasonably requested by Parent (including Executive being available to Parent upon reasonable notice for interviews and factual investigations, appearing at Parent's request to give testimony without requiring service of a subpoena or other legal process, volunteering to Parent all pertinent information and turning over to Parent all relevant documents which are or may come into Executive's possession, all at times and on schedules that are reasonably consistent with Executive's other permitted activities and commitments). In the event Parent requires Executive's cooperation in accordance with this paragraph after the Employment Period, Parent shall reimburse Executive for Executive's reasonable time at a rate of $100 per hour and reasonable travel expenses (including lodging and meals, upon submission of receipts).

(i) Remedies. Each of the parties to this Agreement shall have all rights and remedies set forth in this Agreement and all rights and remedies which such Person has been granted at any time under any other agreement or contract and all of the rights which such Person has under any law. Each of the parties to this Agreement will be entitled to enforce its rights under this Agreement specifically, to recover damages and costs caused by any breach of any provision of this Agreement and to exercise all other rights existing in its favor. The parties hereto agree and acknowledge that money damages may not be an adequate remedy for any breach of the provisions of this Agreement and that any party and/or their respective successors and assigns may, in addition to other rights and remedies existing in their favor, but subject to Section 6(g), apply to any court of competent jurisdiction for specific performance and/or injunctive or other relief in order to enforce, or prevent any violations of, the provisions of this Agreement.

(j) Amendment and Waiver. The provisions of this Agreement may be amended and waived only with the prior written consent of Parent, Employer and Executive. No failure by any party to insist upon the strict performance of any covenant, duty, agreement, or condition of this Agreement or to exercise any right or remedy consequent upon a breach thereof shall constitute a waiver of any such breach or any other covenant, duty, agreement, or condition. The waiver by any party of a breach of any covenant, duty, agreement, or condition of this Agreement of any other party shall not operate or be construed as a waiver of any subsequent breach of that provision or any other provision hereof.

(k) Insurance. Parent or Employer, at its discretion, may apply for and procure in its own name and for its own benefit life and/or disability insurance on Executive in any amount or amounts considered available. Executive agrees to cooperate in any medical or other examination, supply any information, and to execute and deliver any applications or other instruments in writing as may be reasonably necessary to obtain and constitute such insurance.

(l) Business Days. If any time period for giving notice or taking action hereunder expires on a day which is a Saturday, Sunday or holiday in the state in which Parent's chief executive office is located, the time period shall be automatically extended to the business day immediately following such Saturday, Sunday or holiday.

(m) Tax Withholding. Parent, Employer and their respective Subsidiaries shall be entitled to deduct or withhold from any amounts owing from Parent, Employer or any of their respective Subsidiaries to Executive (including withholding shares or other equity securities in the case of issuances of equity by Parent, Employer or any of their respective Subsidiaries) any federal, state, local or foreign withholding taxes, excise taxes, or employment taxes ("Taxes") imposed with respect to Executive's compensation or other payments from Parent, Employer or any of their respective Subsidiaries or Executive's ownership interest in Parent, including wages, bonuses, distributions, the receipt or exercise of equity options and/or the receipt or vesting of restricted equity. In the event any such deductions or withholdings are not made, Executive shall indemnify Parent, Employer and each of their respective Subsidiaries for any amounts paid with respect to any such Taxes, together with any interest, penalties and related expenses thereto; provided, that, Executive shall not be obligated to indemnify Parent pursuant to this Section 6(m) for such interest, penalties or related expenses which are directly caused by the failure of Parent to take necessary action with respect to such deductions and withholdings as it is required by law to take.

(n) Termination. This Agreement (except for the provisions of Sections 1(a) and 1(b)) shall survive a Separation and shall remain in full force and effect after such Separation.

(o) Electronic Delivery. This Agreement, the agreements referred to herein, and each other agreement or instrument entered into in connection herewith or therewith or contemplated hereby or thereby, and any amendments hereto or thereto, to the extent signed and delivered by means of a photographic, portable document format (.pdf), or similar reproduction of such signed writing using an electronic mail shall be treated in all manner and respects as an original agreement or instrument and shall be considered to have the same binding legal effect as if it were the original signed version thereof delivered in person. At the request of any party hereto or to any such agreement or instrument, each other party hereto or thereto shall re-execute original forms thereof and deliver them to all other parties hereto. No party hereto or to any such agreement or instrument shall raise the use of electronic mail to deliver a signature or the fact that any signature or agreement or instrument was transmitted or communicated through the use of electronic mail as a defense to the formation or enforceability of a contract and each such party forever waives any such defense.

(p) No Third-Party Beneficiaries. Except as expressly provided herein (including the last sentence of Section 6(e)), no term or provision of this Agreement is intended to be, or shall be, for the benefit of any Person not a party hereto, and no such other Person shall have any right or cause of action hereunder. Notwithstanding the foregoing, any Subsidiary or Parent or Employer that is not a signatory to this Agreement shall be a third party beneficiary of Executive's obligations under Sections 2, 3, 6(g), 6(h) and 6(o) and shall be entitled to enforce such obligations as if a party hereto.

(q) Directors' and Officers' Insurance. Each of Parent and Employer agree that it shall obtain and maintain in full force and effect during the term of Executive's employment hereunder directors' and officers' insurance policies in amounts and with coverages customary for entities of the size and with the type of business of Parent and Employer, respectively.

(r) Clawback. Notwithstanding any provision of this Agreement to the contrary, Executive acknowledges that the amounts paid or payable under this Agreement shall be subject to (i) the provisions of any applicable clawback policies or procedures adopted by Parent, Employer or any of their Affiliates or Subsidiaries, which clawback policies or procedures may provide for forfeiture and/or recoupment of amounts paid or payable under this Agreement, and (ii) any right or obligation that Employer or Parent may have regarding the clawback of "incentive-based compensation" under Section 10D of the Securities Exchange Act of 1934, as amended, and any applicable rules and regulations promulgated thereunder from time to time by the U.S. Securities and Exchange Commission, the listing standards of any national securities exchange or association on which Parent's securities are listed, or any other applicable law (the "Dodd-Frank Clawback"). Notwithstanding any provision of this Agreement to the contrary, each of Parent, Employer or any of their Affiliates or Subsidiaries reserves the right, without the consent of Executive, to adopt any such clawback policies and procedures, including such policies and procedures applicable to this Agreement with retroactive effect; provided, however, that such clawback policies and procedures shall not apply to compensation paid prior to the Employment Period, except as may be required by the Dodd-Frank Clawback.

* * * * *

IN WITNESS WHEREOF, the parties hereto have executed this Amended and Restated Employment Agreement as of the date first above written.

MARAVAI LIFESCIENCES HOLDINGS, INC.

By: /s/ Carl Hull
Name: Carl Hull
Its: Chief Executive Officer

MARAVAI INTERMEDIATE HOLDINGS, LLC

By: /s/ Carl Hull
Name: Carl Hull
Its: Chief Executive Officer

/s/ Kevin Herde
Kevin Herde

AMENDED AND RESTATED
EMPLOYMENT AGREEMENT

THIS AMENDED AND RESTATED EMPLOYMENT AGREEMENT (this "Agreement") is effective as of May 8, 2023 (the "Effective Date"), by and among Maravai LifeSciences Holdings, Inc., a Delaware corporation ("Parent"), Maravai Intermediate Holdings, LLC, a Delaware limited liability company ("Employer"), and Peter M. Leddy, Ph.D. ("Executive"). Capitalized terms used but not otherwise defined shall have the meanings set forth in Section 4.

WHEREAS, Parent, Employer and Executive previously entered into that certain Employment Agreement (the "Prior Agreement") with an effective date of June 27, 2022 (the "Prior Effective Date").

WHEREAS, the parties to this Agreement desire to amend and restate the Prior Agreement in its entirety to provide for the rights and privileges set forth herein.

NOW, THEREFORE, in consideration of the mutual covenants contained herein and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties to this Agreement hereby agree that the Prior Agreement is hereby amended and restated in its entirety by this Agreement, and hereto further agree as follows:

1. Employment. Employer agrees to continue to employ Executive, and Executive accepts such continued employment, for the period beginning on the Effective Date and ending upon his separation pursuant to Section 1(f) (the "Employment Period").

(a) Position and Duties.

(i) During the Employment Period, Executive shall serve as Executive Vice President and Chief Administrative Officer of Parent and shall have the normal duties, responsibilities and authority implied by such position, which shall include human resources, DEI (diversity, equity and inclusion initiatives), ESG (environmental, social and governance initiatives), facilities, security functions of Parent and its Subsidiaries:, and such other activities as are reasonably directed by the Chief Executive Officer of Parent, subject in each case to the power of the Chief Executive Officer of Parent to expand, limit or otherwise alter such duties, responsibilities, positions and authority and to otherwise override actions of officers.

(ii) Executive shall report to the Chief Executive Officer of Parent, and Executive shall devote his best efforts and his full business time and attention to the business and affairs of Parent, Employer and the other Subsidiaries of Parent; provided, that during the Employment Period, Executive shall be entitled to (A) serve, with the prior written consent of the Chief Executive Officer, on corporate, civic or charitable boards or committees, (B) deliver lectures and fulfill speaking engagements and (C) manage personal investments, so long as, with respect to clauses (B) and (C), such activities do not interfere substantially with the performance of Executive's responsibilities to Parent or Employer under this Agreement.

(b) Salary, Bonus and Benefits. During the Employment Period, Employer will continue to pay Executive a base salary at a rate of $470,250 per annum (the "Annual Base Salary"). The Annual Base Salary shall be reviewed annually by the board of directors of Parent (the "Board") or its Compensation Committee. For each fiscal year of Employer ending during the Employment Period, including fiscal year 2023, Executive shall continue to be eligible for an annual bonus with a target amount equal to 70% of the Annual Base Salary (such amount, the "Annual Bonus"), as determined by the Board based upon the performance of Executive and the achievement by Parent, Employer and the other Subsidiaries of Parent of financial, operating and other objectives set by the Board. Each Annual Bonus, if any, shall be paid as soon as administratively feasible after the Board (or a committee thereof) certifies whether the performance targets for the applicable year have been achieved but in no event later than March 15 following the end of such year. Subject to Section 1(f), no Annual Bonus, if any, or any portion thereof, shall be payable for any year unless Executive remains continuously employed by Employer from the Effective Date through the last day of such year. In addition, during the Employment

Period, Executive will be entitled to such other benefits as are approved by the Board and made generally available to all senior management of Parent and Employer.

(c) Reserved.

(d) Primary Work Location: Executive's primary work location shall initially be in Scottsdale, Arizona, but Executive will be required to travel as required by his duties, including travel to the Company's offices in San Diego, California, and Leland, North Carolina, and the Company shall pay the expenses of such travel as set forth in the Company's Travel and Expense Policy. In the future, at the direction of the Company's Chief Executive Officer, the Company may require Executive to maintain a residence in San Diego, California. Following such requirement and contingent upon Executive's establishment of such residence and timely submission of related documentation to Employer, Employer will provide Executive a reasonable monthly housing allowance for a period of one year, the amount of which shall be determined in good faith by Parent's Chief Executive Officer.

(e) Reserved.

(f) Separation. The Employment Period will continue until (x) the termination of Executive's employment due to Executive's resignation, death or Disability or (y) the Board terminates Executive's employment with or without Cause. Executive shall have the right to terminate Executive's employment with Employer with or without Good Reason and for any other reason, or no reason at all, upon thirty (30) days' advance written notice to Employer; provided, however, that if Executive has provided notice to Employer of Executive's termination of employment, Employer may determine, in its sole discretion, that such termination shall be effective on any date prior to the effective date of termination provided in such notice (and, if such earlier date is so required, then it shall not change the basis for Executive's termination of employment nor be construed or interpreted as a termination of employment by the Board without Cause) and any requirement to continue salary or benefits shall cease as of such earlier date. Upon Executive's Separation, Employer or Parent shall pay to Executive within 30 days following the date of Separation (or such earlier date as may be required by applicable law), the following: (A) any accrued but unpaid Annual Base Salary through the date of the Separation, (B) reimbursement for any unreimbursed business expenses incurred through the date of the Separation, and (C) any amount or benefit as may be due or payable in accordance with the terms of any Parent or Employer benefit plan or program (collectively, the "Accrued Amounts").

(i) Payment Upon Separation. If Executive's employment is terminated by resignation of Executive with Good Reason or by the Board without Cause, then, in addition to the Accrued Amounts, Executive will be entitled to receive, subject to Section 1(f)(iii) and Section 1(g):

(A) any earned but unpaid Annual Bonus pursuant to Section 1(b) for the fiscal year prior to the fiscal year in which the Separation occurs;

(B) an amount equal to the target Annual Bonus prorated for the number of days worked by Executive for Parent in the calendar year of the Separation;

(C) continued payment of Executive's Annual Base Salary for a period of 12 months following the date of the Separation (the "Non-CIC Severance Period"), payable in substantially equal installments in accordance with Employer's regular payroll practices; and

(D) if Executive is eligible to and timely elects continuation coverage under the Consolidated Omnibus Budget Reconciliation Act of 1985, as amended ("COBRA"), then Employer shall pay Executive's COBRA premiums during the Non-CIC Severance Period; provided, that such payments shall not be made in the event an excise tax under Section 4980D of the Code would be imposed on Employer as a result.

(ii) Payment Upon Separation following a Change in Control. If, during the period commencing upon a Change in Control and ending on the second anniversary of such

Change in Control, Executive's employment is terminated by Executive for Good Reason or by Parent or Employer (or their respective successors) without Cause, then, in addition to the Accrued Amounts, and in lieu of the payments and benefits set forth in Section 1(f)(i) above, Executive will be entitled to receive:

(A) any earned but unpaid Annual Bonus pursuant to Section 1(b) for the fiscal year prior to the fiscal year in which the Separation occurs;

(B) an amount equal to the target Annual Bonus prorated for the number of days worked by Executive for Parent in the calendar year of the Separation;

(C) continued payment of Executive's Annual Base Salary for a period of 24 months following the date of Separation (the "CIC Severance Period"), payable in substantially equal installments in accordance with Employer's regular payroll practices;

(D) an amount equal to two times the greatest of (i) Executive's target Annual Bonus for the fiscal year in which the Separation occurs; (ii) the calculation of an Annual Bonus based on (a) Executive's Annual Base Salary and Annual Bonus target in place at the time of the Change in Control and (b) the average of the Company performance achievement percentage applied to calculate annual bonuses under the Parent's annual bonus program with respect to the two fiscal years prior to the fiscal year in which the Separation occurs; and (iii) the annualized amount accrued by Parent in its financial statements as of the date of Separation with respect to Executive's Annual Bonus for the fiscal year in which the Separation occurs, in each case payable in substantially equal installments during the CIC Severance Period in accordance with the Company's regular payroll practices; and

(E) if Executive is eligible to and timely elects continuation coverage under COBRA, then Employer shall pay Executive's COBRA premiums for a period of 18 months following the date of Separation; provided, that such payments shall not be made in the event an excise tax under Section 4980D of the Code would be imposed on Employer as a result.

(iii) Release Agreement. Notwithstanding anything herein to the contrary, (A) Executive shall not be entitled to receive any payments or other benefits pursuant to this Section 1(f) (other than the Accrued Amounts, the " Severance Benefits") unless Executive has timely executed and delivered to Employer a general release and separation agreement in a form prepared by Employer (a "Release Agreement") and such Release Agreement shall become in full force and effect and not been timely revoked as may be permitted by its terms, which Release Agreement shall be delivered by Executive on or before the Release Expiration Date (as defined below) and (B) Executive shall be entitled to receive the Severance Benefits only so long as Executive has not breached any of the provisions of such Release Agreement, this Agreement (including, without limitation, Section 2 or Section 3 herein) or the Invention Assignment Agreement (as defined below). The first payment of the Severance Benefits will include all amounts that otherwise would have been due prior thereto under the terms of this Agreement had such payments commenced immediately upon the effective date of Executive's termination of employment. For purposes of this Agreement, " Release Expiration Date" shall mean the date that is 30 days following the date of Executive's termination of employment, or, in the event that Executive's termination of employment is "in connection with an exit incentive or other employment termination program" (as such phrase is defined in the Age Discrimination in Employment Act of 1967), the date that is 60 days following the date of Executive's termination of employment.

(g) Code Section 409A.

(i) The intent of the parties is that payments and benefits under this Agreement comply with or otherwise be exempt from Internal Revenue Code Section 409A and

the regulations and guidance promulgated thereunder (collectively "Code Section 409A") and, accordingly, to the maximum extent permitted, this Agreement shall be interpreted to be either exempt from or in compliance therewith. In no event whatsoever shall Parent or Employer be liable for any additional tax, interest or penalty that may be imposed on the Executive by Code Section 409A or damages for failing to comply with Code Section 409A.

(ii) Notwithstanding any other payment schedule provided herein to the contrary, if the Executive is deemed on the date of termination to be a "specified employee" within the meaning of that term under Code Section 409A(a)(2)(B), then any payment under this Section 1 that is considered deferred compensation under Code Section 409A payable on account of a "separation from service" shall not be made until the date which is the earlier of (i) the expiration of the six (6)-month period measured from the date of such "separation from service" of Executive, and (ii) the date of Executive's death (the "Delay Period") to the extent required under Code Section 409A. Upon the expiration of the Delay Period, all payments delayed pursuant to this Section 1(g) (ii) shall be paid to the Executive in a lump sum, and all remaining payments due under this Agreement shall be paid or provided in accordance with the normal payment dates specified for them herein.

(iii) A termination of employment shall not be deemed to have occurred for purposes of any provision of this Agreement providing for the payment of any amounts or benefits upon or following a termination of employment unless such termination is also a "separation from service" from Parent and Employer within the meaning of Code Section 409A and, for purposes of any such provision of this Agreement, references to a "termination," "termination of employment" or like terms shall mean "separation from service."

(iv) Notwithstanding anything to the contrary in this Agreement, to the extent that any payments of "nonqualified deferred compensation" (within the meaning of Code Section 409A) due under this Agreement as a result of Executive's termination of employment are subject to Executive's execution and delivery of a Release Agreement, in any case where the date of termination of employment and the Release Expiration Date fall in two separate taxable years, any payments required to be made to Executive that are conditioned on the Release Agreement and are treated as "nonqualified deferred compensation" (within the meaning of Code Section 409A) shall be made in the later taxable year, and any such amounts that are delayed pursuant to this Section 1(g)(iv) shall be paid in a lump sum on the first payroll period to occur in the subsequent taxable year.

(v) To the extent, if any, that the aggregate amount of the installments of the severance payment that would otherwise be paid pursuant to Section 1(f) after March 15 of the calendar year following the calendar year in which the Separation occurs (the "Applicable March 15") exceeds the maximum exemption amount under Treasury Regulation Section 1.409A-1(b)(9)(iii)(A), then such excess shall be paid to Executive in a lump sum on the Applicable March 15 (or the first business day preceding the Applicable March 15 if the Applicable March 15 is not a business day) and the installments of the severance payment payable after the Applicable March 15 shall be reduced by such excess (beginning with the installment first payable after the Applicable March 15 and continuing with the next succeeding installment until the aggregate reduction equals such excess). For purposes of Code Section 409A, the Executive's right to receive any installment payment pursuant to this Agreement shall be treated as a right to receive a series of separate and distinct payments.

(vi) Notwithstanding any other provision to the contrary, in no event shall any payment under this Agreement that constitutes "deferred compensation" for purposes of Code Section 409A be subject to offset by any other amount unless otherwise permitted by Code Section 409A.

(h) Certain Excise Taxes. If Executive is a "disqualified individual" (as defined in Section 280G(c) of the Code), and the separation payments and benefits provided for in this Agreement, together with any other payments and benefits which such Executive has the right to receive from Parent or any of its Affiliates, would constitute a "parachute payment" (as defined in Section 280G(b)(2) of the

Code), then the payments provided for in this Agreement shall be either (a) reduced (but not below zero) so that the present value of such total amounts and benefits received by Executive from the Parent and its Affiliates will be one dollar less than three times Executive's "base amount" (as defined in Section 280G(b)(3) of the Code) and so that no portion of such amounts and benefits received by Executive shall be subject to the excise tax imposed by Section 4999 of the Code or (b) paid in full, whichever produces the better net after-tax position to Executive (taking into account any applicable excise tax under Section 4999 of the Code and any other applicable taxes). The determination as to whether any such reduction in the amount of the payments provided hereunder is necessary shall be made by Parent in good faith. If a reduced payment is made and through error or otherwise that payment, when aggregated with other payments and benefits from Parent (or its Affiliates) used in determining if a "parachute payment" exists, exceeds one dollar less than three times Executive's base amount, then Executive shall immediately repay such excess to Parent (or its Affiliates) upon notification that an overpayment has been made. Nothing in this Section 1(e) shall require Parent or Employer to be responsible for, or have any liability or obligation with respect to, Executive's excise tax liabilities under Section 4999 of the Code.

2. Confidential Information

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(a) Obligation to Maintain Confidentiality. Executive acknowledges that the information, observations and data (including trade secrets) obtained by him during the course of his employment with Employer prior to and after the Prior Effective Date concerning the business or affairs of Parent, Employer and their respective Subsidiaries and Affiliates ("Confidential Information") are the property of Parent, Employer or such Subsidiaries and Affiliates, including information concerning acquisition opportunities in or reasonably related to Parent's and Employer's business or industry of which Executive becomes aware during the Employment Period. Therefore, Executive agrees that he will not disclose to any unauthorized Person or use for his own account any Confidential Information without the Board's written consent, unless and to the extent that the Confidential Information, (i) becomes generally known to and available for use by the public other than as a result of Executive's acts or omissions to act or (ii) is required to be disclosed pursuant to any applicable law or court order. Executive shall deliver to Employer at a Separation, or at any other time Employer may request, all memoranda, notes, plans, records, reports, computer tapes, printouts and software and other documents and data (and copies thereof) relating to the Confidential Information, Work Product (as defined below) or the business of Parent, Employer and their respective Subsidiaries and Affiliates (including all acquisition prospects, lists and contact information) which he may then possess or have under his control.

(b) Protection of Trade Secrets. Executive acknowledges and agrees with Employer that Executive's services to Employer and to Parent and their respective Subsidiaries and Affiliates require the use of Confidential Information and trade secret information (including any formula, pattern, compilation, program, device, method, technique or process) that Employer, Parent or their respective Subsidiaries and Affiliates have made reasonable efforts to keep confidential and that derives independent economic value, actual or potential, from not being generally known to the public or to other persons who can obtain economic value from its disclosure or use ("Trade Secrets"). Executive further acknowledges and agrees that Employer, Parent and such Subsidiaries and Affiliates would be irreparably harmed if Executive were to provide similar services requiring the use of such Trade Secrets.

(c) Ownership of Property. Executive acknowledges that all discoveries, concepts, ideas, inventions, innovations, improvements, developments, methods, processes, programs, designs, analyses, drawings, reports, patent applications, copyrightable work and mask work (whether or not including any confidential information) and all registrations or applications related thereto, all other proprietary information and all similar or related information (whether or not patentable) that relate to Parent, Employer or any of their respective Subsidiaries or Affiliates engaging in Parent Business or an anticipated business in which Parent, Employer or any of their respective Subsidiaries or Affiliates have a bona fide interest or expectancy relating to the acquisition of a business by Parent, Employer or any of their respective Subsidiaries, research and development, or existing or future products or services and that are conceived, developed, contributed to, made, or reduced to practice by Executive (either solely or jointly with others) while employed by Parent, Employer or any of their respective Subsidiaries or Affiliates (including any of the foregoing that constitutes any proprietary information or records) ("Work

Product") belong to Parent, Employer or such Subsidiary or Affiliate, and Executive hereby assigns, and agrees to assign, all of the above Work Product to Parent, Employer or to such Subsidiary or Affiliate. Any copyrightable work prepared in whole or in part by Executive in the course of his work for any of the foregoing entities shall be deemed a "work made for hire" under the copyright laws, and Parent, Employer or such Subsidiary or Affiliate shall own all rights therein. To the extent that any such copyrightable work is not a "work made for hire," Executive hereby assigns and agrees to assign to Parent, Employer or such Subsidiary or Affiliate all right, title, and interest, including without limitation, copyright in and to such copyrightable work. Executive shall promptly disclose such Work Product and copyrightable work to the Board and perform all actions reasonably requested by the Board (whether during or after the Employment Period), to establish and confirm Parent's, Employer's or such Subsidiary's or Affiliate's ownership (including assignments, consents, powers of attorney, and other instruments); provided, that Parent shall reimburse Executive for his reasonable and documented out-of-pocket expenses in connection therewith.

(d) Third Party Information. Executive understands that Parent, Employer and their respective Subsidiaries and Affiliates will receive from third parties confidential or proprietary information ("Third Party Information") subject to a duty on Parent's, Employer's and their respective Subsidiaries and Affiliates' part to maintain the confidentiality of such information and to use it only for certain limited purposes. During the Employment Period and thereafter, and without in any way limiting the provisions of Section 2(a), Executive will hold Third Party Information in the strictest confidence and will not disclose to anyone (other than personnel and consultants of Parent, Employer or their respective Subsidiaries and Affiliates who need to know such information in connection with their work for Parent, Employer or their respective Subsidiaries and Affiliates) or use, except in connection with his work for Parent, Employer or their respective Subsidiaries and Affiliates, Third Party Information unless expressly authorized by a member of the Board (other than Executive) in writing.

(e) Use of Information of Prior Employers. During the Employment Period, Executive will not improperly use or disclose any confidential information or trade secrets, if any, of any former employers or any other Person to whom Executive has an obligation of confidentiality, and will not bring onto the premises of Parent, Employer or any of their respective Subsidiaries or Affiliates any unpublished documents or any property belonging to any former employer or any other Person to whom Executive has an obligation of confidentiality unless consented to in writing by the former employer or Person. Executive will use in the performance of his duties only information which is (i) generally known and used by persons with training and experience comparable to Executive's and which is (x) common knowledge in the industry or (y) is otherwise legally in the public domain, (ii) otherwise provided or developed by Parent, Employer or any of their respective Subsidiaries or Affiliates or (iii) in the case of materials, property or information belonging to any former employer or other Person to whom Executive has an obligation of confidentiality, approved for such use in writing by such former employer or Person. In furtherance of the foregoing, concurrently with the execution of the Prior Agreement, Executive has executed and delivered to Employer a certificate in the form of Exhibit A to the Prior Agreement which, for the avoidance of doubt, remains in full force and effect (the "Certificate") and is incorporated by reference herein.

(f) Whistleblower Protections. No provision of this Agreement will be interpreted so as to impede Executive (or any other individual) from reporting possible violations of federal law or regulation to any governmental agency or entity, including but not limited to the Department of Justice, the Securities and Exchange Commission, the Congress, and any Inspector General of any United States federal agency, or making other disclosures under the whistleblower provisions of federal law or regulation. Executive does not need the prior authorization of Parent or Employer to make any such reports or disclosures, and Executive will not be required to notify Parent or Employer that such reports or disclosures have been made.

(g) Trade Secrets. An individual will not be held criminally or civilly liable under any federal or state trade secret law for the disclosure of a trade secret that (i) is made (A) in confidence to a federal, state, or local government official, either directly or indirectly, or to an attorney, and (B) solely for the purpose of reporting or investigating a suspected violation of law; or (ii) is made in a complaint or other document filed in a lawsuit or other proceeding, if such filing is made under seal. Nothing in this Agreement is intended to conflict with 18 U.S.C. § 1833(b) or create liability for disclosures of trade

secrets that are expressly allowed by 18 U.S.C. § 1833(b). Accordingly, the parties to this Agreement have the right to disclose in confidence trade secrets to federal, state, and local government officials, or to an attorney, for the sole purpose of reporting or investigating a suspected violation of law. The parties also have the right to disclose trade secrets in a document filed in a lawsuit or other proceeding, but only if the filing is made under seal and protected from public disclosure.

3. Noncompetition and Nonsolicitation. Executive acknowledges that in the course of his employment with Employer he will become familiar with Trade Secrets and with other confidential information concerning Parent, Employer and their respective Subsidiaries and that his services will be of special, unique and extraordinary value to Parent, Employer and their respective Subsidiaries. Therefore, Executive agrees that:

(a) Noncompetition. During the Employment Period, Executive shall not engage in any business activity other than for the benefit of the Parent, Employer or any of their respective Subsidiaries.

(b) Nonsolicitation. During the Employment Period and for one year thereafter, other than in good faith in the best interests of the Parent, Employer or any of their respective Subsidiaries, Executive shall not directly or indirectly through another entity (i) induce or attempt to induce any employee of Parent, Employer or any of their respective Subsidiaries to leave the employ of Parent, Employer or such Subsidiary, or in any way interfere with the relationship between Parent, Employer or any of their respective Subsidiaries and any employee thereof or (ii) hire any employee of Parent, Employer or any of their respective Subsidiaries or, hire any former employee of Parent, Employer or any of their respective Subsidiaries within one year after such person ceased to be an employee of Parent, Employer or any of their respective Subsidiaries.

(c) Enforcement. If, at the time of enforcement of Section 2 or this Section 3, a court holds that the restrictions stated are unreasonable under circumstances then existing, the parties agree that the maximum duration, scope or geographical area reasonable under such circumstances shall be substituted for the stated period, scope or area and that the court shall be allowed to revise the restrictions contained to cover the maximum duration, scope and area permitted by law. Because Executive's services are unique and because Executive has access to confidential information, the parties agree that money damages would be an inadequate remedy for any breach of this Agreement. Therefore, in the event of a breach or threatened breach of this Agreement, any party and/or their respective successors or assigns may, in addition to other rights and remedies existing in their favor, subject to Section 6(g), apply to any court of competent jurisdiction for specific performance and/or injunctive or other relief in order to enforce, or prevent any violations of, the provisions hereof.

(d) Additional Acknowledgments. Executive acknowledges that the provisions of this Section 3 are in consideration of: (i) employment with Employer and (ii) additional good and valuable consideration as set forth in this Agreement. In addition, Executive agrees and acknowledges that the restrictions contained in Section 2 and this Section 3 do not preclude Executive from earning a livelihood, nor do they unreasonably impose limitations on Executive's ability to earn a living. In addition, Executive acknowledges (A) that the business of Parent, Employer and their respective Subsidiaries will be conducted throughout the United States and other jurisdictions where Parent, Employer or any of their respective Subsidiaries conduct business during the Employment Period, (B) notwithstanding the state of organization or principal office of Parent, Employer or any of their respective Subsidiaries, or any of their respective executives or employees (including Executive), it is expected that Parent, Employer and their respective Subsidiaries will have business activities and have valuable business relationships within its industry throughout the United States and other jurisdictions where Parent, Employer or any of their respective Subsidiaries conduct business during the Employment Period, and (C) as part of his responsibilities, Executive will be traveling throughout the United States and other jurisdictions where Parent, Employer or any of their respective Subsidiaries conduct business during the Employment Period in furtherance of Employer's business and its relationships. Executive agrees and acknowledges that the potential harm to Parent, Employer and their respective Subsidiaries of the non-enforcement of any provision of Section 2 or this Section 3 outweighs any potential harm to Executive of its enforcement by injunction or otherwise. The covenants contained in each of Sections 2(a), 2(b), 2(c), 2(d), 2(e), 3(a) and 3(b) may be enforced independently and without any one or more of such sections

limiting the provisions of any one or more of the other of such sections. Executive acknowledges that he has carefully read this Agreement and consulted with legal counsel of his choosing regarding its contents, has given careful consideration to the restraints imposed upon Executive by this Agreement and is in full accord as to their necessity for the reasonable and proper protection of confidential and proprietary information of Parent, Employer and their respective Subsidiaries now existing or to be developed in the future. Executive expressly acknowledges and agrees that each and every restraint imposed by this Agreement is reasonable with respect to subject matter, time period and geographical area.

GENERAL PROVISIONS

4. Definitions.

"Affiliate" of any particular Person means any other Person controlling, controlled by, or under common control with such particular Person, where "control" means the possession, directly or indirectly, of the power to direct the management and policies of a Person whether through the ownership of voting securities, by contract, or otherwise.

"Cause" means (a) the commission of a felony, (b) willful conduct tending to bring Parent, Employer or any of their respective Subsidiaries into substantial public disgrace or disrepute, (c) substantial and repeated failure to perform duties of the office held by Executive as reasonably directed by the Board and/or the Chief Executive Officer of Parent, (d) gross negligence or willful misconduct with respect to Parent, Employer or any of their respective Subsidiaries, including any other act or omission involving significant and willful dishonesty or fraud with respect to Parent, Employer or any of their respective Subsidiaries or any of their respective customers or suppliers, or (e) any material breach of Sections 2 or 3 or Section 1(a)(ii) (but only with respect the requirement of such Section 1(a)(ii) that Executive devote his full business time and attention to the business and affairs of Parent, Employer and their Subsidiaries). In each case above the burden of proving such action or omission is a "Cause" event shall be with Employer. In the event of an alleged breach of section (c), Employer shall give Executive written notice with thirty (30) days to cure. In addition, Employer agrees it will permit Executive an opportunity to be heard by the Board before reaching a decision concerning any proposed dismissal for Cause.

"Change in Control" has the meaning set forth in Parent's 2020 Omnibus Incentive Plan, as it may be amended from time to time.

"Code" means the Internal Revenue Code of 1986, as amended.

"Disability" means the disability of Executive caused by any physical or mental injury, illness or incapacity as a result of which Executive is, or is reasonably expected to be, unable to effectively perform the essential functions of Executive's duties for a substantially continuous period of more than 120 days or for any 180 days (whether or not continuous) within a 365 day period, as determined by the Board in good faith.

"Good Reason" means:

(x) solely with respect to Section 1(f)(i) hereof, without Executive's prior consent, (a) any action by Parent or Employer which results in a material reduction in Executive's authority, duties or responsibilities, (b) a material reduction in Executive's Annual Base Salary or target Annual Bonus, or (c) the relocation of Executive's principal office or place of work to a location that would cause an increase by more than thirty-five (35) miles in the one-way commuting distance from Executive's principal personal residence to the principal office or business location at which Executive is then required to perform services; and

(y) solely with respect to Section 1(f)(ii) hereof, without Executive's prior consent, (a) any action by Parent or Employer which results in a material reduction in Executive's title, status, authority, duties or responsibilities as Chief Administrative Officer of Parent and Employer, (b) a reduction in Executive's Annual Base Salary, target Annual Bonus or the target grant date value of Executive's annual equity award (in relation to the target for such Executive's

most recent annual equity award prior to the Change in Control or, if no such award, the target for such award for the Parent executive most similarly situated to Executive), or (c) the relocation of Executive's principal office or place of work to a location that would cause an increase by more than thirty-five (35) miles in the one-way commuting distance from Executive's principal personal residence at the time of the Change in Control to the principal office or business location at which Executive is then required to perform services

Notwithstanding anything to the contrary, any assertion by Executive of a termination for Good Reason shall not be effective unless all of the following conditions are satisfied: (A) Executive must provide written notice to Employer of the existence of such condition(s) within sixty (60) days after the initial occurrence of such condition(s); (B) the condition(s) specified in such notice must remain uncorrected for thirty (30) days following Employer's receipt of such written notice; and (C) the date of Executive's termination of employment must occur within sixty (60) days after written notice of the condition(s) specified in such notice. Further, any Change in Control does not and will not in and of itself constitute a breach by Parent or Employer of their obligations under this Agreement, a diminution in the nature or scope of the powers, duties, status, authority or responsibilities of the Executive or "Good Reason" to terminate Executive's employment under this Agreement.

"Governmental Entity" means the United States of America or any other nation, any state or other political subdivision thereof, or any entity exercising executive, legislative, judicial, regulatory or administrative functions of government or any agency or department or subdivision of any governmental authority, including the United States federal government or any state or local government.

"Parent Business" means the business(es) of providing those services or selling those products which Parent, Employer or any of their respective Subsidiaries actually provide or sell.

"Person" means an individual, a partnership, a corporation, a limited liability company, an association, a joint stock company, a trust, a joint venture, an unincorporated organization, any other business entity, or a Governmental Entity.

"Separation" means Executive ceasing to be employed by any of Parent, Employer and their respective Subsidiaries for any reason.

"Subsidiary" means, with respect to any Person, any corporation, limited liability company, partnership, association, or business entity of which if (a) a corporation, a majority of the total voting power of shares of stock entitled (without regard to the occurrence of any contingency) to vote in the election of directors, managers, or trustees thereof is at the time owned or controlled, directly or indirectly, by that Person or one or more of the other Subsidiaries of that Person or a combination thereof, or (b) a limited liability company, partnership, association, or other business entity (other than a corporation), a majority of partnership or other similar ownership interest thereof is at the time owned or controlled, directly or indirectly, by that Person or one or more Subsidiaries of that Person or a combination thereof. For purposes hereof, a Person or Persons shall be deemed to have a majority ownership interest in a limited liability company, partnership, association, or other business entity (other than a corporation) if such Person or Persons shall be allocated a majority of limited liability company, partnership, association, or other business entity gains or losses or shall be or control any managing director or general partner of such limited liability company, partnership, association, or other business entity. References to a "Subsidiary" of any Person shall be given effect only at such times that such Person has one or more Subsidiaries, and, unless otherwise indicated, the term "Subsidiary" refers to a Subsidiary of Parent.

5. Notices. All notices, demands or other communications to be given or delivered under or by reason of the provisions of this Agreement shall be in writing and shall be deemed to have been given when (a) delivered personally to the recipient, (b) sent to the recipient by reputable express courier service with tracking (charges prepaid), (c) mailed to the recipient by certified or registered mail, return receipt requested and postage prepaid, or (d) emailed to the recipient (with hard copy sent to the recipient by reputable overnight courier service (charges prepaid) that same day) if emailed before 5:00 p.m. Chicago, Illinois time on a business day, and otherwise on the next business day. Such notices, demands and other communications shall be sent to the parties at the addresses indicated below:

If to Parent or Employer:

Maravai LifeSciences Holdings, Inc.
10770 Wateridge Circle Suite 200
San Diego, CA 92121
Attention: Chief Executive Officer

with copies to (which shall not constitute notice):

Maravai LifeSciences Holdings, Inc.
10770 Wateridge Circle Suite 200
San Diego, CA 92121
Attention: General Counsel

If to Executive:

Peter M. Leddy, Ph.D.
****
****
E-mail:**********

or such other address or to the attention of such other Person as the recipient party shall have specified by previous written notice to the sending party.

6. General Provisions.

(a) Severability. Whenever possible, each provision of this Agreement will be interpreted in such manner as to be effective and valid under applicable law, but if any provision of this Agreement is held to be invalid, illegal or unenforceable in any respect under any applicable law or rule in any jurisdiction, such invalidity, illegality or unenforceability will not affect any other provision or any other jurisdiction, but this Agreement will be reformed, construed and enforced in such jurisdiction as if such invalid, illegal or unenforceable provision had never been contained herein.

(b) Entire Agreement. This Agreement, those documents expressly referred to herein (including, without limitation, the Certificate), and Employer's Employee Inventions Assignment and Non-Disclosure Agreement that Executive executed as of the Prior Effective Date (the "Invention Assignment Agreement"), embody the complete agreement and understanding among the parties hereto and supersede and preempt any prior understandings, agreements or representations by or among the parties hereto, written or oral, which may have related to the subject matter hereof in any way. In the event of any conflict between the terms of this Agreement and the Invention Assignment Agreement, the terms of the Invention Assignment Agreement shall control.

(c) Descriptive Headings; Interpretation; No Strict Construction. The descriptive headings of this Agreement are inserted for convenience only and do not constitute a substantive part of this Agreement. Whenever required by the context, any pronoun used in this Agreement shall include the corresponding masculine, feminine, or neuter forms, and the singular form of nouns, pronouns, and verbs shall include the plural and vice versa. The use of the word "including" in this Agreement shall be by way of example rather than by limitation. Reference to any agreement, document, or instrument means such agreement, document, or instrument as amended or otherwise modified from time to time in accordance with the terms thereof. The use of the words "or," "either," and "any" shall not be exclusive. The parties hereto have participated jointly in the negotiation and drafting of this Agreement. In the event an ambiguity or question of intent or interpretation arises, this Agreement shall be construed as if drafted jointly by the parties, and no presumption or burden of proof shall arise favoring or disfavoring any party by virtue of the authorship of any of the provisions of this Agreement.

(d) Counterparts. This Agreement may be executed in multiple counterparts with the same effect as if all signing parties had signed the same document. All counterparts shall be construed together and constitute the same instrument.

(e) Successors and Assigns. Except as otherwise provided, this Agreement shall bind and inure to the benefit of and be enforceable by Executive, Parent, Employer, and their respective successors and assigns; provided, that the rights and obligations of Executive under this Agreement shall not be assigned or delegated. In the event of Executive's death prior to completion by Parent of all payments due under this Agreement, Parent shall make all such payments to Executive's beneficiary or to Executive's estate as appropriate.

(f) Applicable Law. This Agreement shall be governed by, and construed in accordance with, the laws of the State of California, without giving effect to any choice of law or conflict of law rules or provisions (whether of the State of California or any other jurisdiction) that would cause the application of the laws of any jurisdiction other than the State of California.

(g) Dispute Resolution. Any controversy, dispute or claim arising out of or relating to this Agreement (a " Covered Claim") shall be resolved by binding arbitration to be held in San Diego, California, and shall be administered by JAMS in accordance with the Employment Arbitration Rules & Procedures of JAMS then in effect and subject to JAMS Policy on Employment Arbitration Minimum Standards. Each party shall pay their own costs and expenses (including attorneys' fees and other charges of counsel) incurred in resolving any such Covered Claim; except Employer shall pay the costs of arbitration, and provided, that in the event litigation is required to compel arbitration or to enforce an arbitration award or judgment pursuant to this Agreement, the non-prevailing party in such litigation shall reimburse the costs and expenses (including attorney's fees and other charges of counsel) of the prevailing party. The prevailing party in any arbitration shall be entitled to attorney's fees and costs. Judgment upon the award rendered by the arbitrator(s) may be entered into any court having jurisdiction. The parties agree that any action to compel arbitration pursuant to this Agreement shall be brought in the appropriate California state court, and in connection with such action to compel, the laws of California shall control.

(h) Executive's Cooperation. During the Employment Period and thereafter, Executive shall cooperate with Parent, Employer and their respective Subsidiaries and Affiliates in any disputes with third parties, internal investigation or administrative, regulatory or judicial proceeding as reasonably requested by Parent (including Executive being available to Parent upon reasonable notice for interviews and factual investigations, appearing at Parent's request to give testimony without requiring service of a subpoena or other legal process, volunteering to Parent all pertinent information and turning over to Parent all relevant documents which are or may come into Executive's possession, all at times and on schedules that are reasonably consistent with Executive's other permitted activities and commitments). In the event Parent requires Executive's cooperation in accordance with this paragraph after the Employment Period, Parent shall reimburse Executive for Executive's reasonable time at a rate of $100 per hour and reasonable travel expenses (including lodging and meals, upon submission of receipts).

(i) Remedies. Each of the parties to this Agreement shall have all rights and remedies set forth in this Agreement and all rights and remedies which such Person has been granted at any time under any other agreement or contract and all of the rights which such Person has under any law. Each of the parties to this Agreement will be entitled to enforce its rights under this Agreement specifically, to recover damages and costs caused by any breach of any provision of this Agreement and to exercise all other rights existing in its favor. The parties agree and acknowledge that money damages may not be an adequate remedy for any breach of the provisions of this Agreement and that any party and/or their respective successors and assigns may, in addition to other rights and remedies existing in their favor, but subject to Section 6(g), apply to any court of competent jurisdiction for specific performance and/or injunctive or other relief in order to enforce, or prevent any violations of, the provisions of this Agreement.

(j) Amendment and Waiver. The provisions of this Agreement may be amended and waived only with the prior written consent of Parent, Employer and Executive. No failure by any party to insist upon the strict performance of any covenant, duty, agreement, or condition of this Agreement or to exercise any right or remedy consequent upon a breach shall constitute a waiver of any such breach or any other covenant, duty, agreement, or condition. The waiver by any party of a breach of any covenant, duty, agreement, or condition of this Agreement of any other party shall not operate or be construed as a waiver of any subsequent breach of that provision or any other provision.

(k) Insurance. Parent or Employer, at its discretion, may apply for and procure in its own name and for its own benefit life and/or disability insurance on Executive in any amount or amounts considered available. Executive agrees to cooperate in any medical or other examination, supply any information, and to execute and deliver any applications or other instruments in writing as may be reasonably necessary to obtain and constitute such insurance.

(l) Business Days. If any time period for giving notice or taking action expires on a day which is a Saturday, Sunday or holiday in the state in which Parent's chief executive office is located, the time period shall be automatically extended to the business day immediately following such Saturday, Sunday or holiday.

(m) Tax Withholding. Parent, Employer and their respective Subsidiaries shall be entitled to deduct or withhold from any amounts owing from Parent, Employer or any of their respective Subsidiaries to Executive (including withholding shares or other equity securities in the case of issuances of equity by Parent, Employer or any of their respective Subsidiaries) any federal, state, local or foreign withholding taxes, excise taxes, or employment taxes ("Taxes") imposed with respect to Executive's compensation or other payments from Parent, Employer or any of their respective Subsidiaries or Executive's ownership interest in Parent, including wages, bonuses, distributions, the receipt or exercise of equity options and/or the receipt or vesting of restricted equity, including, without limitation, any of the payments or benefits payable pursuant to Sections 1(b), 1(c), 1(d) and 1(e). In the event any such deductions or withholdings are not made, Executive shall indemnify Parent, Employer and each of their respective Subsidiaries for any amounts paid with respect to any such Taxes, together with any interest, penalties and related expenses thereto; provided, that, Executive shall not be obligated to indemnify Parent pursuant to this Section 6(m) for such interest, penalties or related expenses which are directly caused by the failure of Parent to take necessary action with respect to such deductions and withholdings as it is required by law to take.

(n) Termination. This Agreement (except for the provisions of Sections 1(a) and 1(b)) shall survive a Separation and shall remain in full force and effect after such Separation.

(o) Deemed Resignations. Except as otherwise determined by the Board or as otherwise agreed to in writing by Executive and Parent, Employer or any of their respective Subsidiaries before the termination of Executive's employment with Employer, any termination of Executive's employment shall constitute, as applicable, an automatic resignation of Executive: (i) as an officer of Parent, Employer or any of their respective Subsidiaries; and (ii) from any board of directors or board of managers (or similar governing body) of Parent, Employer or any of their respective Subsidiaries and from the board of directors or board of managers (or similar governing body) of any corporation, limited liability entity, unlimited liability entity or other entity in which Parent, Employer or any of their respective Subsidiaries holds an equity interest and with respect to which board of directors or board of managers (or similar governing body) Executive serves as the designee or other representative of Parent, Employer or any of their respective Subsidiaries. Executive agrees to take any further actions that Parent, Employer or any of their respective Subsidiaries reasonably requests to effectuate or document the foregoing.

(p) Electronic Delivery. This Agreement, the agreements referred to, and each other agreement or instrument entered into in connection with this Agreement, and any amendments, to the extent signed and delivered by means of a photographic, portable document format (.pdf), or similar reproduction of such signed writing using an electronic mail shall be treated in all manner and respects as an original agreement or instrument and shall be considered to have the same binding legal effect as if it were the original signed version thereof delivered in person. At the request of any party or party to any such agreement or instrument, each other party shall re-execute original forms and deliver them to all other parties hereto. No party hereto or to any such agreement or instrument shall raise the use of electronic mail to deliver a signature or the fact that any signature or agreement or instrument was transmitted or communicated through the use of electronic mail as a defense to the formation or enforceability of a contract and each such party forever waives any such defense.

(q) No Third-Party Beneficiaries. Except as expressly provided (including the last sentence of Section 6(e)), no term or provision of this Agreement is intended to be, or shall be, for the

benefit of any Person not a party, and no such other Person shall have any right or cause of action hereunder. Notwithstanding the foregoing, any Subsidiary or Parent or Employer that is not a signatory to this Agreement shall be a third party beneficiary of Executive's obligations under Sections 2, 3, 6(g), 6(h) and 6(p) and shall be entitled to enforce such obligations as if a party hereto.

(r) Directors' and Officers' Insurance. Each of Parent and Employer agree that it shall obtain and maintain in full force and effect during the term of Executive's employment directors' and officers' insurance policies in amounts and with coverages customary for entities of the size and with the type of business of Parent and Employer, respectively.

(s) Clawback. Notwithstanding any provision of this Agreement to the contrary, Executive acknowledges that the amounts paid or payable under this Agreement shall be subject to (i) the provisions of any applicable clawback policies or procedures adopted by Parent, Employer or any of their Affiliates or Subsidiaries, which clawback policies or procedures may provide for forfeiture and/or recoupment of amounts paid or payable under this Agreement, and (ii) any right or obligation that Employer or Parent may have regarding the clawback of "incentive-based compensation" under Section 10D of the Securities Exchange Act of 1934, as amended, and any applicable rules and regulations promulgated thereunder from time to time by the U.S. Securities and Exchange Commission, the listing standards of any national securities exchange or association on which Parent's securities are listed, or any other applicable law (the "Dodd-Frank Clawback"). Notwithstanding any provision of this Agreement to the contrary, each of Parent, Employer or any of their Affiliates or Subsidiaries reserves the right, without the consent of Executive, to adopt any such clawback policies and procedures, including such policies and procedures applicable to this Agreement with retroactive effect; provided, however, that such clawback policies and procedures shall not apply to compensation paid prior to the Employment Period, except as may be required by the Dodd-Frank Clawback.

* * * * *

IN WITNESS WHEREOF, the parties hereto have executed this Amended and Restated Employment Agreement as of the date first above written.

MARAVAI LIFESCIENCES HOLDINGS, INC.

By: /s/ Carl W. Hull
Name: Carl W. Hull
Its: CEO

MARAVAI INTERMEDIATE HOLDINGS, LLC

By: /s/ Carl W. Hull
Name: Carl W. Hull
Its: CEO

/s/ Peter M. Leddy, Ph.D.
Peter M. Leddy, Ph.D.

AMENDED AND RESTATED
EMPLOYMENT AGREEMENT

THIS AMENDED AND RESTATED EMPLOYMENT AGREEMENT (this "Agreement") is effective as of May 8, 2023 (the "Effective Date"), by and among Maravai LifeSciences Holdings, Inc., a Delaware corporation ("Parent"), Cygnus Technologies, LLC, a Delaware limited liability company ("Employer"), MLSC Holdings, LLC, a Delaware limited liability company ("MLSC"), and Christine Dolan ("Executive"). Capitalized terms used but not otherwise defined herein shall have the meanings set forth in Section 4.

WHEREAS, Parent, Employer and Executive previously entered into that certain Employment Agreement (the "Prior Agreement") with an effective date of November 19, 2020 (the "Prior Effective Date").

WHEREAS, the parties to this Agreement desire to amend and restate the Prior Agreement in its entirety to provide for the rights and privileges set forth herein.

NOW, THEREFORE, in consideration of the mutual covenants contained herein and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties to this Agreement hereby agree that the Prior Agreement is hereby amended and restated in its entirety by this Agreement, and hereto further agree as follows:

1. Employment. Employer agrees to continue to employ Executive, and Executive accepts such continued employment, for the period beginning on the Effective Date and ending upon Executive's separation pursuant to Section 1(c) (the "Employment Period").

(a) Position and Duties.

(i) During the Employment Period, Executive shall serve as the Chief Operating Officer of Employer and shall have the normal duties, responsibilities and authority implied by such position, which shall include such other activities as are reasonably directed by the Chief Executive Officer of Parent, subject in each case to the power of the Chief Executive Officer of Parent and the board of directors of Parent (the "Board") to expand, limit or otherwise alter such duties, responsibilities, positions and authority and to otherwise override actions of officers.

(ii) Executive shall report to the Chief Executive Officer of Parent or such Person's designee, and Executive shall devote Executive's best efforts and Executive's full business time and attention to the business and affairs of Parent, Employer and the other Subsidiaries of Parent.

(b) Salary, Bonus and Benefits. During the Employment Period, Employer will continue to pay Executive a base salary at a rate of $456,394 per annum (the "Annual Base Salary"). The Annual Base Salary shall be reviewed annually by the Board. For each fiscal year of Employer ending during the Employment Period, Executive shall continue to be eligible for an annual bonus with a target amount equal to 70% of the Annual Base Salary (such amount, the "Annual Bonus"), as determined by the Board based upon the performance of Executive and the achievement by Parent, Employer and the other Subsidiaries of Parent of financial, operating and other objectives set by the Board. Each Annual Bonus, if any, shall be paid as soon as administratively feasible after the Board (or a committee thereof) certifies whether the applicable performance targets for the applicable year have been achieved but in no event later than March 15 following the end of such year. Notwithstanding anything in this Section 1(b) to the contrary, no Annual Bonus, if any, or any portion thereof, shall be payable for any year unless Executive remains continuously employed by Employer from the Effective Date through the last day of such year. In addition, during the Employment Period, Executive will be entitled to such other benefits as are approved by the Board and made generally available to other similarly situated members of senior management of Parent and Employer.

(c) Separation. The Employment Period will continue until (x) the termination of Executive's employment due to Executive's resignation, death or Disability or (y) the Board terminates Executive's employment with or without Cause. Executive shall have the right to terminate Executive's employment with Employer with or without Good Reason and for any other reason, or no reason at all, upon thirty (30) days' advance written notice to Employer; provided, however, that if Executive has provided notice to Employer of Executive's termination of employment, Employer may determine, in its sole discretion, that such termination shall be effective on any date prior to the effective date of termination provided in such notice (and, if such earlier date is so required, then it shall not change the basis for Executive's termination of employment nor be construed or interpreted as a termination of employment by the Board without Cause) and any requirement to continue salary or benefits shall cease as of such earlier date. Upon Executive's Separation, Employer or Parent shall pay to Executive within 30 days following the date of Separation (or such earlier date as may be required by applicable law), the following: (A) any accrued but unpaid Annual Base Salary through the date of the Separation, (B) reimbursement for any unreimbursed business expenses incurred through the date of the Separation, and (C) any amount or benefit as may be due or payable in accordance with the terms of any Parent or Employer benefit plan or program (collectively, the "Accrued Amounts").

(i) Payment Upon Separation. If Executive's employment is terminated by the Board without Cause, then, in addition to the Accrued Amounts, Executive will be entitled to receive, subject to Section 1(c)(iii) and Section 1(d):

(A) any earned but unpaid Annual Bonus pursuant to Section 1(b) for the fiscal year prior to the fiscal year in which the Separation occurs;

(B) an amount equal to the target Annual Bonus prorated for the number of days worked by Executive for Parent in the calendar year of the Separation;

(C) continued payment of Executive's Annual Base Salary for a period of 12 months following the date of the Separation (the "Non-CIC Severance Period"), payable in substantially equal installments in accordance with Employer's regular payroll practices; and

(D) if Executive is eligible to and timely elects continuation coverage under the Consolidated Omnibus Budget Reconciliation Act of 1985, as amended ("COBRA"), then Employer shall pay Executive's COBRA premiums during the Non-CIC Severance Period; provided, that such payments shall not be made in the event an excise tax under Section 4980D of the Code would be imposed on Employer as a result.

(ii) Payment Upon Separation following a Change in Control. If, during the period commencing upon a Change in Control and ending on the second anniversary of such Change in Control, Executive's employment is terminated by Executive for Good Reason or by Parent or Employer (or their respective successors) without Cause, then, in addition to the Accrued Amounts, and in lieu of the payments and benefits set forth in Section 1(c)(i) above, Executive will be entitled to receive:

(A) any earned but unpaid Annual Bonus pursuant to Section 1(b) for the fiscal year prior to the fiscal year in which the Separation occurs;

(B) an amount equal to the target Annual Bonus prorated for the number of days worked by Executive for Parent in the calendar year of the Separation;

(C) continued payment of Executive's Annual Base Salary for a period of 24 months following the date of Separation (the "CIC Severance Period"), payable in substantially equal installments in accordance with Employer's regular payroll practices;

(D) an amount equal to two times the greatest of (i) Executive's target Annual Bonus for the fiscal year in which the Separation occurs; (ii) the calculation

of an Annual Bonus based on (a) Executive's Annual Base Salary and Annual Bonus target in place at the time of the Change in Control and (b) the average of the Company performance achievement percentage applied to calculate annual bonuses under the Parent's annual bonus program with respect to the two fiscal years prior to the fiscal year in which the Separation occurs; and (iii) the annualized amount accrued by Parent in its financial statements as of the date of Separation with respect to Executive's Annual Bonus for the fiscal year in which the Separation occurs, in each case payable in substantially equal installments during the CIC Severance Period in accordance with the Company's regular payroll practices; and

(E) if Executive is eligible to and timely elects continuation coverage under COBRA, then Employer shall pay Executive's COBRA premiums for a period of 18 months following the date of Separation; provided, that such payments shall not be made in the event an excise tax under Section 4980D of the Code would be imposed on Employer as a result.

(iii) Release Agreement. Notwithstanding anything herein to the contrary, (A) Executive shall not be entitled to receive any payments or other benefits pursuant to this Section 1(c) (other than the Accrued Amounts, the " Severance Benefits") unless Executive has timely executed and delivered to Employer a general release and separation agreement in a form prepared by Employer (a "Release Agreement") and such Release Agreement shall become in full force and effect and not been timely revoked as may be permitted by its terms, which Release Agreement shall be delivered by Executive on or before the Release Expiration Date (as defined below) and (B) Executive shall be entitled to receive the Severance Benefits only so long as Executive has not breached any of the provisions of such Release Agreement, this Agreement (including, without limitation, Section 2 or Section 3 herein) or the Invention Assignment Agreement (as defined below). The first payment of the Severance Benefits will include all amounts that otherwise would have been due prior thereto under the terms of this Agreement had such payments commenced immediately upon the effective date of Executive's termination of employment. For purposes of this Agreement, "Release Expiration Date" shall mean the date that is 30 days following the date of Executive's termination of employment, or, in the event that Executive's termination of employment is "in connection with an exit incentive or other employment termination program" (as such phrase is defined in the Age Discrimination in Employment Act of 1967), the date that is 60 days following the date of Executive's termination of employment.

(d) Code Section 409A.

(i) The intent of the parties is that payments and benefits under this Agreement comply with or otherwise be exempt from Internal Revenue Code Section 409A and the regulations and guidance promulgated thereunder (collectively "Code Section 409A") and, accordingly, to the maximum extent permitted, this Agreement shall be interpreted to be either exempt from or in compliance therewith. In no event whatsoever shall Parent or Employer be liable for any additional tax, interest or penalty that may be imposed on the Executive by Code Section 409A or damages for failing to comply with Code Section 409A.

(ii) Notwithstanding any other payment schedule provided herein to the contrary, if the Executive is deemed on the date of termination to be a "specified employee" within the meaning of that term under Code Section 409A(a)(2)(B), then any payment under this Section 1 that is considered deferred compensation under Code Section 409A payable on account of a "separation from service" shall not be made until the date which is the earlier of (i) the expiration of the six (6)-month period measured from the date of such "separation from service" of Executive, and (ii) the date of Executive's death (the "Delay Period") to the extent required under Code Section 409A. Upon the expiration of the Delay Period, all payments delayed pursuant to this Section 1(d)(ii) shall be paid to the Executive in a lump sum, and all remaining payments due under this Agreement shall be paid or provided in accordance with the normal payment dates specified for them herein.

(iii) A termination of employment shall not be deemed to have occurred for purposes of any provision of this Agreement providing for the payment of any amounts or benefits upon or following a termination of employment unless such termination is also a "separation from service" from Parent and Employer within the meaning of Code Section 409A and, for purposes of any such provision of this Agreement, references to a "termination," "termination of employment" or like terms shall mean "separation from service."

(iv) Notwithstanding anything to the contrary in this Agreement, to the extent that any payments of "nonqualified deferred compensation" (within the meaning of Code Section 409A) due under this Agreement as a result of Executive's termination of employment are subject to Executive's execution and delivery of a Release Agreement, in any case where the date of termination of employment and the Release Expiration Date fall in two separate taxable years, any payments required to be made to Executive that are conditioned on the Release Agreement and are treated as "nonqualified deferred compensation" (within the meaning of Code Section 409A) shall be made in the later taxable year, and any such amounts that are delayed pursuant to this Section 1(d)(iv) shall be paid in a lump sum on the first payroll period to occur in the subsequent taxable year.

(v) To the extent, if any, that the aggregate amount of the installments of the severance payment that would otherwise be paid pursuant to Section 1(c) after March 15 of the calendar year following the calendar year in which the Separation occurs (the " Applicable March 15") exceeds the maximum exemption amount under Treasury Regulation Section 1.409A-1(b)(9)(iii)(A), then such excess shall be paid to Executive in a lump sum on the Applicable March 15 (or the first business day preceding the Applicable March 15 if the Applicable March 15 is not a business day) and the installments of the severance payment payable after the Applicable March 15 shall be reduced by such excess (beginning with the installment first payable after the Applicable March 15 and continuing with the next succeeding installment until the aggregate reduction equals such excess). For purposes of Code Section 409A, the Executive's right to receive any installment payment pursuant to this Agreement shall be treated as a right to receive a series of separate and distinct payments.

(vi) Notwithstanding any other provision to the contrary, in no event shall any payment under this Agreement that constitutes "deferred compensation" for purposes of Code Section 409A be subject to offset by any other amount unless otherwise permitted by Code Section 409A.

(e) Certain Excise Taxes. Notwithstanding anything to the contrary in this Agreement, if Executive is a "disqualified individual" (as defined in Section 280G(c) of the Code), and the separation payments and benefits provided for in this Agreement, together with any other payments and benefits which such Executive has the right to receive from Parent or any of its Affiliates, would constitute a "parachute payment" (as defined in Section 280G(b)(2) of the Code), then the payments provided for in this Agreement shall be either (a) reduced (but not below zero) so that the present value of such total amounts and benefits received by Executive from the Parent and its Affiliates will be one dollar less than three times Executive's "base amount" (as defined in Section 280G(b)(3) of the Code) and so that no portion of such amounts and benefits received by Executive shall be subject to the excise tax imposed by Section 4999 of the Code or (b) paid in full, whichever produces the better net after-tax position to Executive (taking into account any applicable excise tax under Section 4999 of the Code and any other applicable taxes). The determination as to whether any such reduction in the amount of the payments provided hereunder is necessary shall be made by Parent in good faith. If a reduced payment is made and through error or otherwise that payment, when aggregated with other payments and benefits from Parent (or its Affiliates) used in determining if a "parachute payment" exists, exceeds one dollar less than three times Executive's base amount, then Executive shall immediately repay such excess to Parent (or its Affiliates) upon notification that an overpayment has been made. Nothing in this Section 1(e) shall require Parent or Employer to be responsible for, or have any liability or obligation with respect to, Executive's excise tax liabilities under Section 4999 of the Code.

2. Confidential Information

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(a) Obligation to Maintain Confidentiality. Executive acknowledges that the information, observations and data (including trade secrets) obtained by Executive during the course of Executive's employment with Employer prior to and after the Prior Effective Date concerning the business or affairs of Parent, Employer and their respective Subsidiaries and Affiliates ("Confidential Information") are the property of Parent, Employer or such Subsidiaries and Affiliates, including information concerning acquisition opportunities in or reasonably related to Parent's and Employer's business or industry of which Executive becomes aware during the Employment Period. Therefore, Executive agrees that Executive will not disclose to any unauthorized Person or use for Executive's own account any Confidential Information without the Board's written consent, unless and to the extent that the Confidential Information, (i) becomes generally known to and available for use by the public other than as a result of Executive's acts or omissions to act or (ii) is required to be disclosed pursuant to any applicable law or court order. Executive shall deliver to Employer at a Separation, or at any other time Employer may request, all memoranda, notes, plans, records, reports, computer tapes, printouts and software and other documents and data (and copies thereof) relating to the Confidential Information, Work Product (as defined below) or the business of Parent, Employer and their respective Subsidiaries and Affiliates (including all acquisition prospects, lists and contact information) which Executive may then possess or have under Executive's control.

(b) Protection of Trade Secrets. Executive acknowledges and agrees with Employer that Executive's services to Employer and to Parent and their respective Subsidiaries and Affiliates require the use of Confidential Information and trade secret information (including any formula, pattern, compilation, program, device, method, technique or process) that Employer, Parent or their respective Subsidiaries and Affiliates have made reasonable efforts to keep confidential and that derives independent economic value, actual or potential, from not being generally known to the public or to other persons who can obtain economic value from its disclosure or use ("Trade Secrets"). Executive further acknowledges and agrees that Employer, Parent and such Subsidiaries and Affiliates would be irreparably harmed if Executive were to provide similar services requiring the use of such Trade Secrets.

(c) Ownership of Property. Executive acknowledges that all discoveries, concepts, ideas, inventions, innovations, improvements, developments, methods, processes, programs, designs, analyses, drawings, reports, patent applications, copyrightable work and mask work (whether or not including any confidential information) and all registrations or applications related thereto, all other proprietary information and all similar or related information (whether or not patentable) that relate to Parent, Employer or any of their respective Subsidiaries or Affiliates engaging in Parent Business or an anticipated business in which Parent, Employer or any of their respective Subsidiaries or Affiliates have a bona fide interest or expectancy relating to the acquisition of a business by Parent, Employer or any of their respective Subsidiaries, research and development, or existing or future products or services and that are conceived, developed, contributed to, made, or reduced to practice by Executive (either solely or jointly with others) while employed by Parent, Employer or any of their respective Subsidiaries or Affiliates (including any of the foregoing that constitutes any proprietary information or records) ("Work Product") belong to Parent, Employer or such Subsidiary or Affiliate, and Executive hereby assigns, and agrees to assign, all of the above Work Product to Parent, Employer or to such Subsidiary or Affiliate. Any copyrightable work prepared in whole or in part by Executive in the course of Executive's work for any of the foregoing entities shall be deemed a "work made for hire" under the copyright laws, and Parent, Employer or such Subsidiary or Affiliate shall own all rights therein. To the extent that any such copyrightable work is not a "work made for hire," Executive hereby assigns and agrees to assign to Parent, Employer or such Subsidiary or Affiliate all right, title, and interest, including without limitation, copyright in and to such copyrightable work. Executive shall promptly disclose such Work Product and copyrightable work to the Board and perform all actions reasonably requested by the Board (whether during or after the Employment Period), to establish and confirm Parent's, Employer's or such Subsidiary's or Affiliate's ownership (including assignments, consents, powers of attorney, and other instruments); provided, that Parent shall reimburse Executive for Executive's reasonable and documented out-of-pocket expenses in connection therewith.

(d) Third Party Information. Executive understands that Parent, Employer and their respective Subsidiaries and Affiliates will receive from third parties confidential or proprietary information ("Third Party Information") subject to a duty on Parent's, Employer's and their respective Subsidiaries and Affiliates' part to maintain the confidentiality of such information and to use it only for certain limited purposes. During the Employment Period and thereafter, and without in any way limiting the provisions of Section 2(a), Executive will hold Third Party Information in the strictest confidence and will not disclose to anyone (other than personnel and consultants of Parent, Employer or their respective Subsidiaries and Affiliates who need to know such information in connection with their work for Parent, Employer or their respective Subsidiaries and Affiliates) or use, except in connection with Executive's work for Parent, Employer or their respective Subsidiaries and Affiliates, Third Party Information unless expressly authorized by a member of the Board (other than Executive) in writing.

(e) Use of Information of Prior Employers. During the Employment Period, Executive will not improperly use or disclose any confidential information or trade secrets, if any, of any former employers or any other Person to whom Executive has an obligation of confidentiality, and will not bring onto the premises of Parent, Employer or any of their respective Subsidiaries or Affiliates any unpublished documents or any property belonging to any former employer or any other Person to whom Executive has an obligation of confidentiality unless consented to in writing by the former employer or Person. Executive will use in the performance of Executive's duties only information which is (i) generally known and used by persons with training and experience comparable to Executive's and which is (x) common knowledge in the industry or (y) is otherwise legally in the public domain, (ii) otherwise provided or developed by Parent, Employer or any of their respective Subsidiaries or Affiliates or (iii) in the case of materials, property or information belonging to any former employer or other Person to whom Executive has an obligation of confidentiality, approved for such use in writing by such former employer or Person. In furtherance of the foregoing, concurrently with the execution of the Prior Agreement, Executive has executed and delivered to Employer a certificate in the form of Exhibit A to the Prior Agreement which, for the avoidance of doubt, remains in full force and effect (the "Certificate") and is incorporated by reference herein.

(f) Continuation of Terms. Notwithstanding anything in this Agreement to the contrary, the parties hereto expressly acknowledge and agree that the terms, conditions, obligations and covenants set forth in this Section 2 are a continuation without interruption, lapse, reprieve, gap or modification of any kind of the terms, conditions, obligations and covenants set forth in Section 8 of the Original Senior Management Agreement.

(g) Whistleblower Protections. Notwithstanding anything to the contrary contained herein, no provision of this Agreement will be interpreted so as to impede Executive (or any other individual) from reporting possible violations of federal law or regulation to any governmental agency or entity, including but not limited to the Department of Justice, the Securities and Exchange Commission, the Congress, and any Inspector General of any United States federal agency, or making other disclosures under the whistleblower provisions of federal law or regulation. Executive does not need the prior authorization of Parent or Employer to make any such reports or disclosures, and Executive will not be required to notify Parent or Employer that such reports or disclosures have been made.

(h) Trade Secrets. An individual will not be held criminally or civilly liable under any federal or state trade secret law for the disclosure of a trade secret that (i) is made (A) in confidence to a federal, state, or local government official, either directly or indirectly, or to an attorney, and (B) solely for the purpose of reporting or investigating a suspected violation of law; or (ii) is made in a complaint or other document filed in a lawsuit or other proceeding, if such filing is made under seal. Nothing in this Agreement is intended to conflict with 18 U.S.C. § 1833(b) or create liability for disclosures of trade secrets that are expressly allowed by 18 U.S.C. § 1833(b). Accordingly, the parties to this Agreement have the right to disclose in confidence trade secrets to federal, state, and local government officials, or to an attorney, for the sole purpose of reporting or investigating a suspected violation of law. The parties also have the right to disclose trade secrets in a document filed in a lawsuit or other proceeding, but only if the filing is made under seal and protected from public disclosure.

3. Noncompetition and Nonsolicitation. Executive acknowledges that in the course of Executive's employment with Employer, Executive will become familiar with Trade Secrets and with

other confidential information concerning Parent, Employer and their respective Subsidiaries and that Executive's services will be of special, unique and extraordinary value to Parent, Employer and their respective Subsidiaries. Therefore, Executive agrees that:

(a) Noncompetition. During the Employment Period, Executive shall not engage in any business activity other than for the benefit of the Parent, Employer or any of their respective Subsidiaries.

(b) Nonsolicitation. During the Employment Period, other than in good faith in the best interests of the Parent, Employer or any of their respective Subsidiaries, Executive shall not directly or indirectly through another entity (i) induce or attempt to induce any employee of Parent, Employer or any of their respective Subsidiaries to leave the employ of Parent, Employer or such Subsidiary, or in any way interfere with the relationship between Parent, Employer or any of their respective Subsidiaries and any employee thereof, (ii) hire any employee of Parent, Employer or any of their respective Subsidiaries or, hire any former employee of Parent, Employer or any of their respective Subsidiaries within one year after such person ceased to be an employee of Parent, Employer or any of their respective Subsidiaries or (iii) induce or attempt to induce any customer, supplier, licensee or other business relation of Parent, Employer or any of their respective Subsidiaries to cease doing business with Parent, Employer or such Subsidiary or in any way interfere with the relationship between any such customer, supplier, licensee or business relation and Parent, Employer or any such Subsidiary.

(c) Enforcement. If, at the time of enforcement of Section 2 or this Section 3, a court holds that the restrictions stated herein are unreasonable under circumstances then existing, the parties hereto agree that the maximum duration, scope or geographical area reasonable under such circumstances shall be substituted for the stated period, scope or area and that the court shall be allowed to revise the restrictions contained herein to cover the maximum duration, scope and area permitted by law. Because Executive's services are unique and because Executive has access to confidential information, the parties hereto agree that money damages would be an inadequate remedy for any breach of this Agreement. Therefore, in the event of a breach or threatened breach of this Agreement, any party and/or their respective successors or assigns may, in addition to other rights and remedies existing in their favor, subject to Section 6(g), apply to any court of competent jurisdiction for specific performance and/or injunctive or other relief in order to enforce, or prevent any violations of, the provisions hereof.

(d) Additional Acknowledgments. Executive acknowledges that the provisions of this Section 3 are in consideration of: (i) employment with Employer and (ii) additional good and valuable consideration as set forth in this Agreement. In addition, Executive agrees and acknowledges that the restrictions contained in Section 2 and this Section 3 do not preclude Executive from earning a livelihood, nor do they unreasonably impose limitations on Executive's ability to earn a living. In addition, Executive acknowledges (A) that the business of Parent, Employer and their respective Subsidiaries will be conducted throughout the United States and other jurisdictions where Parent, Employer or any of their respective Subsidiaries conduct business during the Employment Period, (B) notwithstanding the state of organization or principal office of Parent, Employer or any of their respective Subsidiaries, or any of their respective executives or employees (including Executive), it is expected that Parent, Employer and their respective Subsidiaries will have business activities and have valuable business relationships within its industry throughout the United States and other jurisdictions where Parent, Employer or any of their respective Subsidiaries conduct business during the Employment Period, and (C) as part of Executive's responsibilities, Executive will be traveling throughout the United States and other jurisdictions where Parent, Employer or any of their respective Subsidiaries conduct business during the Employment Period in furtherance of Employer's business and its relationships. Executive agrees and acknowledges that the potential harm to Parent, Employer and their respective Subsidiaries of the non-enforcement of any provision of Section 2 or this Section 3 outweighs any potential harm to Executive of its enforcement by injunction or otherwise. The covenants contained in each of Sections 2(a), 2(b), 2(c), 2(d), 2(e), 3(a) and 3(b) may be enforced independently and without any one or more of such sections limiting the provisions of any one or more of the other of such sections. Executive acknowledges that Executive has carefully read this Agreement and consulted with legal counsel of Executive's choosing regarding its contents, has given careful consideration to the restraints imposed upon Executive by this Agreement and is in full accord as to their necessity for the reasonable and proper protection of confidential and proprietary information of Parent, Employer and their respective

Subsidiaries now existing or to be developed in the future. Executive expressly acknowledges and agrees that each and every restraint imposed by this Agreement is reasonable with respect to subject matter, time period and geographical area.

GENERAL PROVISIONS

4. Definitions.

"Affiliate" of any particular Person means any other Person controlling, controlled by, or under common control with such particular Person, where "control" means the possession, directly or indirectly, of the power to direct the management and policies of a Person whether through the ownership of voting securities, by contract, or otherwise.

"Cause" means (a) the commission of a felony, (b) willful conduct tending to bring Parent, Employer or any of their respective Subsidiaries into substantial public disgrace or disrepute, (c) substantial and repeated failure to perform duties of the office held by Executive as reasonably directed by the Board and/or the Chief Executive Officer of Parent, (d) gross negligence or willful misconduct with respect to Parent, Employer or any of their respective Subsidiaries, including any other act or omission involving significant and willful dishonesty or fraud with respect to Parent, Employer or any of their respective Subsidiaries or any of their respective customers or suppliers, or (e) any material breach of Sections 2 or 3 or Section 1(a)(ii) (but only with respect the requirement of such Section 1(a)(ii) that Executive devote Executive's full business time and attention to the business and affairs of Parent, Employer and their Subsidiaries). In each case above the burden of proving such action or omission is a "Cause" event shall be with Employer. In addition, Employer agrees it will permit Executive an opportunity to be heard by the Board before reaching a decision concerning any proposed dismissal for Cause.

"Change in Control" has the meaning set forth in Parent's 2020 Omnibus Incentive Plan, as it may be amended from time to time.

"Code" means the Internal Revenue Code of 1986, as amended.

"Disability" means the disability of Executive caused by any physical or mental injury, illness or incapacity as a result of which Executive is, or is reasonably expected to be, unable to effectively perform the essential functions of Executive's duties for a substantially continuous period of more than 120 days or for any 180 days (whether or not continuous) within a 365 day period, as determined by the Board in good faith.

"Good Reason" means, without Executive's prior consent, (a) any action by Parent or Employer which results in a material reduction in Executive's title, status, authority, duties or responsibilities as Chief Operating Officer of Parent and Employer, (b) a reduction in Executive's Annual Base Salary, target Annual Bonus or the target grant date value of Executive's annual equity award (in relation to the target for such Executive's most recent annual equity award prior to the Change in Control or, if no such award, the target for such award for the Parent executive most similarly situated to Executive), or (c) the relocation of Executive's principal office or place of work to a location that would cause an increase by more than thirty-five (35) miles in the one-way commuting distance from Executive's principal personal residence at the time of the Change in Control to the principal office or business location at which Executive is then required to perform services. Notwithstanding anything herein to the contrary, any assertion by Executive of a termination for Good Reason shall not be effective unless all of the following conditions are satisfied: (A) Executive must provide written notice to Employer of the existence of such condition(s) within thirty (30) days after the initial occurrence of such condition(s); (B) the condition(s) specified in such notice must remain uncorrected for thirty (30) days following Employer's receipt of such written notice; and (C) the date of Executive's termination of employment must occur within seventy (70) days after the initial occurrence of the condition(s) specified in such notice. Further and notwithstanding anything herein to the contrary, any Change in Control does not and will not in and of itself constitute a breach by Parent or Employer of their obligations under this Agreement, a diminution in the nature or scope of the powers, duties, status, authority or responsibilities of the Executive or "Good Reason" to terminate Executive's employment under this Agreement.

"Governmental Entity" means the United States of America or any other nation, any state or other political subdivision thereof, or any entity exercising executive, legislative, judicial, regulatory or administrative functions of government or any agency or department or subdivision of any governmental authority, including the United States federal government or any state or local government.

"Original Senior Management Agreement" means that certain Senior Management Agreement by and among Employer, Executive and MLSC, dated as of December 27, 2017, as amended from time to time.

"Parent Business" means the business(es) of providing those services or selling those products which Parent, Employer or any of their respective Subsidiaries actually provide or sell.

"Person" means an individual, a partnership, a corporation, a limited liability company, an association, a joint stock company, a trust, a joint venture, an unincorporated organization, any other business entity, or a Governmental Entity.

"Separation" means Executive ceasing to be employed by any of Parent, Employer and their respective Subsidiaries for any reason.

"Subsidiary" means, with respect to any Person, any corporation, limited liability company, partnership, association, or business entity of which if (a) a corporation, a majority of the total voting power of shares of stock entitled (without regard to the occurrence of any contingency) to vote in the election of directors, managers, or trustees thereof is at the time owned or controlled, directly or indirectly, by that Person or one or more of the other Subsidiaries of that Person or a combination thereof, or (b) a limited liability company, partnership, association, or other business entity (other than a corporation), a majority of partnership or other similar ownership interest thereof is at the time owned or controlled, directly or indirectly, by that Person or one or more Subsidiaries of that Person or a combination thereof. For purposes hereof, a Person or Persons shall be deemed to have a majority ownership interest in a limited liability company, partnership, association, or other business entity (other than a corporation) if such Person or Persons shall be allocated a majority of limited liability company, partnership, association, or other business entity gains or losses or shall be or control any managing director or general partner of such limited liability company, partnership, association, or other business entity. For purposes hereof, references to a "Subsidiary" of any Person shall be given effect only at such times that such Person has one or more Subsidiaries, and, unless otherwise indicated, the term "Subsidiary" refers to a Subsidiary of Parent.

5. Notices. All notices, demands or other communications to be given or delivered under or by reason of the provisions of this Agreement shall be in writing and shall be deemed to have been given when (a) delivered personally to the recipient, (b) sent to the recipient by reputable express courier service (charges prepaid), (c) mailed to the recipient by certified or registered mail, return receipt requested and postage prepaid, or (d) emailed to the recipient (with hard copy sent to the recipient by reputable overnight courier service (charges prepaid) that same day) if emailed before 5:00 p.m. Chicago, Illinois time on a business day, and otherwise on the next business day. Such notices, demands and other communications shall be sent to the parties at the addresses indicated below:

If to Parent or Employer:

Maravai LifeSciences Holdings, Inc.
10770 Wateridge Circle Suite 200
San Diego, CA 92121
Attention: Board of Directors

with copies to (which shall not constitute notice):

Kirkland & Ellis LLP
300 North LaSalle Street
Chicago, Illinois 60654
Attention: Sanford E. Perl, P.C.
Michael H. Weed, P.C.
Daniel A. Guerin, P.C.
Email: sperl@kirkland.com
mweed@kirkland.com
daniel.guerin@kirkland.com

If to Executive:

Christine Dolan
****
****
E-mail:**********

or such other address or to the attention of such other Person as the recipient party shall have specified by prior written notice to the sending party.

6. General Provisions.

(a) Severability. Whenever possible, each provision of this Agreement will be interpreted in such manner as to be effective and valid under applicable law, but if any provision of this Agreement is held to be invalid, illegal or unenforceable in any respect under any applicable law or rule in any jurisdiction, such invalidity, illegality or unenforceability will not affect any other provision or any other jurisdiction, but this Agreement will be reformed, construed and enforced in such jurisdiction as if such invalid, illegal or unenforceable provision had never been contained herein.

(b) Entire Agreement. This Agreement, those documents expressly referred to herein (including, without limitation, the Certificate), and Employer's Employee Inventions Assignment and Non-Disclosure Agreement that Executive executed as of the Prior Effective Date (the "Invention Assignment Agreement"), embody the complete agreement and understanding among the parties hereto and supersede and preempt any prior understandings, agreements or representations by or among the parties hereto, written or oral, which may have related to the subject matter hereof in any way, including the Original Senior Management Agreement. In the event of any conflict between the terms of this Agreement and the Invention Assignment Agreement, the terms of the Invention Assignment Agreement shall control.

(c) Descriptive Headings; Interpretation; No Strict Construction. The descriptive headings of this Agreement are inserted for convenience only and do not constitute a substantive part of this Agreement. Whenever required by the context, any pronoun used in this Agreement shall include the corresponding masculine, feminine, or neuter forms, and the singular form of nouns, pronouns, and verbs shall include the plural and vice versa. The use of the word "including" in this Agreement shall be by way of example rather than by limitation. Reference to any agreement, document, or instrument means such agreement, document, or instrument as amended or otherwise modified from time to time in accordance with the terms thereof, and, if applicable, hereof. The use of the words "or," "either," and "any" shall not be exclusive. The parties hereto have participated jointly in the negotiation and drafting of this Agreement. In the event an ambiguity or question of intent or interpretation arises, this Agreement shall be construed as if drafted jointly by the parties hereto, and no presumption or burden of proof shall arise favoring or disfavoring any party by virtue of the authorship of any of the provisions of this Agreement.

(d) Counterparts. This Agreement may be executed in multiple counterparts with the same effect as if all signing parties had signed the same document. All counterparts shall be construed together and constitute the same instrument.

(e) Successors and Assigns. Except as otherwise provided herein, this Agreement shall bind and inure to the benefit of and be enforceable by Executive, Parent, Employer, and their respective successors and assigns; provided, that the rights and obligations of Executive under this Agreement shall not be assigned or delegated. In the event of Executive's death prior to completion by Parent of all payments due under this Agreement, Parent shall make all such payments to Executive's beneficiary or to Executive's estate as appropriate.

(f) Applicable Law. This Agreement shall be governed by, and construed in accordance with, the laws of the State of California, without giving effect to any choice of law or conflict of law rules or provisions (whether of the State of California or any other jurisdiction) that would cause the application of the laws of any jurisdiction other than the State of California.

(g) Dispute Resolution. Any controversy, dispute or claim arising out of or relating to this Agreement (a " Covered Claim") shall be resolved by binding arbitration to be held in San Diego, California, and shall be administered by JAMS in accordance with the Employment Arbitration Rules & Procedures of JAMS then in effect and subject to JAMS Policy on Employment Arbitration Minimum Standards. Each party shall pay their own costs and expenses (including attorneys' fees and other charges of counsel) incurred in resolving any such Covered Claim; provided, that in the event litigation is required to compel arbitration or to enforce an arbitration award or judgment pursuant to this Agreement, the non-prevailing party in such litigation shall reimburse the costs and expenses (including attorney's fees and other charges of counsel) of the prevailing party. Judgment upon the award rendered by the arbitrator(s) may be entered into any court having jurisdiction thereof. The parties hereto agree that any action to compel arbitration pursuant to this Agreement shall be brought in the appropriate California state court, and in connection with such action to compel, the laws of California shall control.

(h) Executive's Cooperation. During the Employment Period and thereafter, Executive shall cooperate with Parent, Employer and their respective Subsidiaries and Affiliates in any disputes with third parties, internal investigation or administrative, regulatory or judicial proceeding as reasonably requested by Parent (including Executive being available to Parent upon reasonable notice for interviews and factual investigations, appearing at Parent's request to give testimony without requiring service of a subpoena or other legal process, volunteering to Parent all pertinent information and turning over to Parent all relevant documents which are or may come into Executive's possession, all at times and on schedules that are reasonably consistent with Executive's other permitted activities and commitments). In the event Parent requires Executive's cooperation in accordance with this paragraph after the Employment Period, Parent shall reimburse Executive for Executive's reasonable time at a rate of $100 per hour and reasonable travel expenses (including lodging and meals, upon submission of receipts).

(i) Remedies. Each of the parties to this Agreement shall have all rights and remedies set forth in this Agreement and all rights and remedies which such Person has been granted at any time under any other agreement or contract and all of the rights which such Person has under any law. Each of the parties to this Agreement will be entitled to enforce its rights under this Agreement specifically, to recover damages and costs caused by any breach of any provision of this Agreement and to exercise all other rights existing in its favor. The parties hereto agree and acknowledge that money damages may not be an adequate remedy for any breach of the provisions of this Agreement and that any party and/or their respective successors and assigns may, in addition to other rights and remedies existing in their favor, but subject to Section 6(g), apply to any court of competent jurisdiction for specific performance and/or injunctive or other relief in order to enforce, or prevent any violations of, the provisions of this Agreement.

(j) Amendment and Waiver. The provisions of this Agreement may be amended and waived only with the prior written consent of Parent, Employer and Executive. No failure by any party to insist upon the strict performance of any covenant, duty, agreement, or condition of this Agreement or to exercise any right or remedy consequent upon a breach thereof shall constitute a waiver of any such breach or any other covenant, duty, agreement, or condition. The waiver by any party of a breach of any covenant, duty, agreement, or condition of this Agreement of any other party shall not operate or be construed as a waiver of any subsequent breach of that provision or any other provision hereof.

(k) Insurance. Parent or Employer, at its discretion, may apply for and procure in its own name and for its own benefit life and/or disability insurance on Executive in any amount or amounts considered available. Executive agrees to cooperate in any medical or other examination, supply any information, and to execute and deliver any applications or other instruments in writing as may be reasonably necessary to obtain and constitute such insurance.

(l) Business Days. If any time period for giving notice or taking action hereunder expires on a day which is a Saturday, Sunday or holiday in the state in which Parent's chief executive office is located, the time period shall be automatically extended to the business day immediately following such Saturday, Sunday or holiday.

(m) Tax Withholding. Parent, Employer and their respective Subsidiaries shall be entitled to deduct or withhold from any amounts owing from Parent, Employer or any of their respective Subsidiaries to Executive (including withholding shares or other equity securities in the case of issuances of equity by Parent, Employer or any of their respective Subsidiaries) any federal, state, local or foreign withholding taxes, excise taxes, or employment taxes ("Taxes") imposed with respect to Executive's compensation or other payments from Parent, Employer or any of their respective Subsidiaries or Executive's ownership interest in Parent, including wages, bonuses, distributions, the receipt or exercise of equity options and/or the receipt or vesting of restricted equity. In the event any such deductions or withholdings are not made, Executive shall indemnify Parent, Employer and each of their respective Subsidiaries for any amounts paid with respect to any such Taxes, together with any interest, penalties and related expenses thereto; provided, that, Executive shall not be obligated to indemnify Parent pursuant to this Section 6(m) for such interest, penalties or related expenses which are directly caused by the failure of Parent to take necessary action with respect to such deductions and withholdings as it is required by law to take.

(n) Termination. This Agreement (except for the provisions of Sections 1(a) and 1(b)) shall survive a Separation and shall remain in full force and effect after such Separation.

(o) Electronic Delivery. This Agreement, the agreements referred to herein, and each other agreement or instrument entered into in connection herewith or therewith or contemplated hereby or thereby, and any amendments hereto or thereto, to the extent signed and delivered by means of a photographic, portable document format (.pdf), or similar reproduction of such signed writing using an electronic mail shall be treated in all manner and respects as an original agreement or instrument and shall be considered to have the same binding legal effect as if it were the original signed version thereof delivered in person. At the request of any party hereto or to any such agreement or instrument, each other party hereto or thereto shall re-execute original forms thereof and deliver them to all other parties hereto. No party hereto or to any such agreement or instrument shall raise the use of electronic mail to deliver a signature or the fact that any signature or agreement or instrument was transmitted or communicated through the use of electronic mail as a defense to the formation or enforceability of a contract and each such party forever waives any such defense.

(p) No Third-Party Beneficiaries. Except as expressly provided herein (including the last sentence of Section 6(e)), no term or provision of this Agreement is intended to be, or shall be, for the benefit of any Person not a party hereto, and no such other Person shall have any right or cause of action hereunder. Notwithstanding the foregoing, any Subsidiary or Parent or Employer that is not a signatory to this Agreement shall be a third party beneficiary of Executive's obligations under Sections 2, 3, 6(g), 6(h) and 6(o) and shall be entitled to enforce such obligations as if a party hereto.

(q) Directors' and Officers' Insurance. Each of Parent and Employer agree that it shall obtain and maintain in full force and effect during the term of Executive's employment hereunder directors' and officers' insurance policies in amounts and with coverages customary for entities of the size and with the type of business of Parent and Employer, respectively.

(r) Clawback. Notwithstanding any provision of this Agreement to the contrary, Executive acknowledges that the amounts paid or payable under this Agreement shall be subject to (i) the provisions of any applicable clawback policies or procedures adopted by Parent, Employer or any of their Affiliates or Subsidiaries, which clawback policies or procedures may provide for forfeiture and/or

recoupment of amounts paid or payable under this Agreement, and (ii) any right or obligation that Employer or Parent may have regarding the clawback of "incentive-based compensation" under Section 10D of the Securities Exchange Act of 1934, as amended, and any applicable rules and regulations promulgated thereunder from time to time by the U.S. Securities and Exchange Commission, the listing standards of any national securities exchange or association on which Parent's securities are listed, or any other applicable law (the "Dodd-Frank Clawback"). Notwithstanding any provision of this Agreement to the contrary, each of Parent, Employer or any of their Affiliates or Subsidiaries reserves the right, without the consent of Executive, to adopt any such clawback policies and procedures, including such policies and procedures applicable to this Agreement with retroactive effect; provided, however, that such clawback policies and procedures shall not apply to compensation paid prior to the Employment Period, except as may be required by the Dodd-Frank Clawback.

* * * * *

IN WITNESS WHEREOF, the parties hereto have executed this Amended and Restated Employment Agreement as of the date first above written.

MARAVAI LIFESCIENCES HOLDINGS, INC.

By: /s/ Carl Hull
Name: Carl Hull
Its: Chief Executive Officer

CYGNUS TECHNOLOGIES, LLC

By: /s/ Carl Hull
Name: Carl Hull
Its: President

MLSC HOLDINGS, LLC

By: /s/ Carl Hull
Name: Carl Hull
Its: President

/s/ Christine Dolan
Christine Dolan

EXHIBIT 31.1

Certification Pursuant to Section 302 of Sarbanes-Oxley Act of 2002

I, Carl Hull, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Maravai LifeSciences Holdings, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: May 9, 2023

/s/ Carl Hull
Carl Hull
Executive Chairman of the Board and
Interim Chief Executive Officer

EXHIBIT 31.2

Certification Pursuant to Section 302 of Sarbanes-Oxley Act of 2002

I, Kevin Herde, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Maravai LifeSciences Holdings, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: May 9, 2023

/s/ Kevin Herde
Kevin Herde
Chief Financial Officer

EXHIBIT 32.1

Certification of the Chief Executive Officer

Pursuant to Rule 18 U.S.C. Section 1350

In connection with the Quarterly Report on Form 10-Q of Maravai LifeSciences Holdings, Inc. (the "Company") for the period ended March 31, 2023, as filed with the U.S. Securities and Exchange Commission (the "Report"), I, Carl Hull, Executive Chairman of the Board and Interim Chief Executive Officer 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 my knowledge:

1. The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and

2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: May 9, 2023

/s/ Carl Hull
Carl Hull
Executive Chairman of the Board and
Interim Chief Executive Officer

EXHIBIT 32.2

Certification of the Chief Financial Officer

Pursuant to Rule 18 U.S.C. Section 1350

In connection with the Quarterly Report on Form 10-Q of Maravai LifeSciences Holdings, Inc. (the "Company") for the period ended March 31, 2023, as filed with the U.S. Securities and Exchange Commission (the "Report"), I, Kevin Herde, Chief Financial Officer 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 my knowledge:

1. The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and

2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: May 9, 2023

/s/ Kevin Herde
Kevin Herde
Chief Financial Officer