



Investor Presentation

Jim Green, President and CEO

May 2020



Forward-Looking Statements and Non-GAAP Financial Information

Forward-Looking Statements

The information in this presentation or in oral statements of the management of the Company includes forward-looking statements within the meaning of the federal securities laws, including the Private Securities Litigation Reform Act of 1995. You can identify these statements by our use of such words as "will," "guidance," "objectives," "optimistic," "potential," "future," "expects," "plans," "estimates," "continue," "drive," "strategy," "potential," "potentially," "growth," "long-term," "projects," "projected," "intends," "believes," "goals," "sees," "seek," "develop," "possible," "new," "emerging," "opportunity," "pursue" and similar expressions that do not relate to historical matters. Forward looking statements in this press release or that may be made during our conference call may include, but are not limited to, statements or inferences about the Company's or management's beliefs or expectations, the Company's anticipated future revenues and earnings, the strength of the Company's market position and business model, industry outlook, the impact of the COVID-19 pandemic on the Company's business, the Company's business strategy, the positioning of the Company for growth, the market demand and opportunity for the Company's current products, or products it is developing or intends to develop, and the Company's plans, objectives and intentions that are not historical facts. These statements involve known and unknown risks, uncertainties and other factors that may cause the Company's actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements. Investors should note that many factors, as more fully described under the caption "Risk Factors" in our Form 10-K, including our Form 10-K for the year ended December 31, 2019, and subsequent Form 10-Q and Form 8-K filings with the Securities and Exchange Commission and as otherwise enumerated herein or therein may cause the Company's actual results to differ materially from those in the forward-looking statements. The forward-looking statements in this press release are qualified by these risk factors. The Company's results may also be affected by factors of which the Company is not currently aware. The Company may not update these forward-looking statements, even though its situation may change in the future, unless it has obligations under the federal securities laws to update and disclose material developments related to previously disclosed information.

Management's Use of Non-GAAP Financial Information

The information in this presentation or in oral statements of the management of the Company may include non-GAAP financial information including adjusted gross profit, adjusted operating income, adjusted net income and adjusted earnings per diluted share. We believe that this non-GAAP financial information provides investors with an enhanced understanding of the underlying operations of the business. For the periods presented, these non-GAAP financial measures have excluded certain expenses and income primarily resulting from purchase accounting or events that we do not believe are related to the underlying operations of the business such as amortization of intangibles related to acquisitions, costs related to acquisition, disposition and integration activities and stock-based compensation expense. They also exclude the tax impact of the reconciling items. This non-GAAP financial information approximates information used by our management to internally evaluate the operating results of the Company. Any non-GAAP measures included herein are accompanied by a reconciliation to the nearest corresponding GAAP measure within this presentation.

The non-GAAP financial information provided in this presentation should be considered in addition to, not as a substitute for, the financial information provided and presented in accordance with GAAP and may be different than other companies' non-GAAP financial information.

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Investment Highlights

- **Global developer that engineers, manufactures and markets specialized products that enable fundamental research, discovery, and pre-clinical testing for drug development**
- **We are the gold standard in Pharma/CRO pre-clinical testing technologies and a respected name in cell & gene therapy products**
- **High margin portfolio of products to Pharmaceutical/CRO, Academic Labs, & Distribution/OEM customer segments**
- **Experienced leadership team possesses the right experience and skillsets to drive shareholder value**
- **Executing the strategic action plan announced in Sept. 2019 to transform company into a profitable growth platform**
- **Aggressive actions through COVID-19 to build a leaner, more profitable business to support our 2021 financial targets**

Company Overview



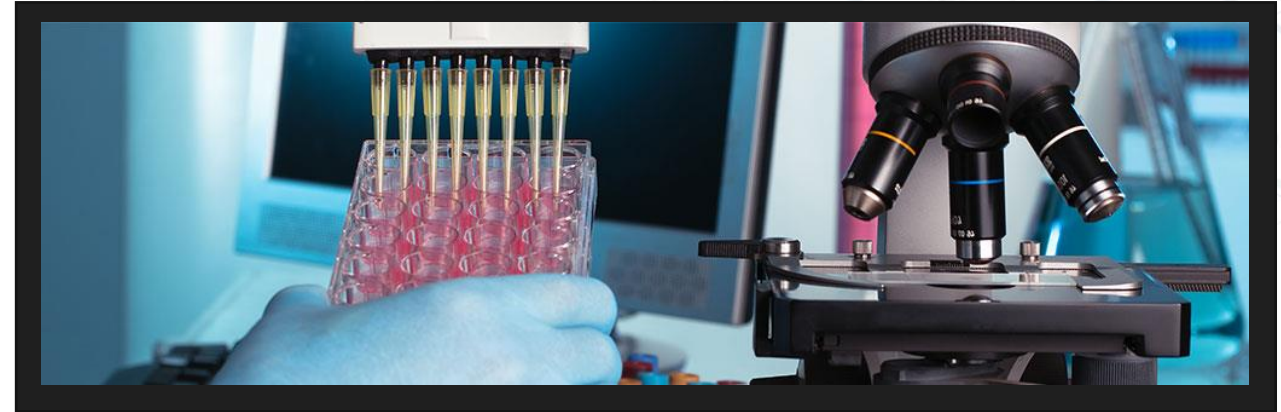
- Founded: 1901 as Harvard Apparatus
- HQ: Greater Boston, Massachusetts
- Employees: ~470
- Ticker: HBIO (NASDAQ)
- Market Cap: ~\$102M
- FY19 Revenue: \$116M



- FY19 Operating Income: \$0.4M, 0.3% of revenue
- FY19 Adjusted Op Inc*: \$14.9M, 12.8% of revenue



- Strong brands
- Blue chip recurring customers
- Gold standard pre-clinical testing



**Non-GAAP measurement – see appendix for reconciliation to GAAP results*

What We Do

- Harvard Bioscience engineers and sells enabling technologies, products and services to Academic labs, CROs and Pharmaceutical customers for discovery through pre-clinical phases of drug development
- Many of our products are used in the research and drug development efforts to combat COVID-19, including our:
 - BTX Electroporation gene splicing products,
 - multi-well plates for antibody detection,
 - recently launched innovative inhalation product,
 - majority of our pre-clinical products

Cellular & Molecular Technologies:

- Cell and Gene Therapy
- Cellular and Molecular Biology
- CRISPR / Gene Splicing related tech
- Electrophysiology & Electro-Chem

Pre-Clinical Systems:

- Physiological Monitoring & Telemetry
- Data Acquisition & Analysis
- Behavioral Research
- Scientific Services

Evolution of Harvard Bioscience

Company transitioned to a targeted portfolio of specialized products aligned to customer segments

1950s: Invented the precision syringe pump for drug infusion

1980s: First micro-processor controlled infusion pump

1983: BTX First commercial electroporation system, CRISPR related Gene Editing

2014: DSI Physiotel HD First implantable device for 'chronic' glucose monitoring

July 2019: Announced new CEO and CFO

April 2020: Optimized sales organization along customer segments

1901: Founded by Dr. William T. Porter as Harvard Apparatus

1967: The BioChrom First fully automated clinical amino acid analyzer using HPLC technology

1989: DSI Physiotel First implantable telemetry device for rodent blood pressure monitoring

2000: IPO and NASDAQ listed

2010: DSI Physiotel First implantable cardio-pulmonary for safety pharmacology & toxicology

January 2018: Acquired Data Sciences International and divested Denville Distribution Business

Sept. 2019: Announced Strategic Action Plan

Key Customer Segments

Reenergized and refocused our sales organization to focus around key customer segments



Academic Research

- Research labs primarily government & grant funded
- Scientific Research & Teaching
- Early discovery of new drug molecules and compounds for therapies and vaccines



Contract Research Organizations

- Pre-clinical studies to determine safety and efficacy of new pharmaceuticals
- Pharmaceutical companies are outsourcing significant pre-clinical activities to CRO



Pharmaceutical

- Perform early discovery and then transition from discovery through pre-clinical and then human clinical trials and on to commercialization
- Often leverage discoveries from Academics & Bio-techs



Distribution/OEMs

- Leverage large distributor relationships to expand access / sales coverage
- Blue chip medical device and services companies that utilizes our products within their products or services

Subset of blue-chip customers

The collage displays logos for various key customers, organized into four columns corresponding to the segments above:

- Academic Research:** MGH 1811, Mayo Clinic, UCsf (University of California San Francisco), Duke University, University of Oxford, Harvard University, University of Cambridge, and CDC (Centers for Disease Control and Prevention).
- Contract Research Organizations:** Charles River, Covance (Solutions Made Real), and WuXi AppTec.
- Pharmaceutical:** gsk, AstraZeneca, abbvie, Pfizer, Sanofi, Novartis, Merck (Inventing for Life), Bayer, and Lilly.
- Distribution/OEMs:** VWR (part of Avantor), Fisher Scientific (part of Thermo Fisher Scientific), Boehringer Ingelheim, and Medtronic.

Experienced Leadership Team

James Green

Chairman, President & CEO



Joined as CEO July 2019

Years of Experience 30+

Michael Rossi

Chief Financial Officer



Joined July 2019

Years of Experience 20+

Ken Olson

SVP, Global Operations & Engineering



Joined October 2019

Years of Experience 30+

Henrik Schmidt

VP EMEA, General Manager,
Cellular and Molecular



Joined March 2020

Years of Experience 25+

- Focusing on driving sales to Academic Research Customers

Don Stewart

VP North America & APAC
Sales, Cellular and Molecular



Joined February 2020

Years of Experience 20+

- Focusing on driving sales to Academic Research Customers

Ryan Wallace

VP Global Sales, Preclinical
Systems



Joined January 2020

Years of Experience 15+

- Focusing on direct sales to CROs, Pharmaceutical and certain large customer accounts

John Welch

VP Global Marketing



Joined May 2020

Years of Experience 25+

Strategic Action Plan

Strategic Action Plan Announced September 2019

Strategic Actions for 2019 and 2020	Status
Stabilize business and complete leadership team	Complete
Refinance debt and reduce interest expense	Refi delayed due to COVID-19 impact on credit markets
Improve margins through consolidations, reduced COGS and operating expenses	On track: FY19 restructure nearly complete over \$4M savings, additional \$3M savings in Q2
Optimize manufacturing and supply chain	On track: 1 consolidation complete, 2 in progress
Reenergize and refocus sales operations	Complete: Sales team alignment to CROs/Pharma, Academic, Distributors/OEM
Rationalize product portfolio and pricing	On track: To be completed by year end
Pay down debt and reduce leverage ratio to < 3x by end of 2020	On track: Reduced debt by \$6 million since July 2019

2020 Growth Drivers and Headwinds

COVID-19 pandemic impacts Q1&Q2, recovers sequentially as Academic labs re-open

Q1/Q2 Headwinds:

- Q1 revenues were down ~16% YoY due to Academic lab closures
- Q2 expected down ~25% YoY due to Academic lab closures

Q2 Immediate Cost Reductions

- World-wide work hours & compensation reductions
- Reductions in force
- ~\$3M cost reductions in Q2

Q3/Q4 Growth Drivers:

- Improved sales coverage and cross-selling
- Price management & trim the tail
- New product introductions
- Combined CROs/Pharma segment saw growth in Q1, continuing throughout the year
- Q3 Academic labs begin to re-open providing sequential growth
- Q4 Academic labs re-opening improve revenues sequentially

2020 Looking Forward

We remain focused on meeting the commitments we have made

- Expect second quarter revenue down approximately 25% year-over-year and to begin recovering as Academic labs reopen in the second half
- Expect to maintain solid gross margins and operating profit during second quarter, improving sequentially through the year as Academic labs re-open
- Will maintain strict cash and cost discipline, while continuing to meet our debt obligations
- We remain focused on the commitments we made to you



Appendix

Non-GAAP Reconciliation

(In thousands)

GAAP operating income

Stock-based compensation expense

Severance, restructuring and acquisition costs

Intangible assets amortization and impairments

Non-cash expense - acquisition accounting

Denville adjusted operating income

Adjusted operating income

GAAP operating income % of revenue

Adjusted operating income % of revenue

	Year Ended December 31,	
	2019	2018
\$	377	\$ 984
	3,030	2,894
	3,943	772
	7,207	5,385
	296	4,719
	-	17
\$	<u>14,853</u>	<u>14,771</u>
	0.3%	0.8%
	12.8%	12.1%