UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

		FORM 10-Q	_
(Mark One) ☑		O SECTION 13 OR 15(d) OF THE SECU- RIOD ENDED SEPTEMBER 29, 2018 OR	RITIES EXCHANGE ACT OF 1934
	TRANSITION REPORT PURSUANT T FOR THE TRANSITION PE	O SECTION 13 OR 15(d) OF THE SECU	RITIES EXCHANGE ACT OF 1934
		Commission File No. 001-15943	
		charles river	
	CHARLES RIVER	LABORATORIES INTERNA	ATIONAL, INC.
	(E	xact Name of Registrant as Specified in Its Charter)	
	Delaware (State or Other Jurisdiction of Incorporation or Organization) 251 Ballardvale Street Wilmington, Massachusetts (Address of Principal Executive Offices)		06-1397316 (I.R.S. Employer Identification No.) 01887 (Zip Code)
	(Registrant's te	elephone number, including area code): (781)	222-6000
during the prece			a 13 or 15(d) of the Securities Exchange Act of 1934 (s), and (2) has been subject to such filing requirements
	(§ 232.405 of this chapter) during the preceding	bmitted electronically every Interactive Data Fil g 12 months (or for such shorter period that the	e required to be submitted pursuant to Rule 405 of registrant was required to submit such
emerging growt			accelerated filer, smaller reporting company, or an ng company," and "emerging growth company" in
I	arge accelerated filer ☑	Accelerated filer \square	Non-accelerated filer \square
Sm	aller reporting company \square	Emerging growth company \square	
	merging growth company, indicate by a check cial accounting standards provided pursuant to	_	extended transition period for complying with any new
Indica	te by check mark whether the registrant is a sho	ell company (as defined in Rule 12b-2 of the Ex	change Act). Yes □ No ☑
As of	October 26, 2018, there were 48,096,420 share	s of the Registrant's common stock outstanding	

CHARLES RIVER LABORATORIES INTERNATIONAL, INC.

QUARTERLY REPORT ON FORM 10-Q FOR THE QUARTERLY PERIOD ENDED SEPTEMBER 29, 2018

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Special Note on Factors Affecting Future Results

This Quarterly Report on Form 10-Q contains forward-looking statements regarding future events and the future results of Charles River Laboratories International, Inc. that are based on our current expectations, estimates, forecasts and projections about the industries in which we operate and the beliefs and assumptions of our management. Words such as "expect," "anticipate," "goal," "project," "intend," "plan," "believe," "seek," "estimate," "will," "likely," "may," "designed," "would," "future," "can," "could," and other similar expressions which are predictions of, indicate future events and trends or which do not relate to historical matters, are intended to identify such forward-looking statements. These statements are based on our current expectations and beliefs and involve a number of risks, uncertainties and assumptions that are difficult to predict.

For example, we may use forward-looking statements when addressing topics such as: goodwill and asset impairments still under review; future demand for drug discovery and development products and services, including the outsourcing of these services; our expectations regarding stock repurchases, including the number of shares to be repurchased, expected timing and duration, the amount of capital that may be expended and the treatment of repurchased shares; present spending trends and other cost reduction activities by our clients; future actions by our management; the outcome of contingencies; changes in our business strategy, business practices and methods of generating revenue; the development and performance of our services and products; market and industry conditions, including competitive and pricing trends; our strategic relationships with leading pharmaceutical and biotechnology companies, venture capital investments, and opportunities for future similar arrangements; our cost structure; the impact of acquisitions; our expectations with respect to revenue growth and operating efficiencies and profitability (and our ability to accommodate future demand with our infrastructure), including gains and losses attributable to businesses we plan to close, consolidate, divest or repurpose (including our Maryland research model production site); changes in our expectations regarding future stock option, restricted stock, performance share units, and other equity grants to employees and directors; expectations with respect to foreign currency exchange; assessing (or changing our assessment of) our tax positions for financial statement purposes; and our liquidity. In addition, these statements include the impact of economic and market conditions on us and our clients; the effects of our cost saving actions and the steps to optimize returns to shareholders on an effective and timely basis; and our ability to withstand the current market conditions.

You should not rely on forward-looking statements because they are predictions and are subject to risks, uncertainties, and assumptions that are difficult to predict. Therefore, actual results may differ materially and adversely from those expressed in any forward-looking statements. You are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date of this document, or in the case of statements incorporated by reference, on the date of the document incorporated by reference.

Factors that might cause or contribute to such differences include, but are not limited to, those discussed in our Annual Report on Form 10-K for the year ended December 30, 2017, under the sections entitled "Our Strategy," "Risk Factors," "Management's Discussion and Analysis of Financial Condition and Results of Operations," in our press releases, and other financial filings with the Securities and Exchange Commission. We have no obligation to publicly update or revise any forward-looking statements, whether as a result of new information, future events, or risks. New information, future events, or risks may cause the forward-looking events we discuss in this report not to occur.

PART I. FINANCIAL INFORMATION

Item 1. Financial Statements

CHARLES RIVER LABORATORIES INTERNATIONAL, INC. CONDENSED CONSOLIDATED STATEMENTS OF INCOME (UNAUDITED) (in thousands, except per share amounts)

	Three Months Ended			Nine Months Ended				
	Sep	otember 29, 2018	s	September 30, 2017	September 29, 2018		Sep	tember 30, 2017
Service revenue	\$	443,038	\$	326,711	\$	1,226,948	\$	960,640
Product revenue		142,257		137,521		437,618		418,484
Total revenue		585,295		464,232		1,664,566		1,379,124
Costs and expenses:								
Cost of services provided (excluding amortization of intangible assets)		298,018		219,725		844,130		641,945
Cost of products sold (excluding amortization of intangible assets)		71,077		67,660		206,786		203,655
Selling, general and administrative		113,033		92,428		336,936		277,157
Amortization of intangible assets		18,805		10,357		47,813		30,913
Operating income		84,362		74,062		228,901		225,454
Other income (expense):								
Interest income		230		134		694		497
Interest expense		(17,197)		(7,667)		(47,031)		(22,053)
Other income, net		5,910		6,410		24,069		24,004
Income from continuing operations, before income taxes		73,305		72,939		206,633		227,902
Provision for income taxes		12,403		19,945		39,613		73,272
Income from continuing operations, net of income taxes		60,902		52,994		167,020		154,630
Income (loss) from discontinued operations, net of income taxes		_		(39)		1,506		(114)
Net income		60,902		52,955		168,526		154,516
Less: Net income attributable to noncontrolling interests		534		481		1,818		1,312
Net income attributable to common shareholders	\$	60,368	\$	52,474	\$	166,708	\$	153,204
Earnings per common share							_	
Basic:								
Continuing operations attributable to common shareholders	\$	1.25	\$	1.11	\$	3.43	\$	3.23
Discontinued operations	\$	_	\$	_	\$	0.03	\$	_
Net income attributable to common shareholders	\$	1.25	\$	1.11	\$	3.47	\$	3.22
Diluted:								
Continuing operations attributable to common shareholders	\$	1.22	\$	1.09	\$	3.36	\$	3.17
Discontinued operations	\$	_	\$	_	\$	0.03	\$	_
Net income attributable to common shareholders	\$	1.22	\$	1.08	\$	3.39	\$	3.16

See Notes to Unaudited Condensed Consolidated Financial Statements.

CHARLES RIVER LABORATORIES INTERNATIONAL, INC. CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (UNAUDITED) (in thousands)

	Three Months Ended				Nine Months Ended			
	Septe	ember 29, 2018	September 30, 2017	S	September 29, 2018	S	eptember 30, 2017	
Net income	\$	60,902	\$ 52,955	\$	168,526	\$	154,516	
Other comprehensive income:								
Foreign currency translation adjustment and other		(6,805)	24,570		(14,524)		69,242	
Amortization of net loss and prior service benefit included in net periodic cost for pension and other post-retirement benefit plans		615	883		1,864		2,638	
Comprehensive income, before income taxes		54,712	78,408		155,866		226,396	
Less: Income tax (benefit) expense related to items of other comprehensive income		257	153		(341)		776	
Comprehensive income, net of income taxes		54,455	78,255		156,207		225,620	
Less: Comprehensive (loss) income related to noncontrolling interests, net of income taxes		(74)	766		886		1,964	
Comprehensive income attributable to common shareholders	\$	54,529	\$ 77,489	\$	155,321	\$	223,656	

CHARLES RIVER LABORATORIES INTERNATIONAL, INC. CONDENSED CONSOLIDATED BALANCE SHEETS (UNAUDITED) (in thousands, except per share amounts)

	Sej	otember 29, 2018	D	ecember 30, 2017
Assets				
Current assets:				
Cash and cash equivalents	\$	138,866	\$	163,794
Trade receivables, net		487,339		430,016
Inventories		125,500		114,956
Prepaid assets		43,764		36,544
Other current assets		42,697		81,315
Total current assets		838,166		826,625
Property, plant and equipment, net		896,901		781,973
Goodwill		1,252,700		804,906
Client relationships, net		545,799		301,891
Other intangible assets, net		83,934		67,871
Deferred tax assets		24,562		22,654
Other assets		154,595		124,002
Total assets	\$	3,796,657	\$	2,929,922
Liabilities, Redeemable Noncontrolling Interest and Equity				
Current liabilities:				
Current portion of long-term debt and capital leases	\$	31,651	\$	30,998
Accounts payable		77,736		77,838
Accrued compensation		112,731		101,044
Deferred revenue		140,760		117,569
Accrued liabilities		109,810		89,780
Other current liabilities		66,911		44,460
Current liabilities of discontinued operations		_		1,815
Total current liabilities		539,599		463,504
Long-term debt, net and capital leases		1,652,733		1,114,105
Deferred tax liabilities		145,331		89,540
Other long-term liabilities		184,954		194,815
Long-term liabilities of discontinued operations		_		3,942
Total liabilities		2,522,617	_	1,865,906
Commitments and contingencies (Note 15)				
Redeemable noncontrolling interest		17,331		16,609
Equity:		,		.,
Preferred stock, \$0.01 par value; 20,000 shares authorized; no shares issued and outstanding		_		_
Common stock, \$0.01 par value; 120,000 shares authorized; 88,315 shares issued and 48,094 shares outstanding as of September 29, 2018, and 87,495 shares issued and 47,402 shares outstanding as of December 30, 2017		883		875
Additional paid-in capital		2,625,256		2,560,192
Retained earnings		460,120		288,658
Treasury stock, at cost, 40,221 shares and 40,093 shares as of September 29, 2018 and December 30, 2017, respectively		(1,673,705)		(1,659,914)
Accumulated other comprehensive loss		(1,073,703)		(1,039,314)
Total equity attributable to common shareholders		1,253,106		1,045,080
• •				
Noncontrolling interest Tetal equity		3,603		2,327
Total equity	¢	1,256,709	¢	1,047,407
Total liabilities, redeemable noncontrolling interest and equity	\$	3,796,657	\$	2,929,922

See Notes to Unaudited Condensed Consolidated Financial Statements.

CHARLES RIVER LABORATORIES INTERNATIONAL, INC. CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS (UNAUDITED) (in thousands)

	Nine Months Ended		
	Septemb	per 29, 2018	September 30, 2017
Cash flows relating to operating activities			
Net income	\$	168,526	\$ 154,516
Less: Income (loss) from discontinued operations, net of income taxes		1,506	(114)
Income from continuing operations, net of income taxes		167,020	154,630
Adjustments to reconcile net income from continuing operations to net cash provided by operating activities:			
Depreciation and amortization		120,198	97,675
Stock-based compensation		35,908	32,902
Deferred income taxes		(10,385)	18,176
Gain on venture capital investments		(22,760)	(12,321)
Gain on divestiture		_	(10,577)
Other, net		10,036	1,034
Changes in assets and liabilities:			
Trade receivables, net		(30,318)	(42,712)
Inventories		(10,340)	(9,500)
Accounts payable		(5,322)	(6,160)
Accrued compensation		6,088	(10,548)
Deferred revenue		33,491	(16,849)
Customer contract deposits		34,455	_
Other assets and liabilities, net		(26,904)	(1,912)
Net cash provided by operating activities		301,167	193,838
Cash flows relating to investing activities			·
Acquisitions of businesses and assets, net of cash acquired		(822,611)	(22,474)
Capital expenditures		(71,378)	(53,928)
Purchases of investments and contributions to venture capital investments		(20,535)	(42,135)
Proceeds from sale of investments		30,595	6,604
Proceeds from divestiture			72,462
Other, net		(118)	(288)
Net cash used in investing activities	_	(884,047)	(39,759)
Cash flows relating to financing activities		(004,047)	(55,755)
Proceeds from long-term debt and revolving credit facility		2,392,201	229,255
Proceeds from exercises of stock options		30,228	35,089
·			
Payments on long-term debt, revolving credit facility, and capital lease obligations		(1,832,805)	(309,258)
Payments on debt financing costs		(18,337)	(406.000)
Purchase of treasury stock		(13,791)	(106,902)
Other, net			(3,650)
Net cash provided by (used in) financing activities		557,496	(155,466)
Discontinued operations			
Net cash used in operating activities from discontinued operations		(3,735)	(1,489)
Effect of exchange rate changes on cash, cash equivalents, and restricted cash		4,664	9,135
Net change in cash, cash equivalents, and restricted cash		(24,455)	6,259
Cash, cash equivalents, and restricted cash, beginning of period		166,331	119,894
Cash, cash equivalents, and restricted cash, end of period	\$	141,876	\$ 126,153

	Nine Months Ended				
	Sept	ember 29, 2018	September 30, 2017		
Supplemental cash flow information:					
Cash and cash equivalents	\$	138,866	\$	123,618	
Restricted cash included in Other current assets		426		591	
Restricted cash included in Other assets		2,584		1,944	
Cash, cash equivalents, and restricted cash, end of period	\$	141,876	\$	126,153	

See Notes to Unaudited Condensed Consolidated Financial Statements.

1. BASIS OF PRESENTATION

The accompanying condensed consolidated financial statements are unaudited and have been prepared by Charles River Laboratories International, Inc. (the Company) in accordance with accounting principles generally accepted in the United States (U.S. GAAP) and pursuant to the rules and regulations of the Securities and Exchange Commission (SEC). The year-end condensed consolidated balance sheet data was derived from the Company's audited consolidated financial statements, but does not include all disclosures required by U.S. GAAP. These unaudited condensed consolidated financial statements should be read in conjunction with the Company's Annual Report on Form 10-K for fiscal year 2017. The unaudited condensed consolidated financial statements, in the opinion of management, reflect all normal and recurring adjustments necessary for a fair statement of the Company's financial position and results of operations.

The Company has reclassified certain amounts in the unaudited condensed consolidated statements of income for prior periods to conform to the current year presentation. See "Newly Adopted Accounting Pronouncements" below for further discussion and impact on the condensed consolidated financial statements.

Use of Estimates

The preparation of unaudited condensed consolidated financial statements in accordance with U.S. GAAP requires that the Company make estimates and judgments that may affect the reported amounts of assets, liabilities, redeemable noncontrolling interest, revenues, expenses and related disclosure of contingent assets and liabilities. On an on-going basis, the Company evaluates its estimates, judgments, and methodologies. The Company bases its estimates on historical experience and on various other assumptions that are believed to be reasonable, the results of which form the basis for making judgments about the carrying values of assets and liabilities. Actual results may differ from these estimates under different assumptions or conditions. Changes in estimates are reflected in reported results in the period in which they become known.

Consolidation

The Company's unaudited condensed consolidated financial statements reflect its financial statements and those of its subsidiaries in which the Company holds a controlling financial interest. For consolidated entities in which the Company owns or is exposed to less than 100% of the economics, the Company records net income (loss) attributable to noncontrolling interests in its consolidated statements of income equal to the percentage of the economic or ownership interest retained in such entities by the respective noncontrolling parties. Intercompany balances and transactions are eliminated in consolidation.

The Company's fiscal year is typically based on 52-weeks, with each quarter composed of 13 weeks ending on the last Saturday on, or closest to, March 31, June 30, September 30, and December 31.

Summary of Significant Accounting Policies

The Company's significant accounting policies are described in Note 1, "Description of Business and Summary of Significant Accounting Policies," in the Company's Annual Report on Form 10-K for fiscal year 2017.

Newly Adopted Accounting Pronouncements

In March 2018, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update (ASU) 2018-05, "Income Taxes (Topic 740) - Amendments to SEC Paragraphs Pursuant to SEC Staff Accounting Bulletin No. 118 (SAB 118)." This standard amends Accounting Standards Codification 740, Income Taxes (ASC 740) to provide guidance on accounting for the tax effects of U.S. Tax Reform pursuant to SAB 118, which allows companies to complete the accounting under ASC 740 within a one-year measurement period from the enactment date of U.S. Tax Reform. This standard is effective upon issuance and the Company has complied with the amendments. See Note 11, "Income Taxes" for further discussion.

In February 2018, the FASB issued ASU 2018-02, "Income Statement - Reporting Comprehensive Income (Topic 220) Reclassification of Certain Tax Effects from Accumulated Other Comprehensive Income." The standard allows for reclassification from accumulated other comprehensive income to retained earnings for the stranded tax effects arising from the change in the reduction of the U.S. federal statutory income tax rate to 21% from 35%. The Company elected to early adopt this standard in fiscal year 2018 as permitted on a prospective basis, resulting in a reclassification of \$3.3 million from Accumulated other comprehensive income to Retained earnings as a result of remeasuring the Company's deferred tax liabilities related to its pension and other post-retirement benefit plan gains and losses. The Company's policy is to release material stranded tax effects on a specific identification basis.

In March 2017, the FASB issued ASU 2017-07, "Improving the Presentation of Net Periodic Pension Cost and Net Periodic Postretirement Benefit Cost." The standard requires an employer to disaggregate the service cost component from the other components of net benefit cost and provides explicit guidance on the presentation of the service cost component and the other components of net benefit cost in the statements of income. The Company adopted this standard in fiscal year 2018 and applied the changes retrospectively to the presentation of the service cost component and the other components of net periodic pension cost in the statements of income for all periods presented as required. The adoption of this standard increased Operating income by \$0.1 million and \$0.7 million during the three and nine months ended September 30, 2017, respectively. In connection with

the impact of Operating income to the Company's reportable segments for the three months ended September 30, 2017, Research Models and Services (RMS) decreased by \$0.1 million, Discovery and Safety Assessment (DSA) decreased by \$0.3 million, Manufacturing Support (Manufacturing) decreased by less than \$0.1 million, and Unallocated corporate increased by \$0.4 million. For the nine months ended September 30, 2017, Operating income for RMS decreased by \$0.1 million, DSA decreased by \$1.0 million, Manufacturing decreased by less than \$0.1 million, and Unallocated corporate increased by \$1.7 million.

In January 2017, the FASB issued ASU 2017-01, "Clarifying the Definition of a Business." The standard clarifies the definition of a business by adding guidance to assist entities in evaluating whether transactions should be accounted for as acquisitions of assets or businesses. The Company's adoption of this standard in fiscal year 2018 did not have a significant impact on the consolidated financial statements and related disclosures.

In October 2016, the FASB issued ASU 2016-16, "Intra-Entity Transfers of Assets Other Than Inventory." The standard requires the immediate recognition of tax effects for an intra-entity asset transfer other than inventory. The Company's adoption of this standard in fiscal year 2018 did not have a significant impact on the consolidated financial statements and related disclosures.

In January 2016, the FASB issued ASU 2016-01, "Recognition and Measurement of Financial Assets and Liabilities." This standard, including a subsequently issued amendment under ASU 2018-03, "Technical Corrections and Improvements to Financial Instruments - Recognition and Measurement of Financial Assets and Financial Liabilities", requires equity investments that are not accounted for under the equity method of accounting to be measured at fair value with changes recognized in net income, simplifies the impairment assessment of certain equity investments, and updates certain presentation and disclosure requirements. The Company adopted this standard in fiscal year 2018, resulting in an increase of \$1.9 million to Other assets with a corresponding increase to Retained earnings and Deferred taxes of \$1.4 million and \$0.5 million, respectively.

In May 2014, the FASB issued ASU 2014-09, "Revenue from Contracts with Customers." The standard, including subsequently issued amendments, replaced most existing revenue recognition guidance in U.S. GAAP and permits the use of either a modified retrospective or cumulative effect transition method. The Company elected the modified retrospective transition method. The standard requires an entity to recognize the amount of revenue to which it expects to be entitled for the transfer of promised goods or services to customers. The Company adopted this standard in fiscal year 2018. See Note 3, "Revenue From Contracts With Customers" for a discussion of the Company's adoption of this standard and its impact on the consolidated financial statements and related disclosures.

Newly Issued Accounting Pronouncements

In August 2018, the FASB issued ASU 2018-15, "Intangibles - Goodwill and Other - Internal-Use Software (Subtopic 350-40): Customer's Accounting for Implementation Costs Incurred in a Cloud Computer Arrangement that is a Service Contract." ASU 2018-15 aligns the requirements for capitalizing implementation costs incurred in a hosting arrangement that is a service contract with the requirements for capitalizing implementation costs incurred to develop or obtain internal-use software (and hosting arrangements that include an internal-use software license). The ASU is effective for fiscal years beginning after December 15, 2019, and interim periods within those fiscal years and will be applied either retrospectively or prospectively. Early adoption is permitted. The Company is still evaluating the impact this standard will have on its consolidated financial statements and related disclosures.

In August 2018, the FASB issued ASU 2018-14, "Compensation Retirement Benefits - Defined Benefit Plans -General (Subtopic 715-20)." ASU 2018-14 removes the requirements to disclose the amounts in Accumulated other comprehensive income (loss) expected to be recognized as components of net periodic benefit cost over the next fiscal year and the related party disclosures about the amount of future annual benefits covered by insurance contracts. In addition, the ASU adds the requirement to disclose an explanation for any significant gains and losses related to changes in the benefit obligation for the period. The ASU is effective for fiscal years ending after December 15, 2020 and will be applied on a retrospective basis to all periods presented. Early adoption is permitted. The Company is still evaluating the impact this standard will have on its consolidated financial statements and related disclosures.

In August 2018, the FASB issued ASU 2018-13, "Fair Value Measurement (Topic 820) - Disclosure Framework - Changes to the Disclosure Requirements for Fair Value Measurement." ASU 2018-13 removes the disclosure requirement for the amount and reasons for transfers between Level 1 and Level 2 fair value measurements as well as the process for Level 3 fair value measurements. In addition, the ASU adds the disclosure requirements for changes in unrealized gains and losses included in Other comprehensive income (loss) for recurring Level 3 fair value measurements held at the end of the reporting period as well as the range and weighted average of significant unobservable inputs used to develop Level 3 fair value measurements. The ASU is effective for fiscal years beginning after December 15, 2019, and interim periods within those fiscal years and will be applied on a retrospective basis to all periods presented. Early adoption is permitted. The Company is still evaluating the impact this standard will have on its consolidated financial statements and related disclosures.

In June 2018, the FASB issued ASU 2018-07, "Stock Compensation (Topic 718): Improvements to Nonemployee Share-Based Payment Accounting." ASU 2018-07 aligns the accounting for share-based payment awards issued to employees and nonemployees as well as improves financial reporting for share-based payments to nonemployees. The ASU is effective for fiscal years beginning after December 15, 2018, and interim periods within those fiscal years and will be applied to all new option awards granted after the date of adoption. Early adoption is permitted. The adoption of this standard is not expected to have a material impact on the Company's consolidated financial statements and related disclosures.

In August 2017, the FASB issued ASU 2017-12, "Derivatives and Hedging (Topic 815) Targeted Improvements to Accounting for Hedging Activities." ASU 2017-12 refines and expands hedge accounting for both financial and commodity risks. It also creates more transparency around how economic results are presented, both on the face of the financial statements and in the disclosures. In addition, this ASU makes certain targeted improvements to simplify the application of hedge accounting guidance. This ASU is effective for fiscal years beginning after December 15, 2018, and interim periods within those fiscal years, and requires the modified retrospective approach. Early adoption is permitted. This update applies to all existing hedging relationships on the date of adoption with the cumulative effect of adoption being reflected as of the beginning of the fiscal year of adoption. The Company is still evaluating the impact this standard will have on its consolidated financial statements and related disclosures.

In January 2017, the FASB issued ASU 2017-04, "Simplifying the Test for Goodwill Impairment." The standard simplifies the accounting for goodwill impairment by removing Step 2 of the goodwill impairment test, which requires a hypothetical purchase price allocation. This standard is effective for annual or interim goodwill impairment tests in fiscal years beginning after December 15, 2019, and will be applied on a prospective basis. Early adoption is permitted for interim or annual goodwill impairment tests performed on testing dates after January 1, 2017. The adoption of this standard is not expected to have a material impact on the Company's consolidated financial statements and related disclosures.

In February 2016, the FASB issued ASU 2016-02, "Leases." The standard, including subsequently issued amendments, established the principles that lessees and lessors will apply to report useful information to users of financial statements about the amount, timing and uncertainty of cash flows arising from a lease. This ASU is effective for fiscal years beginning after December 15, 2018, and interim periods within those fiscal years. Early adoption is permitted. The Company formed an implementation team during fiscal year 2017 to oversee adoption of the new standard. The implementation team has completed its initial assessment of the new standard, including a detailed review of the Company's lease portfolio. The Company continues to assess the impact on the existing lease accounting policies, newly required financial statement disclosures, and executing on the project plan. Currently, the Company is performing contract reviews, evaluating anticipated changes to systems, business processes, and internal controls to support the adoption of the new standard. The Company is still evaluating the full impact this standard will have on its consolidated financial statements and related disclosures, but expects to recognize substantially all of its leases on the balance sheet as of December 30, 2018 (day one of fiscal year 2019, which is the Company's adoption date) by recording a right-of-use asset and a corresponding lease liability. The Company will adopt this standard using a modified retrospective transition approach to be applied to leases existing as of or entered into after the adoption date.

2. BUSINESS ACQUISITIONS AND DIVESTITURE

MPI Research

On April 3, 2018, the Company acquired MPI Research, a non-clinical contract research organization (CRO) providing comprehensive testing services to biopharmaceutical and medical device companies worldwide. The acquisition enhances the Company's position as a leading global early-stage CRO by strengthening its ability to partner with clients across the drug discovery and development continuum. The purchase price for MPI Research was \$829.7 million in cash, subject to certain post-closing adjustments that may change the purchase price. The acquisition was funded by borrowings on the Company's \$2.3B Credit Facility as well as the issuance of the Company's Senior Notes. See Note 9, "Long-Term Debt and Capital Lease Obligations." This business is reported as part of the Company's DSA reportable segment.

The preliminary purchase allocation of \$800.8 million, net of \$27.7 million of cash acquired and a final net working capital adjustment of \$1.2 million, was as follows:

	A	pril 3, 2018
	(in	thousands)
Trade receivables (contractual amount of \$35,073)	\$	35,073
Inventories		4,463
Other current assets (excluding cash)		5,893
Property, plant and equipment		128,403
Goodwill		440,662
Definite-lived intangible assets		309,200
Other long-term assets		1,081
Deferred revenue		(22,600)
Current liabilities		(32,885)
Deferred tax liabilities		(66,277)
Other long-term liabilities		(2,213)
Total purchase price allocation	\$	800,800

The purchase price allocation is subject to change as additional information becomes available concerning the fair value and tax basis of the assets acquired and liabilities assumed, including certain contracts and obligations. Any additional adjustments to the purchase price allocation will be made as soon as practicable but no later than one year from the date of acquisition. From the date of the acquisition through September 29, 2018, the Company recorded measurement-period adjustments related to the acquisition that resulted in an immaterial change to the purchase price allocation on a consolidated basis.

The breakout of definite-lived intangible assets acquired was as follows:

	De	finite-Lived Intangible Assets	Weighted Average Amortization Life
		(in thousands)	(in years)
Client relationships	\$	264,900	13
Developed technology		23,400	3
Backlog		20,900	2
Total definite-lived intangible assets	\$	309,200	12

The goodwill resulting from the transaction, \$4.1 million of which is deductible for tax purposes due to a prior asset acquisition, is primarily attributable to the potential growth of the Company's DSA business from customers introduced through MPI Research and the assembled workforce of the acquired business.

The Company incurred transaction and integration costs in connection with the acquisition of \$0.8 million and \$15.3 million for the three and nine months ended September 29, 2018, respectively, which were primarily included in Selling, general and administrative expenses.

MPI Research revenue for the three and nine months ended September 29, 2018 was \$70.2 million and \$136.8 million, respectively. MPI Research operating income for the three and nine months ended September 29, 2018 was \$12.2 million and \$20.4 million, respectively.

The following selected pro forma consolidated results of operations are presented as if the MPI Research acquisition had occurred as of the beginning of the period immediately preceding the period of acquisition after giving effect to certain adjustments. For the nine months ended September 29, 2018, these adjustments included additional amortization of intangible assets and depreciation of fixed assets of \$11.8 million, additional interest expense on borrowings of \$2.8 million, elimination of intercompany activity and other one-time costs, and the tax impacts of these adjustments. For the nine months ended September 30, 2017, these adjustments included additional amortization of intangible assets and depreciation of fixed assets of \$17.3 million, additional interest expense on borrowings of \$19.3 million, elimination of intercompany activity and other one-time costs, and the tax impacts of these adjustments.

		Three Mo	nths E	nded		Nine Months Ended			
	Septe	mber 29, 2018	Se	eptember 30, 2017	Se	ptember 29, 2018	S	eptember 30, 2017	
		(in thousands)							
Revenue	\$	585,295	\$	523,948	\$	1,726,683	\$	1,555,146	
Net income attributable to common shareholders		59,297		48,927		168,872		139,258	
Earnings per common share									
Basic	\$	1.23	\$	1.03	\$	3.51	\$	2.93	
Diluted	\$	1.20	\$	1.01	\$	3.44	\$	2.87	

These pro forma results of operations have been prepared for comparative purposes only, and they do not purport to be indicative of the results of operations that actually would have resulted had the acquisition occurred on the dates indicated or that may result in the future. No effect has been given for synergies, if any, that may be realized through the acquisition.

KWS BioTest Limited

On January 11, 2018, the Company acquired KWS BioTest Limited (KWS BioTest), a CRO specializing in *in vitro* and *in vivo* discovery testing services for immuno-oncology, inflammatory and infectious diseases. The acquisition enhances the Company's discovery expertise, with complementary offerings that provide the Company's customers with additional tools in the active therapeutic research areas of oncology and immunology. The purchase price for KWS BioTest was \$20.3 million in cash, subject to certain post-closing adjustments that may change the purchase price, and was funded by the Company's various borrowings. In addition to the initial purchase price, the transaction includes aggregate, undiscounted contingent payments of up to £3.0 million (approximately \$3.9 million based on recent exchange rates), based on future performance. During the three months ended September 29, 2018, the terms of these contingent payments were amended, resulting in a fixed payment of £2.0 million (approximately \$2.6 million based on recent exchange rates), due in the first quarter of fiscal year 2019. The KWS BioTest business is reported as part of the Company's DSA reportable segment.

The preliminary purchase price allocation of \$21.5 million, net of \$1.0 million of cash acquired and a final net working capital adjustment of \$0.4 million, was as follows:

	January 11, 2018
	(in thousands)
Trade receivables (contractual amount of \$1,309)	\$ 1,309
Other current assets (excluding cash)	99
Property, plant and equipment	1,136
Definite-lived intangible assets - client relationships	3,647
Goodwill	17,660
Current liabilities	(1,575)
Deferred revenue	(151)
Long-term liabilities	(596)
Total purchase price allocation	\$ 21,529

The purchase price allocation is subject to change as additional information becomes available concerning the fair value and tax basis of the assets acquired and liabilities assumed, including certain contracts and obligations. Any additional adjustments to the purchase price allocation will be made as soon as practicable but no later than one year from the date of acquisition. From the date of the acquisition through September 29, 2018, the Company recorded measurement-period adjustments related to the acquisition that resulted in an immaterial change to the purchase price allocation on a consolidated basis.

The only definite-lived intangible asset relates to client relationships, which will be amortized over a weighted average life of 12 years.

The goodwill resulting from the transaction is primarily attributable to the potential growth of the Company's DSA business from customers introduced through KWS BioTest and the assembled workforce of the acquired business. The goodwill attributable to KWS BioTest is not deductible for tax purposes.

The Company incurred transaction and integration costs of \$0.1 million and \$0.6 million in connection with the acquisition for the three and nine months ended September 29, 2018, respectively, which were included in Selling, general and administrative expenses, within the unaudited condensed consolidated statements of income.

Pro forma financial information as well as actual revenue and operating income have not been included because KWS

BioTest's financial results are not significant when compared to the Company's consolidated financial results.

Brains On-Line

On August 4, 2017, the Company acquired Brains On-Line, a CRO providing critical data that advances novel therapeutics for the treatment of central nervous system (CNS) diseases. Brains On-Line strategically expands the Company's existing CNS capabilities and establishes the Company as a single-source provider for a broad portfolio of discovery CNS services. The purchase price for Brains On-Line was \$21.3 million in cash and was funded by the Company's various borrowings. In addition to the initial purchase price, the transaction includes aggregate, undiscounted contingent payments of up to €6.7 million (approximately \$7.8 million based on recent exchange rates), based on future performance. The Brains On-Line business is reported as part of the Company's DSA reportable segment.

The contingent payments become payable based on the achievement of certain revenue and earnings targets. If achieved, the payments become due in the first quarter of fiscal year 2019. The Company estimated the fair value of this contingent consideration based on a probability-weighted set of outcomes.

The purchase price allocation of \$20.1 million, net of \$0.6 million of cash acquired, was as follows:

	 August 4, 2017
	(in thousands)
Trade receivables (contractual amount of \$1,146)	\$ 1,146
Other current assets (excluding cash)	640
Property, plant and equipment	664
Other long-term assets	29
Definite-lived intangible assets	9,300
Goodwill	12,582
Current liabilities	(1,683)
Deferred revenue	(405)
Long-term liabilities	(2,151)
Total purchase price allocation	\$ 20,122

From the date of acquisition through June 30, 2018, the Company recorded measurement-period adjustments related to the acquisition that resulted in an immaterial change to the purchase price allocation on a consolidated basis. No further adjustments will be made to the purchase price allocation.

The breakout of definite-lived intangible assets acquired was as follows:

	Definite-	Lived Intangible Assets	Weighted Average Amortization Life
	(in	thousands)	(in years)
Client relationships	\$	7,000	13
Other intangible assets		2,300	10
Total definite-lived intangible assets	\$	9,300	12

The goodwill resulting from the transaction is primarily attributable to the potential growth of the Company's DSA business from customers and technology introduced through Brains On-Line and the assembled workforce of the acquired business. The goodwill attributable to Brains On-Line is not deductible for tax purposes.

No significant integration costs were incurred in connection with the acquisition for the three and nine months ended September 29, 2018. The Company incurred transaction and integration costs in connection with the acquisition of \$1.2 million and \$2.1 million for the three and nine months ended September 30, 2017, respectively, which were included in Selling, general and administrative expenses, within the unaudited condensed consolidated statements of income.

Pro forma financial information as well as actual revenue and operating income have not been included because Brains On-Line's financial results are not significant when compared to the Company's consolidated financial results.

Contract Manufacturing

On February 10, 2017, the Company sold its CDMO business to Quotient Clinical Ltd., based in London, England, for \$75.0 million in proceeds, net of \$0.6 million in cash and cash equivalents transferred in conjunction with the sale and \$0.3 million of working capital adjustments.

The CDMO business was acquired in April 2016 as part of the acquisition of WIL Research and was reported in the Company's Manufacturing reportable segment. The Company determined that the CDMO business was not optimized within the Company's portfolio at its current scale, and that the capital could be better deployed in other long-term growth opportunities.

During the three months ended April 1, 2017, the Company recorded a gain on the divestiture of the CDMO business of \$10.6 million, which was included in Other income, net within the Company's unaudited condensed consolidated statements of income. The carrying amounts of the major classes of assets and liabilities associated with the divestiture of the CDMO business were as follows:

	February 10, 2017			
Assets	(in thousands)			
Current assets	\$ 5,505			
Property, plant and equipment, net	11,174			
Goodwill	35,857			
Long-term assets	17,154			
Total assets	\$ 69,690			
Liabilities				
Deferred revenue	\$ 4,878			
Other current liabilities	1,158			
Total liabilities	\$ 6,036			

3. REVENUE FROM CONTRACTS WITH CUSTOMERS

Adoption of ASC Topic 606, "Revenue from Contracts with Customers" (ASC 606)

ASC 606 became effective for the Company on December 31, 2017 and was adopted using the modified retrospective method for all contracts not completed as of the date of adoption. For contracts that were modified before the effective date, the Company reflected the aggregate effect of all modifications when identifying performance obligations and allocating transaction price in accordance with the practical expedient, which did not have a material effect on the cumulative impact of adopting ASC 606. The reported results for 2018 reflect the application of ASC 606 guidance while the historical results for 2017 were prepared under the guidance of ASC 605, "Revenue Recognition" (ASC 605).

The cumulative effect of applying ASC 606 to all contracts with customers that were not completed as of December 30, 2017 was immaterial. There is no material difference in the reporting of revenue for the three and nine months ended September 29, 2018 in accordance with ASC 606 when compared to ASC 605.

Revenue Recognition

Revenue is recognized when, or as, obligations under the terms of a contract are satisfied, which occurs when control of the promised products or services is transferred to customers. Revenue is measured as the amount of consideration the Company expects to receive in exchange for transferring products or services to a customer ("transaction price").

To the extent the transaction price includes variable consideration, the Company estimates the amount of variable consideration that should be included in the transaction price utilizing the amount to which the Company expects to be entitled. Variable consideration is included in the transaction price if, in the Company's judgment, it is probable that a significant future reversal of cumulative revenue under the contract will not occur. Estimates of variable consideration and determination of whether to include estimated amounts in the transaction price are based largely on an assessment of the Company's anticipated performance and all information (historical, current and forecasted) that is reasonably available. Sales, value add, and other taxes collected on behalf of third parties are excluded from revenue.

When determining the transaction price of a contract, an adjustment is made if payment from a customer occurs either significantly before or significantly after performance, resulting in a significant financing component. Generally, the Company does not extend payment terms beyond one year. Applying the practical expedient, the Company does not assess whether a significant financing component exists if the period between when the Company performs its obligations under the contract and when the customer pays is one year or less. None of the Company's contracts contained a significant financing component for the nine months ended September 29, 2018.

Contracts with customers may contain multiple performance obligations. For such arrangements, the transaction price is allocated to each performance obligation based on the estimated relative standalone selling prices of the promised products or services underlying each performance obligation. The Company determines standalone selling prices based on the price at which the performance obligation is sold separately. If the standalone selling price is not observable through past transactions,

the Company estimates the standalone selling price taking into account available information such as market conditions and internally approved pricing guidelines related to the performance obligations.

Contracts are often modified to account for changes in contract specifications and requirements. Contract modifications exist when the modification either creates new, or changes existing, enforceable rights and obligations. Generally, when contract modifications create new performance obligations, the modification is considered to be a separate contract and revenue is recognized prospectively. When contract modifications change existing performance obligations, the existing transaction price and measure of progress for the performance obligation to which it relates is recognized as an adjustment to revenue (either as an increase in or a reduction of revenue) on a cumulative catch-up basis.

Product revenue is generally recognized when the customer obtains control of the Company's product, which occurs at a point in time, and may be upon shipment or upon delivery based on the contractual shipping terms of a contract. Service revenue is generally recognized over time as the services are delivered to the customer based on the extent of progress towards completion of the performance obligation. The selection of the method to measure progress towards completion requires judgment and is based on the nature of the products or services to be provided. Depending on which better depicts the transfer of value to the customer, the Company generally measures its progress using either cost-to-cost (input method) or right-to-invoice (output method). The Company uses the cost-to-cost measure of progress when it best depicts the transfer of value to the customer which occurs as the Company incurs costs on its contract, generally related to fixed fee service contracts. Under the cost-to-cost measure of progress, the extent of progress towards completion is measured based on the ratio of costs incurred to date to the total estimated costs at completion of the performance obligation. The costs calculation includes variables such as labor hours, allocation of overhead costs, research model costs, and subcontractor costs. Revenue is recorded proportionally as costs are incurred. The right-to-invoice measure of progress is generally related to rate per unit contracts, as the extent of progress towards completion is measured based on discrete service or time-based increments, such as samples tested or labor hours incurred. Revenue is recorded in the amount invoiced since that amount corresponds directly to the value of the Company's performance to date.

Disaggregation of Revenue

The following tables disaggregate the Company's revenue by major business line and timing of transfer of products or services for the three and nine months ended September 29, 2018 (in thousands):

Major Products/Service Lines:	Three Months Ended September 29, 2018	Nine Months Ended September 29, 2018			
RMS	\$ 126,811	\$	391,195		
DSA	352,257		958,665		
Manufacturing	106,227		314,706		
Total revenue	\$ 585,295	\$	1,664,566		
Timing of Revenue Recognition:	Three Months Ended September 29, 2018		Nine Months Ended September 29, 2018		
RMS					
Services and products transferred over time	\$ 49,417	\$	146,947		
Services and products transferred at a point in time	77,394		244,248		
DSA					
Services and products transferred over time	352,203		958,174		
Services and products transferred at a point in time	54		491		
Manufacturing					
Services and products transferred over time	31,420		92,978		
Services and products transferred at a point in time	74,807		221,728		
Total revenue	\$ 585,295	\$	1,664,566		

RMS

The RMS business generates revenue through the commercial production and sale of research models and the provision of services related to the maintenance and monitoring of research models and management of clients' research operations. Revenue from the sale of research models is recognized at a point in time when the customer obtains control of the product, which may be upon shipment or upon delivery based on the shipping terms of a contract. Revenue generated from research

models services is recognized over time and is typically based on a right-to-invoice measure of progress (output method) as invoiced amounts correspond directly to the value of the Company's performance to date.

DCA

The Discovery and Safety Assessment business provides a full suite of integrated drug discovery services directed at the identification, screening and selection of a lead compound for drug development and offers a full range of safety assessment services including bioanalysis, drug metabolism, pharmacokinetics, toxicology and pathology. Discovery and Safety Assessment services revenue is generally recognized over time using the cost-to-cost or right to invoice measures of progress, primarily representing fixed fee service contracts and per unit service contracts, respectively.

Manufacturing

The Manufacturing business includes Microbial Solutions, which provides *in vitro* (non-animal) lot-release testing products, microbial detection products, and species identification services; Biologics Testing Services (Biologics), which performs specialized testing of biologics; and Avian Vaccine Services (Avian), which supplies specific-pathogen-free chicken eggs and chickens. Species identification service revenue is generally recognized at a point in time as identifications are completed by the Company. Biologics service revenue is generally recognized over time using the cost-to-cost measure of progress. Microbial Solutions and Avian product sales are generally recognized at a point in time when the customer obtains control of the product, which may be upon shipment or upon delivery based on the contractual shipping terms of a contract.

Transaction Price Allocated to Future Performance Obligations

ASC 606 requires that the Company disclose the aggregate amount of transaction price that is allocated to performance obligations that have not yet been satisfied as of September 29, 2018. The guidance provides certain practical expedients that limit this requirement and, therefore, the Company does not disclose the value of unsatisfied performance obligations for (i) contracts with an original expected length of one year or less and (ii) contracts for which revenue is recognized at the amount to which the Company has the right to invoice for services performed.

The following table includes estimated revenue expected to be recognized in the future related to performance obligations that are unsatisfied (or partially satisfied) as of September 29, 2018:

		Revenue Expected to be Recognized in Future Periods										
	Les	s than 1 Year		1 to 3 Years	4 to 5 Years			Beyond 5 Years		Total		
						(in thousands)						
DSA	\$	126,336	\$	82,192	\$	3,299	\$	492	\$	212,319		
Manufacturing		10,286		20,245		9,013		68		39,612		
Total	\$	136,622	\$	102,437	\$	12,312	\$	560	\$	251,931		

Contract Balances from Contracts with Customers

The timing of revenue recognition, billings and cash collections results in billed receivables (client receivables), contract assets (unbilled revenue), contract liabilities (current and non-current deferred revenue), and customer deposits on the unaudited condensed consolidated balance sheets. The Company's payment terms are generally 30 days in the United States and consistent with prevailing practice in international markets. A contract asset is recorded when a right to consideration in exchange for goods or services transferred to a customer is conditioned other than the passage of time. Client receivables are recorded separately from contract assets since only the passage of time is required before consideration is due. A contract liability is recorded when consideration is received, or such consideration is unconditionally due, from a customer prior to transferring goods or services to the customer under the terms of a contract. Contract liabilities are recognized as revenue after control of the products or services is transferred to the customer and all revenue recognition criteria have been met. The following table provides information about client receivables, contract assets, and contract liabilities from contracts with customers:

	 September 29, 2018	1	December 30, 2017 (1)				
	(in thousands)						
Balances from contracts with customers only:							
Client receivables	\$ 376,302	\$	335,839				
Contract assets (unbilled revenue)	113,311		96,297				
Contract liabilities (current and long-term deferred revenue)	178,331		125,882				
Contract liabilities (customer contract deposits)	44,586		_				

 $^{^{(1)}}$ The beginning balance as of December 30, 2017 is presented under the guidance of ASC 605.

Under ASC 606, when the Company does not have the unconditional right to advanced billings, both advanced client payments and unpaid advanced client billings are excluded from deferred revenue, with the advanced billings also being excluded from client receivables. As of September 29, 2018, the Company excluded approximately \$16 million of unpaid advanced client billings from both client receivables and deferred revenue and approximately \$45 million of advanced client payments have been presented as customer contract deposits within other current liabilities in the accompanying unaudited condensed consolidated financial statements.

Other changes in the contract asset and the contract liability balances during the nine months ended September 29, 2018 were as follows:

(i) Changes due to business combinations:

See Note 2. "Business Acquisitions and Divestiture" for client receivables and deferred revenue that were acquired as part of the MPI Research acquisition occurring on April 3, 2018 and the KWS BioTest acquisition occurring on January 11, 2018.

(ii) Cumulative catch-up adjustments to revenue that affect the corresponding contract asset or contract liability, including adjustments arising from a change in the measure of progress, a change in an estimate of the transaction price (including any changes in the assessment of whether an estimate of variable consideration is constrained), or a contract modification:

During the nine months ended September 29, 2018, an immaterial cumulative catch-up adjustment to revenue was recorded.

(iii) A change in the time frame for a right to consideration to become unconditional (that is, for a contract asset to be recorded as a client receivable):

Approximately \$88 million of unbilled revenue as of December 30, 2017 was billed during the nine months ended September 29, 2018.

(iv) A change in the time frame for a performance obligation to be satisfied (that is, for the recognition of revenue arising from a contract liability):

Approximately \$110 million of contract liabilities as of December 30, 2017 were recognized as revenue during the nine months ended September 29, 2018.

4. SEGMENT INFORMATION

The Company retrospectively adopted ASU 2017-07 in fiscal year 2018, which impacted segment information. Service cost is reflected in operating income within the unaudited condensed consolidated statements of income while all other components of net periodic cost are recorded in Other income, net within the unaudited condensed consolidated statements of income. See Note 1, "Basis of Presentation." The Company's three reportable segments are Research Models and Services (RMS), Discovery and Safety Assessment (DSA), and Manufacturing Support (Manufacturing).

The following table presents revenue and other financial information by reportable segment:

		Three Mo	nths I	Ended		Nine Months Ended						
	Septem	September 29, 2018 September 30, 2017		Se	eptember 29, 2018	September 30, 2017						
			s)									
RMS												
Revenue	\$	126,811	\$	122,020	\$	391,195	\$	373,183				
Operating income		32,121		30,665		104,893		101,949				
Depreciation and amortization		4,811		5,272		14,565		15,309				
Capital expenditures		8,166		6,762		18,105		13,769				
DSA												
Revenue	\$	352,257	\$	246,946	\$	958,665	\$	726,796				
Operating income		62,909		46,324		160,391		135,994				
Depreciation and amortization		31,433		20,333		83,262		58,667				
Capital expenditures		10,800		10,127		34,496		25,552				
Manufacturing												
Revenue	\$	106,227	\$	95,266	\$	314,706	\$	279,145				
Operating income		33,266		31,920		95,904		87,563				
Depreciation and amortization		5,709		5,572		17,313		17,321				
Capital expenditures		2,709		2,879		12,731		7,111				

For the three and nine months ended September 29, 2018 and September 30, 2017, reconciliations of segment operating income, depreciation and amortization, and capital expenditures to the respective consolidated amounts are as follows:

		Operatir	g Inc	ome		Depreciation and Amortization				Capital Expenditures			
	Se	ptember 29, 2018	S	eptember 30, 2017	s	eptember 29, 2018	S	September 30, 2017	5	September 29, 2018		eptember 30, 2017	
			(in thousands)										
Three Months Ended:													
Total reportable segments	\$	128,296	\$	108,909	\$	41,953	\$	31,177	\$	21,675	\$	19,768	
Unallocated corporate		(43,934)		(34,847)		1,639		2,288		764		2,243	
Total consolidated	\$	84,362	\$	74,062	\$	43,592	\$	33,465	\$	22,439	\$	22,011	
Nine Months Ended:													
Total reportable segments	\$	361,188	\$	325,506	\$	115,140	\$	91,297	\$	65,332	\$	46,432	
Unallocated corporate		(132,287)		(100,052)		5,058		6,378		6,046		7,496	
Total consolidated	\$	228,901	\$	225,454	\$	120,198	\$	97,675	\$	71,378	\$	53,928	

Revenue for each significant product or service offering is as follows:

		Three Mo	ıded		Nine Months Ended				
	Sept	tember 29, 2018	Sej	ptember 30, 2017	Sep	tember 29, 2018	September 30, 2017		
				(in tho	usands)			_	
RMS	\$	126,811	\$	122,020	\$	391,195	\$	373,183	
DSA		352,257		246,946		958,665		726,796	
Manufacturing		106,227		95,266		314,706		279,145	
Total revenue	\$	585,295	\$	464,232	\$	1,664,566	\$	1,379,124	

A summary of unallocated corporate expense consists of the following:

		Three Mo	nths E	Ended	Nine Months Ended			
	Sept	ember 29, 2018	S	September 30, 2017	Sept	ember 29, 2018	September 30, 2017	
				(in tho	usands)			
Stock-based compensation	\$	7,910	\$	7,255	\$	24,517	\$	20,259
Compensation, benefits, and other employee-related expenses		20,464		11,337		56,375		36,083
External consulting and other service								
expenses		4,767		6,729		12,711		16,581
Information technology		3,070		3,237		8,723		9,247
Depreciation		1,639		2,288		5,058		6,378
Acquisition and integration		1,122		1,327		15,678		2,539
Other general unallocated corporate		4,962		2,674		9,225		8,965
Total unallocated corporate expense	\$	43,934	\$	34,847	\$	132,287	\$	100,052

Other general unallocated corporate expense consists of costs associated with departments such as senior executives, corporate accounting, legal, tax, human resources, treasury, and investor relations.

Revenue by geographic area is as follows:

	U.S.	Europe	Canada		Asia Pacific	Other	Consolidated
			(in the	usano	ds)		
Three Months Ended:							
September 29, 2018	\$ 336,811	\$ 159,473	\$ 53,665	\$	34,062	\$ 1,284	\$ 585,295
September 30, 2017	238,226	141,967	51,864		31,953	222	464,232
Nine Months Ended:							
September 29, 2018	\$ 919,807	\$ 481,955	\$ 153,802	\$	104,817	\$ 4,185	\$ 1,664,566
September 30, 2017	714,460	418,468	152,293		93,094	809	1,379,124

Included in the Asia Pacific category above are operations located in China, Japan, Korea, Australia, Singapore, and India. Included in the Other category above are operations located in Brazil and Israel. Revenue represents sales originating in entities physically located in the identified geographic area.

5. SUPPLEMENTAL BALANCE SHEET INFORMATION

The composition of trade receivables, net is as follows:

	Sep	tember 29, 2018	December 30, 2017						
		(in thousands)							
Client receivables	\$	376,302	\$	335,839					
Unbilled revenue		113,311		96,297					
Total		489,613		432,136					
Less: Allowance for doubtful accounts		(2,274)		(2,120)					
Trade receivables, net	\$	487,339	\$	430,016					

The composition of inventories is as follows:

	 September 29, 2018	D	ecember 30, 2017					
	(in thousands)							
Raw materials and supplies	\$ 20,798	\$	19,858					
Work in process	20,231		18,200					
Finished products	84,471		76,898					
Inventories	\$ 125,500	\$	114,956					

The composition of other current assets is as follows:

	 September 29, 2018	December 30, 2017		
	(in tho	usands)		
Investments	\$ 5,238	\$	28,489	
Prepaid income taxes	36,733		52,234	
Restricted cash	426		592	
Other	300		_	
Other current assets	\$ 42,697	\$	81,315	

The composition of other assets is as follows:

	September 29, 2018			December 30, 2017			
	(in thousands)						
Life insurance policies	\$	35,916	\$	34,008			
Venture capital investments		95,837		71,101			
Restricted cash		2,584		1,945			
Other		20,258		16,948			
Other assets	\$	154,595	\$	124,002			

The composition of other current liabilities is as follows:

	Se	eptember 29, 2018	D	ecember 30, 2017		
	(in thousands)					
Accrued income taxes	\$	21,387	\$	43,250		
Customer contract deposits		44,586		_		
Other		938		1,210		
Other current liabilities	\$	66,911	\$	44,460		

The composition of other long-term liabilities is as follows:

	September 29, 2018			December 30, 2017
		(in tho	ds)	
U.S. Transition Tax	\$	52,070	\$	61,038
Long-term pension liability		20,231		52,364
Accrued executive supplemental life insurance retirement plan and deferred compensation plan		38,610		37,582
Long-term deferred revenue		37,571		8,313
Other		36,472		35,518
Other long-term liabilities	\$	184,954	\$	194,815

6. VENTURE CAPITAL INVESTMENTS

The Company invests in several venture capital funds that invest in start-up companies, primarily in the life sciences industry. The Company's ownership interest in these funds ranges from less than 1% to 12.0%. The Company accounts for the investments in limited partnerships (LPs), which are variable interest entities, under the equity method of accounting. For publicly-held investments in the LPs, the Company adjusts for changes in fair market value based on reported share holdings at the end of each fiscal quarter. The Company is not the primary beneficiary because it has no power to direct the activities that most significantly affect the LPs' economic performance. The Company accounts for the investments in limited liability companies, which are not variable interest entities, under the equity method of accounting.

The Company's total commitment to the venture capital funds as of September 29, 2018 was \$114.9 million, of which the Company funded \$65.3 million through that date. The Company received dividends totaling \$5.6 million and \$3.3 million for the three months ended September 29, 2018 and September 30, 2017, respectively. The Company received dividends totaling \$14.1 million and \$7.7 million for the nine months ended September 29, 2018 and September 30, 2017, respectively. The Company recognized gains of \$5.4 million and \$5.6 million related to the venture capital investments for the three months ended September 29, 2018 and September 30, 2017, respectively. The Company recognized gains of \$22.8 million and \$12.3 million related to the venture capital investments for the nine months ended September 29, 2018 and September 30, 2017, respectively. Gains and losses are recorded in Other income, net in the accompanying unaudited condensed consolidated statements of income.

7. FAIR VALUE

The Company has certain assets and liabilities recorded at fair value, which have been classified as Level 1, 2, or 3 within the fair value hierarchy:

- Level 1 Fair values are determined utilizing prices (unadjusted) in active markets for identical assets or liabilities that the Company has the ability
 to access.
- Level 2 Fair values are determined by utilizing quoted prices for identical or similar assets and liabilities in active markets or other market observable inputs such as interest rates, yield curves, and foreign currency spot rates,
- Level 3 Prices or valuations that require inputs that are both significant to the fair value measurement and unobservable.

The fair value hierarchy level is determined by asset and liability class based on the lowest level of significant input. The observability of inputs may change for certain assets or liabilities. This condition could cause an asset or liability to be reclassified between levels. The Company recognizes transfers between levels within the fair value hierarchy, if any, at the end of each quarter. During the nine months ended September 29, 2018 and September 30, 2017, there were no transfers between levels.

Valuation methodologies used for assets and liabilities measured or disclosed at fair value are as follows:

- · Cash equivalents Valued at market prices determined through third-party pricing services;
- Mutual funds Valued at the unadjusted quoted net asset value of shares held by the Company;
- Foreign currency forward contracts Valued using market observable inputs, such as forward foreign exchange points and foreign exchanges rates;
- Life insurance policies Valued at cash surrender value based on the fair value of underlying investments;

- Debt instruments The book value of the Company's term and revolving loans, which are variable rate loans carried at amortized cost, approximates the fair value based on current market pricing of similar debt. The book value of the Company's 5.5% Senior Notes (Senior Notes) due in 2026, which are fixed rate debt carried at amortized cost, approximates fair value based on quoted market prices and on borrowing rates available to the Company; and
- Contingent consideration Valued based on a probability weighting of the future cash flows associated with the potential outcomes.

Assets and liabilities measured at fair value on a recurring basis are summarized below:

		Septemb	er 29,	2018	
	 Level 1	Level 2		Level 3	Total
		(in the		ls)	
Cash equivalents	\$ _	\$ 18,717	\$	_	\$ 18,717
Other current assets:					
Foreign currency forward contract		29			29
Other assets:					
Life insurance policies	_	28,193		_	28,193
Total assets measured at fair value	\$ _	\$ 46,939	\$	_	\$ 46,939
Other current liabilities:					
Contingent consideration	\$ _	\$ _	\$	3,400	\$ 3,400
Total liabilities measured at fair value	\$ 	\$ 	\$	3,400	\$ 3,400
		Decembe	er 30,	2017	
	Level 1	Level 2		Level 3	Total
		(in tho	usano	ls)	
Cash equivalents	\$ _	\$ 21	\$	_	\$ 21
Other assets:					
Life insurance policies	 	 26,358			26,358
Total assets measured at fair value	\$ _	\$ 26,379	\$	_	\$ 26,379
Other current liabilities:					
Contingent consideration	\$ _	\$ _	\$	298	\$ 298
Total liabilities measured at fair value	\$ _	\$ 	\$	298	\$ 298

Contingent Consideration

The following table provides a rollforward of the contingent consideration related to previous business acquisitions. See Note 2, "Business Acquisitions and Divestiture."

	 Nine Months Ended						
	 September 29, 2018		September 30, 2017				
	(in thousands)						
Beginning balance	\$ 298	\$	3,621				
Additions	3,315		296				
Payments	_		(3,606)				
Foreign currency translation	(213)		_				
Reversal of previously recorded contingent liability	_		(15)				
Ending balance	\$ 3,400	\$	296				

The unobservable inputs used in the fair value measurement of the Company's contingent consideration are the probabilities of successful achievement of certain financial targets and a discount rate. Increases or decreases in any of the probabilities of

success would result in a higher or lower fair value measurement, respectively. Increases or decreases in the discount rate would result in a lower or higher fair value measurement, respectively.

Debt Instruments

The book value of the Company's term and revolving loans, which are variable rate loans carried at amortized cost, approximates the fair value based on current market pricing of similar debt. As the fair value is based on significant other observable inputs, including current interest and foreign currency exchange rates, it is deemed to be Level 2 within the fair value hierarchy.

The book value of the Company's Senior Notes, which are a fixed rate obligation carried at amortized cost, approximates the fair value at quoted market prices as well as borrowing rates available to the Company. As the fair value is based on significant other observable outputs, it is deemed to be Level 2 within the fair value hierarchy.

8. GOODWILL AND INTANGIBLE ASSETS

Goodwill

The following table provides a rollforward of the Company's goodwill:

				Adjustment					
	De	December 30, 2017		Acquisitions		reign Exchange	September 29, 2018		
		(in thousand)		_	
RMS	\$	58,122	\$	_	\$	(1,059)	\$	57,063	
DSA		605,176		459,228		(9,428)		1,054,976	
Manufacturing		141,608		2,551		(3,498)		140,661	
Goodwill	\$	804,906	\$	461,779	\$	(13,985)	\$	1,252,700	

The increase in goodwill during the nine months ended September 29, 2018 related primarily to the acquisitions of MPI Research and KWS BioTest in the DSA reportable segment, an immaterial acquisition of an Australian business in the Manufacturing reportable segment, and the impact of foreign exchange.

Intangible Assets, Net

The following table displays intangible assets, net by major class:

	 September 29, 2018						December 30, 2017					
	Gross	Accumulated oss Amortization Net			Accumulated Gross Amortization					Net		
		(in thou					ds)					
Backlog	\$ 20,900	\$	(12,391)	\$	8,509	\$	8,111	\$	(8,111)	\$	_	
Technology	102,794		(39,271)		63,523		81,309		(27,157)		54,152	
Trademarks and trade names	8,466		(4,619)		3,847		8,661		(4,562)		4,099	
Other	17,532		(9,477)		8,055		17,465		(7,845)		9,620	
Other intangible assets	149,692		(65,758)		83,934		115,546		(47,675)		67,871	
Client relationships	798,574		(252,775)		545,799		540,425		(238,534)		301,891	
Intangible assets	\$ 948,266	\$	(318,533)	\$	629,733	\$	655,971	\$	(286,209)	\$	369,762	

The increase in intangible assets, net during the nine months ended September 29, 2018 related primarily to the acquisitions of MPI Research and KWS BioTest in the DSA reportable segment.

9. LONG-TERM DEBT AND CAPITAL LEASE OBLIGATIONS

Long-Term Debt

Long-term debt, net consists of the following:

	September 29, 2018			December 30, 2017
		ls)		
Term loans	\$	740,625	\$	601,250
Revolving facility		411,931		500,997
Senior Notes		500,000		_
Other long-term debt		18,091		18,292
Total debt		1,670,647		1,120,539
Less: Current portion of long-term debt		(28,229)		(28,546)
Long-term debt		1,642,418		1,091,993
Debt discount and debt issuance costs		(17,068)		(5,770)
Long-term debt, net	\$	1,625,350	\$	1,086,223

As of September 29, 2018 and December 30, 2017, the weighted average interest rate on the Company's debt was 3.72% and 2.45%, respectively.

Term Loans and Revolving Facility

On March 26, 2018, the Company amended and restated its credit facility creating a \$2.3 billion credit facility (\$2.3B Credit Facility) which extends the maturity date for the credit facility. The \$2.3B Credit Facility provides for a \$750.0 million term loan and a \$1.55 billion multi-currency revolving facility. The amendment was accounted for as a debt modification. In connection with the transaction, the Company capitalized approximately \$6.2 million within Long-term debt, net and capital leases in the accompanying unaudited condensed consolidated balance sheets and expensed approximately \$1.0 million of debt issuance costs recorded within Interest expense in the accompanying unaudited condensed consolidated statements of income.

The term loan facility matures in 19 quarterly installments with the last installment due March 26, 2023. The revolving facility matures on March 26, 2023, and requires no scheduled payment before that date. Under specified circumstances, the Company has the ability to increase the term loan and/or revolving facility by up to \$1.0 billion in the aggregate.

The interest rates applicable to the term loan and revolving facility under the \$2.3B Credit Facility are, at the Company's option, equal to either the base rate (which is the higher of (1) the prime rate, (2) the federal funds rate plus 0.50%, or (3) the one-month adjusted LIBOR rate plus 1.0%) or the adjusted LIBOR rate, plus an interest rate margin based upon the Company's leverage ratio.

The \$2.3B Credit Facility includes certain customary representations and warranties, events of default, notices of material adverse changes to the Company's business and negative and affirmative covenants. These covenants include (1) maintenance of a ratio of consolidated earnings before interest, taxes, depreciation and amortization (EBITDA) less capital expenditures to consolidated cash interest expense, for any period of four consecutive fiscal quarters, of no less than 3.50 to 1.0 as well as (2) maintenance of a ratio of consolidated indebtedness to consolidated EBITDA for any period of four consecutive fiscal quarters, of no more than 4.50 to 1.0 with step downs to 3.50 to 1.0 by the last day of the first quarter of 2020. As of September 29, 2018, the Company was compliant with all covenants.

The obligations of the Company under the \$2.3B Credit Facility are collateralized by substantially all of the assets of the Company.

Senior Notes Offering

On April 3, 2018, the Company entered into an indenture (Indenture) with MUFG Union Bank, N.A., (Trustee) in connection with the offering of \$500.0 million in aggregate principal amount of the Company's 5.5% Senior Notes (Senior Notes), due in 2026, in an unregistered offering. Under the terms of the Indenture, interest on the Senior Notes is payable semi-annually on April 1 and October 1 of each year, beginning on October 1, 2018. The Senior Notes are guaranteed fully and unconditionally, jointly and severally on a senior unsecured basis (Note Guarantees) by the Company and certain of its U.S. subsidiaries. In connection with the transaction, the Company incurred approximately \$7.4 million of debt issuance costs within Long-term debt, net and capital leases in the accompanying unaudited condensed consolidated balance sheets.

The Company may redeem all or part of the Senior Notes at any time prior to April 1, 2021, at its option, at a redemption price equal to 100% of the principal amount of such Senior Notes plus the Applicable Premium (as defined in the Indenture). The Company may also redeem up to 40% of the Senior Notes with the proceeds of certain equity offerings completed before April

1, 2021, at a redemption price equal to 105.5% of the principal amount of such Senior Notes. On or after April 1, 2021, the Company may on any one or more occasions redeem all or a part of the Senior Notes, at the redemption prices specified in the Indenture based on the applicable date of redemption. Upon the occurrence of a Change of Control Triggering Event (as defined in the Indenture), the Company will be required to offer to repurchase the Senior Notes at a purchase price equal to 101% of the aggregate principal amount of such Senior Notes. Any redemption of the Senior Notes would also require settlement of accrued and unpaid interest, if any, to but excluding the redemption date.

The Indenture contains certain covenants, including but not limited to, limitations and restrictions on the ability of the Company and its U.S. subsidiaries to (i) create certain liens, (ii) enter into any Sale and Leaseback Transaction (as defined in the Indenture) with respect to any property, and (iii) merge, consolidate, sell or otherwise dispose of all or substantially all of their assets. These covenants are subject to a number of conditions, qualifications, exceptions and limitations. Any event of default, as defined, could result in the acceleration of the repayment of the obligations.

Net proceeds from the Senior Notes of \$493.8 million were used to partially repay the outstanding revolving credit facility on April 3, 2018.

Commitment Letter

On February 12, 2018, the Company secured a \$830 million commitment under a 364-day senior unsecured bridge loan facility (the "Bridge Facility") for the purpose of financing the acquisition of MPI Research. The Bridge Facility was terminated as of April 3, 2018 upon the successful acquisition of MPI Research. Debt issuance costs of \$1.8 million, which were capitalized upon the execution of the Bridge Facility, were expensed upon termination of the agreement on April 3, 2018. In addition, the Company incurred and expensed \$2.0 million of fees pertaining to a temporary backstop facility related to the negotiation of the Credit Facility during the three months ended March 31, 2018. These costs were included in Interest expense in the accompanying unaudited condensed consolidated statements of income.

Letters of Credit

As of September 29, 2018 and December 30, 2017, the Company had \$5.5 million and \$4.9 million, respectively, in outstanding letters of credit.

Capital Lease Obligations

The Company's capital lease obligations amounted to \$30.8 million and \$30.3 million as of September 29, 2018 and December 30, 2017, respectively.

10. EQUITY AND NONCONTROLLING INTERESTS

Earninas Per Share

The following table reconciles the numerator and denominator in the computations of basic and diluted earnings per share:

	Three Months Ended					Nine Months Ended				
	September 29, 2018		Septe	ember 30, 2017	September 29, 2018		September 30, 2017			
				(in tho	usands)				
Numerator:										
Income from continuing operations, net of income										
taxes	\$	60,902	\$	52,994	\$	167,020	\$	154,630		
Income (loss) from discontinued operations, net of income taxes		_		(39)		1,506		(114)		
Less: Net income attributable to noncontrolling interests		534		481		1,818		1,312		
Net income attributable to common shareholders	\$	60,368	\$	52,474	\$	166,708	\$	153,204		
Denominator:										
Weighted-average shares outstanding - Basic		48,310		47,451		48,098		47,530		
Effect of dilutive securities:										
Stock options, restricted stock units, performance share units and restricted stock		1,016		939		1,020		910		
Weighted-average shares outstanding - Diluted		49,326		48,390		49,118		48,440		

Options to purchase 0.5 million and 0.4 million shares for the three months ended September 29, 2018 and September 30, 2017, respectively, as well as a non-significant number of restricted shares, restricted stock units (RSUs), and performance share units (PSUs), were not included in computing diluted earnings per share because their inclusion would have been anti-dilutive. Options to purchase 0.5 million and 0.6 million shares for the nine months ended September 29, 2018 and September 30, 2017, respectively, as well as a non-significant number of restricted shares, RSUs and PSUs, were not included in computing diluted earnings per share because their inclusion would have been anti-dilutive. Basic weighted-average shares outstanding for the nine months ended September 29, 2018 and September 30, 2017 excluded the impact of 1.0 million and 1.1 million shares, respectively, of non-vested restricted stock and RSUs.

Treasury Shares

During the nine months ended September 29, 2018, the Company did not repurchase any shares under its authorized stock repurchase program. During the nine months ended September 30, 2017, the Company repurchased 1.0 million shares totaling \$90.6 million under its \$1.3 billion authorized stock repurchase program. As of September 29, 2018, the Company had \$129.1 million remaining on the authorized stock repurchase program.

The Company's stock-based compensation plans permit the netting of common stock upon vesting of restricted stock, RSUs, and PSUs in order to satisfy individual statutory tax withholding requirements. During the nine months ended September 29, 2018 and September 30, 2017, the Company acquired 0.1 million shares for \$13.8 million and 0.2 million shares for \$16.3 million, respectively, from such netting.

In October 2018, the Company's Board of Directors approved the cancellation and return to the Company's authorized and unissued capital stock of 40.2 million treasury shares for no consideration.

Accumulated Other Comprehensive Income (Loss)

Changes to each component of accumulated other comprehensive income (loss), net of income taxes, are as follows:

	Foreign Currency Translation Adjustment and Other			sion and Other Post- rement Benefit Plans	Total		
				(in thousands)			
December 30, 2017	\$	(77,545)	\$	(67,186)	\$	(144,731)	
Other comprehensive loss before reclassifications		(13,592)		_		(13,592)	
Amounts reclassified from accumulated other comprehensive loss		_		1,864		1,864	
Net current period other comprehensive (loss) income		(13,592)		1,864		(11,728)	
Amount reclassified from accumulated other comprehensive loss due to adoption of ASU 2018-							
02 (See Note 1)		_		3,330		3,330	
Income tax (benefit) expense		(801)		460		(341)	
September 29, 2018	\$	(90,336)	\$	(69,112)	\$	(159,448)	

Nonredeemable Noncontrolling Interest

The Company has an investment in an entity whose financial results are consolidated in the Company's financial statements, as it has the ability to exercise control over this entity. The interest of the noncontrolling party in this entity has been recorded as noncontrolling interest. The activity within the nonredeemable noncontrolling interest was immaterial during the three and nine months ended September 29, 2018 and September 30, 2017.

Redeemable Noncontrolling Interest

The Company's redeemable noncontrolling interest in Vital River is 13%.

The Company has the right to purchase, and the noncontrolling interest holders have the right to sell, the remaining 13% equity interest at a contractually defined redemption value, subject to a redemption floor (embedded derivative). These rights are exercisable beginning in 2019 and are accelerated in certain events. The redeemable noncontrolling interest is measured at the greater of the amount that would be paid if settlement occurred as of the balance sheet date based on the contractually defined redemption value (\$17.3 million as of September 29, 2018) and its carrying amount adjusted for net income (loss) attributable to the noncontrolling interest. As the noncontrolling interest holders have the ability to require the Company to purchase the remaining 13% interest, the noncontrolling interest is classified in the mezzanine section of the unaudited condensed consolidated balance sheets, which is presented above the equity section and below liabilities. The agreement does not limit the amount that the Company could be required to pay to purchase the remaining 13% equity interest.

The following table provides a rollforward of the activity related to the Company's redeemable noncontrolling interest:

	Nine Months Ended						
	Septer	nber 29, 2018	Sept	tember 30, 2017			
	(in thousands)						
Beginning balance	\$	16,609	\$	14,659			
Total gains or losses (realized/unrealized):							
Net income attributable to noncontrolling interest		543		474			
Adjustment to redemption value		1,111		_			
Foreign currency translation		(932)		652			
Ending balance	\$	17,331	\$	15,785			

11. INCOME TAXES

The Company's effective tax rates for the three months ended September 29, 2018 and September 30, 2017 were 16.9% and 27.3%, respectively. The Company's effective tax rates for the nine months ended September 29, 2018 and September 30, 2017 were 19.2% and 32.2%, respectively. For the three months ended September 29, 2018, the decrease in the effective tax rate from the prior year period was primarily attributable to the net benefits of U.S. Tax Reform, as well as a one-time benefit under SAB 118 as discussed in the U.S. Tax Reform section below. For the nine months ended September 29, 2018, the decrease in the effective tax rate from the prior year period was primarily attributable to the items previously mentioned, as well as the tax rate impact of the \$18.0 million gain on the CDMO business divestiture in the first quarter of 2017.

For the three months ended September 29, 2018, the Company's unrecognized tax benefits increased by \$0.3 million to \$20.1 million, primarily due to an additional quarter of Canadian Scientific Research and Experimental Development Credit reserves offset with the settlement of prior period positions with tax authorities. For the three months ended September 29, 2018, the unrecognized income tax benefits that would impact the effective tax rate increased by \$0.8 million to \$18.8 million, for the same reasons listed above. The accrued interest on unrecognized tax benefits was \$2.8 million at September 29, 2018. The Company estimates that it is reasonably possible that the unrecognized tax benefits will decrease by up to \$8.2 million over the next twelve-month period, primarily due to the outcome of pending tax audits and statute of limitation lapses.

The Company continues to monitor its accounting for the elements of U.S. Tax Reform enacted in December 2017. The Company made reasonable estimates of the effects of U.S. Tax Reform to its consolidated financial statements in fiscal year 2017 based on guidance and regulations released by the Internal Revenue Service. During the three months ended September 29, 2018, the Company recorded measurement period adjustments under SAB 118 to the provisional amounts recorded in the fourth quarter of 2017 based on the filing of the Company's 2017 U.S. federal tax return. The measurement period adjustments included a \$1.0 million tax benefit relating to a decreased Transition Tax liability and a \$1.8 million tax benefit for additional decreases to the net deferred tax liability relating to the reduction on the U.S. federal statutory tax rate to 21%. The Company anticipates finalizing and recording any adjustments resulting from the release of any additional guidance and interpretations by the end of its fiscal year ending December 29, 2018.

The Company conducts business in a number of tax jurisdictions. As a result, it is subject to tax audits in jurisdictions including the U.S., U.K., China, France, Germany, and Canada. With few exceptions, the Company is no longer subject to U.S. and international income tax examinations for years before 2015.

The Company and certain of its subsidiaries have ongoing tax controversies with various tax authorities in the U.S., Canada, Germany, France, and India. The Company does not believe that resolution of these controversies will have a material impact on its financial position or results of operations.

12. PENSION AND OTHER POST-RETIREMENT BENEFIT PLANS

The Company retrospectively adopted ASU 2017-07 in fiscal year 2018. Service cost is reflected in Cost of services provided (excluding amortization of intangible assets) and Selling, general and administrative within the unaudited condensed consolidated statements of income. All other components of net periodic cost are recorded in Other income, net within the unaudited condensed consolidated statements of income. See Note 1, "Basis of Presentation." The following table provides the components of net periodic cost for the Company's pension, deferred compensation and executive supplemental life insurance retirement plans:

		Three Mo	nded	Nine Months Ended					
	Sep	otember 29, 2018	Se	eptember 30, 2017	September 29, 2018			September 30, 2017	
			(in tho	usand	ls)				
Service cost	\$	814	\$	749	\$	2,629	\$	2,277	
Interest cost		2,752		2,663		8,241		8,428	
Expected return on plan assets		(3,801)		(3,476)		(11,690)		(10,411)	
Amortization of prior service credit		(135)		(134)		(406)		(392)	
Amortization of net loss		736		1,017		2,267		3,030	
Net periodic cost	\$	366	\$	819	\$	1,041	\$	2,932	

The net periodic cost for the Company's other post-retirement benefit plan for the three and nine months ended September 29, 2018 and September 30, 2017 was not significant.

13. STOCK-BASED COMPENSATION

The Company has stock-based compensation plans under which employees and non-employee directors may be granted stock-based awards such as stock options, restricted stock, RSUs, and PSUs.

The following table provides stock-based compensation by the financial statement line item in which it is reflected:

		Three Mon	nded	Nine Months Ended							
	Se	September 29, 2018 September 30, 2017				September 29, 2018		September 30, 2017			
		(in thousands)									
Cost of revenue	\$	1,596	\$	1,700	\$	4,747	\$	4,989			
Selling, general and administrative		10,224		9,826		31,161		27,913			
Stock-based compensation	\$	11,820	\$	11,526	\$	35,908	\$	32,902			

During the nine months ended September 29, 2018, the Company granted stock options representing 0.5 million common shares with a per-share weighted-average grant date fair value of \$24.80, RSUs representing 0.2 million common shares with a per-share weighted-average grant date fair value of \$109.15, and PSUs representing 0.2 million common shares with a per-share weighted-average grant date fair value of \$117.28. The maximum number of common shares to be issued upon vesting of PSUs granted during the nine months ended September 29, 2018 is 0.4 million.

14. FOREIGN CURRENCY CONTRACT

The Company entered into a foreign exchange forward contract to limit its foreign currency exposure related to intercompany loans that are not of a long-term investment nature. The contract is recorded at fair value in the Company's unaudited condensed consolidated balance sheets and is not designated as hedging instruments. Any gains or losses on such a contract is immediately recognized in Other income, net, and is largely offset by the remeasurement of the underlying intercompany loan balances.

The notional amount and fair value of the Company's foreign currency forward contract is summarized as follows:

	N	Notional Amount	Fair Value		Balance Sheet Location
		(in thousands)			
September 29, 2018	\$	28,665 \$		29	Other Current Asset

The effect of the foreign exchange forward contract related to an intercompany loan denominated in British Pounds on the Company's unaudited condensed consolidated statements of income was immaterial for the three months ended September 29, 2018.

The forward contract outstanding as of September 29, 2018 had a duration of 1 month. The Company had no such contracts during the three months ended September 30, 2017.

15. COMMITMENTS AND CONTINGENCIES

Litigation

Various lawsuits, claims and proceedings of a nature considered normal to its business are pending against the Company. While the outcome of any of these proceedings cannot be accurately predicted, the Company does not believe the ultimate resolution of any of these existing matters would have a material adverse effect on the Company's business or financial condition.

Lease Commitments

During the nine months ended September 29, 2018, the Company assumed or entered into new lease agreements or exercised options to extend the lease terms for certain existing leases. As a result, the Company's lease obligations through 2032 increased by \$55.2 million during the nine months ended September 29, 2018.

16. RESTRUCTURING AND ASSET IMPAIRMENTS

Global RMS Restructuring Initiatives

In the fourth quarter of fiscal year 2017, the Company committed to a plan to further reduce costs and improve operating efficiencies in its RMS reportable segment. The plan included ceasing production within the Company's facility in Maryland and reducing its workforce at various global RMS facilities during 2018. On August 1, 2018, the Company's Board of Directors approved a modification to the plan which repurposes the facility in Maryland to be used for alternative initiatives.

The following table presents a summary of severance and transition costs, and asset impairments (referred to as restructuring costs) related to this initiative within the unaudited condensed consolidated statements of income for the three and nine months ended September 29, 2018.

		Т	Nine M	ì								
						September	29, 20	18				
	Tra	rance and insition Costs	Asse Impairn and Other	nents	ŗ	Fotal	Tra	erance and nsition Costs	Imp	Asset pairments Other Costs		Total
						(in thou	sands)					
Cost of services provided and products sold (excluding amortization of intangible assets)	\$	95	\$	238	\$	333	\$	650	\$	822	\$	1,472
Selling, general and administrative		(30)		_		(30)		158		_		158
Total	\$	65	\$	238	\$	303	\$	808	\$	822	\$	1,630

Restructuring costs incurred during the fourth quarter of 2017 were \$18.1 million, which primarily related to non-cash asset impairments and accelerated depreciation charges of \$17.7 million. The costs incurred during the three and nine months ended September 29, 2018 were \$0.3 million and \$1.6 million, respectively. The remaining restructuring costs related to this initiative in 2018 are not expected to exceed \$1.0 million, all of which relate to employee separation costs and other transition costs. All of the costs are recorded in the RMS reportable segment. The cash portion of the total costs are not expected to exceed \$2.5 million.

Other Restructuring Initiatives

In recent fiscal years, the Company has undertaken productivity improvement initiatives within all reportable segments at various locations across the U.S., Europe, and Japan. This includes workforce right-sizing and scalability initiatives, resulting in severance and transition costs; and cost related to the consolidation of facilities, resulting in asset impairment and accelerated depreciation charges. The Company's existing lease obligations for certain facilities continue through various dates, the latest being March 2028.

The following table presents a summary of restructuring costs related to these initiatives within the unaudited condensed consolidated statements of income for the three and nine months ended September 29, 2018 and September 30, 2017.

		Three Months Ended											
			Sep	tember 29, 2018			September 30, 2017						
	Tran	nce and sition osts		Asset pairments and Other Costs		Total		erance and ransition Costs	Asset Impairments and Other Costs			Total	
						(in thou	sands)						
Cost of services provided and products sold (excluding amortization of													
intangible assets)	\$	30	\$	5	\$	35	\$	189	\$	276	\$	465	
Selling, general and administrative		4,619		21		4,640		447		_		447	
Total	\$	4,649	\$	26	\$	4,675	\$	636	\$	276	\$	912	

		Nine Months Ended													
			Sep	ptember 29, 2018				,							
	Severance and Transition Costs			Asset npairments and Other Costs		Total		verance and Fransition Costs	Asset Impairments and Other Costs			Total			
						(in thou	sand	s)							
Cost of services provided and products sold (excluding amortization of intangible assets)	\$	767	\$	27	\$	794	\$	1,188	\$	485	\$	1,673			
Selling, general and administrative	Ψ	6,354	Ψ	21	Ψ	6,375	Ψ	788	Ψ	_	Ψ	788			
Total	\$	7,121	\$	48	\$	7,169	\$	1,976	\$	485	\$	2,461			
	_				_		_		_		_				

The following table presents restructuring costs by reportable segment for these productivity improvement initiatives:

		Three Months Ended				Nine Months Ended				
	Septem	September 29, 2018 Septem			Septe	mber 29, 2018	Se	ptember 30, 2017		
				(in th	ousands)					
DSA	\$	56	\$	360	\$	1,021	\$	841		
Manufacturing		_		552		870		1,620		
Unallocated corporate		4,619		_		5,278		_		
Total	\$	4,675	\$	912	\$	7,169	\$	2,461		

The following table provides a rollforward for all of the Company's severance and transition costs, and lease obligation liabilities related to all restructuring activities:

		Three Mo	Ended	Nine Months Ended					
	Se	eptember 29, 2018	September 30, 2017		September 29, 2018		September 30, 2017		
Beginning balance	\$	6,810	\$	7,010	\$	6,856	\$	8,102	
Expense		4,714		636		7,929		1,976	
Payments / utilization		(4,407)		(676)		(7,544)		(3,506)	
Foreign currency adjustments		(55)		200		(179)		598	
Ending balance	\$	7,062	\$	7,170	\$	7,062	\$	7,170	

As of September 29, 2018 and September 30, 2017, \$2.6 million and \$2.9 million of severance and other personnel related costs liabilities and lease obligation liabilities, respectively, were included in accrued compensation and accrued liabilities within the Company's unaudited condensed balance sheets and \$4.4 million and \$4.3 million, respectively, were included in other long-term liabilities within the Company's unaudited condensed consolidated balance sheets.

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

The following discussion should be read in conjunction with our unaudited condensed consolidated financial statements and related notes of this Quarterly Report on Form 10-Q and our audited consolidated financial statements and related notes included in our Annual Report on Form 10-K for fiscal year 2017. The following discussion contains forward-looking statements. Actual results may differ significantly from those projected in the forward-looking statements. Factors that might cause future results to differ materially from those projected in the forward-looking statements include, but are not limited to, those discussed in Item 1A, "Risk Factors" in our Annual Report on Form 10-K for fiscal year 2017. Certain percentage changes may not recalculate due to rounding.

Overview

We are a full service, early-stage contract research organization (CRO). For over 70 years, we have been in the business of providing the research models required in research and development of new drugs, devices, and therapies. Over this time, we have built upon our original core competency of laboratory animal medicine and science (research model technologies) to develop a diverse portfolio of discovery and safety assessment services, both Good Laboratory Practice (GLP) and non-GLP, that enable us to support our clients from target identification through non-clinical development. We also provide a suite of products and services to support our clients' manufacturing activities. Utilizing our broad portfolio of products and services enables our clients to create a more flexible drug development model, which reduces their costs, enhances their productivity and effectiveness, and increases speed to market.

Our client base includes all major global biopharmaceutical companies, many biotechnology companies, CROs, agricultural and industrial chemical companies, life science companies, veterinary medicine companies, contract manufacturing companies, medical device companies, and diagnostic and other commercial entities, as well as leading hospitals, academic institutions, and government agencies around the world.

Segment Reporting

Our three reportable segments are Research Models and Services (RMS), Discovery and Safety Assessment (DSA), and Manufacturing Support (Manufacturing). Our RMS reportable segment includes the Research Models and Research Model Services businesses. Research Models includes the commercial production and sale of small research models, as well as the supply of large research models. Research Model Services includes: Genetically Engineered Models and Services (GEMS), which performs contract breeding and other services associated with genetically engineered models; Research Animal Diagnostic Services (RADS), which provides health monitoring and diagnostics services related to research models; and Insourcing Solutions (IS), which provides colony management of our clients' research operations (including recruitment, training, staffing, and management services). Our DSA reportable segment includes services required to take a drug through the early development process including discovery services, which are non-regulated services to assist clients with the identification, screening, and selection of a lead compound for drug development, and regulated and non-regulated (GLP and non-GLP) safety assessment services. Our Manufacturing reportable segment includes Microbial Solutions, which provides *in vitro* (non-animal) lot-release testing products, microbial detection products, and species identification services; Biologics Testing Services (Biologics), which performs specialized testing of biologics; Avian Vaccine Services (Avian), which supplies specific-pathogen-free chicken eggs and chickens; and contract development and manufacturing, and analytical and stability testing for small molecules.

Recent Acquisitions and Divestiture

Our strategy is to augment internal growth of existing businesses with complementary acquisitions. Our recent acquisitions and divestiture are described

On April 3, 2018, we acquired MPI Research, a non-clinical CRO providing comprehensive testing services to biopharmaceutical and medical device companies worldwide. The acquisition enhances our position as a leading global early-stage CRO by strengthening our ability to partner with clients across the drug discovery and development continuum. The purchase price for MPI Research was \$829.7 million in cash, subject to certain post-closing adjustments. The acquisition was funded by borrowings on our \$2.3 billion credit facility (\$2.3B Credit Facility) as well as the issuance of \$500.0 million of our senior notes. MPI Research is reported as part of our DSA reportable segment.

On January 11, 2018, we acquired KWS BioTest Limited (KWS BioTest), a CRO specializing in *in vitro* and *in vivo* discovery testing services for immuno-oncology, inflammatory and infectious diseases. The acquisition enhances our discovery expertise, with complementary offerings that provide our customers with additional tools in the active therapeutic research areas of oncology and immunology. The purchase price for KWS BioTest was \$20.3 million in cash, subject to certain post-closing adjustments. In addition to the initial purchase price, the transaction includes aggregate, undiscounted contingent payments of up to £3.0 million (approximately \$3.9 million based on recent exchange rates), based on future performance. During the three months ended September 29, 2018, the terms of these contingent payments were amended, resulting in a fixed payment of £2.0

million (approximately \$2.6 million based on recent exchange rates), due in the first quarter of fiscal year 2019. The KWS BioTest business is reported as part of our DSA reportable segment.

On August 4, 2017, we acquired Brains On-Line, a CRO providing critical data that advances novel therapeutics for the treatment of central nervous system (CNS) diseases. Brains On-Line strategically expands our existing CNS capabilities and establishes us as a single-source provider for a broad portfolio of discovery CNS services. The purchase price for Brains On-Line was \$21.3 million in cash. In addition to the initial purchase price, the transaction includes aggregate, undiscounted contingent payments of up to €6.7 million (approximately \$7.8 million based on recent exchange rates), based on future performance and due in the first quarter of fiscal year 2019 if achieved. The Brains On-Line business is reported as part of our DSA reportable segment.

On February 10, 2017, we completed the divestiture of our CDMO business to Quotient Clinical Ltd., based in London, England, for \$75.0 million in proceeds, net of cash, cash equivalents, and working capital adjustments. The CDMO business was acquired in April 2016 as part of the acquisition of WIL Research and was reported in our Manufacturing reportable segment.

Overview of Results of Operations and Liquidity

Revenue for the three months ended September 29, 2018 was \$585.3 million compared to \$464.2 million in the corresponding period in 2017. This increase of \$121.1 million, or 26.1%, was primarily due to the recent acquisitions of MPI Research, KWS BioTest, and Brains On-Line as well as growth in our DSA and Manufacturing segments; partially offset by the negative effect of changes in foreign currency exchange rates which decreased revenue by \$2.7 million, or 0.6%, when compared to the corresponding period in 2017. Revenue for the nine months ended September 29, 2018 was \$1.7 billion compared to \$1.4 billion in the corresponding period in 2017. This increase of \$285.5 million, or 20.7%, was primarily due to both growth in our DSA and Manufacturing segments as well as the recent acquisitions of MPI Research, KWS BioTest, and Brains On-Line. The positive effect of changes in foreign currency exchange rates increased revenue by \$30.2 million, or 2.2%, when compared to the corresponding period in 2017.

In the three months ended September 29, 2018, our operating income and operating income margin were \$84.4 million and 14.4%, respectively, compared with \$74.1 million and 16.0%, respectively, in the corresponding period of 2017. In the nine months ended September 29, 2018, our operating income and operating margin were \$228.9 million and 13.8%, respectively, compared with \$225.5 million and 16.3%, respectively, in the corresponding period of 2017. The increases in operating income were primarily due to our recent acquisitions. The decreases in operating income margin were primarily due to increased amortization expense and costs related to our recent acquisitions; as well as continued investments to support future growth of the Company, which includes increased investments in personnel (staffing levels and hourly wage increase), facility expansions (primarily in the RMS and Biologics businesses), and company-wide IT and infrastructure projects. Offsetting the decreases in operating income margin were the realization of improved volume, mix, and pricing across our products and services portfolio as well as the impact of recent productivity initiatives across all businesses.

Net income attributable to common shareholders increased to \$60.4 million in the three months ended September 29, 2018, from \$52.5 million in the corresponding period of 2017. The increase in Net income attributable to common shareholders was primarily due to the increase in operating income discussed above and net income tax benefits related to U.S. Tax Reform; partially offset by higher interest expense related to higher debt balances. Net income attributable to common shareholders increased to \$166.7 million in the nine months ended September 29, 2018, from \$153.2 million in the corresponding period of 2017. The increase in Net income attributable to common shareholders was primarily due to gains on our venture capital investments and a lower effective tax rate driven by net benefits of U.S. Tax Reform and the income tax gain on the divestiture of the CDMO business in 2017; partially offset by higher interest expense related to higher debt balances as well as the absence of a gain recorded in Other income, net on the CDMO divestiture in 2017.

During the first nine months of 2018, our cash flows from operations was \$301.2 million compared with \$193.8 million for 2017. The increase was primarily driven by an increase in income from continuing operations; positive changes in working capital resulting from an increase in our deferred revenue and customer contract deposits as well as improved collections of our receivables.

On March 26, 2018, we amended and restated our credit facility creating a \$2.3B Credit Facility. The \$2.3B Credit Facility provides for a \$750.0 million term loan and a \$1.55 billion multi-currency revolving facility. The term loan facility matures in 19 quarterly installments with the last installment due March 26, 2023. The revolving facility matures on March 26, 2023, and requires no scheduled payment before that date. Under specified circumstances, we have the ability to increase the term loan and/or revolving facility by up to \$1.0 billion in the aggregate.

On April 3, 2018, we issued \$500.0 million of 5.5% Senior Notes (Senior Notes) due 2026 in an unregistered offering. Interest on the Senior Notes is payable semi-annually on April 1 and October 1 of each year, beginning on October 1, 2018.

Results of Operations

Three Months Ended September 29, 2018 Compared to the Three Months Ended September 30, 2017

Revenue

The following tables present consolidated revenue by type and by reportable segment:

		Three Mor	ths E	nded								
	Septe	ember 29, 2018	S	eptember 30, 2017		\$ change	% change					
		(in millions, except percentages)										
Service revenue	\$	443.0	\$	326.7	\$	116.3	35.6%					
Product revenue		142.3		137.5		4.8	3.4%					
Total revenue	\$	585.3	\$	464.2	\$	121.1	26.1%					

		Three Mo	nths Er	nded				
	Septe	ember 29, 2018	September 30, 2017			\$ change	% change	Impact of FX
				(in millio	ons, ex	cept percentages)		
RMS	\$	126.8	\$	122.0	\$	4.8	3.9%	(0.6)%
DSA		352.3		246.9		105.4	42.6%	(0.5)%
Manufacturing		106.2		95.3		10.9	11.5%	(1.1)%
Total revenue	\$	585.3	\$	464.2	\$	121.1	26.1%	(0.6)%

RMS revenue increased by \$4.8 million due primarily to higher research model product revenue in China, and higher research model services revenue attributable to the IS and GEMS businesses resulting from increased research and development activity conducted across biotechnology, global biopharmaceutical, and academic institutional clients; partially offset by the effect of changes in foreign currency exchange rates.

DSA revenue increased \$105.4 million due primarily to the recent acquisitions of MPI Research, KWS BioTest, and Brains On-Line, which contributed \$70.2 million, \$2.7 million and \$1.0 million to service revenue growth, respectively. Additionally, service revenue increased in both the Safety Assessment and Discovery Services businesses due to demand from both biotechnology and global biopharmaceutical clients, as well as leveraging synergies between these businesses; and was partially offset by the effect of changes in foreign currency exchange rates.

Manufacturing revenue increased \$10.9 million due primarily to higher demand for endotoxin products and species identification services in the Microbial Solutions business, higher service revenue in the Biologics business, higher product revenue in the Avian business; partially offset by the effect of changes in foreign currency exchange rates.

Cost of Services Provided and Products Sold (Excluding Amortization of Intangible Assets)

The following tables present consolidated Cost of services provided and products sold (excluding amortization of intangible assets) (Costs) by type and by reportable segment:

		Three Mor					
	September 29, 2018			tember 30, 2017	\$	change	% change
			ntages)			
Cost of services provided	\$	298.0	\$	219.7	\$	78.3	35.6%
Cost of products sold		71.1		67.7		3.4	5.1%
Total cost of services provided and products sold (excluding amortization of intangible assets)	\$	369.1	\$	287.4	\$	81.7	28.4%

		Three Mo					
	September 29, 2018			ember 30, 2017	\$	change	% change
			(in m	illions, except per	centage	s)	
RMS	\$	79.2	\$	75.8	\$	3.4	4.5%
DSA		239.3		167.3		72.0	43.0%
Manufacturing		50.6		44.3		6.3	14.3%
Total cost of services provided and products sold (excluding amortization of intangible assets)	\$	369.1	\$	287.4	\$	81.7	28.4%

Costs for the three months ended September 29, 2018 increased \$81.7 million, or 28.4%, compared to the corresponding period in 2017. Costs as a percentage of revenue for the three months ended September 29, 2018 were 63.1%, an increase of 1.2% from 61.9% for the corresponding period in 2017.

RMS Costs increased \$3.4 million. RMS Costs as a percentage of revenue for the three months ended September 29, 2018 were 62.4%, an increase of 0.3% from 62.1% for the corresponding period in 2017.

DSA Costs increased \$72.0 million due primarily to the recent acquisitions of MPI Research, KWS BioTest, and Brains On-Line, which included a higher service cost base; partially offset by the impact of changes in foreign currency exchange rates. DSA Costs as a percentage of revenue for the three months ended September 29, 2018 were 67.9%, an increase of 0.2% from 67.7% for the corresponding period in 2017.

Manufacturing Costs increased \$6.3 million due primarily to an increase in Microbial Solutions Costs resulting from higher demand for endotoxin products and species identification services, increased Biologics service and Avian product revenue; partially offset by the effect of changes in foreign currency exchange rates. Manufacturing Costs as a percentage of revenue for the three months ended September 29, 2018 were 47.7%, an increase of 1.2% from 46.5% for the corresponding period in 2017.

Selling, General and Administrative Expenses

		Three Mo	nths I						
	Septe	September 29, 2018		September 30, 2017		\$ change	% change		
	(in millions, except percentages)								
RMS	\$	15.1	\$	15.2	\$	(0.1)	(0.1)%		
DSA		33.8		25.7		8.1	31.5 %		
Manufacturing		20.1		16.7		3.4	20.3 %		
Unallocated corporate		44.0		34.8		9.2	26.1 %		
Total selling, general and administrative	\$	113.0	\$	92.4	\$	20.6	22.3 %		

Selling, general and administrative expenses (SG&A) for the three months ended September 29, 2018 increased \$20.6 million, or 22.3%, compared to the corresponding period in 2017. SG&A as a percentage of revenue for the three months ended September 29, 2018 was 19.3%, a decrease of 0.6%, from 19.9% for the corresponding period in 2017.

RMS SG&A for the three months ended September 29, 2018 decreased \$0.1 million, compared to the corresponding period in 2017. RMS SG&A as a percentage of revenue for the three months ended September 29, 2018 was 11.9%, a decrease of 0.5% from 12.4% for the corresponding period in 2017.

The increase in DSA SG&A of \$8.1 million was primarily related to an increase in compensation, benefits, and other employee-related expenses due to our recent acquisitions and to support the growth of the business. DSA SG&A as a percentage of revenue for the three months ended September 29, 2018 was 9.6%, a decrease of 0.8% from 10.4% for the corresponding period in 2017.

The increase in Manufacturing SG&A of \$3.4 million was primarily related to an increase in compensation, benefits, and other employee-related expenses to support the growth of the business. Manufacturing SG&A as a percentage of revenue for the three months ended September 29, 2018 was 18.9%, an increase of 1.4% from 17.5% for the corresponding period in 2017.

The increase in unallocated corporate SG&A of \$9.2 million was primarily related to an increase in compensation, benefits, and other employee-related expenses.

Amortization of Intangible Assets

Amortization of intangible assets for the three months ended September 29, 2018 was \$18.8 million, an increase of \$8.4 million, or 81.6%, from \$10.4 million for the corresponding period in 2017, due primarily to the amortization of certain intangible assets acquired in connection with our recent acquisitions.

Interest Income

Interest income, which represents earnings on cash, cash equivalents, and time deposits remained consistent at \$0.2 million and \$0.1 million for the three months ended September 29, 2018 and the corresponding period in 2017, respectively.

Interest Expense

Interest expense for the three months ended September 29, 2018 was \$17.2 million, an increase of \$9.5 million, or 124.3%, compared to \$7.7 million for the corresponding period in 2017. The increase was due primarily to higher debt to fund our recent acquisitions.

Other Income, Net

Other income, net, was \$5.9 million for the three months ended September 29, 2018, a decrease of \$0.5 million, or 7.8%, compared to \$6.4 million for the corresponding period in 2017. The decrease in Other income, net, was driven by a decrease of \$0.2 million in gains recognized related to our venture capital investments.

Income Taxes

Income tax expense for the three months ended September 29, 2018 was \$12.4 million, a decrease of \$7.5 million compared to \$19.9 million for the corresponding period in 2017. Our effective tax rate was 16.9% for the three months ended September 29, 2018, compared to 27.3% for the corresponding period in 2017. The decrease was primarily attributable to the net benefits of U.S. Tax Reform, as well as a one-time benefit under SAB 118 as a result of filing our 2017 U.S. federal tax return.

Nine Months Ended September 29, 2018 Compared to the Nine Months Ended September 30, 2017

Revenue

The following tables present consolidated revenue by type and by reportable segment:

		Nine Mor	ıths 1	Ended						
	Septe	mber 29, 2018	September 30, 2017			\$ change	% change			
		(in millions, except percentages)								
Service revenue	\$	1,227.0	\$	960.6	\$	266.4	27.7%			
Product revenue		437.6		418.5		19.1	4.6%			
Total revenue	\$	1,664.6	\$	1,379.1	\$	285.5	20.7%			

		Nine Mo	nths E	Inded						
	Septer	September 29, 2018		September 30, 2017		\$ change	% change	Impact of FX		
				(in millio	ons, except percentages)					
RMS	\$	391.2	\$	373.2	\$	18.0	4.8%	2.6%		
DSA		958.7		726.8		231.9	31.9%	1.8%		
Manufacturing		314.7		279.1		35.6	12.7%	2.7%		
Total revenue	\$	1,664.6	\$	1,379.1	\$	285.5	20.7%	2.2%		

RMS revenue increased \$18.0 million due primarily to the effect of changes in foreign currency exchange rates, higher research model product revenue in China, and higher research model services revenue attributable to the IS and GEMS businesses resulting from increased research and development activity conducted across biotechnology, global biopharmaceutical, and academic institutional clients; partially offset by lower research model product revenue outside of China.

DSA Revenue increased \$231.9 million due primarily to the recent acquisitions of MPI Research, KWS BioTest, and Brains On-Line, which contributed \$136.8 million, \$6.4 million and \$6.0 million to service revenue growth, respectively. Additionally, service revenue increased in both the Safety Assessment and Discovery Services businesses due to demand from both biotechnology and global biopharmaceutical clients, as well as leveraging synergies between these businesses, and the effect of changes in foreign currency exchange rates.

Manufacturing revenue increased \$35.6 million due primarily to higher demand for endotoxin products and species identification services in the Microbial Solutions business, higher service revenue in the Biologics business, higher product revenue in the Avian business, and the effect of changes in foreign currency exchange rates; partially offset by the absence of \$1.8 million of service revenue related to the CDMO business.

Cost of Services Provided and Products Sold (Excluding Amortization of Intangible Assets)

The following tables present consolidated Costs by type and by reportable segment:

		Nine Months Ended					
	Sepi	September 29, 2018 September 30, 2017		\$	change	% change	
	(in millions, except percentages)						
Cost of services provided	\$	844.1	\$	641.9	\$	202.2	31.5%
Cost of products sold		206.8		203.7		3.1	1.5%
Total cost of services provided and products sold (excluding amortization of intangible assets)	\$	1,050.9	\$	845.6	\$	205.3	24.3%

	Nine Months Ended						
	Sej	ptember 29, 2018	September 30, 2017		\$ change		% change
			lions, except perco	entag	es)		
RMS	\$	238.8	\$	224.8	\$	14.0	6.2%
DSA		661.9		489.2		172.7	35.3%
Manufacturing		150.2		131.6		18.6	14.1%
Total cost of services provided and products sold (excluding amortization of intangible assets)	\$	1,050.9	\$	845.6	\$	205.3	24.3%

Costs for the nine months ended September 29, 2018 increased \$205.3 million, or 24.3%, compared to the corresponding period in 2017. Costs as a percentage of revenue for the nine months ended September 29, 2018 were 63.1%, an increase of 1.8% from 61.3% for the corresponding period in 2017.

RMS Costs increased \$14.0 million due primarily to the effect of changes in foreign currency exchange rates and certain charges associated with the realignment of our research model production site in Maryland. RMS Costs as a percentage of revenue for the nine months ended September 29, 2018 were 61.1%, an increase of 0.8% from 60.3% for the corresponding period in 2017.

DSA Costs increased \$172.7 million due primarily to the recent acquisitions of MPI Research, KWS BioTest, and Brains On-Line, which included a higher service cost base, and the impact of changes in foreign currency exchange rates. DSA Costs as a percentage of revenue for the nine months ended September 29, 2018 were 69.0%, an increase of 1.7% from 67.3% for the corresponding period in 2017, due primarily to increases to compensation, benefits, and other employee related expenses to support the growth of the business as compared to the prior period.

Manufacturing Costs increased \$18.6 million due primarily to an increase in Microbial Solutions Costs resulting from higher demand for endotoxin products and species identification services, increased Biologics service and Avian product revenue, and by the effect of changes in foreign currency exchange rates; partially offset by a decrease in CDMO Costs related to the divestiture of the CDMO business. Manufacturing Costs as a percentage of revenue for the nine months ended September 29, 2018 were 47.7%, an increase of 0.6% from 47.1% for the corresponding period in 2017.

Selling, General and Administrative Expenses

	Nine Months Ended						
	Sep	September 29, 2018 September 30				\$ change	% change
			entag	es)			
RMS	\$	46.3	\$	45.1	\$	1.2	2.5%
DSA		96.5		79.6		16.9	21.4%
Manufacturing		61.8		52.4		9.4	17.9%
Unallocated corporate		132.3		100.1		32.2	32.2%
Total selling, general and administrative	\$	336.9	\$	277.2	\$	59.7	21.6%

SG&A expenses for the nine months ended September 29, 2018 increased \$59.7 million, or 21.6%, compared to the corresponding period in 2017. SG&A as a percentage of revenue for the nine months ended September 29, 2018 was 20.2%, an increase of 0.1%, from 20.1% for the corresponding period in 2017.

RMS SG&A remained consistent with the corresponding period in 2017. RMS SG&A as a percentage of revenue for the nine months ended September 29, 2018 was 11.8%, a decrease of 0.3%, from 12.1% for the corresponding period in 2017.

The increase in DSA SG&A of \$16.9 million was primarily related to an increase in compensation, benefits, and other employee-related expenses due to our recent acquisitions and to support the growth of the business. DSA SG&A as a percentage of revenue for the nine months ended September 29, 2018 was 10.1%, a decrease of 0.8%, from 10.9% for the corresponding period in 2017.

The increase in Manufacturing SG&A of \$9.4 million was primarily related to an increase in compensation, benefits, and other employee related expenses to support the growth of the business. Manufacturing SG&A as a percentage of revenue for the nine months ended September 29, 2018 was 19.6%, an increase of 0.8% from 18.8% for the corresponding period in 2017.

The increase in unallocated corporate SG&A of \$32.2 million was primarily related to an increase in compensation, benefits, and other employee-related expenses and an increase in costs associated with the evaluation and integration of our recent acquisitions.

Amortization of Intangible Assets

Amortization of intangible assets for the nine months ended September 29, 2018 was \$47.8 million, an increase of \$16.9 million, or 54.7%, from \$30.9 million for the corresponding period in 2017, due primarily to the amortization of certain intangible assets acquired in connection with our recent acquisitions.

Interest Income

Interest income, which represents earnings on cash, cash equivalents, and time deposits remained consistent at \$0.7 million and \$0.5 million for the nine months ended September 29, 2018 and September 30, 2017, respectively.

Interest Expense

Interest expense for the nine months ended September 29, 2018 was \$47.0 million, an increase of \$24.9 million, or 113.3%, compared to \$22.1 million for the corresponding period in 2017. The increase was due primarily to higher debt to fund our recent acquisitions.

Other Income, Net

Other income, net, was \$24.1 million for the nine months ended September 29, 2018, an increase of \$0.1 million, or 0.3%, compared to \$24.0 million for the corresponding period in 2017. The increase in Other income, net, was driven by an increase of \$10.5 million in gains recognized related to our venture capital investments and the impact of changes in foreign currency exchange rates; partially offset by the absence of a \$10.6 million gain recognized as a result of the CDMO business.

Income Taxes

Income tax expense for the nine months ended September 29, 2018 was \$39.6 million, a decrease of \$33.7 million compared to \$73.3 million for the corresponding period in 2017. Our effective tax rate was 19.2% for the nine months ended September 29, 2018, compared to 32.2% for the corresponding period in 2017. The decrease was primarily attributable to the tax on the gain on the divestiture of the CDMO business of \$18.0 million in 2017, net benefits of U.S. Tax Reform, as well as a one-time benefit under SAB 118 as a result of filing our 2017 U.S. federal tax return.

Liquidity and Capital Resources

We currently require cash to fund our working capital needs, capital expansion, and acquisitions, and to pay our debt and pension obligations. Our principal sources of liquidity have been our cash flows from operations, supplemented by long-term borrowings. Based on our current business plan, we believe that our existing funds, when combined with cash generated from operations and our access to financing resources, are sufficient to fund our operations for the foreseeable future.

The following table presents our cash, cash equivalents and investments:

	Sep	tember 29, 2018	Do	ecember 30, 2017		
		(in millions)				
Cash and cash equivalents:						
Held in U.S. entities	\$	27.5	\$	30.6		
Held in non-U.S. entities		111.4		133.2		
Total cash and cash equivalents		138.9		163.8		
Investments:						
Held in non-U.S. entities		5.2		28.5		
Total cash, cash equivalents and investments	\$	144.1	\$	192.3		

Borrowings

On March 26, 2018, we amended and restated our \$1.65 billion credit facility, creating our \$2.3B Credit Facility which extended the maturity date for the credit facility. The \$2.3B Credit Facility provides for a \$750.0 million term loan and a \$1.55 billion multi-currency revolving facility. The term loan facility matures in 19 quarterly installments with the last installment due March 26, 2023. The revolving facility matures on March 26, 2023, and requires no scheduled payment before that date.

On April 3, 2018, we entered into an indenture (Indenture) with MUFG Union Bank, N.A., in connection with the offering of \$500.0 million in aggregate principal amount of the Company's 5.5% Senior Notes (Senior Notes) due in 2026 in an unregistered offering. Under the terms of the Indenture, interest on the Senior Notes is payable semi-annually on April 1 and October 1 of each year, beginning on October 1, 2018.

Amounts outstanding under our credit facilities and Senior Notes were as follows:

	Se	ptember 29, 2018	D	ecember 30, 2017
	(in millions)			
Term loans	\$	740.6	\$	601.3
Revolving facility		411.9		501.0
Senior Notes		500.0		_
Total	\$	1,652.5	\$	1,102.3

Under specified circumstances, we have the ability to increase the term loan and/or revolving facility by up to \$1.0 billion in the aggregate. The interest rates applicable to the term loan and revolving facility under the \$2.3B Credit Facility are, at our option, equal to either the base rate (which is the higher of (1) the prime rate, (2) the federal funds rate plus 0.50%, or (3) the one-month adjusted LIBOR rate plus 1.0%) or the adjusted LIBOR rate, plus an interest rate margin based upon our leverage ratio.

Repurchases of Common Stock

During the nine months ended September 29, 2018, we did not repurchase any shares under our authorized stock repurchase program. As of September 29, 2018, we had \$129.1 million remaining on the authorized \$1.3 billion stock repurchase program. Our stock-based compensation plans permit the netting of common stock upon vesting of restricted stock, restricted stock units, and performance share units in order to satisfy individual statutory tax withholding requirements. During the nine months ended September 29, 2018, we acquired 0.1 million shares for \$13.8 million through such netting.

Cash Flows

The following table presents our net cash provided by operating activities:

	Nine Months Ended			
	September 29, 2018 September 30,			
Income from continuing operations	\$	167.0	\$	154.6
Adjustments to reconcile net income from continuing operations to net cash provided by operating activities		133.0		126.9
Changes in assets and liabilities		1.2		(87.7)
Net cash provided by operating activities	\$	301.2	\$	193.8

Net cash provided by cash flows from operating activities represents the cash receipts and disbursements related to all of our activities other than investing and financing activities. Operating cash flow is derived by adjusting our income from continuing operations for (1) non-cash operating items such as depreciation and amortization, stock-based compensation, deferred income taxes, and gains on venture capital investments and divestiture, as well as (2) changes in assets and liabilities, which reflect timing differences between the receipt and payment of cash associated with transactions and when they are recognized in our results of operations. For the nine months ended September 29, 2018, compared to the nine months ended September 30, 2017, the increase in cash provided by operating activities was primarily driven by an increase in income from continuing operations; positive changes in working capital resulting from an increase in our deferred revenue (primarily due to a one-time up-front payment received in connection with a strategic agreement), an increase in customer contract deposits, as well as improved collections of our receivables.

The following table presents our net cash used in investing activities:

		Nine Months Ended				
	Septer	September 29, 2018 Septem				
	(in millions)					
Acquisitions of businesses and assets, net of cash acquired	\$	(822.6) \$	(22.5)			
Capital expenditures		(71.4)	(53.9)			
Investments, net		10.1	(35.6)			
Proceeds from divestiture		_	72.5			
Other, net		(0.1)	(0.3)			
Net cash used in investing activities	\$	(884.0) \$	(39.8)			

For the nine months ended September 29, 2018, the primary use of cash used in investing activities related primarily to our acquisitions of MPI Research and KWS BioTest, and our capital expenditures to support the growth of the business; partially offset by proceeds from net investments, which primarily relate to short-term investments held by our U.K. operations. For the nine months ended September 30, 2017, the primary use of cash used in investing activities related to our capital expenditures to support the growth of the business, net investments, and our acquisition of Brains On-Line; partially offset by the proceeds from the divestiture of the CDMO business.

The following table presents our net cash provided by (used in) financing activities:

	Nine Months Ended				
	September 29, 2018 September 30,			September 30, 2017	
	(in millions)				
Proceeds from long-term debt and revolving credit facility	\$	2,392.2	\$	229.3	
Proceeds from exercises of stock options		30.2		35.1	
Payments on long-term debt, revolving credit facility and capital lease obligations		(1,832.8)		(309.3)	
Payments on debt financing costs		(18.3)		_	
Purchase of treasury stock		(13.8)		(106.9)	
Other, net		_		(3.7)	
Net cash provided by (used in) financing activities	\$	557.5	\$	(155.5)	

For the nine months ended September 29, 2018, net cash provided by financing activities reflected the incremental proceeds from the refinancing of our previous \$1.65 Billion Credit Facility to the \$2.3 Billion Credit Facility and the proceeds from our \$500.0 million Senior Notes; and proceeds from exercises of employee stock options of \$30.2 million; partially offset by payments on debt financing costs of \$18.3 million, and treasury stock purchases of \$13.8 million made due to the netting of common stock upon vesting of stock-based awards in order to satisfy individual statutory tax withholding requirements. For the nine months ended September 30, 2017, net cash used in financing activities reflected treasury stock purchases of \$106.9 million made pursuant to our authorized stock repurchase program and the netting of common stock upon vesting of stock-based awards in order to satisfy individual statutory tax withholding requirements; and net payments of \$80.0 million on our long-term debt, revolving credit facility, and capital lease obligations; partially offset by proceeds from exercises of employee stock options of \$35.1 million.

Contractual Commitments and Obligations

The disclosure of our contractual commitments and obligations was reported in our Annual Report on Form 10-K for fiscal 2017. There have been no material changes from the contractual commitments and obligations previously disclosed in our Annual Report on Form 10-K for fiscal 2017 other than the changes described in Note 7, "Fair Value," Note 9, "Long-Term Debt and Capital Lease Obligations," and Note 15, "Commitments and Contingencies" in our notes to the unaudited condensed consolidated financial statements in this Quarterly Report on Form 10-Q.

Off-Balance Sheet Arrangements

As of September 29, 2018, we did not have any significant off-balance sheet arrangements, as defined in Item 303(a)(4)(ii) of SEC Regulation S-K promulgated under the Exchange Act, except as disclosed below.

Venture Capital Investments

We invest in several venture capital funds that invest in start-up companies, primarily in the life sciences industry. Our total commitment to the funds as of September 29, 2018 was \$114.9 million, of which we funded \$65.3 million through September 29, 2018. Refer to Note 6, "Venture Capital Investments" in our notes to the unaudited condensed consolidated financial statements in this Quarterly Report on Form 10-Q for additional information.

Letters of Credit

Our off-balance sheet commitments related to our outstanding letters of credit as of September 29, 2018 were \$5.5 million with the increase related primarily to the new MPI Research letter of credit.

Critical Accounting Policies and Estimates

Our discussion and analysis of our financial condition and results of operations is based upon our consolidated financial statements prepared in accordance with generally accepted accounting principles in the U.S. The preparation of these financial statements requires us to make certain estimates and assumptions that may affect the reported amounts of assets and liabilities, the reported amounts of revenues and expenses during the reported periods and related disclosures. These estimates and assumptions are monitored and analyzed by us for changes in facts and circumstances, and material changes in these estimates could occur in the future. We base our estimates on our historical experience, trends in the industry, and various other factors that are believed to be reasonable under the circumstances. Actual results may differ from our estimates under different assumptions or conditions.

We believe that our application of the following accounting policies, each of which require significant judgments and estimates on the part of management, are the most critical to aid in fully understanding and evaluating our reported financial results: (1) revenue recognition, (2) income taxes, (3) goodwill and intangible assets, (4) valuation and impairment of long-lived assets, (5) pension and other retirement benefit plans, and (6) stock-based compensation. Our significant accounting policies are described in our Annual Report on Form 10-K for fiscal year 2017, with the exception of revenue recognition, which was updated upon the adoption of ASC 606 in the three month period ended March 31, 2018. Refer to Note 3, "Revenue From Contracts With Customers" in our notes to the unaudited condensed consolidated financial statements in this Quarterly Report on Form 10-Q for our revenue recognition accounting policy.

Recent Accounting Pronouncements

For a discussion of recent accounting pronouncements please refer to Note 1, "Basis of Presentation," in our notes to the unaudited condensed consolidated financial statements in this Quarterly Report on Form 10-Q. Other than as discussed in Note 1, "Basis of Presentation," we did not adopt any other new accounting pronouncements during the nine months ended September 29, 2018 that had a significant effect on our unaudited condensed consolidated financial statements included in this Quarterly Report on Form 10-Q.

Item 3. Quantitative and Qualitative Disclosures about Market Risk

We are exposed to market risk from changes in interest rates and currency exchange rates, which could affect our future results of operations and financial condition. We manage our exposure to these risks through our regular operating and financing activities.

Interest Rate Risk

We are exposed to changes in interest rates while conducting normal business operations as a result of ongoing financing activities. As of September 29, 2018, our debt portfolio was comprised primarily of floating interest rate borrowings. A 100-basis point increase in interest rates would increase our annual pre-tax interest expense by \$11.5 million.

Foreign Currency Exchange Rate Risk

We operate on a global basis and have exposure to some foreign currency exchange rate fluctuations for our financial position, results of operations, and cash flows.

While the financial results of our global activities are reported in U.S. dollars, our foreign subsidiaries typically conduct their operations in their respective local currency. The principal functional currencies of the Company's foreign subsidiaries are the Euro, British Pound, Canadian Dollar, Chinese Yuan Renminbi, and Japanese Yen. During the nine months ended September 29, 2018, the most significant drivers of foreign currency translation adjustment the Company recorded as part of Other comprehensive income (loss) were the Euro, British Pound, Canadian Dollar, and Chinese Yuan Renminbi.

Fluctuations in the foreign currency exchange rates of the countries in which we do business will affect our financial position, results of operations, and cash flows. As the U.S. dollar strengthens against other currencies, the value of our non-U.S. revenue, expenses, assets, liabilities, and cash flows will generally decline when reported in U.S. dollars. The impact to net income as a result of a U.S. dollar strengthening will be partially mitigated by the value of non-U.S. expenses, which will decline when reported in U.S. dollars. As the U.S. dollar weakens versus other currencies, the value of the non-U.S. revenue, expenses,

assets, liabilities, and cash flows will generally increase when reported in U.S. dollars. For the nine months ended September 29, 2018, our revenue would have decreased by approximately \$61.1 million and our operating income would have decreased by approximately \$4.7 million, if the U.S. dollar exchange rate had strengthened by 10.0%, with all other variables held constant.

We attempt to minimize this exposure by using certain financial instruments in accordance with our overall risk management and our hedge policy. We do not enter into speculative derivative agreements.

During the nine months ended September 29, 2018, we utilized foreign exchange contracts, principally to hedge certain balance sheet exposures resulting from foreign currency fluctuations.

Item 4. Controls and Procedures

(a) Evaluation of Disclosure Controls and Procedures

Based on their evaluation, required by paragraph (b) of Rules 13a-15 or 15d-15, promulgated by the Securities Exchange Act of 1934, as amended (Exchange Act), the Company's principal executive officer and principal financial officer have concluded that the Company's disclosure controls and procedures, as defined in Rules 13a-15(e) and 15d-15(e) of the Exchange Act, are effective, at a reasonable assurance level, as of September 29, 2018, to ensure that information required to be disclosed by the Company in reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in Securities and Exchange Commission rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by the Company in the reports that it files or submits under the Exchange Act is accumulated and communicated to the Company's management, including its principal executive and principal financial officers, or persons performing similar functions, as appropriate to allow timely decisions regarding required disclosure. In designing and evaluating the disclosure controls and procedures, our management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurances of achieving the desired control objectives, and management necessarily was required to apply its judgment in designing and evaluating the controls and procedures.

(b) Changes in Internal Controls

The Company continued to execute a plan to centralize certain accounting transaction processing functions to internal shared service centers during the three months ended September 29, 2018. There were no other material changes in the Company's internal control over financial reporting identified in connection with the evaluation required by paragraph (d) of the Exchange Act Rules 13a-15 or 15d-15 that occurred during the quarter ended September 29, 2018 that materially affected, or were reasonably likely to materially affect, the Company's internal control over financial reporting.

PART II. OTHER INFORMATION

Item 1. Legal Proceedings

Please refer to Note 15, "Commitments and Contingencies" in our notes to the unaudited condensed consolidated financial statements in this Quarterly Report on Form 10-Q.

Item 1A. Risk Factors

In addition to the other information set forth in this report, you should carefully consider the factors discussed in Part I, "Item 1A. Risk Factors" in our Annual Report on Form 10-K for fiscal year 2017, which could materially affect our business, financial condition, and/or future results. The risks described in our Annual Report on Form 10-K are not the only risks we face. Additional risks and uncertainties not currently known to us or that we currently deem to be immaterial also may materially adversely affect our business, financial condition, and/or operating results. There have been no material changes to the risk factors set forth in our Annual Report on Form 10-K for fiscal year 2017.

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

The following table provides information relating to the purchases of shares of our common stock during the three months ended September 29, 2018.

	Total Number of Shares Purchased	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	pproximate Dollar Value of Shares That May Yet Be Purchased Under the Plans or Programs
				(in thousands)
July 1, 2018 to July 28, 2018	351	\$ 112.24	_	\$ 115,387
July 29, 2018 to August 25, 2018	519	121.89	_	115,323
August 26, 2018 to September 29, 2018	165	123.51	_	115,303
Total	1,035		_	

Our Board of Directors authorized up to an aggregate amount of \$1.3 billion for our stock repurchase program. As of September 29, 2018, we had \$129.1 million remaining on the authorized stock repurchase program.

Additionally, our stock-based compensation plans permit the netting of common stock upon vesting of restricted stock, restricted stock units, and performance share units in order to satisfy individual statutory tax withholding requirements.

Item 6. Exhibits

(a) Exhibits	Description of Exhibits
	10.1+*	Separation Memorandum between Davide Molho and Charles River Laboratories, Inc. dated August 1, 2018 (revised on August 28, 2018)
	10.2+*	Separation Agreement between Davide Molho and Charles River Laboratories, Inc. dated August 1, 2018 (revised on August 28, 2018)
	10.3+*	Consulting Agreement between Davide Molho and Charles River Laboratories, Inc. dated August 28, 2018
	31.1+	Rule 13a-14(a)/15d-14(a) Certification of Chief Executive Officer
	31.2+	Rule 13a-14(a)/15d-14(a) Certification of Chief Financial Officer
	32.1+	Certification of the Principal Executive Officer and the Principal Financial Officer required by Rule 13a-14(a) of 15d-14(a) of the
Exchange Act		Exchange Act
	101.INS	eXtensible Business Reporting Language (XBRL) Instance Document
	101.SCH	XBRL Taxonomy Extension Schema Document
	101.CAL	XBRL Taxonomy Calculation Linkbase Document
	101.DEF	XBRL Taxonomy Definition Linkbase Document
	101.LAB	XBRL Taxonomy Label Linkbase Document
	101.PRE	XBRL Taxonomy Presentation Linkbase Document

⁺ Furnished herein.

 $[\]boldsymbol{\ast}$ Management contract or compensatory plan, contract or arrangement.

SIGNATURES

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

CHARLES RIVER LABORATORIES INTERNATIONAL, INC.

November 7, 2018 /s/ JAMES C. FOSTER

James C. Foster

Chairman, President and Chief Executive Officer

November 7, 2018 /s/ DAVID R. SMITH

David R. Smith

Corporate Executive Vice President and Chief Financial Officer



Exhibit 10.1

CONFIDENTIAL

To: Davide Molho

From: Jim Foster

Date: August 1, 2018 (Revised on August 28, 2018)

Subject: Separation Agreement

The purpose of this memorandum ("Memorandum") is to formally advise you of a decision by Charles River Laboratories (the "Company") to terminate your employment without cause and due to a position elimination pursuant to the terms of the 2010 Charles River Corporate Officer Separation Plan (the "Plan"), a copy of which is attached for your reference. This Memorandum is delivered pursuant to Section 11.0 of the Plan, and provides you with formal written notice that, subject to your execution of the letter agreement dated August 1, 2018 (the "Letter Agreement") delivered in conjunction with this notification, your employment with the Company will terminate effective today, August 2, 2018 (the "Separation Date"). Should you become deceased before all benefits hereunder are paid and/or provided to you, all such payments and/or benefits shall be made to your estate.

You will be entitled to twenty-four (24) months of severance based upon your regular base pay, which will not be subject to mitigation per Section 3.0 of the Plan ("Severance Pay"). Such Severance Pay will be paid to you in accordance with the Company's regular payroll practices. However, Severance Pay will cease if you do not adhere to the terms and conditions of the Letter Agreement and the Plan.

Beginning on the date immediately following the Separation Date, the Company will pay you an amount equal to your current base salary, on a bi-weekly basis, for a period of twenty-four (24) months, subject to the terms and conditions of the Plan (including, without limitation, the provisions of Section 9.1 relating to non-competition and non-solicitation but excluding being subject to mitigation under Section 3.0), so long as you continue to meet the respective terms of the Letter Agreement and the Plan. Notwithstanding anything in the Plan to the contrary and except as specifically noted in the Letter Agreement or in specific plans, you agree that any Company-provided 401(k) plan or in any short-term disability, long-term disability, life or accidental death insurance, deferred compensation, or similar programs will cease on the Separation Date.

If you participated in the Company's group medical and/or dental plans prior to the date of this Agreement, the Company will continue your coverage at the applicable employee contribution rate for plan participants through the period in which you are eligible to receive Severance Pay (the "Severance Period"). Following the termination or expiration of the Severance Period, you will have 18 months of COBRA eligibility, with the opportunity to continue to participate in any such medical and dental plans through the end of your

COBRA eligibility period at your sole expense. In the event of any increases in employee contribution rates during the Severance Period or in coverage rates during the 18-month COBRA period referenced above, you will be required to bear the expense of any such increases. Information regarding your ability to continue your medical and dental insurance coverage following your severance period will be provided to you in the coming weeks. You will continue to participate in the MGH Executive Physical Program at the Company's expense during the Severance Period.

The Company will provide Executive Outplacement Services to you at an established outplacement organization of your choice and reasonably acceptable to the Company. Outplacement services are capped at an amount not to exceed the lesser of 15% of your annualized pay or \$75,000, as detailed in Section 6.1 of the Plan. You also are permitted to use all or any portion of this amount to enroll in a Harvard Business School ("HBS") Advanced Management Program class, or a similar education class at HBS or elsewhere.

You have also been advised that those stock options and/or restricted stock awards granted to you by the Company which have not vested or for which restrictions have not lapsed will, as of the Separation Date, be forfeited pursuant to the terms of the underlying plan. You have three (3) months from the Separation Date in which to exercise any options which are fully vested as of the Separation Date. Notwithstanding the foregoing, the Company has established certain terms and conditions in the Letter Agreement which would allow you to receive 100% of your calculated stock award amount under the Performance Share Unit Award Agreement between you and the Company dated February 26, 2016.

Excluding all computer(s), tablets, computer accessories, pager(s), cellular phone(s), and cellular telephone numbers (all of which shall become your personal property ("Personal Property")) as of the Separation Date, you are obligated to return all Company property and equipment in your possession or control upon the termination of your employment, including, but not limited to:, entry cards, identification badges and keys, customer information, customer lists, employee lists, correspondence, proposals, reports, files, notes, contracts, drawings, records, business plans, financial information, specifications, computer-recorded information, software, tangible property, credit cards, calling cards, corporate credit cards, the Employee Handbook, Company brand books and any materials of any kind which contain or embody any proprietary or confidential material of the Company (and all reproductions thereof). You also agree to leave intact all electronic Company documents, including without limitation those which you developed or helped develop during your employment. You further agree to cooperate in canceling all accounts for your benefit (if any) in the Company's name including, but not limited to credit cards, telephone charge cards, cellular phone accounts, pager accounts and computer accounts. The Company agrees to take all reasonable efforts to transfer all Personal Property to you.

The Company has reminded you of the duties and obligations regarding your conduct following the Separation Date contained in the Non-Disclosure, Non-Solicitation and Non-Competition Agreement which you previously executed, which has been modified by an amendment of even date herewith, and which is appended

to this Memorandum as <u>Attachment I</u>, and respectfully asks you to be mindful of those duties and obligations, since they are a significant and material inducement for the Company to enter into this separation agreement.

We trust that you will approach this necessary business decision and the transition of your current responsibilities with a high level of professionalism and we will work cooperatively with you to address any specific challenges and concerns as they arise.

Very truly yours,

/s/ David P. Johst

David P. Johst

Corporate Executive Vice President, General Counsel & CAO

Attachments

Receipt Acknowledged:

/s/ Dr. Davide A. Molho

Dr. Davide A. Molho

August 28, 2018

Date

Amendment 1

to

Non-Disclosure, Non-Solicitation and Non-Competition Agreement

Reference is made to that certain Non-Disclosure, Non-Solicitation and Non-Competition Agreement dated May 18, 2009 (the "Agreement") between Charles River Laboratories International, Inc. (the "Company") and Dr. Davide A. Molho ("the Undersigned"). Unless otherwise defined herein, all defined terms in this <u>Amendment 1</u> shall have the respective meanings attributed to them in the Agreement.

WHEREAS, in connection with his promotion to a senior officer position in the Company, the Undersigned entered into the Agreement whereby he agreed to certain restrictions and constraints relating to engaging in certain post-employment activities competitive with the Company's business interests;

WHEREAS, the Undersigned has requested that the Company modify those restrictions and constraints in exchange for, among other things and without limitation, a waiver and release of claims and liabilities as set forth in a letter agreement of even date herewith between the Undersigned and the Company (the "Letter Agreement"); and

WHEREAS, the Company is willing to accommodate this request in exchange for the Undersigned's execution of the above-referenced Letter Agreement and strict adherence to this Agreement as modified by this <u>Amendment 1</u>.

NOW THEREFORE, in return for good and valuable consideration, the sufficiency and receipt of which are hereby acknowledged, the parties hereby agree to the following:

- 1. Section 5 of the Agreement is amended by deleting the third sentence of this section in its entirety and replacing it with the following:
 - "Accordingly, as a material inducement for the Company to promote you, and in order to protect the Company's Confidential Information and good will and to protect its employee and customer relations and maintain a stable workforce, you agree that (i) in the case of Sections 5(a) and 5(c), during the time you are employed by the Company and for a period of twenty-four (24) months after the expiration of the 7-day revocation period referenced in the Letter Agreement and (ii) in the case of Section 5(b), during the time you are employed by the Company and for a period of twelve (12) months after the expiration of the 7-day revocation period referenced in the Letter Agreement (in each case, the "Restriction Period"), you shall not, directly or indirectly, without the prior written consent of the Company:"
 - 2. Section 5(b) of the Agreement is hereby deleted in its entirety and is replaced by the following:
 - "(1) render services as an employee, consultant, director, partner or otherwise to any of the companies listed on <u>Exhibit I</u> to this <u>Amendment 1</u> (the "Primary Competitors") or any division, subsidiary or subgroup of any of the Primary Competitors; or"

- 3. Section 5 of the Agreement is further amended by adding a new subparagraph (d) which reads as follows:
 - "(d) Nothing contained in this Section 5 will preclude the Undersigned from being employed by a company that shares a common parent entity with the Primary Competitors so long as the undersigned is not involved in any oversight or activities with the Primary Competitors."
- 4. Except as expressly modified by this <u>Amendment 1</u>, the Agreement is unchanged and remains in full force and effect.

AGREED TO as of this 28th day of August, 2018.

CHARLES RIVER LABORATORIES INTERNATIONAL, INC.

By: /s/ David P. Johst
David P. Johst
Corporate Executive Vice President,
General Counsel & CAO
/s/ Dr. Davide A. Molho
Dr. Davide A. Molho



Exhibit 10.2

Revised Date: August 28, 2018 Original Date: August 1, 2018

Personal and Confidential

Dr. Davide A. Molho 56 W. Cedar Street Boston, MA 02114

Dear Davide:

By this letter ("Letter Agreement"), we are offering to agree to the following arrangement with you concerning your separation from employment with Charles River Laboratories, Inc. (the "Company"). You have until August 28, 2018 to execute and return this Letter Agreement. Should you become deceased before all benefits and payments hereunder are paid and/or provided to you, all such payments and/or benefits shall be made to your estate.

- 1. You will cease all active employment with the Company effective August 2, 2018 (the "Separation Date"). The Company will continue you on its payroll and pay you your current bi-weekly salary for a twenty-four (24) month period in the manner described in the 2010 Charles River Corporate Officer Separation Plan (the "Plan"), a copy of which accompanies this Letter Agreement and related notification, but excluding the mitigation requirement set forth in Section 3.0. Similarly, you will be afforded continuation of certain benefits as outlined in the Plan and the memorandum of even date herewith (the "Memorandum") delivered in conjunction with this Letter Agreement.
- 2. This Letter Agreement, together with the Memorandum (including any attachments appended to the aforementioned), the Non-Disclosure, Non-Solicitation and Non-Competition Agreement signed July 27, 2009 between you and the Company, as amended in conjunction with your execution of this Letter Agreement (the "Non-Competition Agreement"), your Consulting Agreement, and the Performance Share Unit Award Agreement dated February 26, 2016 between you and the Company (the "Award Agreement"), together (with all agreements referenced in all of the aforementioned) constitute the entire agreement between you and the Company (and supersedes any prior communications, written or oral), with respect to your employment by the Company and the termination of such employment, and with respect to all matters pertaining thereto. You agree that, by signing this Letter Agreement, you are knowingly and voluntarily releasing and forever waiving, to the fullest extent permitted by law, any and all causes of action or claims, known or unknown to you including costs and attorneys' fees, that you have or ever have had in any way related to or arising out of or in connection with your employment and/or its termination or pursuant to any federal, state or local employment laws, regulations, executive

orders or other requirements including without limitation those based on express or implied contract; any action arising in tort, including, but not limited to: libel, slander, defamation, intentional infliction of emotional distress, or negligence; any or all claims for wrongful discharge; for any reason or constructive discharge; any claim for violation of any legal or equitable duty of good faith and fair dealing; any claim for discrimination including disparate impact, harassment, failure to accommodate or retaliation; any public policy, contract, tort or common law including but not limited to claim(s) for wrongful termination in violation of public policy; any claim for breach of any term or condition of an employee handbook or policy manual including any claim for breach of any promise of specific treatment in specific situations; and any and all claims based on the Age Discrimination in Employment Act; Title VII of the Civil Rights Act of 1964 (42 U.S.C. § 2000e); the Equal Pay Act of 1963 (29 U.S.C. § 206(d)); the Civil Rights Acts of 1866 and 1871 (42 U.S.C. § 1981); the Worker Adjustment and Retraining Notification Act (29 U.S.C. § 1651); the Family and Medical Leave Act of 1993; the Employee Retirement Income Security Act (29 U.S.C. § 1001); the Americans With Disabilities Act (42 U.S.C. § 12,101); the Occupational Safety and Health Act (29 U.S.C. § 651); the Immigration Reform Control Act; the Federal Fair Credit Reporting Act; the National Labor Relations Act; Massachusetts Payment of Wages Law (M.G.L. c. 149, §148, the "Wage Act"); the Massachusetts Fair Employment Practices Act (M.G.L. c.151B); the Massachusetts Civil Rights Act (M.G.L. c.12, §§11H and 11I); the Massachusetts Equal Rights Act (M.G.L. c.93 §102 and M.G.L. c.214, §1C); the Massachusetts Labor and Industries Act (M.G.L. c. 149); and the Massachusetts Privacy Act (M.G.L. c.214, §1B); all as amended, or any other federal, state or local constitution, statute, regulation, rule, or public policy prohibiting discrimination on the basis of age, race, creed, color, religion, national origin, sex, disability, marital status or any other protected classification which you have or at any time had. In consideration of the benefits that you will receive under this Agreement, you hereby release, waive and discharge any and all such causes of action or claims against the Company, its parent, subsidiaries and affiliated organizations, and their respective past, present and future directors, officers, agents, employees, insurers, predecessors, successors and assigns, both individually and in their business capacities, the employee benefit plans and programs of the Company and its affiliates and their administrators and fiduciaries, and you hereby agree that neither you nor any of your heirs or personal representatives will ever assert in any forum any such causes of action or claims.

This Release of Claims does not include: (a) rights to defense and indemnification from the Company for actions taken by you in the course and scope of your employment with the Company and its parents, subsidiaries and/or affiliates; (b) vested rights and benefits under the Company's deferred compensation and/or equity plans and applicable agreements; (c) claims and/or rights under the Employee Retirement Income Security Act for vested benefits under the 401(k) Plan or other retirement and/or pension plans; (d) claims for benefits under state workers' compensation statutes; (e) claims under COBRA; (f) claims, actions, or rights arising under or to enforce the terms of this Letter Agreement, your Consulting Agreement and/or the Memorandum and all attachments to and documents referenced in the foregoing; (g) and any claim that cannot be released under applicable law.

The Company, including its parents, subsidiaries and affiliated organizations, agree that, by signing this Letter Agreement, it is knowingly and voluntarily releasing and forever waiving, to the fullest extent permitted by law, any and all causes of action or claims, known or unknown to it against you, including costs and attorneys' fees, that it has or ever had in any way related to or arising out of or in connection with your employment and/or its termination or pursuant to any federal, state or local laws, regulations, executive orders or other requirements including without limitation those based on express or implied contract or any action arising in tort.

You agree to accept the provisions set forth in this Letter Agreement in full satisfaction of all claims, including but not limited to all claims for compensation or benefits, which you may have against the Company. The parties agree that this Letter Agreement is intended to release the Company from any and all liability to the fullest extent permitted by law.

You agree and represent that no complaint, lawsuit or investigation has been brought, filed or initiated by you or by any agent or representative in any local, state or federal court or governmental agency. You hereby agree that neither you nor any representative or agent will ever assert in any forum any claim as to which this release of claims may lawfully be applied. You hereby agree, to the fullest extent permitted by law, that you will not join, assist or voluntarily participate in any lawsuit or class action brought or filed against the Company. Nothing in this Letter Agreement prohibits or prevents you from filing a charge with or participating, testifying, or assisting in any investigation, hearing, or other proceeding before the U.S. Equal Employment Opportunity Commission, the National Labor Relations Board or a similar agency enforcing federal, state or local anti-discrimination laws. However, to the maximum extent permitted by law, you agree that if such an administrative claim is made to such an anti-discrimination agency, you shall not be entitled to recover any individual monetary relief or other individual remedies. In addition, nothing in this Letter Agreement, including but not limited to the release of claims nor the confidentiality clauses, prohibits you from: (1) reporting possible violations of federal law or regulations, including any possible securities laws violations, to any governmental agency or entity, including but not limited to the U.S. Department of Justice, the U.S. Securities and Exchange Commission, the U.S. Congress, or any agency Inspector General; (2) making any other disclosures that are protected under the whistleblower provisions of federal law or regulations; or (3) otherwise fully participating in any federal whistleblower programs, including but not limited to any such programs managed by the U.S. Securities and Exchange Commission and/or the Occupational Safety and Health Administration. Moreover, nothing in this Letter Agreement prohibits or prevents you from receiving individual monetary awards or other individual relief by virtue of participating in such federal whistleblower programs.

By signing this Letter Agreement you represent that no promises or agreements of any kind (other than those expressly made by the Company in this Letter Agreement, your Consulting Agreement and the Memorandum) have been made to or with you by any person or entity whatsoever to cause you to sign this Letter Agreement, and that you fully understand the meaning and intent of this Letter Agreement.

You further represent that you have carefully read this Letter Agreement, understand its contents, freely and voluntarily assent to all of its terms and conditions, and sign your name of your own free will. You further agree that if you challenge this Letter Agreement or file any claim against the Company arising from or relating to your employment with, or termination from, the Company, excluding any claim challenging the validity of your waiver of rights under the Age Discrimination in Employment Act (the "ADEA"), you will return all monies and benefits received by you from the Company pursuant to this Letter Agreement and the Award Agreement. In the event you challenge the validity of your waiver of rights under the ADEA, you agree that the Company may recover money and benefits paid under this Letter Agreement and the Award Agreement if your challenge and ADEA claim are successful and you obtain a monetary award, as long as not contrary to state or federal law.

You agree that neither the existence of this Letter Agreement nor performance of the Letter Agreement or any of the agreements referenced herein constitutes admission by you or the Company of any violation of any law, statute, regulation, common law, breach of contract, or any other wrong-doing of any type.

3. By signing this Letter Agreement you affirm that, except as delineated in the subsequent paragraph, you have been paid and received all leave (paid or unpaid), compensation, wages, bonuses, vacation pay (excluding any unpaid wages or payment for any earned but unused vacation time payable through August 1, 2018 which will be paid by the Company to you subsequent to delivery of this Letter Agreement), commissions, performance incentives and/or benefits to which you may be entitled, and that no other leave (paid or unpaid), compensation, wages, bonuses, commissions, performance incentives and/or benefits are due to you except as specifically provided in this Letter Agreement, the Memorandum and the Plan. You further affirm that you have not filed, caused to be filed, or presently are a party to any claim, complaint or action against the Company in any forum or form. You further affirm that you have no known workplace injuries or occupational diseases and have been provided and/or have not been denied any leave requested under the Family and Medical Leave Act. You affirm that no retaliatory or adverse action has been taken against you for exercising any rights under Federal or state law, including but not limited to the Fair Labor Standards Act (which provides for minimum wage and overtime pay, Family Medical Leave Act and workers' compensation laws).

In conjunction with the execution of this Letter Agreement, and subject to the terms and conditions stated herein, the Company has agreed to extend the following benefits, which will accrue to you following the execution of this Letter Agreement and the expiration of the 7-day revocation period referenced herein:

(i) Notwithstanding the eligibility requirements for receipt of bonus amounts under the Company's Executive Incentive Compensation Plan (the "EICP Plan"), because you were actively employed for a significant portion of FY2018 the Company will calculate the bonus you would have received if you had remained an employee of the Company through March, 2019 and, upon completing that calculation by reference to your established FY2018 goals, will pay you 65%

of that calculated bonus amount on the date that FY2018 bonuses are paid, but in any event not later than March 15, 2019.

- (ii) Subject to you executing and performing your duties under a Consulting Agreement of even date herewith (the "Consulting Agreement"), the Company will exercise the discretion afforded to it under Section 4.e.(5-6) of the Company's Charles River Laboratories International, Inc. 2007 Incentive Plan (as amended, the "Stock Plan") and shall waive the requirement that you be employed for the entirety of the performance period referenced in the Award Agreement and, in consideration for you providing services under the Consulting Agreement through December 31, 2018, will cause any shares to be awarded to you under the Award Agreement to be conveyed to you as if you remained employed through the entire performance period and award payout date and in the same time and manner as other senior executives of the Company. You understand and acknowledge that this award remains at all times subject to the terms of the Stock Plan and that the number of shares to be awarded to you under the Award Agreement is currently undetermined and that the number of shares you will actually receive will result from calculations that will be undertaken following the close of FY2018. Such calculations will be performed in the same manner as the calculations that will be performed for other senior executives of the Company in computing your award.
- (iii) In keeping with a relocation benefit generally described in a letter delivered to you by the Company on May 18, 2009 (the "2009 Letter"), and in order to provide greater specificity regarding the scope and nature of that benefit, the Company will afford you the relocation benefit described in details on Attachment I to this Letter Agreement. In executing this Letter Agreement you acknowledge and agree that provision of the benefits referenced on Attachment I fully satisfies any and all relocation obligations the Company may have had pursuant to the 2009 Letter.
- 4. By signing this Letter Agreement you represent that no promises or agreements of any kind (other than those expressly made by the Company in this Letter Agreement, the Memorandum, the Consulting Agreement or under the Plan) have been made to or with you by any person or entity whatsoever to cause you to sign this Letter Agreement, and that you fully understand the meaning and intent of this Letter Agreement. You further represent that you have carefully read this Letter Agreement, understand its contents, freely and voluntarily assent to all of its terms and conditions, and sign your name of your own free act.
- 5. You agree that as a condition for receipt of the benefits provided in this Letter Agreement that you shall not now, or at any time in the future, directly or indirectly, make any statements to anyone about the Company or its management, directors, employees or customers, publicly or privately that are derogatory, defamatory, or disparaging in any way to the reputation or business of the Company, except to the extent required by law. Similarly, the Company's directors, and officers and executives will not make any

statements, orally or in writing, which disparage you or damage your personal or professional reputation. In the event of an actual or threatened breach of this paragraph, the non-breaching party shall be entitled to injunctive relief.

Similarly, you agree to execute a letter in the form attached hereto as <u>Attachment II</u>, resigning from all board and committee memberships you may have held by virtue of your prior position with the Company.

- 6. You further understand and agree that as a condition for receipt of the benefits set forth in this Letter Agreement, you agree to keep the substance and terms of this Letter Agreement and/or any discussions relating to this Letter Agreement in the strictest confidence and to not reveal the terms of this Letter Agreement or discussions relating hereto to any person except: (a) information that is made available to the public by the Company; (b) as required by law/government regulation; (c) or to your immediate family, attorney, accountant, job counselor, health care provider, and financial advisor, and to them only provided that they also agree to keep the information completely confidential. You will be considered to have breached this Letter Agreement if you or any of those individuals fails to keep such information completely confidential unless required to make a disclosure to comply with government regulation or the law. Nothing in this Letter Agreement shall bar you from providing truthful testimony in any legal proceeding or in cooperating with any governmental agency investigation; provided, however, that in providing such testimony or making such disclosures or communications, you will use reasonable efforts to ensure that this paragraph is complied with to the maximum extent possible. You agree that any violation of this paragraph by you (or any violation of paragraph 4 above by you) will be deemed a material breach of the terms of this Letter Agreement and that in the event of such a breach, in addition to any other remedy the Company may have at law or in equity, in the event of a breach by you, you shall be liable to the Company for the full amount of your severance benefits; provided, however, before taking any action concerning your severance benefits, the Company will provide you with written notice of any alleged breach and an opportunity to respond and cure within sixty (60) days of receipt of such notice.
- 7. This Letter Agreement shall be governed by the laws of the Commonwealth of Massachusetts (regardless of its or any other jurisdiction's choice of law rules), and in executing this Letter Agreement the undersigned hereby submits to the jurisdiction of the Commonwealth of Massachusetts as the exclusive forum for adjudicating any disputes relating to this Letter Agreement.
- 8. You acknowledge that you have been given twenty-one (21) days to consider this Letter Agreement and that the Company has advised you to consult with an attorney of your choosing prior to signing this Letter Agreement.

You may revoke this Letter Agreement for a period of seven (7) days after you sign it, and this Letter Agreement shall not be effective or enforceable until the expiration of this seven (7) day revocation period. To revoke your acceptance of this Letter Agreement, you must notify the Company in writing. Revocation

notices should be sent to Charles River Laboratories, Inc., ATTN: David P. Johst, Corporate Executive Vice President, General Counsel & CAO, 251 Ballardvale St., Wilmington, MA 01887, or to (978) 988-5665 (facsimile).

CHARLES RIVER LABORATORIES, INC.

By: /s/ David P. Johst

David P. Johst

Corporate Executive Vice President, General Counsel & CAO

I hereby agree to the terms and conditions set forth above. I have been given sufficient time to consider this Letter Agreement and I have chosen to execute this on the date below. I intend that this Letter Agreement will become a binding agreement between me and the Company if I do not revoke my acceptance in seven (7) days. Having elected to execute this Letter Agreement, to fulfill the promises and to receive the benefits set forth above, I freely and knowingly, and after due consideration, enter into this Letter Agreement intending to waive, settle and release all claims I have or might have against the Company.

AGREED TO AND ACCEPTED:

/s/ Dr. Davide A. Molho August 28, 2018

Dr. Davide A. Molho Date

ATTACHMENT I

RELOCATION BENEFIT

During the period from January 1, 2019 through December 31, 2020, Charles River International, Inc. (the "Company") shall afford Dr. Davide A. Molho ("DMO") relocation benefits for relocation anywhere in the world at the top tier provided to senior executives of the Company, which shall include, but not be limited to, the following:

- Reimbursement of reasonable realtor's fees associated with the sale of DMO's primary Boston residence, as well as the cost of any required surveys or site inspections.
- Reimbursement for up to ninety (90) days of temporary housing.
- Two (2) trips of up to eight (8) days total for DMO and one family member to undertake a new housing search.
- Airfare or mileage, lodging and per diem for meals in connection with travel to destination location (coach-class air travel unless trip requires over six (6) hours of non-stop travel, in which case it is elevated to business class).
- Reimbursement for moving of furniture and household goods.
- Reimbursement for up to ninety (90) days storage of household goods; if requested, move coordinated by the Company's relocation services provider.
- Shipment of two (2) vehicles if the relocation is a distance greater than fifty (50) miles; reimbursement for up to thirty (30) days rental car usage if needed while vehicles are being transferred.
- If requested, assistance in marketing DMO's primary Boston residence provided by the Company's relocation services provider.
- Reimbursement of up to \$20,000 for normal and customary closing costs (exclusive of loan origination fees or points), as well as up to \$700 for any required home inspection. Not subject to tax gross-up.

Except as noted above, any taxable amounts would be grossed-up at the marginal rate. Payment and reimbursement would be limited to costs actually incurred and/or amounts actually expended in calendar year 2019 or calendar year 2020; prospective costs/expenses do not qualify for reimbursement. The parties have agreed that the aggregate amount of such payments and reimbursements for the referenced 2-year period will be capped at \$400,000, inclusive of any gross-up amounts; gross-ups would not be incremental to the \$400,000 cap. The Company will not be required to pay anything in excess of that amount.

CONSULTING AGREEMENT

THIS CONSULTING AGREEMENT (the "Consulting Agreement"), made this 28th day of August, 2018 (the "Effective Date"), is entered into by Charles River Laboratories, Inc., with its principal place of business at 251 Ballardvale Street, Wilmington, Massachusetts 01887 (the "Company"), and Dr. Davide Molho (the "Consultant").

The Company desires to retain the services of the Consultant and the Consultant desires to perform certain services for the Company. In consideration of the mutual covenants and promises contained herein and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the parties agree as follows:

- 1. <u>Services</u>. The Consultant agrees to use his best efforts to perform such consulting, advisory and related services to and for the Company as may be reasonably requested from time to time by the Company relating to the transition of his prior responsibilities (the "Services"). Unless otherwise agreed by the Company and Consultant, the Consultant will be available to provide such Services no less than an average of sixteen (16) hours per month during the Consulting Period.
- 2. <u>Term.</u> This Consulting Agreement shall take effect as of the Effective Date and shall continue through the period ending December 31, 2018 (such period being referred to as the "Consulting Period"), unless sooner terminated in accordance with the terms hereof.

3. Compensation.

- 3.1 <u>Consideration of Services</u>. As full consideration for this Consulting Agreement, the Company has agreed to allow for the nonforfeiture of certain performance stock unit awards made to the Consultant during his period of employment with the Company prior to commencement of the Consulting Period, pursuant to a Letter Agreement signed contemporaneously with this Consulting Agreement (the "Letter Agreement"). The Consultant acknowledges and agrees that this constitutes full and fair consideration for his provision of Services. Consultant further acknowledges that (1) depending on, among other things, (i) the termination or expiration of this Consulting Agreement, (ii) Consultant's choices and actions regarding disposition of any options and/or shares and (iii) external market conditions, there can be no assurance that he will be afforded any additional financial benefit from this Consulting Agreement; and (2) that the non-forfeiture and continued vesting of such awards does not create any employment relationship between the Company and the Consultant who remains, at all times, an independent contractor.
- 3.2 <u>Reimbursement of Expenses</u>. The Company shall reimburse the Consultant for all reasonable expenses incurred or paid by the Consultant in connection with, or related to, the performance of the Services. The Consultant shall submit to the Company itemized monthly statements, in a form satisfactory to the company, of any such expenses incurred in the previous month. The Company shall pay to the Consultant amounts shown on each such statement within 30 days after receipt thereof. Notwithstanding

the foregoing, the Consultant shall not incur total expenses in excess of \$2,000 per month without the prior written approval of the Company.

3.3 <u>Exclusion of Benefits</u>. Except as provided in Section 3.1 above and in the Letter Agreement and contemporaneously signed Memorandum, or as expressly provided under the Company's 2010 Charles River Corporate Officer Separation Plan, the Consultant shall not be entitled to any Company-provided benefits, coverages or privileges, including without limitation, social security, unemployment, medical or pension payments, made available to employees of the Company; provided, however, the Company shall fully cover Consultant under its defense and indemnification policies for the Services.

4. Termination.

- 4.1 This Consulting Agreement shall automatically terminate upon the occurrence of any of the following events:
 - (i) the Consultant's death;
 - (ii) any fraud, intentional and material dishonesty, willful gross malfeasance, gross negligence or material and willful misconduct on the part of the Consultant in connection with his performance of the Services;
 - (iii) the conviction of the Consultant of, or the entry of a pleading of guilty by the Consultant to, any crime involving moral turpitude or any felony; or
 - (iv) effective upon written notice to the Consultant, in the event the Consultant breaches or threatens to breach any material provision of the Letter Agreement or any provision of the Non-Disclosure, Non-Solicitation and Non-Competition Agreement referenced therein, as amended (the "Non-Competition Agreement") after providing written notice to Consultant of such alleged breach(es) and a reasonable opportunity to cure.
- 4.2 In the event of termination of this Consulting Agreement and/or the Consulting Period before December 31, 2018 for any of the reasons set forthin Section 4.1 (ii) through (iv) above only the consideration set forth in Section 3.1 above shall be affected; the Consultant shall otherwise maintain all vested equity and vested deferred compensation as set forth in applicable agreements and plans. In the event of termination of this Consulting Agreement and/or the Consulting Period before December 31, 2018 for the reason set forth in Section 4.1(i) above, the consideration set forth in Section 3.1 above shall remain in full force and effect and shall be paid to Consultant's estate.
- 5. <u>Cooperation</u>. The Company shall provide such access to its information and property as may be reasonably required in order to permit the Consultant to perform his obligations hereunder. The Consultant shall cooperate with the Company's personnel, shall not adversely interfere with the conduct of the Company's business and shall observe all rules, regulations and security requirements of the Company.
- 6. <u>Confidential Information.</u> The Consultant will hold in strict confidence and will not use or disclose, except as set forth herein, any confidential or proprietary information of the Company or any customer of the Company. Confidential or proprietary information shall not include any information which becomes generally known or available to the public other than as a result of a disclosure by the Consultant. The

Consultant may disclose any such information to any or all employees, directors, officers, advisors or representatives of the Company, as the Consultant deems necessary or appropriate.

7. Warranties and Acknowledgments.

- 7.1 <u>Debarment.</u> If applicable, Consultant warrants and certifies that he has not been debarred under Section 306 of the Federal Food, Drug and Cosmetic Act and will notify Company immediately upon commencement of any debarment investigation or proceeding against Consultant.
 - 7.2 Performance of Services. Consultant warrants that the Services will be performed in accordance with all applicable laws.
- 7.3 Return of Company Property. Except as specifically set forth in the Memorandum, Consultant understands his obligation to, and agrees that he will, return all Company property and equipment in his possession or control on the date the Consulting Period is terminated or as soon thereafter as is practicable. Except as specifically set forth in the Memorandum, Company property and equipment includes, but is not limited to: all Company computer(s) and accessories, pager(s), cellular phone(s), entry cards, identification and/or security badges, keys, customer information, customer lists, employee lists, correspondence, proposals, reports, files, notes, contracts, drawings, records, business plans, financial information, specifications, computer-recorded information, software, tangible property, credit cards, calling cards, corporate credit cards, and all other materials of any kind which contain or embody any proprietary or confidential material of the Company (and all reproductions thereof). Consultant further agrees to cancel all accounts for Consultant's benefit (if any) in the Company's name including, but not limited to credit cards, telephone charge cards, cellular phone accounts, pager accounts and computer accounts.
- 8. <u>No Conflicting Agreements.</u> Consultant represents and warrants that as of the Effective Date of this Consulting Agreement, Consultant has no conflicting third party agreements and Consultant will not enter into any third party agreements that would prevent or interfere with Consultant's performance of his obligations hereunder. For absolute clarity, other than as set forth in the Non-Competition Agreement, nothing herein shall prevent Consultant from providing services for another entity.
- 9. <u>Independent Contractor Status</u>. The Consultant shall perform all Services as an "independent contractor" and not as an employee or agent of the Company. The Consultant is not authorized to assume or create any obligation or responsibility, express or implied, on behalf of, or in the name of, the Company or to bind the Company in any manner.

This Consulting Agreement shall not be construed to create any association, partnership, joint venture, employee or agency relationship between the Consultant and the Company for any purpose. The Consultant have no authority (and shall not hold himself out as having authority) to bind the Company and the Consultant shall not make any agreements or representations on the Company's behalf without the Company's prior written consent.

- 10. <u>Notices</u>. All notices required or permitted under this Consulting Agreement shall be in writing and shall be deemed effective upon deposit in the United States Post Office, addressed to the other party at the address shown above, or at such other address or addresses as either party shall designate to the other in accordance this Section 10.
- 11. <u>Entire Agreement</u>. This Consulting Agreement, together with the Memorandum, Letter Agreement and all documents appended to or referenced within all of the aforementioned documents, constitute the entire agreement between the parties and supersedes all prior agreements and understandings, whether written or oral, relating to the subject matter of this Consulting Agreement. This Consulting Agreement may be amended or modified only by a written instrument executed by both the Company and the Consultant. For absolute clarity, nothing in this Consulting Agreement, together with the Memorandum, Letter Agreement and all documents appended to or referenced within all of the aforementioned documents, shall have any effect whatsoever on all of Consultant's vested rights and benefits accrued to date under all equity, deferred compensation and/or retirement/pension agreements and plans.
- 12. <u>Governing Law</u>. This Consulting Agreement shall be construed, interpreted and enforced in accordance with the laws of the Commonwealth of Massachusetts (regardless of its or any other jurisdiction's choice of law rules).
- 13. <u>Successors and Assigns</u>. The obligations of the Consultant hereunder are personal and shall not be assigned by him. However, the Company may assign its rights and obligations under this Consulting Agreement.

14. Miscellaneous.

- 14.1 No delay or omission by either party in exercising any right under this Consulting Agreement shall operate as a waiver of that or any other right. A waiver or consent given by either party on any one occasion shall be effective only in that instance and shall not be construed as a bar or waiver of any right on any other occasion.
- 14.2 In the event that any provision of this Consulting Agreement shall be invalid, illegal or otherwise unenforceable, the validity, legality and enforceability of the remaining provisions shall in no way be affected or impaired thereby.

IN WITNESS WHEREOF, the parties hereto have executed this Consulting Agreement effective as of the Effective Date.

CHARLES RIVER LABORATORIES INTERNATIONAL, INC.

CONSULTANT

By: /s/ David P. Johst /s/ Dr. Davide Molho

David P. Johst Dr. Davide Molho

Corporate Executive Vice President, General Counsel & CAO

<u>August 28, 2018</u> <u>August 28, 2018</u>

Date Date

CERTIFICATION PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002 AND RULE 13a-14(a)/15d-14(a) OF THE EXCHANGE ACT OF 1934

I, James C. Foster, Chairman, President and Chief Executive Officer of Charles River Laboratories International, Inc. (the registrant) certify that:

- 1. I have reviewed this quarterly report on Form 10-Q for the quarter ended September 29, 2018 of the registrant;
- 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 officers 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 officers 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.

/s/ James C. Foster

James C. Foster

Chairman, President and Chief Executive Officer

Charles River Laboratories International, Inc.

November 7, 2018

CERTIFICATION PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002 AND RULE 13a-14(a)/15d-14(a) OF THE EXCHANGE ACT OF 1934

I, David R. Smith, Corporate Executive Vice President and Chief Financial Officer of Charles River Laboratories International, Inc. (the registrant) certify that:

- 1. I have reviewed this quarterly report on Form 10-Q for the quarter ended September 29, 2018 of the registrant;
- 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 officers 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 officers 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.

/s/ David R. Smith

David R. Smith

Corporate Executive Vice President and Chief Financial Officer Charles River Laboratories International, Inc.

November 7, 2018

CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the quarterly report on Form 10-Q for the quarter ended September 29, 2018 of Charles River Laboratories International, Inc. (the "Company") as filed with the Securities and Exchange Commission on the date hereof (the "Report"), the undersigned, James C. Foster, Chairman, President and Chief Executive Officer of the Company, and David R. Smith, Corporate Executive Vice President and Chief Financial Officer of the Company, each hereby certifies, to the best of his knowledge and pursuant to 18 U.S.C. Section 1350, that:

- (1) the Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 (the "Exchange Act"); and
- (2) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ James C. Foster

James C. Foster

Chairman, President and Chief Executive Officer Charles River Laboratories International, Inc.

November 7, 2018

/s/ David R. Smith

David R. Smith

Corporate Executive Vice President and Chief Financial Officer

Charles River Laboratories International, Inc.

November 7, 2018

This certification shall not be deemed "filed" for any purpose, nor shall it be deemed to be incorporated by reference into any filing under the Securities Act of 1933 or the Exchange Act.