amsny | The Voice of Medical Education

Testimony of:

Jonathan Teyan, President & CEO

Associated Medical Schools of New York (AMSNY)

New York State Academic Dental Centers (NYSADC)

At a Hearing of

The Assembly Standing Committee on Economic Development, Job Creation, Commerce, and Industry

The Assembly Standing Committee on Small Business

&

The Legislative Commission on Skills Development and Career Education

November 10, 2026

10:00AM

Legislative Office Building

Hearing Room C

Associated Medical Schools of New York | 99 Park Avenue, Suite 2010
New York, New York 10016 | 212-218-4610 | www.amsny.org

Thank you, Chairs Stirpe, Buttenschon and Conrad and other distinguished members of the Legislature for the opportunity to provide testimony about economic development programs funded in the enacted 2026-27 State budget.

My name is Jonathan Teyan, President and Chief Executive Officer of the Associated Medical Schools of New York (AMSNY) and the New York State Academic Dental Centers (NYSADC).

AMSNY is the consortium of the academic medical centers in New York and strives to be the voice of medical education in the state. To that end, we advocate for policies that help advance the education and training of physicians, support biomedical research and provide New Yorkers with access to the very best clinical care.

NYSADC is the consortium of the academic dental centers in New York. We work on behalf the dental schools to address issues important to dental education, including providing advanced training opportunities in the treatment of people with special needs and improving access to oral healthcare for all New Yorkers.

I would first like to thank the Assembly for its strong support of the New York Fund for Innovation in Research and Scientific Talent (NYFIRST) Program, which has supported the recruitment and retention of leaders in biomedical research, resulting in more than $100 million in additional research funding brought into New York State.

Background

New York State is home to more academic medical centers and academic dental centers than any other state. Annually, we have more than 11,000 students enrolled in our medical schools and train approximately 12% of the nation's medical residents at our teaching hospitals.

In addition to education and clinical care, our academic medical and dental centers are global leaders in biomedical research, conducting the foundational research that leads to new treatments and cures. This research also drives innovation in the state's life sciences sector through collaborations, licensing and new startup ventures. Additionally, our academic centers' graduate programs are essential in training the next generations of scientists, who then pursue careers in academic research and in the private sector.

Investments in biomedical research yield economic benefits. New York State is the second leading recipient of funding from the National Institutes of Health (NIH), with $3.5 billion awarded to New York scientists in 2025 – primarily, but not exclusively at our academic institutions – and directly supporting 35,000 jobs. Federal funding, along with state and local investments, have translated to direct results in the private sector, with nearly 6,000 life sciences companies – a 20% growth over the past five years – attracting $3.6 billion in venture capital investment and employing more than 160,000 New Yorkers.[1]

Investments in biomedical research drive employment and help New York create the highly skilled workforce of the future. New York's system of developing scientists, who drive advancements in academia and the private sector, has depended on federal funding and federal training programs that supported access to careers in science, particularly for people who have overcome adversity on the path to science. New York's leadership in scientific workforce

[1] Biotechnology Innovation Organization. The U.S. Bioscience Economy: Driving Economic Growth and Opportunity in States and Regions. 2024

development, however, is challenged by steep declines in funding opportunities and the elimination of NIH and National Science Foundation (NSF) training programs. In the long term, this disinvestment in science and scientists will discourage the brightest minds from pursuing careers in science and result in a loss of talent from New York to other US states and global competitors.

Investments in biomedical research improve the lives and health outcomes of New Yorkers and our communities. Publicly funded research has contributed to the development of 99% of the FDA-approved therapies from 2010-2019. Scientists across New York have been working on new cures and treatments that will be available here first through the more than 4,400 clinical trials underway in the state. This research-to-patient pipeline ensures that all New Yorkers – including populations of greatest need – have access to the highest quality healthcare through new technologies, treatment and cures and helps drive down the costs of delivering quality care.

Competition for Scientific Talent

The competition for scientists has escalated dramatically over the last two years. Other states and global competitors have launched multibillion dollar campaigns to recruit scientists. Given the instability of federal research funding since early 2025, New York's scientists – particularly our early career researchers – are a prime target for these recruitment efforts.

California

For decades, California has supported its life sciences sector, providing seed and other funding to startup companies launching from its academic institutions. As a result, California has the most robust life sciences sector in the US, with more than 14,000 life sciences companies employing nearly 335,000 people in 2021 and $79 billion in venture capital investment from 2018-21.

- The California Institute for Regenerative Medicine (CIRM), which supports stem cell science, launched with $3 billion in 2004 and voters approved an additional $5.5 billion in 2020. CIRM has recently focused much of its funding on translational science.[2]
- In September 2026, Governor Newsom signed Senate Bill 895, which puts a new $7.5 billion health and science research bond before voters in March 2028.[3]
- In November 2026, voters approved CA Proposition 38, which authorizes the creation of a new $8.4 billion California Immunology Research and Cures Initiative.[4]

Massachusetts

Massachusetts has long been a global hub for biomedical innovation with a startup ecosystem that supports companies launching from academic institutions.

- The state created its $1.5 billion Massachusetts Life Sciences Center to drive basic research and grow its bioscience sector in 2006.[5]
- Governor Healey is advancing a new $200 million commitment to biomedical research through the Discovery, Research and Innovation for a Vibrant Economy (DRIVE) Initiative.[6]

[2] https://www.cirm.ca.gov/
[3] https://calmatters.digitaldemocracy.org/bills/ca_202520260sb895
[4] https://vig.cdn.sos.ca.gov/2026/general/pdf/prop38-text-proposed-laws.pdf
[5] https://www.masslifesciences.com/
[6] https://www.mass.gov/the-drive-initiative

Pennsylvania
Governor Shapiro's 2026-27 budget includes up to $125 million for the Innovate in PA program, the intention of which is to close gaps between invention and commercialization.[7]

Texas
Texas has made substantial investments in research over the past two decades, with a primary focus on cancer, and is now expanding to include research on neurodegenerative diseases. A recent report indicated that every dollar invested in the Cancer Prevention Research Initiative of Texas (CPRIT) returns more than $200 in economic activity.[8]

- CPRIT launched in 2007 with an initial $3 billion investment over 10 years. Building on the first decade of success, Texas voters authorized a second $3 billion investment in CPRIT in 2019. CPRIT is now the second largest public funder of cancer research in the US, following only the National Cancer Institute. Over the last 15 years, CPRIT has awarded $854 million to Texas institutions specifically to recruit out-of-state scientists through their CPRIT Scholar and Recruitment of Rising Stars (RRS) programs which have included successful recruitments from New York.
- Modeled after CPRIT, Texas launched in May 2025 a new $3 billion Dementia Prevention Research Initiative of Texas (DPRIT).[9]

Despite the clear economic and health benefits, New York State's commitments to biomedical research have significantly lagged our closest US competitors in nominal and per capita investments.

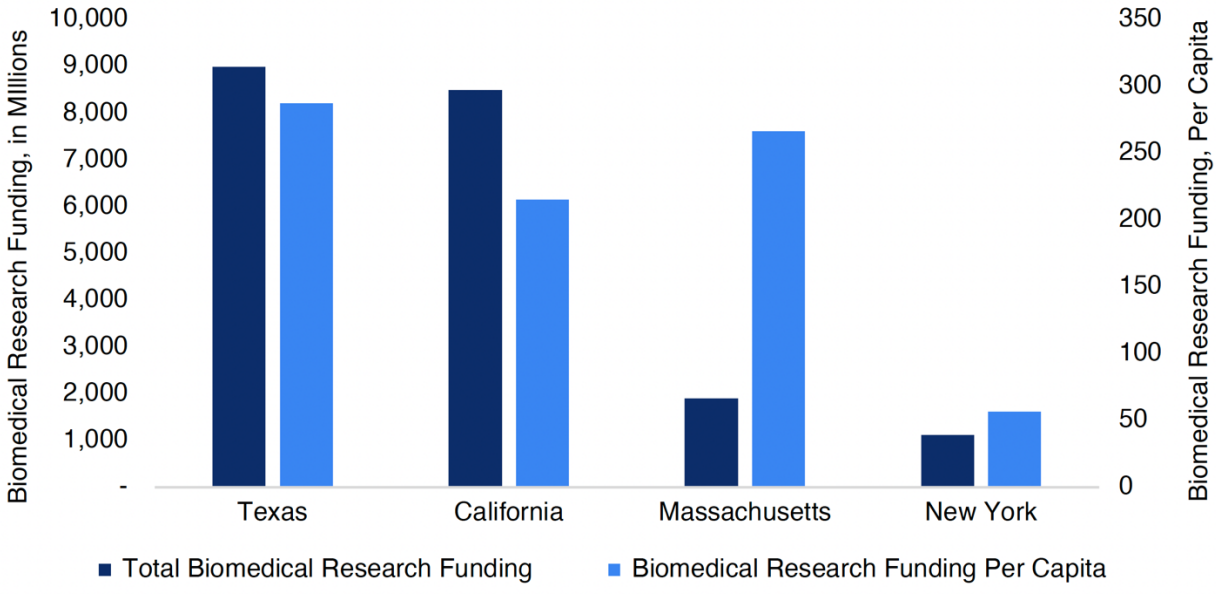


Figure 1. Major State Biomedical Research Funding Initiatives, 2005 – Present.

Global Competitors
As the US adjusts to federal policy shifts, academic institutions outside the US have launched new initiatives to recruit scientists from our institutions. Europe and China have been aggressively recruiting U.S.

[7] https://dced.pa.gov/business-assistance/technology-innovation/innovate-in-pa/
[8] https://cprit.texas.gov/
[9] https://www.txalzresearch.org/research/dprit/

scientists for most of the past two years, and Canada recently launched a $1.2 billion effort to recruit scientists from the U.S.[10]

New York Fund for Innovation in Research and Scientific Talent (NYFIRST)

The NYFIRST program was established in 2018 as part of the $620 million Life Sciences Initiative. The Legislature recognized the importance of scientific talent in the development of new discoveries that translate to new treatments and cures. The intent of that initial $20 million investment, and a subsequent appropriation of $10 million in the enacted 2024-25 budget, was to enhance the competitiveness of New York State's medical schools in recruiting and retaining senior scientists whose research has clear commercial potential.



Recruited scientists must:

- **Have at least one National Institutes of Health R01 or similar federal grant**
- **Hire or retain a team of researchers and other staff, such as postdoctoral fellows**
- **Possess a proven record of innovative research with clear potential for commercialization**

Return on Investment

Since 2018, with $17.7 million committed by the State, NYFIRST generated $191 million in additional research spending, which includes matching funds and leveraged funds. This represents a nearly 11:1 return on every state dollar invested in NYFIRST. In the first eight years of the program, the State has enabled New York research institutions to retain or recruit 18 leading scientists, creating 202 new jobs with an average salary of $77,100. Additionally, 29 patent applications have been filed by NYFIRST grantees since receiving the NYFIRST award.

Employment

NYFIRST is a proven driver of life sciences employment that supports high-wage jobs at institutions with deep historical roots in New York State. Across six funding cycles to date, the State has enabled New York research institutions to retain or recruit 18 leading scientists, creating 202 new jobs. Given their complex infrastructures and partnerships with other healthcare entities and local communities, academic medical centers are stable employers over the long term. They will continue to be an important component of the State's economy for the foreseeable future, meaning that there is little risk that State investments in NYFIRST will flow out-of-state and fail to provide in-state jobs.

- Scientists recruited from: TX (2), MA (2), GA, NJ, PA (3), CT, OH, NV, NC, MD, CA, VA, WI
- New jobs to date: 202
- New out-of-state hires to date: 125

[10] https://www.science.org/content/article/canada-s-new-budget-aims-lure-u-s-researchers-relocate

Intellectual Property
The commercialization of scientific discoveries is a clearly defined goal of the NYFIRST program. To date, NYFIRST awardees have filed 29 new patent applications and launched two spinout companies based on their academic research.

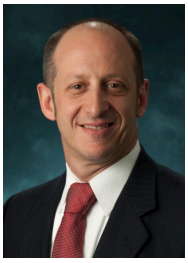
Spinout Companies from NYFIRST Awardees at AMSNY Member Institutions

NYFIRST Round 4 (2022) recruitment of Dr. Thomas Diacovo at Stony Brook University Renaissance School of Medicine:
NeoCordia Inc. was founded in September 2025 to address a critical gap in neonatal intensive care. This workflow will establish clinical feasibility and support an eventual 510(k) FDA regulatory submission. To build a scalable national and international footprint, NeoCordia is in talks with prominent strategic partners, including Vitalant in the U.S. and the UK's National Health Service Blood and Transplant (NHSBT) service.

NYFIRST Round 2 (2019) retention of Dr. Juntao Luo at Upstate Medical University
Tentargo Therapeutics LLC was registered in March 2021 to pursue development of patented telodendrimer technologies. Dr. Luo and his team have advanced these technologies for therapeutic delivery and immune modulation, with applications in sepsis, acute respiratory distress syndrome (ARDS), infection, and cancer. Dr. Luo has worked with SUNY Research Foundation technology transfer staff on potential licensing and industry partnerships, while collaborating with CMTx Inc. and more than ten research laboratories at Upstate and other institutions.

NYFIRST Awardees

Funding Cycle 1:



Columbia University Irving Medical Center recruited **Jordan Orange, MD, PhD, from Baylor College of Medicine in Houston, Texas**. Dr. Orange, recruited to serve as chair of the Department of Pediatrics, is a highly regarded clinician scientist who applies advanced imaging techniques to understand the biology of genetic immunodeficiencies.



The University of Rochester recruited **Paula Vertino, PhD**, **a research scientist from Emory University in Atlanta, Georgia.** Dr. Vertino is recognized for her work on the role of epigenetics in cancer development and serves as the Associate Director for Basic and Translational Research at the Wilmot Cancer Institute and the Senior Associate Dean for Basic Research at the University of Rochester School of Medicine and Dentistry (URMC).

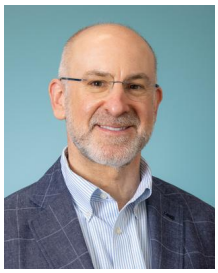


Icahn School of Medicine at Mount Sinai recruited **Trey Hedden III, PhD, from Harvard Medical School in Boston, Massachusetts.** Dr. Hedden's research focuses on applying innovative imaging techniques for age-related neurodegenerative disorders like Alzheimer's disease. His laboratory at Mount Sinai focuses on integrating multiple brain markers to help build a comprehensive picture of the relationship between brain function and cognition during aging and neurodegenerative disease.

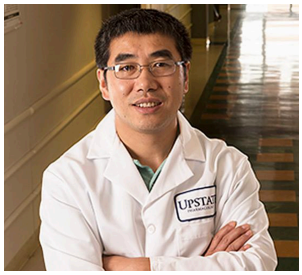
Funding Cycle 2:



Columbia University Irving Medical Center recruited **Simon John, PhD, from Jackson Laboratory in Maine** as a Professor and Howard Hughes Medical Institute Investigator. Dr. John currently serves as the Robert L. Burch III Professor of Ophthalmic Sciences at the Vagelos College of Physicians and Surgeons. Dr. John's research at Columbia is expected to lead to many patentable discoveries related to glaucoma and generalized visual degeneration.



The University of Rochester recruited **Steven Silverstein, PhD, from the Robert Wood Johnson School of Medicine at Rutgers University in New Jersey.** Dr. Silverstein serves as the George Engel Professor of Psychosocial Medicine, Associate Chair for Research in Psychiatry and Director of the Rochester Center for Brain and Retina. Dr. Silverstein's research focuses on the development of visual system biomarkers for neuropsychiatric disorders, especially severe mental illness and psychological consequences of vision loss.



SUNY Upstate Medical University **retained Juntao Luo, PhD,** to support his efforts to develop a unique approach to sepsis treatment. Dr. Luo has filed 15 patents and has been awarded seven patents since joining UMU in 2011. Dr. Luo is also interested in establishing startups to commercialize his technology and therapeutic products to develop a unique approach to sepsis treatment.

Funding Cycle 3:



Columbia University Irving Medical Center recruited **Sabrina Diano, PhD, from Yale University School of Medicine and Graduate School in Connecticut.** Dr. Diano currently serves as the Robert R. Williams Professor of Nutrition, Director of the Institute of Human Nutrition and Professor of Molecular Pharmacology and Therapeutics at Columbia University Irving Medical Center. Dr. Diano's research at Columbia will focus on human nutrition and neuroendocrinology, studying the brain's regulation of energy and glucose metabolism.



The University of Rochester recruited **Ruth Serra-Moreno, PhD, from Texas Tech University.** Dr. Serra-Moreno serves as an Associate Professor in the Department of Microbiology and Immunology at URMC. Dr. Serra-Moreno's research focuses on the mechanisms by which human pathogens such as Human Immunodeficiency Virus (HIV), its close relative Simian Immunodeficiency Virus (SIV), and SARS-CoV-2 (the causative agent of COVID-19) circumvent the barriers of the innate immunity in their respective hosts and cause disease.

Funding Cycle 4:



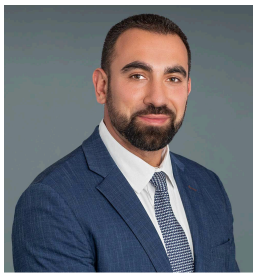
Columbia University Irving Medical Center recruited **Hülya Bayir, MD, from the University of Pittsburgh.** Dr. Bayir currently serves as Chief of the Division of Critical and Palliative Care and Hospital Medicine in the Department of Pediatrics at Columbia University Vagelos College of Physicians and Surgeons. Dr. Bayir has both clinical and basic research interests in the detection and mitigation of brain injuries. She has established a world-recognized research program focused on damaging and signaling mechanisms of free radicals and oxidatively modified biomolecules in brain injury.



Stony Brook University Renaissance School of Medicine recruited **Thomas Diacovo, MD, from the University of Pittsburgh**. Dr. Diacovo serves as Vice Chair of Research and Chief of Neonatology for the Department of Pediatrics at Stony Brook Children's Hospital. Dr. Thomas Diacovo focuses on the development of a novel process for isolating and storing components of cord blood to augment US and global blood supplies, which have been in decline since the COVID-19 pandemic.



Icahn School of Medicine at Mount Sinai recruited **Yizhou Dong, PhD, from the Ohio State University.** Dr. Dong serves as the Mount Sinai Endowed Professor in Nanomedicine with the Icahn Genomics Institute, the Marc and Jennifer Lipzhultz Precision Immunology Institute (PrIISM), the Department of Immunology and Immunotherapy, and the Department of Oncological Sciences at the Icahn School of Medicine at Mount Sinai. Dr. Dong's research focuses on the design and development of delivery systems and RNA therapeutics for the treatment of cancer, genetic disorders, and infectious diseases.



New York University Grossman School of Medicine recruited **Mark Yarmarkovich, PhD, from Children's Hospital of Philadelphia in Pennsylvania.** Dr. Yarmarkovich serves as Assistant Professor, Department of Pathology at NYU Grossman School of Medicine. Dr. Mark Yarmarkovich is an expert in biotechnology, protein/antibody engineering, immunology, cancer biology, bioinformatics, and computational biology.

Empire Biomedical Research Institute (EBRI)

In addition to continued support for the NYFIRST program, AMSNY is urging the creation of a state-funded Empire Biomedical Research Institute. Proposed in partnership with a coalition of more than 40 organizations representing New York's scientific, higher education, healthcare delivery, business and economic development communities, EBRI would advance the state's global competitiveness for science and scientists. The rapidly changing landscape created by evolving federal policies and funding for science creates new opportunities for states like New York that possess the scientific infrastructure and talent and are willing to invest boldly in the future of biomedical research and the life sciences.

The EBRI coalition recommends $500 million over the first two years, which would include:

- Funding to create EBRI infrastructure.
- Recruitment and retention of biomedical research workforce.
- Financial relief for federally funded projects.

The EBRI coalition recommends an investment of $6 billion over 10 years, which should include a balance of capital and operating grants. A fully funded EBRI would:

- Strengthen collaborations and partnerships among our statewide network of academic research institutions and our life sciences sector.
- Enhance the development of our scientific workforce while accelerating the growth of New York's innovation economy.
- Ensure access to the highest quality healthcare through new technologies, treatments and cures for all New Yorkers, including populations of greatest need.

Closing

Thank you for the opportunity to testify today and for your support of academic medicine and dentistry.

Respectfully submitted,
Jonathan Teyan, President and Chief Executive Officer
Associated Medical Schools of New York
New York State Academic Dental Centers

AMSNY Member Institutions

Albany Medical College
Albert Einstein College of Medicine
Columbia University Vagelos College of Physicians and Surgeons
CUNY School of Medicine
Icahn School of Medicine at Mount Sinai
Jacobs School of Medicine and Biomedical Sciences, the University at Buffalo
NYU Langone Health
New York Institute of Technology College of Osteopathic Medicine
New York Medical College
Norton College of Medicine at SUNY Upstate Medical University
Renaissance School of Medicine at Stony Brook University
School of Medicine and Dentistry at the University of Rochester Medical Center
SUNY Downstate Health Sciences University
Touro College of Osteopathic Medicine
Weill Cornell Medicine
Zucker School of Medicine at Hofstra/Northwell

NYSADC Member Institutions
Columbia University College of Dental Medicine
New York University College of Dentistry
Stony Brook University School of Dental Medicine
Touro College of Dental Medicine
University at Buffalo School of Dental Medicine
University of Rochester School of Medicine & Dentistry