



**Accelerating
breakthroughs for life.**

Fiscal Year 2020

Annual Report

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A LETTER FROM THE INTERIM PRESIDENT & CEO

Unprecedented Times Represent a Clarion Call for Action

This year, unlike any other before it, pushed our ecosystem, Commonwealth, and nation to the brink. While we adapt to our new reality, the Massachusetts Life Sciences Center and our many industry, academic, and civic partners have laid the foundation of prioritizing safety, caution, and accountability while ensuring essential economic, workforce, and scientific development moves forward.

As the COVID-19 pandemic has shown, people await vital advances in health care that will alleviate suffering, improve treatment, and save lives. The world looks to our Massachusetts ecosystem to deliver the breakthroughs that further unlock our understanding of human physiology, work across scientific disciplines to improve patient outcomes, and to spur scientific discovery for solutions.

We continue to invest proactively in education, research and development, as well as workforce training in the life sciences. This past fiscal year, we ran programs, representing more than \$61 million, investing in human capital to support workforce needs, providing companies with investment, infrastructure, and community supports to grow, development of new scientific innovations to improve patient outcomes, and driving the convergence revolution in digital health, biopharma, medical device, and engineering.

While we work to ensure that Massachusetts remains the global leader in the life sciences, we must also endeavor to create a more inclusive and diverse sector. At the MLSC, the foundation of our programs and activities centers upon the inherent truth that the strongest life sciences ecosystem is a diverse one. The killing of George Floyd served as a reminder of longstanding systemic barriers that exist and we must embrace it as a clarion call to come together and act.

We promise to work diligently with our partners across the life sciences spectrum, now and in the future, to be catalysts of the change we know is possible in the world. We must also encourage and amplify the voices and experiences of black people.

Over the years, the MLSC has initiated and actively supports many programs that directly address the dearth of diversity found in our sector. We remain committed to working with our civic, industry, nonprofit, and academic partners and welcome the challenge of defeating inequality and implicit bias based on race, gender, and ethnicity.

We do not have to look far beyond the coming generations to understand the potential for a brighter future. The work that remains is what world we want to pass on.

We remain your partner in this good work.

Sincerely,

Damon Cox

Interim President & CEO, Massachusetts Life Sciences Center
Assistant Secretary for Technology, Innovation, and Entrepreneurship, Executive Office of
Housing & Economic Development



THE CAPITAL OF SCIENTIFIC REVOLUTION

Mission

The Massachusetts Life Sciences Center (MLSC) is an economic development and investment agency with a mission of supporting the growth and development of the life sciences in Massachusetts.

Through public-private funding initiatives, the MLSC supports innovation, research and development, commercialization, and manufacturing activities in the fields of biopharma, medical device, diagnostics, and digital health. As a quasi-public agency, the MLSC also offers programs that fund innovation-driven economic and workforce development initiatives in Massachusetts.

The MLSC's mission is to serve as the "hub" of the Massachusetts life sciences ecosystem, encourage innovation through investments in good science and good business, strengthen and protect Massachusetts' global leadership position in the life sciences, accelerate the commercialization of promising treatments, therapies, and cures that will improve patient care, and create jobs and drive economic and STEM workforce development.

Vision

We are a catalyst, a convener of partners in government, academia, and industry. Working together is critical to continuing the scientific and economic development achieved here. We have seen the best, brightest, and bravest find their places, people, and purposes fulfilled here. Defining our place, people, and purpose as the capital of scientific revolution.

Human Capital: Investing in the next generation of life science professionals, readying our workforce.

Intellectual Capital: Serving as a partner in catalyzing continuous breakthroughs and the environment that makes them possible.

Growth Capital: Providing capital, access, and recognition to ensure a diversity of entrepreneurs and support a thriving environment for early-stage companies.

Innovation Capital: Capitalizing on great science, inventions, and innovation that extend across the entire life sciences value chain.

Strategy

The future of life sciences will usher in new research and development, discoveries, and opportunities to improve human health. Massachusetts is poised to remain the global beacon for that bright future.

At the Massachusetts Life Sciences Center we recognize that life sciences is more than simply a sector, it is a culture here. To build that culture, it takes a unique and dynamic ecosystem comprised of government, academic, and industry stakeholders working together. This cross-sector leadership will remain integral to continuing the important scientific and economic development being achieved here in the Commonwealth.



FISCAL YEAR 2020 HIGHLIGHTS

\$6 million deployed to support critical and urgent COVID-19 response programs

\$700,000 in life science industry investment in MassNextGen reached with the addition of Johnson and Johnson Innovation as a sponsor to support women entrepreneurs

\$23+ million in capital investment directed towards life science infrastructure in Massachusetts core facilities, academic research institutions, and incubators

3,837 students benefited from \$280,000 in STEM equipment and professional development funding for 10 under-resourced public high schools and middle schools

THE BOTTOM LINE

Since inception approximately \$796M of investments have been committed into the life sciences ecosystem as follows:

Programs	Award Amount	Number of Awards
Capital Projects	\$504,843,272	146 projects
Company Grants and Loans	\$38,713,365	111 awards
Academic Research Grants	\$27,108,205	53 projects
Tax Incentives	\$154,152,491	184 awards
Internships and Apprenticeships	\$34,017,748	4,826 internships
STEM Equipment and Supplies	\$18,600,849	198 awards
COVID-19 Response	\$6,296,167	16 awards
Other Grants	\$12,624,311	123 awards
Total	\$796,356,407	5,657 awards

The impact of MLSC investments since inception:

- Generated **\$4.1 billion** of leveraged investments in the Commonwealth
- Created more than **14,000 jobs** in Massachusetts through various Center programs
- Funded **4,433 college internships** at 811 companies and 393 high school apprenticeships with 95 organizations
- Supplied **STEM equipment and professional development grants** to Massachusetts schools, serving 199 public high schools and middle schools throughout the Commonwealth

The Commonwealth Responds to the Pandemic

Massachusetts was seriously impacted by COVID-19, with more than 100,000 confirmed cases and thousands of lost lives. On March 23, 2020, Governor Baker issued an executive order closing all non-essential businesses across the Commonwealth in order to reduce the transmission of COVID-19. In addressing the public health threat of COVID-19, the Baker-Polito Administration has moved swiftly in partnership with health care providers and municipalities, conducting more than 1 million COVID-19 tests, launching a national model for contact tracing, committing over \$1 billion in funding to support our health care system, and distributed more than 10.5 million pieces of personal protective equipment (PPE).

On May 18, 2020, the Baker-Polito Administration released Reopening Massachusetts, the Reopening Advisory Board's report, which detailed a four-phased strategy to responsibly reopen the economy while continuing to fight COVID-19. The Administration also released a new Safer-at-Home Advisory, which instructed residents to leave home only for healthcare, worship, permitted work, shopping, and activities as a way to continue limiting the spread of COVID-19.

Through the Massachusetts Consortium on Pathogen Readiness (MassCPR) and the Manufacturing Emergency Response Team (M-ERT), the MLSC was proud to be part of a coordinated response by the Commonwealth's leading academic, industry, and government stakeholders to respond to the COVID-19 pandemic.

Our partners in industry exemplified the strength of our ecosystem. This included MassBio rapidly launching new initiatives to engage its members in their new virtual settings, including weekly Town Halls, Virtual Forums, and launching a web-based COVID-19 resource center. MassMEDIC also launched a COVID-19 resource center for its members in the MedTech community as a way to keep up to date on everything they need to stay on top of this rapidly developing crisis. Finally, Life Science Cares launched a COVID-19 Response Fund to support partner nonprofits as these organizations work tirelessly to mitigate the effects of COVID-19 on our neighbors living in poverty.

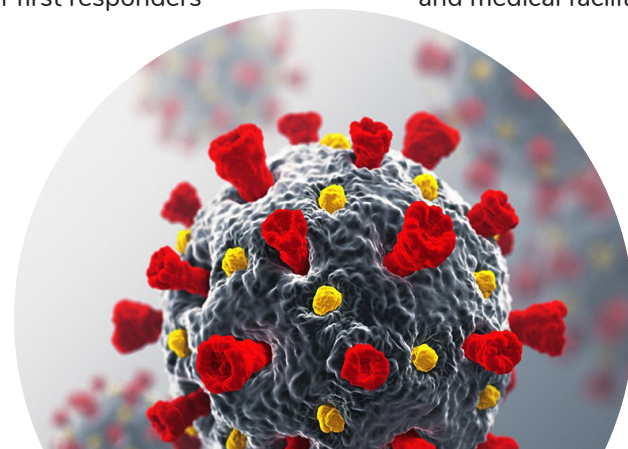
We are grateful to our many public and private partners working collaboratively to combat COVID-19. We are proud to be part of such a rich life sciences ecosystem that is able to immediately mobilize and work together to tackle these types of public health challenges, benefiting not only our region but the world. We are especially appreciative of the ongoing work of first responders and health care professionals.

“The MLSC is proud to have invested in Massachusetts life sciences companies, nonprofits, and academic institutions that are directing resources and talents to address the challenges of this pandemic. Their individual and collaborative efforts are a reminder of the dynamic and robust ecosystem in Massachusetts, with everyone working towards a common goal of saving lives.”

Damon Cox
Interim President & CEO, MLSC



Governor Charlie Baker visits LabCentral in Cambridge as companies here work on essential issues during the pandemic.



Massachusetts Consortium on Pathogen Readiness

To address the most pressing challenges of the pandemic, the MassCPR, a multi-institutional initiative convened by Harvard Medical School to combat the disease and prepare for future outbreaks, recently announced more than \$16.5 million in funding to support 62 high-impact research projects. Recognizing MassCPR's ability to bring together leading scientists and researchers from across the Commonwealth to respond to the pandemic, MLSC is providing up to \$2.3 million to support nine collaborative project teams through the consortium.

Manufacturing Emergency Response Team

The Manufacturing Emergency Response Team is a coordinated response by the Commonwealth's leading academic, industry, and government stakeholders to respond to the COVID-19 pandemic and to address the urgent need for PPE for healthcare workers on the frontlines. The M-ERT launched alongside \$10.6 million (\$4 million from MLSC) in new funding to help manufacturers scale their operations to produce PPE and other critical items. Managed by the Massachusetts Technology Collaborative, the M-ERT effort relied heavily on Massachusetts experts and healthcare leaders to inform investment decisions. MLSC brought expertise as well as significant financial resources to the effort. These products include surgical equipment such as masks, surgical masks, emergency ventilators, and gowns. The MLSC supported 15 manufacturers across the Commonwealth through this program.

MatTek's Pivot to COVID-19 Supported by M-ERT

MatTek received grant support through the M-ERT's funding program. The support substantially increased the company's output of its viral transport media. Boasting a highly trained scientific staff, expertise in cell culture and building human tissues, and existing relationships with government agencies and the FDA, Ashland, Massachusetts-based MatTek was in a unique position to shift their operations to support the Commonwealth's response to COVID-19. Support from the M-ERT's experts, particularly MIT's System Design and Management program streamlined the transition from the manufacture of cell culture media to the production of viral transport media streamlined.

In addition to providing essential products for COVID-19 research, MatTek also pivoted labs and staff into producing hand sanitizer, and has donated hundreds of liters to local first responders and medical facilities, and shipped thousands of liters across the country. •

Rallying Resources & Expertise in the COVID-19 Response

The Massachusetts Life Sciences Center leveraged its unique position within the Massachusetts ecosystem to bring resources, expertise, and investment to the Commonwealth's battle against COVID-19. The Center moved swiftly and effectively to contribute to the effort. The MLSC's Board of Directors authorized an expenditure of \$5 million from the Center's Investment Fund and \$5 million from its Capital Fund to support academic and/or industry partners engaged in responding to the imminent public health threat. These efforts included the manufacture of PPE, diagnostic solutions, and developing innovative COVID-19 solutions for gaps in prevention and treatment.



Governor Charlie Baker tours MatTek Life Sciences with Senate President Karen Spilka.

HUMAN CAPITAL

Interns Playing a Vital Role in a Pandemic

Massachusetts is home to countless life sciences companies working to accelerate the commercialization of promising treatments, therapies, and cures to improve patient care. Kephera Diagnostics is one such company stepping up to pivot their current pipeline of infectious disease diagnostics from Lyme, Zika, and Chagas, to focus attention on COVID-19.

Dr. Andrew Levin founded Kephera Diagnostics, located in Framingham, in 2016. Using blood samples from positive COVID-19 patients, the company is developing an antibody test for the virus that will measure the levels of IgG and IgM antibodies in a patient's serum. Through their research and development of

this test, Kephera provides tools to answer the provocative question: Can a person be immune to reinfection if they have a high enough level of antibodies?

To help with Kephera's research and speed up the development of the COVID-19 test, Dr. Levin hired two interns through the MLSC's Internship Challenge. The workforce development program facilitates and funds paid internship opportunities that enhance the talent pipeline for Massachusetts life sciences companies. The program connects employers with prospective interns and reimburses eligible companies for intern stipends.

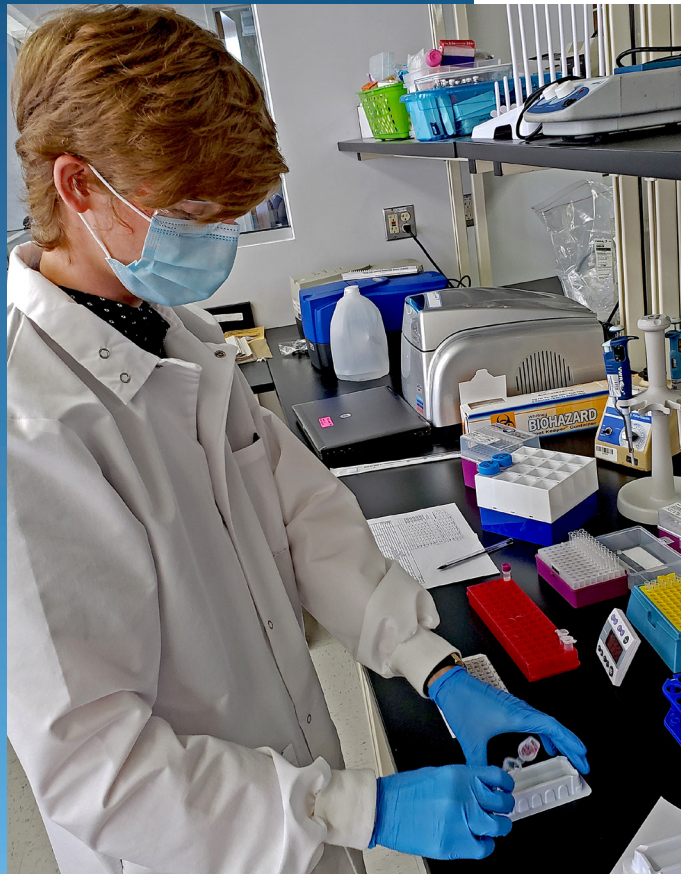
Dr. Levin believes "it is a great program that offers companies a way to subsidize the talent we are looking for by bringing people on at an early point in their career, while simultaneously helping the interns get a taste of what the work is like in the field. They quickly become productive members of our lab team."

One of Kephera's current interns, Anton Kobrin was welcomed back for a second internship in April to assist with the company's swift pandemic response during this critical time. "I have been working with the senior scientists in the lab doing a lot more hands-on experiments that I would never have been able to do a couple of months ago," said Anton. "I appreciate this opportunity and I am grateful this internship program has been created. I have gained a lot of valuable skills and experience that will be very beneficial to my future."

During the 2019-2020 program year, MLSC funding enabled the creation of 513 new internships at 286 companies throughout the Commonwealth. Students who

participated in the program represented 106 different academic institutions.

With the pandemic affecting this year's program, the Internship Challenge quickly adapted in response to the needs of participating companies, permitting interns to work remotely, if needed, for the duration of the program year. The Internship Challenge is absolutely imperative to the development of our future workforce and critical to the life-changing work the companies are doing, especially at the height of a global pandemic. •



Intern, Anton Kobrin, working in the lab at Kephera Diagnostics

4,433
Internships created
since inception

811
Companies
provided internship
opportunities

240
Academic
institutions
represented

High School Apprenticeship Challenge Continues Creating Experiential Learning Opportunities

The High School Apprenticeship Challenge facilitates and funds paid internship opportunities for Massachusetts high school students interested in STEM. The program's goal is to expand career pathways for students from socio-economically challenged areas. Massachusetts students are eligible to apply for paid summer internships with research institutions and life sciences companies. Since the program launched in 2016, the MLSC has supported 393 internships with 95 organizations. Interns have represented 117 different high schools.

In FY20, the program placed 170 students from 68 different high schools in internships with 54 life sciences companies and research institutions. Eligible employers received a reimbursement of up to \$2,880 per intern, based on \$12 per hour for six weeks.

The program also offers a pre-internship lab-training program that provides intensive biotechnology and professional skills development for under-served and under-represented students. The program runs either after-school or during the summer and it has been offered in Brockton, New Bedford, Worcester, and Cambridge (serving Boston, Cambridge, and Everett students).

In the spring of 2020, the MLSC began accepting summer internship applications for the fifth round of the High School Apprenticeship Challenge and kicked-off after-school training programs at Brockton High School and New Bedford High School, which served 42 students. In spite of school closures due to COVID-19, both programs were able to successfully transition to a virtual learning experience utilizing the online platform LabXchange. •



MLSC Funding Makes Learning Experiences Possible for Young Scientists

In the summer of 2019, the MLSC supported the Health Resources in Action's LEAH (Leaders through Education, Action, & Hope) Knox Scholars Program, an MIT-based biomedical research training program that prepares students for internships. Funding supports hands-on lab experience and mentorship for low-income high school students of color providing a foundation for science education in college and beyond. The training program served a cohort of 23 students from eleven different high schools, while 22 students from the 2018 cohort participated in paid internship opportunities with life sciences companies and research institutions.

With the funding from MLSC and the Amgen Foundation, the program was able to build upon the program's core funding from the Science Education Partnership Award (SEPA) of the National Institutes of Health (NIH) to expand its training cohort by eight additional students and provide internship stipends. First-year students received a five-week summer biomedical research learning opportunity and nearly all of the second-year LEAH Knox Scholars earned paid internship opportunities with labs throughout Boston and Cambridge.

MLSC's support and partnership with the LEAH Project continue to make these experiences for young scientists possible. •



Data Science Internship Program

The MLSC launched the Advanced Analytics/Data Science Internship Program in the fall of 2019. The MLSC's internship programming embodies a belief in the power of experiential learning to cultivate a critical talent pipeline. A timely new offering, this newest program responds to the growing demand for data science talent in the life sciences by funding well-paid six-month internships for qualified candidates. The program connects life sciences companies and research institutions with prospective interns through an online platform and reimburses eligible employers for intern stipends. By providing real-world opportunities for students and graduates to explore life sciences careers, the program increases the availability of data science talent needed to advance the development of novel techniques for data mining in strategic areas to accelerate biomedical research.

HUMAN CAPITAL

Championing STEM Education throughout the Commonwealth

The MLSC continued its approach to awarding STEM equipment and professional development grants that has an even greater impact on addressing educational inequities and diversifying the life sciences workforce pipeline. This past fiscal year, Salem and Chelsea school districts received funding from the MLSC. Since FY12, the MLSC has awarded nearly \$18 million to 199 public schools throughout Massachusetts.

Salem Public Schools received \$68,343 for three high schools and \$20,589 for two middle schools. The grant includes \$76,932 for equipment and supplies and \$12,000 for teacher professional development. The district will purchase 3D printers, robotics kits, digital microscopes, spectrometers, and miniPCR machines, among other industry-standard equipment, as well as transform an aging classroom into a full laboratory for a new biomedical pathway program. Teachers will participate in training workshops provided by Project Lead the Way (PLTW) and the MassBioEd BioTeach program. MLSC funding leverages \$64,000 provided by the Norman H. Read Trust to support PLTW courses at Salem High School and purchase middle school lab supplies.

"I am so grateful to the Massachusetts Life Sciences Center for providing this grant to Salem's schools," said Salem Mayor Kimberley Driscoll. "Investments in equipment and teachers' professional development for our science, technology, engineering, and mathematics programs will help our schools better serve Salem students as they prepare for careers and success later in life. Beyond just career success, though, STEM education helps our students become more critical thinkers and better citizens of the world around them."

Chelsea Public Schools received \$194,237 (\$100,537 for equipment and supplies and \$93,700 for professional development). The award will enable five schools, Chelsea High School and all four Chelsea middle schools, to create a partnership with MassBioEd to receive job-embedded professional development, form connections with experts in the field, and bring hands-on lab science experiences to classrooms. Funds will also support the purchase of augmented reality equipment for students to engage in more complex or invisible phenomena through partially or fully immersive experiences. •



Lt. Governor Polito tours Gloucester Genomic Marine Institute during 2019 STEM Week.



Lawrence students participate in biotech lab with support from MassBioEd and a \$134,373 MLSC grant

Boston Public Schools: Biotechnology an Opportunity for All Students

In 2019, the MLSC awarded nearly \$1.14 million in STEM equipment and professional development funding to 36 public middle schools and high schools in the five school districts of Boston, Brockton, Lawrence, Lowell, and Springfield. Boston Public Schools (BPS) received the largest grant, totaling \$421,668, to support nine high schools with equipment, supplies, technology, and teacher training that expanded life sciences education for 1,700 students.

Over the past year, BPS accomplished this by developing new career and technical education Biotechnology Pathways and courses in three high schools, building instructional capacity to integrate biotechnology hands-on labs into 15 existing courses and four new courses in seven high schools with new industry-standard equipment and high-quality training for 21 teachers.

Teachers gained confidence in facilitating authentic biotechnology laboratory experiences in the classroom during training with the Massachusetts Biotechnology Education Foundation (MassBioEd). Through participating in the labs, teachers are able to predict areas where students may struggle or have questions and network with teachers from other schools and discuss best practices in implementing the target labs. Additionally, the grant provided an opportunity for three teachers to complete summer externships at MIT, also with MassBioEd.

This grant also supported the BPS mission of opening up access for its historically underrepresented students to the life sciences and related STEM careers, amplifying an ethos of biotechnology as an opportunity for all students. Once students become familiar and develop competency with the equipment and its use, it becomes less intimidating and more exciting to them. The school district remains committed to connecting students with the real-world issues biotechnology solves, exposing them to the range of careers in the life sciences, while also introducing them to industry professionals that include women and people of color. •



Boston Public School students explore STEM and biotechnology through hands-on learning with equipment funded by MLSC.

INTELLECTUAL CAPITAL

What Sets Massachusetts Apart: Expanding the Benefits of Life Sciences throughout our State

In February, Governor Charlie Baker and Lt. Governor Karyn Polito joined state and local officials for the ribbon cutting ceremony on the \$13.7 million Berkshire Innovation Center (BIC), which will catalyze and accelerate innovation and growth of new and existing companies and spur economic growth, job creation, retention and investment in Western Massachusetts.

“Facilities like the Berkshire Innovation Center are what sets Massachusetts apart, ensuring that cities and towns across the Commonwealth experience the benefits of the state’s thriving life sciences sector,” said Governor Baker. “Our administration has been proud to make a nearly \$12.5 million commitment to BIC’s development, and leverage the partnerships necessary to make this state-of-the-art facility a reality as it enables and accelerates growth and success of small and medium-sized companies.”

The BIC will provide advanced capabilities to manufacturers in the Berkshires, primarily small and medium-sized companies in life sciences, the life sciences supply chain, advanced manufacturing and technology. The Baker-Polito Administration has committed nearly \$12.5 million towards the project through a \$12 million allocation from the Massachusetts Life Sciences Center and the approval of \$450,000 from MassDevelopment. This funding leverages an additional \$1 million commitment from the City of Pittsfield and \$300,000 from the Pittsfield Economic Development Authority.

The 22,500 square-foot facility of the BIC represents a broader commitment by the MLSC and its partners for the development of regional life sciences clusters throughout Massachusetts. Moving toward central Massachusetts. The most recent fiscal year also signified more momentum for central Massachusetts’ life sciences footprint.

In December, Lieutenant Governor Polito joined leaders from the Massachusetts Biomedical Initiatives (MBI), and state and local officials at the site of MBI’s expansion to celebrate construction progress of the redeveloped facility, which will double the operational capacity for the life sciences incubator. The gathering also served as an opportunity to unveil the “MBI Champions Wall” which recognizes the numerous stakeholders who have contributed to the success and growth of the Central Massachusetts’ life sciences cluster. The MLSC invested \$3.5 million in capital funding for MBI to redevelop 17 Briden Street within Worcester’s Gateway Park by establishing additional incubator

space, including a “ScaleUp Center” for growing incubator companies. The project includes 28 additional suites for startup companies and supporting office spaces. ●



Gov. Charlie Baker joins local dignitaries to celebrate the ribbon-cutting of the \$13.7 million Berkshire Innovation Center in the William Stanley Business Park in Pittsfield, a project that will spark innovation in the Berkshire economy.

Innovation Challenge

The MLSC has leveraged its funds to supplement other innovative opportunities for life sciences entrepreneurs. Such initiatives provide an opportunity for the Center to collaborate with partner organizations in addition to MLSC-run programs. Last year, the Center participated in Boston Scientific’s Connected Patient Challenge V, providing a Spotlight Award of up to \$25,000 to a Massachusetts-based winner. This worldwide competition, co-sponsored by Google Cloud and Medstro, promotes the development of meaningful innovation to address complex healthcare challenges.

The Spotlight winner was nQ Medical, a technology originated from MIT. The team is developing a machine-learning platform that will mine information obtained from the daily use of mechanical and touchscreen devices for the early detection of subclinical symptoms of Parkinson’s disease in newly diagnosed or untreated stages of the disease.

Leveling The Playing Field for Underrepresented Students in Medicine and Science

The MLSC provided the Biomedical Science Careers Program (BSCP) a \$50,000 grant. The funding provides students from underrepresented populations, in particular African Americans, Hispanics/Latinos and Native Americans/Alaska Natives, in medicine and science, for a two-day forum to match students with advisors, skill-based workshops, and provide expansive scientific and academic resources, including internships, summer programs, and after-school activities. The forum, originally set for April 2020, is rescheduled to April 2021 due to COVID-19.

BSCP aims to provide students of every race, ethnic background, gender, and financial status with encouragement, support, and guidance needed for the successful pursuit of biomedical science and other science careers. BSCP believes that the individual potential of each student should not be lost or ignored.

“The goal of BSCP is to try to provide information and resources that will help level the playing field,” said Hollie DeSilva, Executive Director of BSCP. “The development of a diversified, well-balanced workforce is required to meet the future needs of business, scientific, and academic organizations. By expanding the academic and career horizons of students, we are helping meet that need for our economy and society.”

BSCP was founded in 1991 and incorporated as a not-for-profit in 1994. The founding sponsors of the BSCP are the Harvard Medical School Minority Faculty Development Program, the New England Board of Higher Education and the Massachusetts Medical Society. Since its inception, more than 13,000 minority students and 1,200 postdoctoral trainees and junior faculty members have participated in programming. The participants range from high school students to postdoctoral levels.

The grant to BSCP was one of two FY20 discretionary grants awarded by the MLSC. The second was a \$25,000 grant to support Project Onramp. ●

Project Onramp: Helping Students Chart Pathways to Life Science Careers

The MLSC continues to join forces with leading life science organizations—MassBio, MassBioEd, and Life Science Cares—to connect passionate, high-achieving four-year college students with paid internships through our investment in Project Onramp. With help from the non-profit, Bottom Line, first-generation students from low-income backgrounds receive encouragement and support to explore STEM career pathways. The MLSC recognizes that gaining access to life sciences internship opportunities can be challenging for students from demographics that remain underrepresented in STEM careers.

The MLSC is committed to being a catalyst for change in opening up new opportunities for minority students in Massachusetts, helping bridge the gap for many promising students. Through the Internship Challenge, the Center offers funding for small early-stage companies hiring Project Onramp interns.

To date, Project Onramp has matched 90 students with company internships. Many interns from the 2019 cohort received part-time job offers with their host companies following the completion of their internship. Despite the challenging times of COVID-19, the program has welcomed 38 summer interns to work remotely in paid internships. ●



Project OnRamp interns celebrate and proudly share their experiential learning accomplishments at the Internship Showcase, hosted by Pfizer

GROWTH CAPITAL

Advancing Innovation & Equity by Investing In

Women-Led Ventures

The Massachusetts Next Generation Initiative (MassNextGen) is a five year, more than \$2 million commitment (funding and in-kind) to moving the needle on improving gender parity in the next generation of life science entrepreneurs. Along with sponsors Takeda, King Street Properties, Sanofi, and most recently, Johnson & Johnson Innovation, MassNextGen supports women leaders with funds, network connections, and skills they need to help them in building successful ventures.

Lieutenant Governor Karyn Polito, a strong advocate for this program explains "MassNextGen demonstrates our administration's commitment to supporting diversity in the life sciences and the innovation economy. The work and research of these female entrepreneurs and their companies represent what is possible in Massachusetts when we work together to provide critical support to help female leaders build successful enterprises".

The Commonwealth's entrepreneurs and investors benefit from an innovation ecosystem with more diverse leadership. Underrepresentation of women in the industry has real consequences not only for individual careers but also for new innovative therapeutics for patients. Through MassNextGen, the goal is to shift the paradigm to build a more diverse and equitable life sciences ecosystem.

With the addition of our newest sponsor, Johnson & Johnson Innovation, the award pool expanded to over \$500,000. After receiving 34 applications and a highly competitive review process, six awardees were selected to each receive \$85,416 in non-dilutive grant funding. In addition, awardees gain access to a yearlong, curated coaching program and network. The coaching program focuses on key topics such as pitching to investors, pricing and reimbursement, as well as negotiating term sheets.

Nancy Briefs, President, CEO, and Co-founder of Altrix Bio, Inc., an entrepreneur and MassNextGen Coach, captures the benefit of this program for the entrepreneurs: "Having a network that you can go to, that could be a trusted advisor, and a coach can really help you think through the challenging questions that you have to answer when building a new company."

This year's six awardees join a group of 10 women entrepreneurs awarded through the program in the past two years. MassNextGen year two awardees have utilized the funding for the hiring of employees, securing of IP, and completion of crucial experiments, putting these companies in a stronger position to raise further funding. The first cohort of MassNextGen entrepreneurs continues to accelerate their companies, including the completion of a Series A fundraising round and expansion of their respective management teams. •

MassNextGen Awardees



**Natalie Artzi, Ph.D.,
Founder, BioDevek**

BioDevek is developing the next generation of adhesive materials to prevent leakages during surgeries.

BioDevek



Virginia Burger, Ph.D., Founder & CEO, New Equilibrium Biosciences, Boston

New Equilibrium Biosciences works with a computational-experimental platform for drug discovery

to cure cancer and neurodegenerative diseases.

new equilibrium biosciences



Ida Pavlichenko, Ph.D., Co-founder, PionEar, Allston

PionEar is pioneering innovative ear tube implants with unique drug transport capabilities for the treatment of ear and hearing disorders.

PionEar Technologies



Joanna Stackina, Ph.D., CEO and Co-founder, Axonis, Boston

Axonis is advancing breakthrough drug discovery to develop therapies for spinal cord injury and other incurable neurological disorders.

AXONIS



Nele van Dessel, Ph.D., CEO, Ernest Pharmaceuticals, Hadley

Ernest Pharmaceuticals is pioneering bacterial therapeutics to seek out tumors and deploy anti-cancer payloads.

Ernest pharmaceuticals

LivOnyx: Can you kill a pathogen in three seconds?

The COVID-19 pandemic has placed a hyper-focus on hygiene and infection prevention. For LivOnyx, and its President and Co-founder Carmela Mascio, that focus is at the heart of its mission. Founded in 2016, LivOnyx is an early-stage company developing a rapid, fully automated hand disinfection system to reduce healthcare-associated infections using its proprietary, patented thinSpray technology and antiseptic. The company was as one of five women-led companies to receive \$87,500 in funding and access to a network of executive coaches for a year as part of the second round of MassNextGen.

"COVID-19 has opened many eyes to infection prevention and how mitigation matters," said Mascio. "However, a lot of the behavior proving to be critical during the pandemic, from hand washing to the proper use of hand sanitizers,



The LivOnyx Team stands ready to reduce the spread of infections with their thinSpray™ hand sanitizing system

has always been critical to our health."

For Mascio and her team, this echoes most sincerely for health care workers and patients. According to a 2011 Centers for Disease Control and Prevention survey, one in 25 patients in U.S. acute care hospitals contract a healthcare-associated infection with close to 75,000 of those patients dying annually.

The company's goal is simple: aid healthcare practitioners in maintaining hand sanitization effectively and efficiently, so their prime focus is on direct patient care. The team's ethnography research, led by fellow co-founder Lawrence Shubert, confirmed that a need exists for a hand hygiene solution that leaves hands dry, facilitates hand health, is available near the patient, and is effective against a host of pathogens that current products miss, all within three seconds. Ultimately, it all boiled down to this question — is it even possible to kill a pathogen in three seconds? Mascio confidently answers, "With the right combination of a controlled deposition method and antiseptic, yes!"

LivOnyx has demonstrated through proof of concept work that its thinSpray system rapidly inactivates clinically relevant bacteria – including Clostridium difficile spores, a pathogen which infects more than 220,000 hospitalized patients each year – by dispensing a minute volume of antiseptic to quickly and consistently coat test surfaces.

As a first-time entrepreneur, Mascio is not shy to admit, her foray into biotech did not initially include an itch to start a company. However, the mission to help health care workers and patients drew her in. The funding from MassNextGen was indeed critical for the LivOnyx team, while she also lauds the access to serial entrepreneurs through the MassNextGen Executive Coaching network.

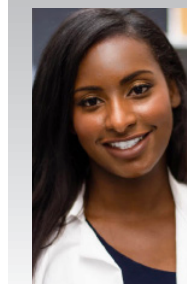
"The coaches and coaching sessions helped demystify so much for me and my team," said Mascio. "It is hard to put a value on hearing directly about the successes, and even failures, of others and how they responded." •

Johnson & Johnson Innovation Steps Up as Newest MassNextGen Sponsor

Johnson & Johnson Innovation came onboard in 2020 as the newest sponsor for MassNextGen. The \$75,000 in funding provided to the public-private strategic partnership for the third round of MassNextGen allowed Johnson & Johnson Innovation to define an "Awardee Track" for a MassNextGen awardee in 2020.

Six companies received approval by the MLSC's Board of Directors. Of those six awardees, Cambridge-based Seaspire, under the leadership of its Chief Executive Officer Camille Martin, received the Johnson & Johnson Innovation Track award. Seaspire produces multifunctional performance colorants, with the first application in sunscreen for UV protection.

Since the program's inception, the amount of funding made available to awardees has increased each year, made possible by the addition of new corporate sponsors and support from the MLSC's Board of Directors.



Camille Martin, Ph.D. Co-founder & Chief Executive Officer, Seaspire, Cambridge

Seaspire is pioneering a new category of multifunctional materials, initially targeting replacement of harmful active ingredients that provide UV filtering in

existing sunscreens. Camille is the Johnson & Johnson MassNextGen Awardee.

seaspire SKINCARE

GROWTH CAPITAL

Catalyzing Innovation, Economic Development and Job Growth Across the Commonwealth

In fiscal year 2020, the MLSC awarded \$19.5 million in tax incentives to 35 life sciences companies under the MLSC's 2019 Tax Incentive program. The companies receiving tax incentive awards have committed to creating 1,242 new jobs in the Commonwealth during the calendar year 2020 and retaining them at least through 2024. The awardees represent a diverse cohort of companies working on new technologies such as personalized medicine, diagnostics, cell and gene therapy, RNAi medicines and innovations in medical device manufacturing across broad geographic areas of the Commonwealth. More than half of this year's awardees are expanding their facilities outside of Greater Boston and more than 70 percent are companies with fewer than 250 employees.

Since the Tax Incentive program's inception, 291 awards were authorized representing over \$241 million of incentives with the goal of creating approximately 12,579 net new jobs across the Commonwealth and maintaining them over a five-year period.

As of June 30, 2020, there were 106 active awards from the 2015 through 2019 program years, with a combined commitment of 5,026 net new jobs under the program. To date, the Tax Incentive Program has resulted in combined net new hire commitments or actual new hires of 8,162 jobs among active and completed awards. Companies who did not meet the new hiring commitment and retention throughout the course of the five-year period are required to terminate their awards and refund the incentives to the Commonwealth.

The MLSC team works diligently to ensure that these competitive awards are deployed strategically to fuel innovation in promising new modalities, promote job growth in high-impact areas, and to help maintain Massachusetts' position as the most diverse and productive life sciences ecosystem in the world. This year's

awardees include companies that are pushing the cutting edge of gene editing, investing in next-generation biomanufacturing, and driving the global markets in medical devices and enabling technology.

While the Tax Incentive application period closed before the widespread U.S. outbreak of the novel coronavirus, many of the awardees were subsequently involved in the global pandemic response. **Berkshire Sterile Manufacturing**, a Western Massachusetts CMO and multi-year Tax Incentive awardee, provided contract manufacturing and sterile filling services for multiple COVID-19 treatments. In the face of impending shortages at hospitals, **Zoll Medical** in Chelmsford ramped up its ventilator production more than tenfold, producing thousands of units monthly. Synthetic biology pioneer **Ginkgo Bioworks** pledged \$25 million in access to its foundries and proprietary platform to accelerate work toward the development of diagnostics, vaccines, and treatments.

This year's awardees continue a growing trend of companies developing novel therapeutics choosing to locate their advanced manufacturing operations in Massachusetts. In July, **CRISPR Therapeutics** joined the ranks of those companies, breaking ground on a new biomanufacturing facility in Framingham.



Ginkgo Bioworks in Boston

The company plans to utilize the facility to produce its pipeline of allogeneic CAR-T treatments for clinical and commercial supply. Meanwhile, global pharma company **UCB Boston** continues to grow its Massachusetts presence, building out a viral vector development lab in Bedford and acquiring Cambridge-based rare disease company **Ra Therapeutics**. Gene therapy and CAR-T developer **Mustang Bio** was an early leader in building in-house manufacturing capabilities. This year the company was awarded incentives to grow its Worcester biomanufacturing hub.

The MLSC supports companies of all sizes and stages of development, including established global leaders like **Instrumentation Lab Company**, which recently added a global shipping and logistics hub in Devens, and **Charles River Laboratories, Inc.**, which supported the advancement of approximately 85 percent of the drugs approved by the FDA in 2018. Tax Incentives also help advance clinical-stage pioneers like **Beam Therapeutics**, striving to be the first to crack the code on base editing, **eGenesis**, seeking to make organ transplant rejection a thing of the past, and **Spero Therapeutics**, developing new approaches to the global problem of antibiotic resistant infections. The Massachusetts Life Sciences Center continues to invest in the companies that make up the ecosystem that leads the world today and in those that will carry it into the future. Massachusetts continues to thrive as the life sciences hub for companies looking to begin or to expand in the innovation economy. •

Why Massachusetts?

Life sciences companies can find the people, ideas, and resources they need here in Massachusetts, the world's leading life sciences ecosystem. Massachusetts has the infrastructure, the talent, and the resources to bring transformational discoveries in biotech, pharma, medical technology, devices and diagnostics from the lab bench to patients and every step in between. Companies launching, arriving, and expanding here continue to discover that Massachusetts offers access to the nation's most skilled workforce, modern infrastructure, leading research institutions and an array of pro-business incentives. Massachusetts Life Sciences Center strategically invests in companies and people to uphold the state's position as the #1 life sciences hub in the world—where scientists and innovators arrive to discover, invent and accelerate the next scientific revolution. **Discover it here. Develop it here. Make it here.**



Mustang Bio in Worcester



Berkshire Sterile Manufacturing in Lee



Charles River Laboratories, Inc. in Shrewsbury



UCB Boston Laboratories in Bedford

Fostering Regional Economic Development & Innovation Through Seed Funding

The MLSC launched the Seed Fund in 2019 as a means to catalyze life sciences innovations and to support economic development in five pilot regions: Lowell, Worcester, Amherst, Springfield, and Pittsfield.

These communities and surrounding regions are already home to a verdant presence of major research universities, medical centers, and incubators, such as the Massachusetts Medical Device Development Center (M2D2) at UMass Lowell and the Institute for Applied Life Sciences (IALS) at UMass Amherst, and Massachusetts Biomedical Initiatives (MBI) in Worcester. The Seed Fund is one of the MLSC's latest tools to match the environment of anchor institutions with opportunities for early-stage funding that is currently more concentrated within the Cambridge/Greater Boston area.

On a rolling basis, companies can apply for up to \$250,000 in convertible notes to support novel innovations in all life sciences sectors. In year one, more than half of the applicants were located outside of the pilot regions and intended to establish a presence in one of these key areas.

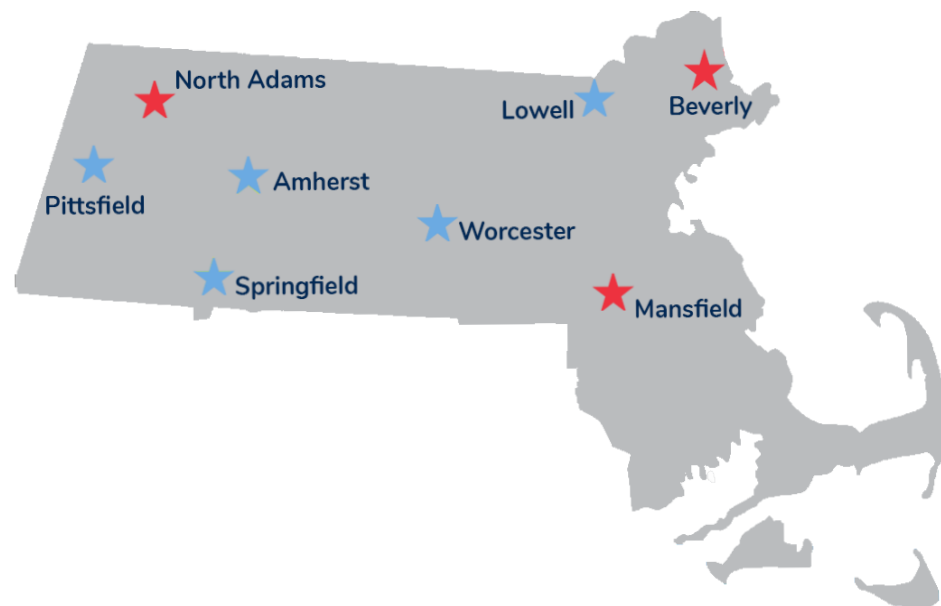
The Center has allocated \$250,000 each for its inaugural awardees, all three of which will be locating in Worcester. 149 Medical, Inc. is a medical device company whose product non-invasively measures real-time brain hemodynamics in preterm newborns. iVexSol, Inc. is a "product-as-a-service" custom vector manufacturing company founded on a stable, lentiviral vector production process. This process can reliably produce at least 10-times the quantity of a potent high-quality vector at less than 50 percent of the cost and in less than 20 percent of production time. The Center's third investment, Nutrimedy, is a HIPAA-compliant digital health platform, which improves the outdated care delivery model by automating medical nutrition therapy for many chronic conditions. Of the investments to date, the Center has joined seven institutional investors and several angel investors as part of the three syndicates.

The Seed Fund is expanding to Beverly, Mansfield, and North Adams, for the second year. This fund was enabled by the Regional Innovative Strategies Seed Fund Support award, which required a 1:1 match to operationalize the Seed Fund. With the support of the federal government and state partners, the Center can deploy critical capital outside of the Cambridge/Greater Boston area. •

"This Seed Fund investment is of great importance to iVexSol, not only owing to the financial investment, but because it reflects the confidence MLSC has in iVexSol's team, its advanced technology, and our ability to become a world-class manufacturer of lentiviral vector. We sincerely appreciated working with MLSC through the application and vetting process, both of which refined our thinking and reinforced the fact that starting our business at MBI in Worcester was a great decision."

Rodney L. Rietze, Ph.D.
CEO, iVexSol

Seed Fund Awardees



Building Infrastructure to Support Life Sciences Research and Development

The MLSC believes that investment in various kinds of infrastructure, ranging from core facilities to incubator space, and repositories of scientific data, is required to create and sustain the attributes that make Massachusetts attractive to innovation clusters. The design of the Open Capital program is to provide grants for state-of-the-art equipment and infrastructure that support the life sciences ecosystem in Massachusetts. To date, the MLSC has awarded or committed more than \$480 million to support capital projects across the state. Funding through this year's Open Capital round supported projects at academic organizations, research institutions, research hospitals, start-up incubators and other non-profit organizations.

In this round, the MLSC awarded approximately \$10.4 million in funding to 11 projects. This includes Worcester Polytechnic Institute (WPI), which is receiving \$877,314 to support the campus' Cell Engineering Research Accelerator (CERA). WPI will utilize MLSC funds to purchase key equipment, including a flow cytometer and live cell imaging system, which will allow academic researchers and industry scientists to investigate ways to improve public health by accelerating development of innovative treatments, and creating jobs and preparing the workforce needed to grow a thriving biotechnology industry in the Commonwealth. The CERA core facility will provide startups access to resources needed to bring cell-based products to market, and leverage cell culture models of human disease for drug discovery applications. A major indicator of success will be the growth and maturation of the biotech discovery ecosystem in central Massachusetts, especially in the number of startup companies supported by CERA at WPI.

"With this support from the MLSC, we will establish an agile core facility that meets the needs of the growing startup and academic research community in the rapidly evolving cell and gene therapy sectors", says Dr. Marsha Rolle, Associate Professor, Biomedical Engineering at WPI. "Housed in our Biomanufacturing Education & Technology Center, CERES@WPI will also expand opportunities for cutting edge, hands-on training to meet the demand for talent that will help young companies take root and flourish in the heart of the Commonwealth." •



Staff and students convene in the WPI Biomanufacturing Education & Training Center where the CERES core facility will reside.

Capitalizing on Datasets to Answer Pressing Life Sciences Questions

The MLSC launched Bits to Bytes in 2019 to provide grants for projects that generate and analyze large datasets to answer pressing life science questions, and to attract and train data scientists in the Commonwealth. The goal of Bits to Bytes is to employ data analytics and/or machine learning techniques to develop a greater understanding of medical conditions to develop optimal treatments to improve patient health. Additionally, the MLSC and its partners are committed to a collective goal of attracting, training, and retaining data scientists to the life sciences. Exposing data scientists to projects with a focus on human health can encourage the application of their much-needed skill sets to the industry and mission-driven work of the life sciences.

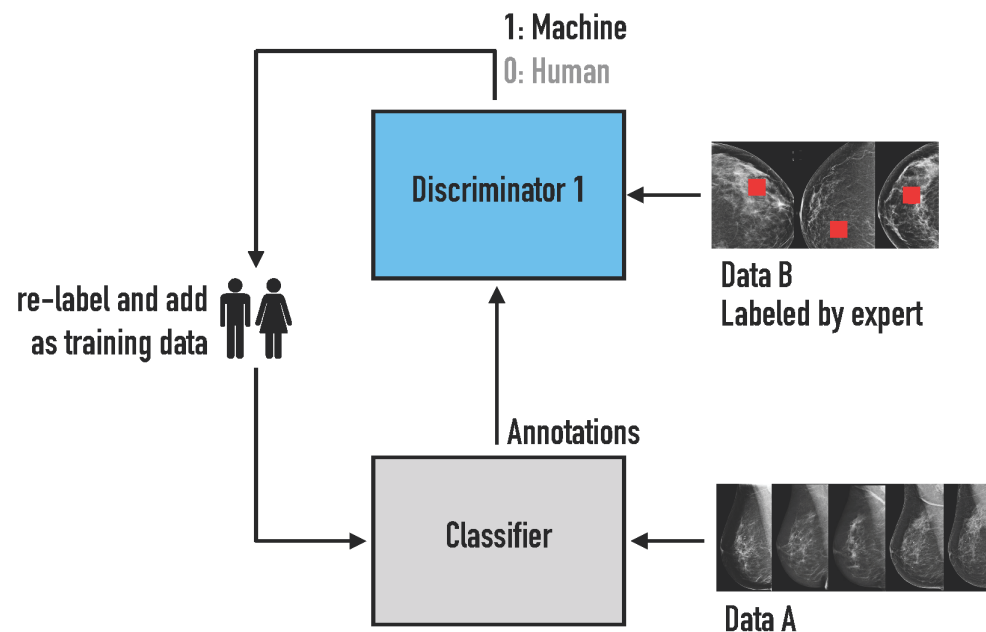
Awardees comprise of not-for-profit organizations collaborating with at least one for-profit Massachusetts life science company. In total, six projects are receiving funding totaling \$4.6 million with 14 industry partners. The projects ranged from mapping neuroinflammation in neurodegenerative disease to creating and integrating an echocardiogram and electrocardiogram extension to the MIMIC database.

UMass Boston, in collaboration with DeepHealth, Inc., spearheads one such project, The Oregon-Massachusetts Mammography Database. Their research focuses on a modern deep-learning system to improve breast cancer-detection algorithms.

"Modern algorithms can detect breast cancer early when trained with large amounts of data. However, generating these manual labels is extremely time-consuming. We are designing intelligent annotation methods that increase labeling throughput", says Dr. Daniel Haehn, Assistant Professor, Computer Science Department, UMass Boston. "With the help of the MLSC Bits to Bytes award and by partnering with a local medical imaging company, we will create the world's largest publicly available annotated mammography dataset."

"We combine machine intelligence with human annotations to automatically detect breast cancer lesions. But no computational method is perfect, and we need to identify classification errors. We pair two artificial neural networks that guide annotators towards correcting common error patterns, ultimately improving breast cancer detection accuracy."

Dr. Daniel Haehn
Assistant Professor, Computer
Science Department
UMass Boston



Developing Novel Technologies and Techniques for Delivering Therapies

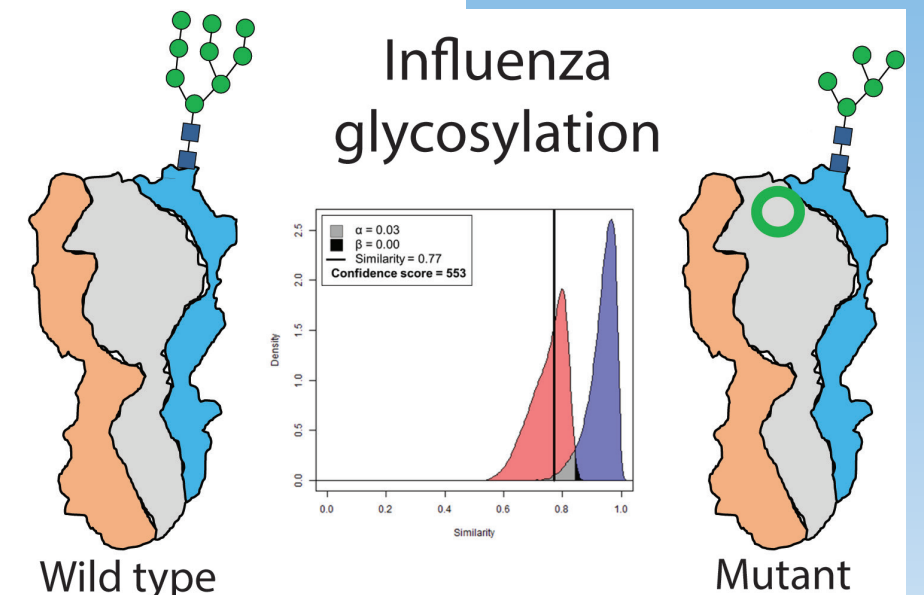
The design of the MLSC's Novel Therapeutics Delivery program is intended to foster the development of novel technologies and techniques for the delivery of new or existing therapies by working at the intersection of engineering, biology, chemistry, and medicine. Innovative new therapies are dependent on advancements in drug delivery. Increased drug complexity, the rise of biopharmaceuticals, novel therapeutic technologies, bioavailability challenges, and the demand for the demonstration of strong drug performance are all driving unprecedented technology development. However, the availability of such therapies is not accelerating at the rate with which technology is advancing. Existing therapies can also benefit from improved delivery methods and devices, increasing patient compliance and improving overall health.

Overall, this program is supporting six projects, totaling more than \$4,271,776 million in capital funding, with seven industry partners. MLSC funding is being matched by more than \$6 million in investment from non-profit and industry partners.

Awardees include a project team at Boston University focusing its efforts on developing new glycosylation analysis techniques and software to enable the generation of more effective Influenza A virus vaccines. Dr. Joseph Zaia, Professor of Biochemistry at Boston University, in partnership with Waters Corporation, is developing more effective techniques for measuring glycosylation patterns.

"The need for better vaccines against viral pathogens has never been more apparent. Viruses evolve constantly and new strains emerge occasionally that cause disastrous human pandemics. We study viral protein glycosylation to inform the development of vaccines with improved breadth and depth of immune protection. These viral proteins are complex, with dozens of glycosylation sites. Which glycosylated protein forms are the best for vaccines? To answer these questions, we need tools to quantify changes in viral protein glycosylation rapidly and accurately", says Dr. Zaia.

"This MLSC Novel Therapeutics Delivery award will allow us to purchase a next-generation Waters Cyclic IMS instrument that changes the game for characterization of viral glycoproteins for vaccine development. With this new, industry-leading, enhanced ion mobility mass spectrometry instrument, we will identify the viral protein forms most appropriate for vaccine development."



Influenza hemagglutinin undergoes amino acid substitution as it evolves in human circulation. Such substitutions also alter the glycosylation of hemagglutinin. We are characterizing hemagglutinin glycosylation to aid development of improved influenza vaccines.

INNOVATION CAPITAL

Overcoming Challenges in the Development of Effective Therapies in Women's Health

The Women's Health program supports collaborative projects to improve the discovery, technical innovation, and/or analysis of datasets to answer pressing life science questions around women's health. Massachusetts recognizes there has been a lack of development in novel solutions to treat conditions that solely or disproportionately affect women or have a different presentation between genders. This affects not only patients, but also employers and the health care system. The consequences are profound, with women more likely to have adverse drug reactions compared to men, and the lack of effective therapies results in reduced quality of life. This capital effort is providing \$4,123,531 million in funding to five cross-sector project teams.

Brigham and Women's Hospital, in conjunction with Beth Israel Deaconess Medical Center, is serving as the lead organization on one such project, which aims to establish a first-of-its kind "Lactation Lab." The lab will have both the clinical and laboratory infrastructure for investigating lactation outcomes and breastmilk composition. According to researchers, 60 percent of U.S. women struggle to breastfeed and are not able to breastfeed for the desired length of time. Research also demonstrates that longer breastfeeding duration can decrease post-partum weight retention and metabolic issues, while also decreasing the possibility post-partum depression and rates of breast and ovarian cancer.

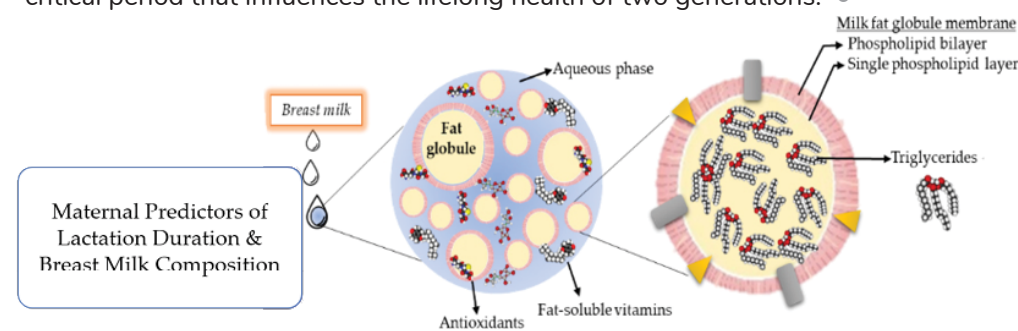
Utilizing infrastructure, supported by \$1,126,306 in MLSC capital funding, and expertise from their industry partner, Metabolon, the project team will conduct a thorough investigation of the maternal predictors of lactation outcomes and breastmilk composition. In the short-term, this inquiry will generate fundamental knowledge required for the discovery of interventions to improve maternal and infant health outcomes. In the long-term, the development of the Lactation Lab will provide a model for discovery in the field of lactation science, bringing much-needed scientific rigor to investigations during this critical period that influences the lifelong health of two generations.

"We are honored to receive the Massachusetts Life Sciences Center Women's Health grant funding. It will allow for the establishment of a state-of-the-art center to study lactation science. The Lactation Lab will encompass both a basic science laboratory, with protocols optimized for breastmilk assays, and a clinical research space designed for the needs of breastfeeding women and their infants."

Camilia R. Martin, M.D. MS,
Associate Professor of Pediatrics,
Beth Israel Deaconess Medical
Center

Sarbattama Sen, M.D.
Assistant Professor of Pediatrics,
Harvard Medical School

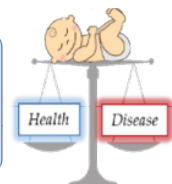
The influence of breast milk lipid components on the balance between neonatal health and disease.



State-of-the-Art biochemical and molecular analysis of maternal and infant samples.

- Metabolomics
- Lipidomics
- Inflammation
- Microbiome

Measures of Maternal & Infant Health Outcomes



APPENDICES

Financial Summary

Statement of Net Position July 1, 2019–June 30, 2020

Assets

Current assets	\$66,172,578
Assets held on behalf of Neuroscience Consortium	\$1,770,008
Noncurrent assets	\$1,400,699
Capital assets	\$92,990

Total assets **\$69,436,275**

Liabilities

Current liabilities	\$13,866,563
Noncurrent liabilities	\$17,940,884

Total liabilities **\$31,807,447**

Net Position

Net investment in capital assets	\$92,990
Unrestricted	\$37,535,838

Total net position **\$37,628,828**

Total liabilities and net position **\$69,436,275**

Statements of Revenues, Expenses and Changes in Net Position July 1, 2019 - June 30, 2020

Revenues and Expenses

Operating revenues	\$30,108,646
Operating expenses	\$(37,322,652)

Operating loss **\$(7,214,006)**

Nonoperating revenues	\$516,034
Capital contributions	\$10,000,000

Increase/(decrease) in net position **\$3,302,028**

The complete audited financial statements are available on the Massachusetts Life Sciences Center website: www.masslifesciences.com or you can request a copy by calling 781-373-7777 or emailing info@masslifesciences.com.

Fiscal Year 2020 Investments

Awards Approved by the MLSC Board of Directors

Month/Year	Awardee	Program	Headquarters/Work Performed	Award Amount
Sep-19	Northway Biotech, Inc.	MassTAG	Waltham	\$150,000
Sep-19	Advanced Analytics Internship	Internship Challenge	Various - Statewide	\$500,000
Oct-19	149 Medical, Inc.	Seed Fund	Worcester	\$250,000
Oct-19	FY20 Professional Development for STEM Teachers	STEM Equipment and Professional Development Investment Fund	Various - Statewide	\$150,000
Dec-19	Life Science Cares	Investment Fund	Various - Statewide	\$25,000
Dec-19	Biomedical Science Careers Program, Inc.	Investment Fund	Various - Statewide	\$50,000
Dec-19	Boston Scientific Connected Patient Challenge	Investment Fund	Various - Statewide	\$25,000
Dec-19	Massachusetts Biomedical Initiatives, Inc.	Capital	Worcester	\$500,000
Dec-19	2020 High School Apprenticeship Program	High School Apprenticeship	Various - Statewide	\$650,000
Dec-19	FY20-21 Internship Program	Internship Challenge	Various - Statewide	\$3,700,000
Feb-20	iVexSol, Inc.	Seed Fund	Worcester	\$250,000
Feb-20	Quincy College	Capital - NIIMBL	Quincy	\$50,000
Feb-20	2020 M2D2 \$200,000 Challenge	Innovation Challenge	Various - Statewide	\$50,000
Feb-20	Salem Public School District	Capital - STEM Equipment to District	Salem	\$76,932
Feb-20	Beth Israel Deaconess Medical Center	Capital	Boston	\$1,705,471
Feb-20	The Mansfield Bio-Incubator	Capital	Mansfield	\$2,000,000
Feb-20	UMass Amherst	Capital	Amherst	\$1,101,559
Feb-20	UMass Amherst	Capital	Amherst	\$515,626
Feb-20	UMass Amherst	Capital	Amherst	\$299,329
Feb-20	UMass Amherst	Capital	Amherst	\$129,900
Feb-20	UMass Boston	Capital	Boston	\$388,324
Feb-20	UMass Lowell	Capital	Lowell	\$1,132,950
Feb-20	UMass Medical School	Capital	Worcester	\$1,370,315
Feb-20	UMass Medical School	Capital	Worcester	\$926,305
Feb-20	Worcester Polytechnic Institute	Capital	Worcester	\$877,314
Apr-20	COVID-19 Response	Capital and Investment Fund	Various - Statewide	\$10,000,000
Apr-20	National Summit on Women's Health	Innovation Challenge	Various - Statewide	\$60,000
Apr-20	AXONIS Therapeutics, Inc.	MassNextGen	Cambridge	\$85,417
Apr-20	BioDevek, Inc.	MassNextGen	Cambridge	\$85,417
Apr-20	Ernest Pharmaceuticals, LLC	MassNextGen	Hadley	\$85,417
Apr-20	New Equilibrium Biosciences, Inc.	MassNextGen	Boston	\$85,417
Apr-20	PionEar Technologies, Inc.	MassNextGen	Allston	\$85,417
Apr-20	Seaspire, Inc.	MassNextGen	Cambridge	\$85,417
Apr-20	Beam Therapeutics, Inc.	Tax Incentive Program	Cambridge	\$1,050,000
Apr-20	Berkshire Sterile Manufacturing, Inc.	Tax Incentive Program	Lee	\$290,000
Apr-20	Blueprint Medicines Corporation	Tax Incentive Program	Cambridge	\$1,065,000
Apr-20	Charles River Laboratories, Inc.	Tax Incentive Program	Wilmington	\$780,952
Apr-20	CRISPR Therapeutics, Inc.	Tax Incentive Program	Framingham	\$420,000
Apr-20	Dicerna Pharmaceuticals, Inc.	Tax Incentive Program	Lexington	\$1,425,000
Apr-20	eGenesis, Inc.	Tax Incentive Program	Cambridge	\$312,380
Apr-20	EMD Holding Corporation	Tax Incentive Program	Burlington	\$1,350,000
Apr-20	Entrada Therapeutics, Inc.	Tax Incentive Program	Boston	\$240,000
Apr-20	Evelo Biosciences, Inc.	Tax Incentive Program	Cambridge	\$150,000
Apr-20	Finch Therapeutics, Inc.	Tax Incentive Program	Somerville	\$600,000
Apr-20	Ginkgo Bioworks, Inc.	Tax Incentive Program	Boston	\$1,874,285
Apr-20	Inozyme Pharma, Inc.	Tax Incentive Program	Boston	\$110,000
Apr-20	Instrumentation Laboratory Company	Tax Incentive Program	Bedford	\$374,860
Apr-20	Insulet Corporation	Tax Incentive Program	Acton	\$2,000,000
Apr-20	Intellia Therapeutics	Tax Incentive Program	Cambridge	\$1,140,000

Fiscal Year 2020 Investments (continued)

Month/Year	Awardee	Program	Headquarters/Work Performed	Award Amount
Apr-20	Intuitive Surgical, Inc.	Tax Incentive Program	Worcester	\$390,476
Apr-20	Kymera Therapeutics, Inc.	Tax Incentive Program	Cambridge	\$375,000
Apr-20	LogicBio Therapeutics, Inc.	Tax Incentive Program	Cambridge	\$150,000
Apr-20	Mevion Medical Systems, Inc.	Tax Incentive Program	Littleton	\$156,190
Apr-20	Morphic Therapeutic, Inc.	Tax Incentive Program	Waltham	\$156,190
Apr-20	Mustang Bio, Inc.	Tax Incentive Program	Worcester	\$234,285
Apr-20	New England Biolabs, Inc.	Tax Incentive Program	Ipswich	\$375,000
Apr-20	Orchard Therapeutics North America	Tax Incentive Program	Boston	\$195,000
Apr-20	Platelet BioGenesis, Inc.	Tax Incentive Program	Watertown	\$390,480
Apr-20	Quanterix Corporation	Tax Incentive Program	Billerica	\$624,760
Apr-20	Sanvita Medical Corporation	Tax Incentive Program	Billerica	\$156,190
Apr-20	Snapdragon Chemistry, Inc.	Tax Incentive Program	Waltham	\$30,000
Apr-20	Spero Therapeutics, Inc.	Tax Incentive Program	Cambridge	\$255,000
Apr-20	Stoke Therapeutics, Inc.	Tax Incentive Program	Bedford	\$328,000
Apr-20	TScan Therapeutics, Inc.	Tax Incentive Program	Waltham	\$270,000
Apr-20	UCB Holdings, Inc.	Tax Incentive Program	Bedford	\$300,000
Apr-20	Ultragenyx Pharmaceutical, Inc.	Tax Incentive Program	Cambridge	\$780,952
Apr-20	WuXi Biologics USA, LLC	Tax Incentive Program	Cambridge	\$400,000
Apr-20	ZOLL Medical Corporation	Tax Incentive Program	Chelmsford	\$750,000
Jun-20	Nutrimedy, Inc.	Seed Fund	Worcester	\$250,000
Jun-20	FY20 Seed Fund	Seed Fund	Various - Statewide	\$1,000,000
Jun-20	BIDMC and Massachusetts Capital Institute of Technology	Bits to Bytes	Boston	\$995,856
Jun-20	Brigham and Women's Hospital	Capital - Bits to Bytes	Boston	\$728,559
Jun-20	Massachusetts General Hospital	Capital - Bits to Bytes	Boston	\$666,500
Jun-20	Massachusetts General Hospital	Capital - Bits to Bytes	Boston	\$750,000
Jun-20	UMass Boston	Capital - Bits to Bytes	Boston	\$749,834
Jun-20	UMass Medical School	Capital - Bits to Bytes	Worcester	\$750,000
Jun-20	Beth Israel Deaconess Medical Center	Capital - Novel Therapeutics Delivery	Boston	\$525,000
Jun-20	Boston University	Capital - Novel Therapeutics Delivery	Boston	\$749,349
Jun-20	Harvard School of Public Health and MGH	Capital - Novel Therapeutics Delivery	Boston	\$750,000
Jun-20	Massachusetts General Hospital	Capital - Novel Therapeutics Delivery	Boston	\$750,000
Jun-20	Massachusetts Institute of Technology	Capital - Novel Therapeutics Delivery	Boston	\$747,427
Jun-20	Wyss Institute at Harvard	Capital - Novel Therapeutics Delivery	Boston	\$750,000
Jun-20	BWH and BIDMC	Capital - Women's Health	Boston	\$1,126,306
Jun-20	UMass Amherst	Capital - Women's Health	Amherst	\$747,225
Jun-20	UMass Lowell and UMass Medical School	Capital - Women's Health	Lowell	\$750,000
Jun-20	UMass Medical School	Capital - Women's Health	Worcester	\$750,000
Jun-20	Westfield State University	Capital - Women's Health	Westfield	\$750,000
Jun-20	Chelsea Public School District	Capital - STEM Equipment to District	Chelsea	\$100,537
Total Fiscal Year 2020 Awards				\$61,333,118

*MassNextGen is also supported by funds from Takeda, King Street Properties, Sanofi Genzyme, and Johnson & Johnson Innovation.

Certified Life Sciences Companies

List of Certified Active Life Sciences Companies as of June 30, 2020

Company	Location	Company	Location
149 Medical, Inc.	Worcester	Kymera Therapeutics, Inc.	Cambridge
3Derm Systems, Inc.	Boston	Lariat Biosciences, Inc.	Beverly
908 Devices, Inc.	Boston	LivOnyx, Inc.	Allston
AbbVie, Inc.	Worcester	LogicBio Therapeutics, Inc.	Cambridge
Abiomed, Inc.	Danvers	Lucy Therapeutics, Inc.	Reading
Acorda Therapeutics, Inc.	Waltham	Lumme, Inc.	Amherst
Akili Interactive Labs, Inc.	Boston	LX Medical Corporation	Westwood
Alcyone Lifesciences, Inc.	Lowell	Lykan Bioscience, LLC	Hopkinton
Aldatu Biosciences	Watertown	Masy Systems, Inc.	Pepperell
Alkermes, Inc.	Waltham	Medidata Solutions, Inc. & SHYFT Analytics, Inc.	Boston
Alnylam Pharmaceuticals, Inc.	Cambridge	Mevion Medical Systems, Inc.	Littleton
Amgen, Inc.	Cambridge	Micro-Leads, Inc.	Somerville
Astellas Institute for Regenerative Medicine	Marlborough	Moderna Therapeutics, Inc.	Cambridge
AXONIS Therapeutics, Inc.	Cambridge	Morphic Therapeutic, Inc.	Waltham
Beam Therapeutics, Inc.	Cambridge	Mustang Bio, Inc.	Worcester
Berkshire Sterile Manufacturing	Lee	MyTide Therapeutics, Inc.	Boston
Bio2 Technologies, Inc.	Woburn	New England Biolabs, Inc.	Ipswich
BioDevek, Inc.	Cambridge	New Equilibrium Biosciences, Inc.	Boston
Blueprint Medicines Corporation	Cambridge	Nitto Denko AVECIA, Inc.	Milford
Charles River Laboratories, Inc.	Wilmington	Northway Biotech, Inc.	Waltham
Charm Sciences, Inc.	Lawrence	Nova Biomedical Corporation	Waltham
Commonwealth Diagnostics International, Inc.	Salem	nQ Medical	Cambridge
Corbus Pharmaceuticals, Inc.	Norwood	Nutrimed, Inc.	Worcester
CRISPR Therapeutics, Inc.	Cambridge	Olaris Therapeutics, Inc.	Cambridge
Dassault Systemes	Waltham	Orchard Therapeutics North America	Boston
Day Zero Diagnostics, Inc.	Allston	PhagePro, Inc.	Somerville
Decibel Therapeutics, Inc.	Boston	PhAST Corp.	Cambridge
Dicerna Pharmaceuticals, Inc.	Cambridge	PionEar Technologies, Inc.	Allston
eGenesis, Inc.	Cambridge	Platelet Biogenesis, Inc.	Cambridge
EMD Holding Corporation	Burlington	Prapela, Inc.	Concord
Emulate, Inc.	Boston	ProTom International Holding Corporation	Wakefield
Enanta Pharmaceuticals, Inc.	Watertown	Quanterix Corporation	Billerica
Envision Endoscopy	Somerville	Radius Health, Inc.	Waltham
Ernest Pharmaceuticals, LLC	Hadley	REBIScan, Inc.	Boston
Eutropics Pharmaceuticals, Inc.	Cambridge	Reveal Pharmaceuticals, Inc.	Cambridge
Evelo Biosciences, Inc.	Cambridge	Rubius Therapeutics	Cambridge
Excellims Corporation	Acton	Sage Therapeutics, Inc.	Cambridge
Finch Therapeutics, Inc.	Somerville	Sanvita Medical Corporation	Billerica
Flaskworks, LLC	Boston	Seaspire, Inc.	Cambridge
Fresenius Kabi Compounding USA, LLC	Canton	See Yourself Health, LLC	Beverly
Freudenberg Medical, LLC	Gloucester	Siemens Healthcare Diagnostics, Inc.	East Walpole
Fulcrum Therapeutics, Inc.	Cambridge	Snapdragon Chemistry	Waltham
Gel4Med, Inc.	Lowell	Spero Therapeutics, Inc.	Cambridge
Ginkgo Bioworks, Inc.	Boston	SQZ Biotech	Watertown
Gritstone Oncology, Inc.	Cambridge	Stoke Therapeutics, Inc.	Bedford
Hepatochem, Inc.	Beverly	Takeda Pharmaceuticals America, Inc.	Cambridge
Homology Medicines, Inc.	Bedford	TScan Therapeutics, Inc.	Waltham
Inozyme Pharma, Inc.	Boston	UCB Holdings, Inc.	Bedford
InsomniSolv, Inc.	Beverly	Ultragenyx Pharmaceutical, Inc.	Cambridge
Instrumentation Laboratory Company	Bedford	UrSure, Inc.	Allston
Insulet Corporation	Acton	Vaxess Technologies, Inc.	Cambridge
HydroGlyde Coatings, LLC	Worcester	Versatope Therapeutics, Inc.	Lowell
Indigo Agriculture, Inc.	Boston	Vicarious Surgical, Inc.	Cambridge
Intellia Therapeutics	Cambridge	WAVE Life Sciences	Cambridge
Ipsen Biopharmaceuticals, Inc.	Cambridge	Windgap Medical	Watertown
iVexSol, Inc.	Worcester	Wuxi Biologics USA, LLC	Cambridge
Kala Pharmaceuticals, Inc.	Waltham	XGenomes Corp	Cambridge
		Zoll Medical Corporation	Chelmsford

Capital Awards - Includes all Capital Awards from inception through June 30, 2020

Institution	Total Award	Year of Award	FY 2020 Status
Bay Path College	\$50,000	FY 2013	Completed
Bay Path University	\$499,996	FY 2015	Completed
Baystate Health	\$3,949,912	FY 2019	Ongoing
Baystate Medical Center/Health Informatics & Technology Innovation Center	\$5,500,000	FY 2013	Completed
Berkshire Community College	\$499,998	FY 2015	Completed
Berkshire Innovation Center	\$2,300,000	FY 2018	Completed
Beth Israel Deaconess Medical Center (BIDMC)	\$1,705,471	FY 2020	Ongoing
BioBuilder	\$500,000	FY 2017	Ongoing
Bits to Bytes			
BIDMC and Massachusetts Institute of Technology	\$995,856	FY 2020	Ongoing
Boston Children's Hospital (Subcellular Dynamics)	\$658,167	FY 2019	Ongoing
Brigham and Women's Hospital	\$728,559	FY 2020	Ongoing
Brigham and Women's Hospital (Pathology Images)	\$748,826	FY 2019	Ongoing
Brigham and Women's Hospital (Serum miRNA)	\$750,000	FY 2019	Ongoing
Broad Institute (Cell Painting)	\$821,000	FY 2019	Ongoing
Broad Institute (Data driven approaches to cardio diseases)	\$750,000	FY 2019	Ongoing
Harvard Medical School (Metabolomics and Big Data)	\$750,000	FY 2019	Ongoing
Harvard School of Public Health (Microbiome in chronic disease management)	\$736,750	FY 2019	Ongoing
MGH (Integrative Platform to Understand & Exploit Cancer Metabolism)	\$750,000	FY 2020	Ongoing
MGH (Large-Scale Longitudinal Dataset of Digital Behavior)	\$666,500	FY 2020	Ongoing
Northeastern University (In Silico design of an array chromophores)	\$750,000	FY 2019	Ongoing
UMass Boston (Oregon-Massachusetts Mammography Database)	\$749,834	FY 2020	Ongoing
UMass Medical School (Spatial Transcriptomic Approaches)	\$750,000	FY 2020	Ongoing
UMass Medical School (AI in high resolution neurovascular imaging)	\$750,000	FY 2019	Ongoing
Boston Children's Hospital	\$1,545,050	FY 2019	Ongoing
Boston Children's Hospital	\$4,014,031	FY 2013	Completed
Boston Children's Hospital	\$2,263,133	FY 2015	Completed
Boston University Biomedical Lab and Clinical Sciences Program	\$180,000	FY 2015	Completed
Boston University Business Innovation Center	\$363,750	FY 2015	Completed
Boston University Medical School	\$4,991,000	FY 2019	Ongoing
Boston University Medical School	\$1,743,648	FY 2015	Completed
Brigham & Women's Hospital	\$5,000,000	FY 2019	Ongoing
Brigham & Women's Hospital	\$2,603,537	FY 2015	Completed
Bristol Community College	\$4,400,000	FY 2017	Ongoing
Building Breakthroughs			
MIT (CCTC- Braatz)	\$750,000	FY 2019	Ongoing
MIT (Model Predictive Controls)	\$750,000	FY 2019	Ongoing
UMass Lowell (Integrated Continuous Biopharma Manufacturing)	\$746,118	FY 2019	Ongoing
WPI (Recombinant Adeno-Associated Virus)	\$580,500	FY 2019	Ongoing
Bunker Hill Community College	\$200,000	FY 2013	Completed
Cape Cod Community College	\$394,912	FY 2014	Completed
City of Taunton	\$55,000	FY 2014	Completed
Dana-Farber Cancer Institute	\$4,629,019	FY 2017	Completed
Dana-Farber Molecular Cancer Imaging Center	\$10,000,000	FY 2012	Completed
Dean College	\$297,030	FY 2017	Completed
Framingham State University	\$454,000	FY 2017	Completed
Framingham State University	\$3,000,000	FY 2014	Completed
Framingham Wastewater and Pumping Station	\$12,860,534	FY 2009	Completed
Gloucester Marine Genomics Institute	\$2,744,219	FY 2017	Completed
Gloucester Marine Genomics Institute	\$174,383	FY 2019	Ongoing
Harvard Medical School	\$4,345,000	FY 2017	Completed
Harvard Medical School	\$4,999,921	FY 2013	Completed
Harvard School of Public Health	\$4,912,307	FY 2017	Ongoing
Holyoke Community College	\$3,800,000	FY 2013	Completed
Holyoke Community College	\$300,000	FY 2015	Completed
Institute for Protein Innovation	\$5,000,000	FY 2017	Completed
Joslin Diabetes Center's Translational Center for the Cure of Diabetes	\$5,000,000	FY 2012	Completed
Just-A-Start	\$46,079	FY 2014	Completed
Just-A-Start	\$49,992	FY 2015	Completed

APPENDICES

Institution	Total Award	Year of Award	FY 2020 Status
LabCentral	\$4,955,515	FY 2013	Completed
LabCentral	\$5,000,000	FY 2014	Completed
LabCentral 238	\$5,000,000	FY 2019	Ongoing
MA Green High Performance Computing Center	\$4,540,000	FY 2013	Completed
Marine Biological Laboratory in Woods Hole	\$10,000,000	FY 2009	Completed
Massachusetts Biomedical Initiatives, Inc.	\$3,494,256	FY 2019	Ongoing
Massachusetts Biomedical Initiatives, Inc.	\$500,000	FY 2020	Ongoing
Massachusetts General Hospital	\$4,805,000	FY 2019	Ongoing
Massachusetts Institute of Technology	\$1,838,000	FY 2015	Completed
MassBay Community College	\$500,000	FY 2019	Ongoing
MassBay Community College	\$43,920	FY 2014	Completed
MassBiologics-UMass Medical School	\$5,000,000	FY 2014	Completed
Merrimack College	\$500,000	FY 2017	Completed
Middlesex Community College	\$36,664	FY 2013	Completed
Middlesex Community College	\$3,000,000	FY 2014	Completed
Mount Wachusett Community College	\$1,646,725	FY 2017	Completed
Mount Wachusett Community College	\$499,146	FY 2014	Completed
Museum of Science "Hall of Human Life"	\$5,000,000	FY 2012	Completed
New Bedford Economic Development Council	\$75,000	FY 2014	Completed
NIIMBL - MassBiologics	\$447,566	FY 2018	Completed
NIIMBL - MassBiologics (Viral Vaccines)	\$192,000	FY 2019	Ongoing
NIIMBL - MIT (Blended Learning)	\$330,200	FY 2018	Ongoing
NIIMBL - MIT (Small-scale Membrane-less Perfusion Bioreactor System)	\$272,646	FY 2019	Ongoing
NIIMBL - MIT (Viral Vaccines)	\$226,000	FY 2019	Ongoing
NIIMBL - Quincy College	\$50,000	FY 2020	Ongoing
NIIMBL - UMass Lowell	\$246,754	FY 2018	Completed
NIIMBL - UMass Lowell-Lyophilization Scale-up	\$1,000,000	FY 2018	Completed
NIIMBL - UMass Lowell-Lyophilization Scale-up (Additional funding)	\$299,779	FY 2019	Completed
NIIMBL - WPI (Blended Learning)	\$262,267	FY 2018	Completed
NIIMBL - WPI-SPIDER Project	\$139,984	FY 2018	Completed
North Shore Biotech Consortium	\$5,000,000	FY 2014	Completed
North Shore InnoVentures	\$1,500,000	FY 2019	Ongoing
Northeastern University	\$4,271,867	FY 2019	Ongoing
Northern Essex Community College	\$1,242,000	FY 2013	Completed
Novel Therapeutics Delivery - Beth Israel Deaconess Medical Center	\$525,000	FY 2020	Ongoing
Novel Therapeutics Delivery - Boston University	\$749,349	FY 2020	Ongoing
Novel Therapeutics Delivery - Harvard School of Public Health and MGH	\$750,000	FY 2020	Ongoing
Novel Therapeutics Delivery - Massachusetts General Hospital	\$750,000	FY 2020	Ongoing
Novel Therapeutics Delivery - Massachusetts Institute of Technology	\$747,427	FY 2020	Ongoing
Novel Therapeutics Delivery - Wyss Institute at Harvard	\$750,000	FY 2020	Ongoing
Pittsfield Economic Development Authority	\$55,000	FY 2013	Completed
Pittsfield Economic Development Authority/Berkshire Innovation Center	\$9,670,000	FY 2014	Completed
Quincy College	\$725,739	FY 2019	Ongoing
Quincy College	\$78,799	FY 2013	Completed
Quincy College	\$499,872	FY 2014	Completed
Quinsigamond Community College	\$310,000	FY 2013	Completed
Quinsigamond Community College	\$499,880	FY 2014	Completed
Quinsigamond Community College	\$4,999,998	FY 2015	Completed
Regis College	\$50,000	FY 2013	Completed
Regis College	\$355,000	FY 2015	Completed
Roxbury Community College	\$3,000,000	FY 2015	Completed
Smith College	\$489,435	FY 2017	Completed
Springfield Technical Community College	\$85,673	FY 2013	Completed
Springfield Technical Community College	\$972,850	FY 2015	Completed
The Forsyth Institute	\$4,133,215	FY 2013	Completed
The Forsyth Institute	\$2,210,229	FY 2015	Completed
The Mansfield Bio-Incubator	\$2,000,000	FY 2020	Ongoing
Tufts/Cummings School of Veterinary Medicine, NE Regional Biosafety Lab in Grafton	\$9,500,000	FY 2009	Completed

Institution	Total Award	Year of Award	FY 2020 Status
UMass Amherst	\$1,101,559	FY 2020	Ongoing
UMass Amherst	\$515,626	FY 2020	Ongoing
UMass Amherst	\$299,329	FY 2020	Ongoing
UMass Amherst	\$129,900	FY 2020	Ongoing
UMass Amherst Life Sciences Laboratories	\$95,000,000	FY 2013	Completed
UMass Boston	\$388,324	FY 2020	Ongoing
UMass Boston /Dana Farber Center for Personalized Cancer Therapy	\$2,000,000	FY 2011	Completed
UMass Boston /Dana Farber Center for Personalized Cancer Therapy Expansion	\$7,878,503	FY 2014	Completed
UMass Boston VDC	\$588,848	FY 2014	Completed
UMass Dartmouth Advanced Technology Manufacturing Center (ATMC)	\$11,400,000	FY 2012	Completed
UMass Dartmouth/Vector Manufacturing Center	\$20,600,000	FY 2012	Completed
UMass Lowell	\$1,132,950	FY 2020	Ongoing
UMass Lowell Emerging Technologies and Innovation Center	\$10,000,000	FY 2012	Completed
UMass Lowell Innovation Hub	\$1,000,000	FY 2014	Completed
UMass Lowell M2D2	\$4,046,592	FY 2014	Completed
UMass Medical School	\$5,000,000	FY 2015	Completed
UMass Medical School	\$1,370,315	FY 2020	Ongoing
UMass Medical School	\$926,305	FY 2020	Ongoing
UMass Medical School Albert Sherman Center	\$90,000,000	FY 2010	Completed
University of Massachusetts Lowell	\$5,000,000	FY 2017	Completed
Venture Cafe	\$347,000	FY 2014	Completed
Wellesley College	\$49,376	FY 2015	Completed
Western New England University	\$497,449	FY 2014	Completed
Westfield State University	\$43,564	FY 2017	Completed
Women's Health - BWH and BIDMC	\$1,126,306	FY 2020	Ongoing
Women's Health - UMass Amherst	\$747,225	FY 2020	Ongoing
Women's Health - UMass Lowell and UMass Medical School	\$750,000	FY 2020	Ongoing
Women's Health - UMass Medical School	\$750,000	FY 2020	Ongoing
Women's Health - Westfield State University	\$750,000	FY 2020	Ongoing
Worcester Polytechnic Institute	\$877,314	FY 2020	Ongoing
Worcester Polytechnic Institute (Biomanufacturing Education & Training Center)	\$5,149,999	FY 2010	Completed

Total Capital Awards \$504,843,272

MLSC Internship Program

Diversity Statistics*

Total funds expended on high school internships	\$447,795
Total funds expended on college internships	\$3,375,992
Percentage of high school internships awarded to minority students attending schools where at least 80 per cent of the student population is eligible for free or reduced lunch	65 interns out of 157 respondents (41%) identified as a race other than Caucasian and attended economically disadvantaged schools.
Percentage of college internships awarded to minority students enrolled full-time or part-time at a community college	12 (2%) interns out of 491 respondents identified as a race other than Caucasian.
Racial and ethnic composition of the high school internship program	Asian: 48 (31%) Black: 24 (15%) Caucasian: 60 (38%) Latinx: 16 (10%) Multi-Racial/Other: 9 (6%)
Racial and ethnic composition of the college internship program	Asian: 133 (27%) Black: 22 (5%) Caucasian: 290 (59%) Latinx: 28 (6%) Native American: 1 Multi-Racial/Other: 17 (3%)
Analysis of the impact of the college internship program on the ability of its participants to enter the full-time job market in the life science	For the 2019-20 Program Year, 39 interns that graduated in 2018-2020 were reported to have been hired for full-time positions by the company that hosted them.

*Annual reporting as required by Massachusetts General Laws, Chapter 23I, Section 6(c).

Internship and Apprenticeship Host Companies

Company/Organization	Location	Company/Organization	Location
3Derm Systems, Inc.	Boston	Cam Med LLC	West Newton
AAVPack, LLC.	Worcester	Cambridge Scientific Products	Watertown
AB Biosciences, Inc.	Concord	Cambrio LLC.	Sudbury
Abpro Labs	Woburn	Caraway Therapeutics, Inc.	Cambridge
Abveris Antibody	Canton	Carefree Pharmacy	Andover
Acceleron Pharma	Cambridge	CarePoint Solutions, Inc.	Worcester
Access Vascular, Inc.	Woburn	CaroCare	Boston
Accure Health Inc.	Boston	CDX Analytics, LLC	Salem
Activ Surgical	Boston	Celldex Therapeutics, Inc.	Needham
ActivSignal, LLC.	Natick	Cellino Biotech, Inc.	Cambridge
AdMeTech Foundation	Boston	Celltreat Scientific Products	Shirley
AdmetSys Corporation	Boston	Centaur Diagnostics, Inc.	Boston
Advanced Continuing Education Association	Boston	Cephos Corp.	Pepperell
Advanced Silicon Group	Lincoln	CF Technologies, Inc.	Boston
Advantagene, Inc.	Boston	Cisbio US Inc.	Bedford
Aldeyra Therapeutics, Inc.	Lexington	Clark University	Worcester
Allurion Technologies	Natick	Clear Scientific, Inc.	Cambridge
AltrixBio, Inc.	Cambridge	Clover Medical LLC	Dover
AlvaMed, Inc.	Needham	Cocoon Biotech, Inc.	Lowell
Amplyus	Cambridge	Cognito Therapeutics	Cambridge
Anderson Biotest, LLC.	Bedford	Common Sensing, Inc.	Cambridge
Angiex	Cambridge	CONTINUUS Pharmaceuticals, Inc.	Woburn
Antagen Pharmaceuticals, Inc.	Boston	Convergent Dental	Natick
Aphios Corporation	Woburn	Corvia Medical	Tewksbury
Apollo Digital Health, Inc.	Holliston	Court Square Group, Inc.	Springfield
Applied Pathology Systems	Shrewsbury	CovalX	Sagus
Arsenal Medical	Watertown	CreaGen Biosciences, Inc.	Woburn
Arteriocyte Medical Systems (Isto Biologics)	Hopkinton	Curii Corporation	Somerville
Atantares Corp.	Cambridge	CuriRx, Inc.	Wilmington
Avania, LLC.	Northborough	Custom NMR Service	Ayer
Avedro, Inc.	Waltham	CYTO Consulting	Lexington
Averica Discovery Services, Inc.	Marlborough	Dana-Farber Cancer Institute	Boston
Axial Biotherapeutics, Inc.	Waltham	Datycs, Inc.	Methuen
Bach Pharma, Inc.	North Andover	Day Zero Diagnostics, Inc.	Boston
Bakku Technologies, LLC.	Framingham	Delsys, Inc.	Natick
Barrett Technology	Newton	Delve, Inc.	Boston
Barrett Technology, Inc.	Newton	DentalTOR, Inc.	Boston
Bayard Design, LLC	Cambridge	Dermal Photonics Corporation	Middleton
Beacon Biosignals, Inc.	Boston	Diagnosys LLC	Lowell
Beantown Biotech, LLC	Natick	Docent Health	Boston
Behavioral Health Innovators, Inc.	S. Chatham	DRF Engineering Services, LLC.	Framingham
Berkshire Sterile Manufacturing, Inc.	Lee	Eikonizo Therapeutics, Inc.	Cambridge
Binx Health Inc.	Boston	Elektrofi Inc.	Cambridge
BioBright LLC	Cambridge	EMBR Labs, Inc.	Cambridge
BioSensics LLC	Cambridge	eMotionRx	Boston
Biostage, Inc.	Holliston	Empatica, Inc.	Cambridge
BioSurfaces Inc	Ashland	Enable Life Sciences LLC	Worcester
BioSurfaces, Inc.	Ashland	EndoSim, LLC	Bolton
Bitome, Inc.	Boston	enEvolv, Inc.	Boston
Blossom Innovations	Boston	EpigenDx, Inc.	Hopkinton
Boston Bioskills Lab	Boston	Erbi Biosystems, Inc.	Woburn
Boston Children's Hospital	Boston	Essential Life Solutions Ltd	Stoughton
Boston Innovation Technology	Waltham	Etiometry, LLC	Boston
Boston Institute of Biotechnology LLC	Southborough	Fairbanks Pharmaceuticals	Concord
Boston MedTech Advisors	Dedham	Feles Inc.	Cambridge
Boyd Technologies	Lee	figur8, Inc.	Boston
BrainSpec	Boston	Fikst, LLC	Woburn
Brandeis University	Waltham	FloDesign Sonics	Wilbraham
Broad Institute	Cambridge	Fluigent, Inc.	Lowell

Internship and Apprenticeship Host Companies (continued)

Company/Organization	Location
Founders Science Group	Taunton
Fractyl Laboratories, Inc.	Waltham
Frequency Therapeutics, Inc.	Woburn
FTL Labs Corporation	Amherst
Gel4Med	Boston
Genocea Biosciences, Inc.	Cambridge
Genomic Expression Inc.	Beverly
Genprex	Cambridge
Genuity, LLC	Sudbury
Giner Life Sciences, Inc.	Newton
Giner, Inc.	Newton
Glycosyn Inc.	Medford
Glyscend, Inc.	Lowell
Goddard Technologies, Inc.	Beverly
Halloran Consulting Group, Inc	Waltham
HelixBind, Inc.	Marlborough
Hemedex Inc.	Cambridge
HepatoChem, Inc.	Beverly
HiFiBiO, Inc.	Cambridge
Holobiome	Cambridge
Human Systems Integration	Walpole
Hyalex Orthopaedics, Inc.	Lexington
Hybrigenics Corporation	Cambridge
HydroCision, Inc	North Billerica
iCareBetter	Boston
iHope Network	Beverly
Imagine Optic, Inc.	Boston
InCrowd, Inc.	Boston
Info Tree Corporation	Acton
Innovara, Inc.	Hadley
Instylla Inc.	Waltham
Integral BioSystems, LLC	Bedford
iOmics Corporation	Cambridge
IonSense	Saugus
iSpecimen, Inc.	Lexington
J&J Machine Company, Inc.	Marlborough
Jana Care	Boston
Kephera Diagnostics, LLC	Framingham
KeraFAST	Boston
KnipBio	Lowell
L.E.A.F. Pharmaceuticals	Woburn
LabCentral	Cambridge
LabCloud Inc.	Boston
LakePharma	Worcester
Lariat Biosciences, Inc.	Beverly
LaunchPad Medical, LLC	Lowell
LaVoie Health Sciences	Boston
Leuko Labs, Inc.	Boston
LexaGene	Beverly
Lexington Medical, Inc.	North Billerica
Liberating Technologies, Inc.	Holliston
Life Science Cares	Cambridge
Life Science Nation	Boston
LifeMine Therapeutics	Cambridge
LinkedUp Biosciences, Inc.	Wakefield
Liquiglide, Inc.	Cambridge
Little Sparrows Technologies, LLC	Winchester
Locust Walk	Boston

Company/Organization	Location
Loro Co.	Boston
Lumicell Diagnostics, Inc.	Newton
Luminopia	Cambridge
Lymphedivas	Pittsfield
Massachusetts General Hospital	Boston
Massachusetts Institute of Technology	Cambridge
MassBiologics	Boston
Matregenix, Inc.	Boston
MedChem Partners LLC	Lexington
Mediate	Somerville
Medicinal Genomics Corporation	Woburn
MedPanel	Cambridge
Microbiotix, Inc.	Worcester
Micro-Leads, Inc.	Boston
MobiDrop, Inc.	Cambridge
Morphic Therapeutic Inc	Waltham
Mount Holyoke College	Northampton
Myomo, Inc.	Cambridge
Mytide Therapeutics, Inc.	Cambridge
NEHI, Inc.	Boston
NeuroBo Pharmaceuticals, Inc.	Cambridge
NeuroScouting LLC	Cambridge
New England Peptide, LLC	Gardner
Nexcelom Bioscience, LLC	Lawrence
NinePoint Medical, Inc.	Bedford
Nix, Inc.	Cambridge
North East Biomedical, Inc.	Tyngsborough
Novabioassays, LLC	Woburn
NovoBiotic Pharmaceuticals, LLC	Cambridge
Nuclease Probe Technologies	Belmont
Octagon Therapeutics	Boston
OMNI Life Science, Inc.	East Taunton
Optimum Technologies, Inc.	Southbridge
Opus KSD, Inc.	Halifax
Partner Therapeutics	Lexington
Perthera, Inc.	Holliston
PhagePro, Inc.	Somerville
PharmaEssentia Corp.	Burlington
PhAST Corp.	Boston
Phosphorex, Inc.	Hopkinton
Platelet Biogenesis	Boston
PlenOptika, Inc.	Boston
Podimetrics, Inc.	Somerville
Polestar Technologies, Inc.	Needham
Portal Instruments, Inc.	Cambridge
PraNA Biosciences LLC	Worcester
Prapela	Concord
Precision Fabricators Ltd.	Stoughton
Precisionary LLC	Boston
Pressure BioSciences, Inc.	Somerville
Prime Bio, Inc.	South Easton
Privo Technologies	Dartmouth
Prospective Research, Inc.	Peabody
ProterixBio, Inc.	Beverly
Protom International Holding Corporation	Billerica
Proveris Scientific Corporation	Wakefield
Puffin Innovations, Inc.	Marlborough
Pure Tech Management, Inc.	Woburn
	Boston

Internship and Apprenticeship Host Companies (continued)

Company/Organization	Location
QSM Diagnostics, Inc.	Boston
Quality Systems Integration, LLC	North Reading
Quantum Diamond Technologies, Inc.	Somerville
Raiing Medical, Inc.	Boston
RAN Biotechnologies, Inc.	Beverly
Rapid Micro Biosystems	Lowell
Ras Labs, Inc.	Quincy
REBIScan	Cambridge
Renovia Inc.	Boston
Relieve Cardiovascular	Milford
Respiratory Motion, Inc.	Waltham
ReSurfX LLC	Lexington
Revitope Inc.	Cambridge
Right Submission, LLC	Newton
Ring Therapeutics, Inc.	Cambridge
Riparian Pharmaceuticals, Inc.	Cambridge
Rogers Sciences, Inc.	Boston
Rowat Management Services, LLC	Framingham
S2N Health, LLC	Boston
SafePath Medical, Inc	Boston
Sage Science, Inc.	Beverly
Sano LLC	Wellesley
Scimpact, LLC	Cambridge
Script Solutions, LLC	Boston
Seeding Labs	Boston
SeLux Diagnostics	Boston
SemiNex Corporation	Peabody
Senscio Systems, Inc.	Boxborough
Shamaym	Newton
Shepherd Therapeutics, LLC	Boston
Skinap Therapeutics, Inc.	Cambridge
Snapdragon Chemistry, Inc.	Cambridge
Sofar Acoustics, LLC	Boston
Solarea Bio, inc.	Cambridge
Spectra Medical Devices, Inc.	Wilmington
Spectrus, LLC	Beverly
Spero Therapeutics, Inc.	Cambridge
Spring Bank Pharmaceuticals, Inc.	Milford
Stability Health, LLC	Worcester
STAR Analytical Services	Bedford
STC Biologics, Inc.	Cambridge
StemCellerant, LLC	Boston
Storeon Systems	Somerville
Syner-G Pharma Consulting	Southborough
Syros Pharmaceuticals	Cambridge
TARIS Biomedical	Lexington
Tarveda Therapeutics	Watertown
Tepha	Lexington
Terry's Foundation for Muscular Dystrophy	Cambridge
Tetragenetics, Inc.	Arlington
The Forsyth Institute	Cambridge
Thermedical, Inc.	Waltham
Thrive Biosciences, Inc.	Beverly
Tiaki Therapeutics, Inc.	Cambridge
Tiba Biotech, LLC	Cambridge
Tidal Therapeutics, Inc.	Cambridge
Toothprints PC	Hopkinton
Trace Matters Scientific, LLC	Somerville

Company/Organization	Location
Triple Ring Technologies, Inc.	Lynnfield
Tufts Medical Center	Boston
Unicus Pharmaceuticals, LLC	Taunton
Union Biometrica, Inc.	Holliston
University of Massachusetts Amherst	Amherst
University of Massachusetts Boston	Boston
University of Massachusetts Dartmouth	Dartmouth
University of Massachusetts Lowell	Lowell
University of Massachusetts Medical School	Worcester
UrSure, Inc.	Boston
Vaxess Technologies, Inc.	Cambridge
Versatope Therapeutics, Inc.	Lowell
Vertex	Boston
Vicarious Surgical, Inc.	Boston
Vivonics, Inc.	Bedford
Vivtex Corporation	Cambridge
VocaliD, Inc.	Belmont
Vox Biomedical LLC.	Newton
VR Health USA, Inc.	Boston
Windgap Medical, Inc.	Watertown
Worcester Polytechnic Institute	Worcester
X-Chem, Inc.	Waltham
Xeno Therapeutics, Inc.	Boston
Xtal BioStructures, Inc.	Natick
Yurogen Biosystems	Worcester
Zaiput Flow Technologies	Cambridge
ZATA Pharmaceuticals, Inc.	Worcester

Number of Interns

High School Interns by School

High School	Location	Interns
Abby Kelley Foster Charter High School	Worcester	1
Acton-Boxborough Regional High School	Acton	3
Advanced Math and Science Academy Charter School	Marlborough	1
Algonquin Regional High School	Northborough	2
Amherst Regional High School	Amherst	6
Ashland High School	Ashland	2
Ayer Shirley Regional High School	Ayer	1
Belmont High School	Belmont	1
Boston Latin Academy	Boston	4
Boston Latin School	Boston	6
Brockton High School	Brockton	10
Brookline High School	Brookline	1
Burncoat High School	Worcester	1
Catholic Memorial High School	Boston	1
Chelmsford High School	Chelmsford	1
Clark School	Rowley	1
Concord Academy	Concord	2
Concord Carlisle High School	Concord	1
Dartmouth High School	Dartmouth	2
Doherty Memorial High School	Worcester	2
Dr. William Henderson Inclusion K12 School	Boston	1
East Boston High School	Boston	5
Easthampton High School	Easthampton	2
Everett High School	Everett	5
Gateway Regional High School	Huntington	1
Groton Dunstable Regional High School	Groton	1
Hampshire Regional High School	Westhampton	1
Hingham High School	Hingham	2
Hopkins Academy	Hadley	3
John D. O'Bryant School of Mathematics and Science	Boston	1
Josiah Quincy Upper School	Boston	1
Lexington High School	Lexington	2
Lincoln Sudbury Regional High School	Sudbury	3
Lowell High School	Lowell	10
Lowell Middlesex Academy Charter School	Lowell	1
Malden High School	Malden	2
Masconomet Regional High School	Boxford	1
Massachusetts Academy of Math and Science	Worcester	4
Medford High School	Medford	1
Montrose School	Medfield	1
Nashoba Regional High School	Bolton	1
New Bedford High School	New Bedford	9
Newton North High School	Newton	1
Newton South High School	Newton	1
Nipmuc Regional High School	Upton	2
Northampton High School	Northampton	6
Northbridge High School	Northbridge	1
Notre Dame Academy	Worcester	1
Pioneer Valley Chinese Immersion Charter School	Amherst	3
Pittsfield High School	Pittsfield	1
Ralph C. Mahar Regional High School	Orange	1
Revere High School	Revere	1
Roxbury Latin School	Boston	1
Saint John's High School	Shrewsbury	1

High School	Location	Interns
Sharon High School	Sharon	2
Shrewsbury High School	Shrewsbury	2
South Hadley High School	South Hadley	2
The Bromfield School	Harvard	1
The Springfield Renaissance School	Springfield	1
Tri-County Regional Vocational Technical High School	Franklin	1
Wachusett Regional High School	Holden	2
Waltham High School	Waltham	4
Wayland High School	Wayland	1
Weston High School	Weston	1
Winchester High School	Winchester	1
Worcester North High School	Worcester	2
Worcester South High Community School	Worcester	2
Worcester Technical High School	Worcester	19

High School Interns by School District

School District	Location	Interns
Acton-Boxborough Regional School District	Acton	3
Amherst Public Schools	Amherst	6
Ashland Public Schools	Ashland	2
Ayer Shirley Regional School District	Ayer	1
Belmont Public Schools	Belmont	1
Bolton Public Schools	Bolton	1
Boston Public Schools	Boston	18
Brockton Public Schools	Brockton	10
Brookline Public Schools	Brookline	1
Chelmsford Public Schools	Chelmsford	1
Concord-Carlisle Regional School District	Concord	1
Dartmouth Public Schools	Dartmouth	2
Easthampton Public Schools	Easthampton	2
Everett Public Schools	Everett	5
Gateway Regional School District	Huntington	1
Groton-Dunstable Regional School District	Groton	1
Hadley Public Schools	Hadley	3
Hampshire Public Schools	Westhampton	1
Hingham Public Schools	Hingham	1
Lexington Public Schools	Lexington	2
Lincoln-Sudbury Regional School District	Sudbury	3
Lowell Public Schools	Lowell	10
Malden Public Schools	Malden	2
Masconomet Regional School District	Boxford	2
Medford Public Schools	Medford	1
Mendon-Upton Regional School District	Upton	2
New Bedford Public Schools	New Bedford	9
Newton Public Schools	Newton	2
Northampton Public Schools	Northampton	6
Northborough-Southborough Regional School District	Northborough	2
Northbridge Public Schools	Northbridge	1
Pittsfield Public Schools	Pittsfield	1
Ralph C. Mahar Regional School District	Orange	1
Revere Public Schools	Revere	1
Sharon Public Schools	Sharon	2
Shrewsbury Public Schools	Shrewsbury	2
South Hadley Public Schools	South Hadley	2
Springfield Public Schools	Springfield	1

College/University	Location	Interns
Tri-County Regional Vocational Technical School District	Franklin	1
Wachusett Regional School District	Holden	2
Waltham Public Schools	Waltham	4
Wayland Public Schools	Wayland	1
Weston Public Schools	Weston	1
Winchester Public Schools	Winchester	1
Worcester Public Schools	Worcester	26

College Interns by School

College/University	Location	Interns
Amherst College	Amherst	1
American International College	Springfield	1
Babson College	Wellesley	9
Bentley University	Waltham	3
Berklee College of Music	Boston	2
Berkshire Community College	Pittsfield	1
Boston College	Chestnut Hill	11
Boston University	Boston	53
Bowdoin College, ME		1
Brandeis University	Waltham	7
Bridgewater State University	Bridgewater	1
Bristol Community College	Fall River	3
Brown University, RI		1
Bryant University, RI		1
Bucknell University, PA		3
Bunker Hill Community College	Boston	4
Cambridge College	Cambridge	1
Carnegie Mellon University, PA		1
Case Western Reserve University, OH		1
Clark University	Worcester	1
Coastal Carolina University, SC		1
Colby College, ME		1
College of the Holy Cross	Worcester	1
Columbia University, NY		2
Cornell University, NY		1
Dartmouth College, NH		1
Drexel University, PA		1
Duke University, NC		1
Elon University, NC		1
Emerson College	Boston	2
Emmanuel College	Boston	2
Emory University, GA		1
Endicott College	Beverly	5
Fordham University, NY		1
Framingham State University	Framingham	2
Franklin W. Olin College of Engineering	Needham	3
Gloucester Biotechnology Academy	Gloucester	2
Gordon College	Wenham	3
Hamilton College, NY		1
Harvard University	Cambridge	9
High Point University, NC		1
Hult International Business School	Cambridge	7
Keene State College, NH		1
Lasell College	Newton	1
Lehigh University, PA		1
Loyola University Maryland		1
Massachusetts Bay Community College	Wellesley	5
Massachusetts College of Art	Boston	1

College/University	Location	Interns
Massachusetts College of Liberal Arts	North Adams	1
Massachusetts College of Pharmacy and Health Sciences University	Boston	7
Massachusetts Institute of Technology	Cambridge	11
Massasoit Community College	Brockton	2
Merrimack College	North Andover	5
Middlebury College, VT		2
Middlesex Community College	Bedford/Lowell	9
Mount Wachusett Community College	Gardner	1
North Shore Community College	Lynn	1
Northeastern University	Boston	94
Northern Essex Community College	Haverhill	2
Ohio State University		1
Ottawa University, KS		1
Pennsylvania State University		1
Providence College, RI		1
Quincy College	Quincy	4
Quinsigamond Community College	Worcester	3
Rensselaer Polytechnic Institute, NY		2
Rochester Institute of Technology, NY		2
Roger Williams University, RI		1
Roxbury Community College	Boston	1
Saint Michael's College, VT		1
Salem State University	Salem	6
Salve Regina University, RI		1
Stanford University, CA		1
Stevens Institute of Technology, NJ		1
Stonehill College	Easton	2
Stony Brook University, NY		1
Suffolk University	Boston	8
Swarthmore College, PA		1
Tufts University	Medford	16
University of California, Berkeley		1
University of Connecticut		2
University of Hartford		1
University of Maryland		1
University of Massachusetts Amherst	Amherst	26
University of Massachusetts Boston	Boston	7
University of Massachusetts Dartmouth	Dartmouth	10
University of Massachusetts Lowell	Lowell	42
University of Michigan		1
University of New England, ME		1
University of New Hampshire		4
University of Notre Dame, IN		1
University of Oslo, Norway		1
University of Pittsburgh		1
University of Rhode Island		7
University of Rochester, NY		1
University of Washington		1
Utah Valley University		1
Wake Forest University, NC		1
Wellesley College	Wellesley	1
Wentworth Institute of Technology	Boston	10
Wesleyan University, CT		1
Western New England University	Springfield	3
Westfield State University	Westfield	2
Wheaton College	Norton	1
Worcester Polytechnic Institute	Worcester	25
Worcester State University	Worcester	5

Massachusetts: The Capital of Scientific Revolution



The Massachusetts Life Sciences Center (MLSC) is an economic development and investment agency with a mission of supporting the growth and development of the life sciences in Massachusetts.

Through public-private funding initiatives, MLSC supports innovation, research and development, commercialization, and manufacturing activities in the fields of biopharma, medical device, diagnostics, and digital health. As a quasi-public agency, MLSC also offers programs that fund innovation-driven economic and workforce development initiatives in Massachusetts.

MLSC's mission is to serve as the "hub" of the Massachusetts life sciences ecosystem, encourage innovation through investments in good science and good business, strengthen and protect Massachusetts' global leadership position in the life sciences, accelerate the commercialization of promising treatments, therapies, and cures that will improve patient care, and create jobs and drive economic and STEM workforce development.

Massachusetts
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The capital of scientific revolution.

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