

# LIFE SCI NYC

## LEADING THE WAY IN LIFE SCIENCES INNOVATION



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# OUR VISION: HEALTHIER COMMUNITIES, A STRONGER ECONOMY

A female scientist with dark hair, wearing a white lab coat over a dark turtleneck, is focused on her work. She is wearing blue nitrile gloves and holding a clear petri dish with a dark, granular sample. In the background, a laboratory setting is visible with shelves containing various bottles and equipment. A petri dish is also visible on a surface in the foreground.

With its deep and diverse talent pool, network of premier academic medical centers, lab space, and access to National Institutes of Health and venture funding, New York City has emerged as a major center of life sciences innovation.

What started as a hub of biomedical research, clinical care, and commercial biotech firms on the East Side of Manhattan has evolved to become a citywide ecosystem, with neighborhood-based clusters that each make a distinctive contribution to the city's growing life sciences sector.

**Now is the time** to build on these strengths and invest in the spaces, companies, and talent that will create **life-saving cures and treatments**, while catalyzing **new economic opportunities** for the people of this city.

**Over the next decade, the City will nurture the development of a thriving life sciences industry by investing in:**

**Over 3M square feet of additional life sciences space**, including specialized facilities to prepare early-stage discoveries for commercialization, incubator space for startups, and space for expanding biotech companies to continue to grow in NYC

**100 new startup companies** that will drive the development of small molecules, biologics, vaccines, gene therapies, and cell therapies—addressing high unmet medical needs

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**These investments will lead to:**

**Thousands of new jobs** in an industry where 50 percent of jobs do not require a bachelor's degree

**Dozens of new cures** and treatments to keep New Yorkers safe and healthy

# OUR BUILDING BLOCKS: TALENT, INSTITUTIONS, AND INFRASTRUCTURE

New York City is home to a **deep and diverse talent pool, premier academic and medical institutions,** and the widest and most **varied healthcare-delivery infrastructure** of any place in the world.

These key ingredients position New York City to take a leading role in advancing the fundamental understanding of disease, developing cures, and delivering treatment—from discovery to patient care.







## TALENT

**Strong pool of talent and expertise** with nine academic medical centers; 7,000 graduate students and postdocs; over 500,000 healthcare workers; the finest doctors across over 50 hospitals; and the world's highest concentration of Nobel laureates, spanning fields from chemistry to physics to medicine

## INSTITUTIONS

**Largest research base of academic medical centers** driving discovery of new treatments that are clinically tested to serve all communities

**One of the most extensive healthcare systems** in the nation, with over 50 hospitals and 370 federally qualified healthcare centers serving a large and diverse population, as well as 100 disease specialty foundations driving advocacy for patients

## INFRASTRUCTURE

**Expanding network of life science spaces**, with the City having already opened or announced the opening of 1.2M square feet of space to-date, another half-million square feet planned for 2021, and an additional three million square feet by 2030

**Growing startup investment scene** that draws on ready access to capital; nurtures and retains entrepreneurial talent; and leverages strong relationships with the venture capital, nonprofit, and public sectors

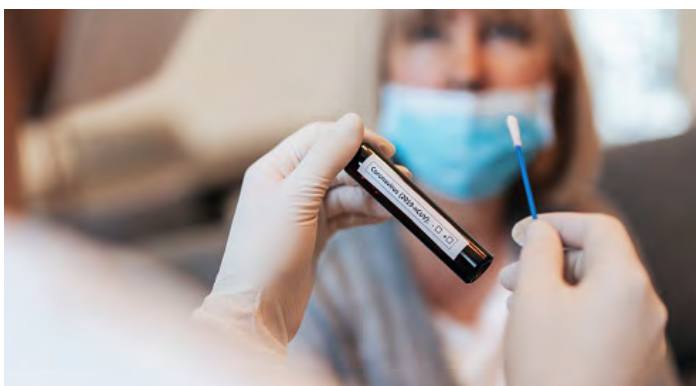
**Network of established pharmaceutical and biotech companies** attracting more than \$1 billion in annual venture investment—up from \$130 million in 2016

# LIFE SCIENCES INNOVATION, RESILIENCY, AND COLLABORATION: INSIDE NYC'S COVID PANDEMIC RESPONSE

New York City was hit early and hard by COVID-19. But the pandemic also showed the world the potential of our robust life sciences industry to mobilize resources and help New Yorkers through one of the most severe crises our city has ever faced.

## 30K tests per day

processed by the Pandemic Response Lab (PRL), launched by the City and located in the Alexandria Center for Life Sciences, using technology created at the NYU Institute for Systems Genetics and robotics invented at Brooklyn-based advanced manufacturer Opentrons



## 1.25M test kits

produced by the City and local partners—Print Parts, Albert Einstein College of Medicine, and Collab—for use at NYC Health + Hospitals facilities and community testing sites

## 16 clinical studies

completed, ongoing, and planned by the City and its partners to advance new testing technologies for COVID-19—building a diagnostic research infrastructure that will benefit NYC in any future pandemic





# LIFE SCIENCES IN NYC: A CITYWIDE ECOSYSTEM

What started as a biotech cluster on the East Side of Manhattan has evolved to become a citywide life sciences network.



# THE HEART OF OUR ECOSYSTEM: LIFESCI AVE

LifeSci Ave—New York City’s established life sciences corridor along the East Side of Manhattan—stretches from Kips Bay in the south through East Harlem in the north, encompassing some of the country’s premier institutions in biomedical research, clinical care, and commercial biotech. We envision LifeSci Ave evolving to become a network of wet-lab, manufacturing, and innovation spaces that will support our top institutions’ research of vaccines and treatments.

## KIPS BAY

A life sciences community is growing in Kips Bay, the heart of LifeSci Ave. Anchored by NYU Langone, the neighborhood is already home to the city’s largest existing cluster of commercial life sciences activity, with more than 1M square feet of space between Alexandria’s East River Science Park and Deerfield Management’s CURE.

- With its existing institutions and transit connections to leading hospitals and academic medical centers on the Upper East Side, Kips Bay offers expansion opportunities for spin-outs and high-growth companies that will foster collaboration and innovation.
- Kips Bay is home to large, City-owned sites suitable for life sciences development, presenting a rare chance to shape the future of life sciences in NYC by adding more wet labs and research facilities.

- **There is an opportunity to expand the Kips Bay cluster by creating a complete life sciences campus—a place where researchers, companies, and the community connect.** A new life sciences campus would transform the district into a vibrant new center of activity (similar to the role Silicon Valley plays for the tech industry), ensuring a workforce pipeline and large-scale life sciences development through the next decade.





## UPPER EAST SIDE

Home to a dense concentration of patient care facilities and some of the world's leading academic medical centers, the Upper East Side presents an opportunity to support programs that advance basic research and startup formation. Rockefeller University, in partnership with Memorial Sloan Kettering Cancer Center and Weill Cornell Medicine, will launch the Tri-Institutional Translational Center for Therapeutics on its campus—a first-of-its-kind commercial incubator in the neighborhood.

## EAST HARLEM

The New York Proton Center is a multi-institutional collaboration delivering innovative proton therapy cancer treatment to patients. Several blocks away will be the City's new Public Health Lab, helping to bolster the City's preparedness for future diseases.



# OUR NEIGHBORHOODS: GROWING CENTERS OF INNOVATION

Outside of LifeSci Ave, neighborhoods across New York City are developing their own unique areas of expertise that contribute to the city's thriving life sciences ecosystem.

## **Creating the next generation of life sciences companies:**

Developing shared lab space that will foster growth and promote innovation among startup and growth-stage life sciences companies

### **SUNSET PARK AND CENTRAL BROOKLYN**

With early-stage companies, an established manufacturing base, and SUNY Downstate's Advanced Biotechnology Incubator (directly adjacent to Brooklyn's only academic medical center), this neighborhood cluster represents the core of Brooklyn's growing biotech community.

### **HUDSON SQUARE**

Anchored by the New York Genome Center and home to innovative incubators like BioLabs and JLABS, Hudson Square represents the intersection of the biotech industry and Silicon Alley's tech industry.

### **WEST HARLEM AND UPPER MANHATTAN**

This area—home to multiple life sciences incubators and two of New York City's leading institutions in biology, chemistry, and engineering—supports emerging companies working to develop the future of biotech. Columbia University will be launching a new Therapeutic Validation Center to help create the next generation of medicines.

### **LONG ISLAND CITY**

Long Island City is defined by developments like King Street Properties' InnoLabs and Alexandria's Prestone—projects designed to unlock growth-stage lab and office space in a mixed-use neighborhood with a rich history of innovation.



MANHATTAN'S WEST SIDE: NEW YORK STEM CELL FOUNDATION

### **Building the spaces where cures are made:**

Academia is partnering with biotech and pharmaceutical companies to manufacture new types of cures for diseases, like stem cell treatments for macular degeneration and glaucoma, both of which are presently incurable.

## **MORRIS PARK**

The Albert Einstein College of Medicine—part of the Montefiore Health System, one of the Bronx's largest employers—is the springboard for new life sciences growth in Morris Park. Montefiore plans to launch the Einstein-Montefiore Biotechnology Accelerated Research Center, a biomanufacturing operation focused on cell, gene, and antibody production.

## **MANHATTAN'S WEST SIDE**

The West Side is an emerging frontier for growth-stage companies, home to a growing supply of commercial life sciences space—all anchored by the New York Stem Cell Foundation (NYSCF). NYSCF will also be expanding its research institute to enable the translation of research into stem cell therapies for patient treatment.



## WHAT COMES NEXT

As the City looks towards the future, life sciences will continue to play an integral role in creating healthier communities and a stronger economy for all. And as the industry continues to mature, the City is committed to investing in early-stage discoveries, furthering development of life sciences spaces, and creating more equitable health outcomes for communities.

Within the next decade, the City will activate more than **three million square feet** of additional life sciences innovation space, which will support **100 new startup companies**.

These new spaces and companies will create, produce, and deliver **dozens of new cures and treatments**, generating **thousands of new jobs** for New Yorkers—making our city healthier and fairer.

Learn more by visiting [\*\*lifesci.nyc\*\*](https://lifesci.nyc) and [\*\*edc.nyc/program/lifesci-nyc\*\*](https://edc.nyc/program/lifesci-nyc)

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