

CITY COUNCIL
CITY OF NEW YORK

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TRANSCRIPT OF THE MINUTES

Of the

COMMITTEE ON ECONOMIC DEVELOPMENT

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June 21, 2021
Start: 11:19 a.m.
Recess: 1:03 p.m.

HELD AT: Remote Hearing (Virtual Room 2)

B E F O R E: Paul Vallone
CHAIRPERSON

COUNCIL MEMBERS:
Inez Barron
Robert Cornegy, Jr.
Mark Gjonaj
Peter Koo
Brad Lander
Farah Louis
Keith Powers

A P P E A R A N C E S (CONTINUED)

Susan Rosenthal, Senior Vice President of
Life Sciences and Healthcare
Economic Development Corporation (EDC)

Carlo Yuvienko, Vice President of Life
Sciences and Healthcare
Economic Development Corporation (EDC)

Morias Brown, Life Sci NYC Intern
Hibiscus Bio Adventures

Samuel Sia, Founder
Harlem Bio Space

Ben Dubin-Thaler, Founder and Executive
Director
Bio Bus

James Flynn
Deerfield Management Cure

Ari Espinal
Construction and General Building
Laborers Local 79

Nancy J. Kelly, Founder
NYC Builds Bio

George James, New York City Resident

Maria Gotch, New York City Resident

Anthony George
Local 79

Najah Valera [sp?]
Greater New York Laborers Employers
Cooperation and Educational Trust [New
York LECET]

Martin Bell
Edjen Biotech

2 SERGEANT-AT-ARMS: Recording to the cloud
3 started, as well.

4 SERGEANT-AT-ARMS: Thank you.

5 SERGEANT-AT-ARMS: Backup is still rolling.

6 SERGEANT-AT-ARMS: Thank you. And good
7 morning and welcome to today's remote New York City
8 Council hearing of the Committee on Economic
9 Development. At this time, would all Council members
10 and Council staff please turn on their video? To
11 minimize disruption, please place electronic devices
12 on vibrate or silent mode. If you wish to submit
13 testimony, you may do so at
14 testimony@Council.NYC.gov. Once again, that is
15 testimony@Council.NYC.gov. Thank you. We are ready
16 to begin.

17 CHAIRPERSON VALLONE: Thank you,
18 Sergeant. Good morning, everyone. Welcome to our
19 Committee on Economic Development where today we will
20 have oversights on right sciences in New York City
21 and we welcome Council members Koo, Powers, Cornegy,
22 Louis, and Lander and I hope everyone had a wonderful
23 weekend. We celebrated Juneteenth, we celebrated
24 Father's Day, got my Disney dad cup here. Life is
25 good and we have got primary day tomorrow. So, lots

2 going on here in the city, so let's get through this
3 great. They had let started off. So, good morning
4 and welcome to today's City Council. Today is
5 Monday, June 21, 2021. The first day of summer. My
6 name is Paul Vallone and I have the privilege of
7 chairing this Committee. I would like to extend my
8 thanks to my fellow committee members and staff
9 together to hold this important. As we follow up on
10 life sciences in New York City. This has been in the
11 works a little over four years in EDC's efforts in
12 this project have already begun to bear fruit. We
13 had this hearing not too long ago and this is a good
14 follow-up, especially on the typing of the Mayors new
15 announcement. In the late 2016, Mayor de Blasio
16 announced a \$500 million investment into the cities
17 life sciences sector in order to generate an
18 estimated 16,000 new jobs and to further cement New
19 York's position as a global leader in life sciences
20 research and innovation. The Mayor dubbed this
21 initiative Life Sci NYC and outlined a 10 point plan
22 detailing how that 500 million would be spent, where
23 the jobs would be created, and what sort of
24 expectations the public should have for engagement
25 with this new funding of the Cities life sciences

2 sector. The highlights of that plan including
3 borough spanning campus of life sciences institutions
4 along Manhattan's East side that EDC is now calling
5 Life Sci Avenue, significant tax incentives to
6 attract commercial laboratories to the city of
7 various investments in nonprofits, incubator startups
8 and innovation hubs in the citywide paid internship
9 program for life sciences at local colleges and
10 university, something that was dear to me at the
11 first hearing, so I am looking forward to an update
12 on that. Thus far, the Life Sci NYC initiative seems
13 to have delivered on most of its promises. The
14 administration is highlighted that Life Sci NYC has
15 attracted over 1 billion in venture funding in 2020
16 alone up from 130 million in 2016. This enabled the
17 city to open 2,000,000 square feet of new life
18 sciences or innovation spaces and has generated six
19 new incubators yielding roughly 150 startup companies
20 every couple of years. The administration has also
21 highlighted successes opening campuses and loves in
22 partnership with several private developers and
23 academic institutions across the city, including the
24 Alexandria Center in Kips Bay, the Cure Center on
25 Parks Avenue, and the Bio Labs at NYC in Soho.

2 Additional investments are underway at Columbia
3 University, Albert Einstein College of medicine,
4 Rockefeller University, and the New York stem cell
5 foundation. Each of which will continue to grow the
6 footprint of the life science sector in our city.
7 Seeing how these investments were each announced
8 within the last six months, we, on the committee look
9 forward to hearing updates on the progress up to
10 date. Additionally, there was a \$7.5 million
11 investment in the NYC internship program which was
12 initially slated to create 1000 paid summer
13 internships for undergraduate and graduate students,
14 starting at \$15 an hour. Thus far, it appears only
15 400 students have participated and received paid
16 internships, so we look forward to hearing details
17 from EDC today on how they plan to spread this great
18 program, especially since I thought working with DOE
19 and partnering with our students and knowing what
20 jobs and careers are available right here is
21 paramount to the success of this initiative. Lastly,
22 the Mayor announced a doubling of the program earlier
23 this month in the form of a plan to inject an
24 additional \$500 million into this life science sector
25 to continue to build lab space, incubators, and

2 support. We, on the committee, are very eager to
3 hear the details of this new investment that we are
4 clearly taking pride in since we announced the
5 hearing and there's another 500 million [inaudible
6 00:04:53]. Were committed to that and look forward
7 to hearing that testimony. Before we begin, I would
8 just like to formally congratulate EDC's new
9 president and CEO, Rachel Lowe, who I had the
10 pleasure of meeting and doing groundbreaking
11 [inaudible 00:05:06] last week on her new position in
12 her amazing staff which we worked so well with over
13 the last four years. We look forward to having
14 several productive hearings with you during our final
15 six months of the Council session. With that, I
16 would like to thank the economic development
17 committee staff and our amazing legislative counsel,
18 Alex Polinov, our amazing policy analyst, Emily
19 Forgione, and our amazing finance analysis Aaliyah
20 Ali for all their hard work in putting this hearing
21 together and staying with me and the team from day
22 one. With that said, I would now turn it over to our
23 moderator, committee counsel and happy Father's Day,
24 Alex Polinov to go over some of the procedural items.

2 COMMITTEE COUNSEL: Thank you, Chair
3 Vallone. It was a great Father's Day.

4 CHAIRPERSON VALLONE: Yes.

5 COMMITTEE COUNSEL: I am Alex Polinov,
6 counsel to the Economic Development Committee of the
7 New York City Council. Before we begin testimony, I
8 would just like to remind everyone that you will be
9 on mute until you are called upon to testify, at
10 which point you will be unmuted by the host. The
11 members of the administration who are testifying will
12 not be muted during the question and answer portion
13 of the administration's testimony. I will be calling
14 on panelists to testify, so please listen for your
15 name to be called. The first panelist to give
16 testimony today will be Susan Rosenthal, the senior
17 vice president of life sciences and healthcare at the
18 New York City Economic Development Corporation.
19 Carlo Yuvienko, EDC's vice president of life science
20 and healthcare will also be available for
21 questioning. I will call on each of you shortly for
22 the oath and then again when it is time to begin your
23 testimony. During the hearing, if Council members
24 would like to ask a question of the administration or
25 of a specific panelist, please use the zoom raise

2 hand function and I will call upon you in order. We
3 will be limiting Council member questions to five
4 minutes which includes the time it takes to answer
5 those questions. Please note that for the use of
6 this virtual hearing, we will not be allowing a
7 second round of questions for each panelist outside
8 of the committee chairs. All hearing participants
9 should submit written testimony to
10 testimony@Council.NYC.gov if you have not already
11 done so. The deadline for written testimony is 72
12 hours after the close of the hearing. Before we
13 begin testimony, I will administer the oath. To all
14 members of the administration who will be offering
15 testimony or will be available for questions, please
16 raise your right hands. I will read the oath and
17 then call on each of you individually for a response.
18 Do you swear or affirm to tell the truth, the whole
19 truth, and nothing but the truth before this
20 committee today and I need to respond honestly to
21 Council member questions? Senior vice president
22 Rosenthal?

23 SUSAN ROSENTHAL: I do.

24 COMMITTEE COUNSEL: Vice president
25 Yuvienko?

2 CARLO YUVIENKO: I do.

3 COMMITTEE COUNSEL: Thank you both.

4 Senior vice president Rosenthal, you may begin your
5 testimony.

6 SUSAN ROSENTHAL: Thank you.

7 CHAIRPERSON VALLONE: We have also been
8 joined by Council member Barron. Sorry, Susan. I
9 just wanted to make sure she was announced.

10 SUSAN ROSENTHAL: No worries. Good
11 morning, Chair Vallone and members of the Economic
12 Development Committee. I am Susan Rosenthal and I
13 have the pleasure of serving as senior vice president
14 of life sciences and healthcare at New York City
15 Economic Development Corporation. With me is Dr.
16 Carlo Yuvienko, our vice president of life sciences
17 and healthcare. I am pleased and proud to be here to
18 discuss Life Sci NYC, and initiative led by New York
19 City Economic Development Corporation. We launched
20 Life Sci NYC 2016 to invest in life sciences
21 research, development, and related innovation.
22 Today, I will lay out the initiative accomplishments
23 to date, are important pandemic response efforts, and
24 the plans for the \$500 million investment recently
25 announced in the Mayors executive budget for Life Sci

2 NYC, bringing the city's total commitment to the \$1
3 billion. Life-sciences is coming-of-age in New York
4 City. Not long ago we couldn't name a handful of New
5 York City based Life Sci companies and now we have
6 hundreds. My testimony will detail the story of
7 life-sciences here, it's foundation, its rapid growth
8 through our investment, and our exciting future.
9 First of all, what are life-sciences in this context?
10 We say life-sciences are the combined applications of
11 biology and technology for the advancement of
12 humanity. It sounds like a lofty goal, but, really,
13 it is a practical one. Taking biology research and
14 putting its outcomes to use. In this definition, the
15 word applications encompasses both the applied
16 research activities within our academic institutions,
17 as well as commercial activities of large and small
18 companies. The foundation all research can be used
19 in health or nonhealth applications. And nonhealth,
20 it can be used in consumer goods and foods and
21 agriculture and industrial chemicals and health, put
22 simply, thank medicine, diagnostics, medical devices,
23 and vaccines. Not none of this is new to New York
24 City. For decades, we have had many of the essential
25 building blocks for a thriving life-sciences

2 ecosystem. Our advantages include an array of
3 teaching hospitals, research facilities,
4 universities, researchers and scientists,
5 technicians, students, Nobel laureates, clinicians,
6 and one of the world's largest public healthcare
7 systems. Maybe you didn't know this, but New York
8 has among the world, one of the highest
9 concentrations of Nobel prizes attributed to academic
10 institutions. This remarkable science expands from
11 chemistry to physics to the medicine and, along with
12 them, we have a deep and diverse talent pool with all
13 levels of necessary skills. Every year, 7000
14 graduate students and postdocs in the life sciences
15 study at premier academic and medical institutions,
16 including nine academic medical centers. These
17 world-class programs bring hundreds of years of
18 experience and knowledge to the global scientific
19 community and we would like to keep that knowledge
20 here. Beyond investments in new labs and office
21 space, we are investing directly in talent. More
22 than 400 undergraduate and graduate interns have been
23 placed across over 100 host companies. In previous
24 years, 47 percent of those internships have either
25 been extended or transformed into full-time roles.

2 This five-year-old program supports NYC EDC
3 commitment to equity, diversity, and inclusion.
4 Interns hail from every borough and a majority
5 identify as black, Asian, or Latino. In addition,
6 over eight half-million healthcare workers make their
7 living within the five boroughs. Our extensive
8 healthcare system includes over 50 hospitals and 370
9 federally qualified health care centers. On top of
10 that, 100 disease specialty foundations drive
11 research and advocacy for patients. Together, these
12 ingredients position New York City to take a leading
13 role to advance the fundamental understanding of
14 disease, develop curators, and deliver treatment from
15 discovery by bench science and innovators to patient
16 care in our hospitals. We want to make sure that
17 that science starts here and stays here. In recent
18 years, New York City has experienced early growth in
19 life-sciences. We have unlocked 2 million square
20 feet of new life scientists and innovation space,
21 funded research in our meeting Jake academic
22 institutions, and seeing the growth of six incubators
23 generating hundreds of companies. As part of that,
24 NYC EDC established key early partnerships prior to
25 the 2016 commitment to Life Sci NYC. Let's take a

2 look at some of them. The Alexandria Center for Life
3 Science on Manhattan's East side is home to a diverse
4 range of high quality life-sciences entities. They
5 include multinational pharmaceutical firms as well as
6 early stage and growth stage companies. Our
7 [inaudible 00:12:08] space is one of the city's first
8 biotech incubators to offer affordable shared wet lab
9 space for competitively selected entrants. In
10 Brooklyn's Bio Bat offers research and manufacturing
11 space to biotechnology and related companies as well
12 as work opportunities for SUNY downstate scientists,
13 clinicians, and students. In addition to these early
14 efforts, NYC EDC wanted to better understand how to
15 bolster growth and position New York City as a global
16 center of innovation in life-sciences. We conducted
17 fundamental research into the field to learn what can
18 be further accomplished and all our findings helped
19 lay the groundwork for the first \$500 million for
20 Life Sci NYC which included \$150 million in city
21 capital to support nonprofit R and D facilities to
22 spur new research that translates to companies, jobs,
23 and medicines, \$300 million in city investments to
24 see the construction of needed commercial lab space
25 and incubators, and \$50 million dedicated to

2 investments in talent and early-stage companies. In
3 2017, we established an advisory Council to provide
4 leadership and strategic direction. The Council is
5 comprised of leaders spanning academia, the venture
6 community, and industry. It is cochaired by Dr.
7 Harold Varmus, Professor of medicine of the Weill
8 Medical College of Cornell University and Dr. Vicki
9 Sato, chairman of the board of biotechnology. Under
10 the Council's leadership, we opened BioLab's at NYU
11 Langone, a premier co-working space for startups to
12 test, develop, and grow innovative ideas. BioLab's
13 offer exclusive events, programming, and activities
14 to connect startups with industry partners. The
15 facility can hold up to 35 companies at a time, among
16 those which located their startups at The Bio Labs
17 and recently shared their expanding to larger spaces
18 in New York City are C16 biosciences, a female lead
19 company that manufactures environmentally friendly
20 synthetic palm oil an MUI which maps the immune
21 system for better medicine development. Through
22 Life Sci NYC, we have also offered city investments
23 to create new wet lab capable space and incubators at
24 Deerfield management cure. It is where innovators
25 from across the industry and around the world can

2 work in a collaborative atmosphere. I just want to
3 pause for a moment and recognize the crisis we have
4 all lived through. As you can imagine, we can't talk
5 about the importance of life sciences in Covid 19 and
6 the pandemic that has swept the world. As we all
7 know, New York City was hit early and hit hard, but
8 the pandemic showed the world the potential of our
9 robust life-sciences industry. Together, we mobilize
10 resources to help New Yorkers through one of the most
11 severe crises our city has ever faced. NYC EDC
12 played an important role, helping the city overcome
13 early shortages of personal protective equipment. We
14 leveraged our relationship in the advanced
15 manufacturing life-sciences and fashion industries to
16 help quickly pivoted at businesses to create much-
17 needed gowns, face shields, and test kits. One of
18 our biggest challenges was to help address the
19 shortage of lifesaving ventilators. We convened a
20 partnership with researchers, local innovators, and
21 members of the medical and public health communities
22 to develop a bridge ventilator called the Spiro wave
23 and we did that in less than a month. The
24 manufacturer of Covid testing kits was another
25 challenge which EDC also help to overcome. With the

2 assistance of experts across the country, local
3 medical professionals and city agencies, we refined
4 the process and quickly found local manufacturers to
5 go into production. These efforts ultimately
6 produced 1.25 million test kits for use at New York
7 City Health and Hospitals and community testing
8 sites, as well as other sites within the city's test
9 and trace program. Knowing how critical testing
10 would be to the health and economy of New York, in
11 September we also partnered with a Brooklyn based
12 company called Open Tron's to launch the pandemic
13 response lab. It has consistently delivered Covid 19
14 test results in under 24 hours at a cost-effective
15 \$28 per test. Ultimately, the lab grew to process at
16 least 40,000 tests per day. And to activate more
17 testing innovation for quick results and to support
18 New York City's access to rapid tests, we created the
19 rapid testing innovation competition. From that, we
20 awarded \$164,000 to Columbia University to Dr. David
21 Ho's lab to support studies to accelerate the
22 deployment of its code to scan rapid test. Even in
23 the midst of the chaos of Covid, we knew we could not
24 just concentrate on emergency response. We needed to
25 focus on the future for New York City, as well, so we

2 did. In December, we announced the establishment of
3 the pandemic response Institute. Its mission is to
4 better prepare the city for future health emergencies
5 and pandemics. It will help position the city as a
6 leader in public health research and innovation.

7 These efforts will not only improve New York City's
8 health infrastructure, that serve as a blueprint for
9 the rest of the country and, perhaps, the world.

10 Despite the pandemic or maybe because of it, funding
11 for life sciences companies reach new levels. NIH
12 funding and venture investment has reached new
13 heights for New York City this past year and now over
14 2,000,000 square feet of new life-sciences spaces
15 have been anticipated to come online by the end of
16 this year, what a total of over 3,000,000 square feet
17 by 2023. This acceleration illustrates New York
18 City's unprecedented opportunity to create, produce,
19 and deliver medical breakthroughs and generate
20 thousands of jobs for New Yorkers, making our city a
21 healthier and fair place to live and work. So, what
22 is next? The plan for the next half billion dollars
23 calls for over \$200 million in city financial
24 investment and \$300 million in city capital. It
25 includes an expansion fund to invest in companies

2 growing into wet lab spaces from universities or
3 incubators and it further extends the Life Sci NYC
4 internship program. We expect to this total \$1
5 billion investment to create 40,000 jobs, so whether
6 someone is beginning their career, starting with an
7 idea, the expanding the company, or planning its next
8 phase of growth, we want to encourage them to do it
9 here in New York City. Mayor de Blasio kicked off
10 this next chapter of Life Sci NYC by announcing the
11 Life Sciences Innovation Infrastructure RFP. It's
12 focus is to help advance the commercial research and
13 development of new medicines, medical devices,
14 diagnostics, and research tools. Selected projects
15 will receive an award of up to \$20 million.

16 Currently, the heart of the New York City life-
17 sciences ecosystem is what has been called Life Sci
18 Avenue, the established industry corridor along the
19 east side of Manhattan. The stretch encompasses some
20 of the country's premier institutions in biomedical
21 research, clinical care, and commercial biotech.

22 This new investment will support this existing
23 industry corridor and strength in the development of
24 other life-sciences clusters in neighborhoods around
25 the city. This will contribute to a greater

2 ecosystem and the dissemination of career building
3 jobs. Manhattan's West side is already home to
4 multiple life-sciences incubators and leading
5 institutions. It is home to newer hubs like the
6 Hudson Research Center in Midtown and that Tasty lab
7 building in the Manhattanville factory district
8 further uptown. But there are important clusters in
9 other boroughs, too. In Morris Park in the Bronx,
10 the Einstein Montefiore Biotechnology Accelerated
11 Research Center also known as EMBARK, will anchor a
12 growing life-sciences ecosystem with the new bio
13 manufacturing facility. EMBARK will accelerate the
14 growth of New York City companies by providing cells
15 and proteins critical to commercializing patient
16 therapies. In Long Island city, Queens, Alexandria's
17 Bindery is unlocking growth stage lab and office
18 space in a mixed-use neighborhood with a rich history
19 of innovation. On the Brooklyn waterfront, the core
20 of the boroughs growing biotech community is coming
21 together and expanding. It is defined by an early
22 stage company and includes an established
23 manufacturing base, some of it at the Brooklyn Navy
24 Yard and the Brooklyn Army Terminal and anchored by
25 SUNY Downstates Advanced Biotechnology and Incubator.

2 To build this hearty life-sciences ecosystem, we need
3 companies and founders to be believers, too. Just
4 last week we sponsored the global marketplace of the
5 International Buyout Conference which brings together
6 industry giants and startups alike. This is just one
7 step in a business attraction plan that is well
8 underway. This is what EDC does: helps business form
9 or come to New York, stay in New York, and thrive in
10 New York. All to help build a better, stronger, and
11 more diversified economy. Through the city's
12 landmark \$1 billion total investment in Life Sci NYC,
13 we are committed to early-stage discoveries, further
14 development of life scientist spaces, more equitable
15 health outcomes for communities, and supporting a
16 valuable jobs pipeline to add to a stronger recovery
17 for all. Thank you for the opportunity to testify.
18 I know welcome home any questions you have.

19 CHAIRPERSON VALLONE: Thank you, Susan,
20 and to your entire teams. There's a lot in there.

21 SUSAN ROSENTHAL: Yes.

22 CHAIRPERSON VALLONE: We could spend a
23 week on each one of those. I have to say, if we
24 didn't-- if this didn't start in 2016, I think we
25 would have had a very different response to the

2 pandemic. I think the critical beginning of this
3 program back in 2016/2017 put the footprint in place
4 to quickly pivot when we could. I think that's why
5 we saw-- and that is why EDC played such a lead role
6 in those survival beginning days and weeks. I thank
7 your team for that. And for the Council members that
8 are on, I know this is a very busy day, especially
9 with what is happening tomorrow, so any questions
10 that you what, you just jump in at any time. I see
11 Council member Cornegy. He's got a very busy 48
12 hours on his plate, so, Robert, if you wanted to ask
13 your question now so we can get you on your way, I'd
14 be happy to do that.

15 SERGEANT-AT-ARMS: Time starts now.

16 COUNCIL MEMBER CORNEGY: Thank you,
17 Chair Vallone, and thank you for this tremendous
18 testimony. I think the concern has been in
19 communities that are in ciliary to Manhattan that
20 these jobs that are going to be created, which are
21 fantastic jobs, pipeline to the middle class and
22 upper middle-class and while-- I just want to know
23 if there is a curriculum in place that reaches back
24 into our high schools in junior high schools as we
25 set up the system and that all of the growth that we

2 see take place is not accessed by people who we have
3 to import in to meet these jobs. There is a pipeline
4 that we can create and I am hoping that we can
5 consider that. So, the jobs in the economic
6 development and are being at the forefront of this
7 industry I think is incredibly important. It
8 signifies who New York is and how we truly recover.
9 But without a pathway for everyone to participate in
10 this over the next year as attrition takes place in
11 these jobs is going to be important. So, is there a
12 time-- I didn't hear it mentioned. Is there a tie
13 directly to curriculums that are part of our school
14 system and not just the colleges, but the high
15 schools putting young people on the path to these
16 jobs of the future?

17 SUSAN ROSENTHAL: Thank you, Council
18 member Cornegy. It's a really important question and
19 one that I am happy to share some insight into
20 something that we are going to be working on over
21 time as the Life Sci NYC initiative unfolds. So, a
22 couple of thoughts. The first is that talent is
23 incredibly important to this initiative and so we
24 will continue to invest in talent programs as part of
25 the broader Life Sci NYC initiative. Part of that is

2 through some of the financial support that we bring
3 forward. We will be working with operators on
4 considering programming in a stem space, whether that
5 is like our internships program or more K-12
6 opportunities, we will consider those. At this time,
7 we are focused on both our internship program and on
8 programs like that where we take the, as we are
9 setting up different campuses, we are thinking about
10 how do we then include programming with those
11 operators for earlier STEM education.

12 COUNCIL MEMBER CORNEGY: Thank you.

13 CHAIRPERSON VALLONE: What I'll do is
14 follow up on that, Robert, because that's-- you know
15 I'm going to ask questions on the students. For me,
16 probably the greatest part over these last eight
17 years was incorporating our children into their
18 careers and futures here in the city. So this is a
19 perfect opportunity. And I think you have two kinds
20 of segments here, right? You have the first
21 additional \$500 million investment and now we have
22 the announcement of the second which I know is more
23 futuristic. But, Susan, maybe you can tell us on the
24 successes of the first capital investments. You
25 outlined the first \$500 million investments in your

2 testimony. You said unlocking 2 million square feet,
3 funded research labs, six incubators. For those who
4 didn't have access to, you also had like a slide
5 there where that was. Could you run us through,
6 since we are five boroughs and we are always
7 advocating for our districts in the outer boroughs
8 also, how that it was capital investments look at the
9 five boroughs where you link the city together within
10 the investments? And then, secondly, take that to
11 how are we developing our children and our students
12 in high school and college to be knowledgeable of the
13 internship and where they can--

14 SUSAN ROSENTHAL: Sure. So, first let
15 me start by saying how grateful we are to the city of
16 the initial investment of the \$500 million back in
17 2016 as well as the expansion of \$2 billion. And
18 just to share, will run through very quickly some of
19 the broader successes and highlight where they are
20 across the five boroughs and then I will give a
21 little more detail into your second question. So,
22 the Life Sci NYC program has successfully launched or
23 invested in several projects in both infrastructure
24 and the talent needed in New York City based on that
25 initial 2016 vision. That included in an incubator

2 at Bio Labs and NYU Langone which is, as mentioned
3 earlier, in Soho. We have also invested in
4 commercial lab and eating Q Bader space with The Cure
5 and in Innolabs Long Island city. We also have a
6 life science internship program, as you know, which
7 is accessed across all five boroughs and is
8 predominantly used by people of color, that of the
9 will was almost somewhere between 40 and 50 percent
10 of students come from CUNY and SUNY.

11 CHAIRPERSON VALLONE: So, let's just
12 stay with that. So, how do we know that where are
13 those students coming from and how are we drawing
14 that pathway and that career path for students in
15 city schools to know of these opportunities within
16 Life Science? What exactly is the EDC project? Are
17 we coming up with those numbers and where are these
18 students coming from?

19 SUSAN ROSENTHAL: So, EDC has an
20 operator that manages the internship program and that
21 operator starts very early in the fall working with
22 all of the schools across the city to go through a
23 promotional effort to make sure that students are
24 aware of the internship program and that there are
25 sessions to learn about the process to apply as well

2 as learning about what the expectations of the
3 interns are, as well. So, that operator canvasses
4 across the city and also host sessions virtual--
5 well, this past year's been entirely virtual to make
6 sure that that is accessible to students across all
7 five boroughs. In one, actually, suggestion and
8 question I have back to the Council members is that
9 if there are ways that we can further support gaining
10 access to the internship program for your
11 constituents, we would welcome reaching out and
12 partnering with you to help do that.

13 CHAIRPERSON VALLONE: Well, I mean,
14 right off the bat, I haven't had any contact with the
15 operator or whoever the person is who is running the
16 programs. And, you know, I was one of the ones that
17 were advocating to make sure our student [inaudible
18 00:27:38] Council member Cornegy. I see Council
19 member Barron. I see your hand up, so I'll get right
20 to you. Good morning, by the way. This is one of
21 those really jewels. I mean, these are great jobs
22 that are good paying pathways to bringing us to that
23 middle class and beyond and I think you even stated
24 as a projection of a maybe 40,000 jobs. So, the
25 capital investments there, the success is clearly

2 there and I know we will get a chance to pivot back
3 to what you think some of the great successes are and
4 then how we are able to pivot to the pandemic from
5 that. But I think there is the incorporation between
6 our great school districts, private and public.
7 There can definitely be a quick way, with fall around
8 the corner, to let our students know, probably a
9 little bit better, that this pathway and how you can
10 obtain these types of careers through these incubator
11 programs into the capital investments and the RFPs
12 that are coming out. I think we can probably team up
13 with the operator of whatever crew that is doing
14 that. We have over 50 Council members who would be
15 very happy to spread that word and link that
16 information and get these students that opportunity
17 because in the, I guess, post pandemic world where we
18 are still just coming out of it, job creation, small
19 business creation, this type of investment is huge.
20 It's over a billion dollars. It's a direct link to
21 bring that, so I think we can probably do a little
22 better job there. I would be happy to work with
23 spreading that word and I know my-- high schools and
24 colleges and students would heed this opportunity.

2 SUSAN ROSENTHAL: Okay. That sounds
3 great, Chair Vallone. We would love to be in touch
4 with you about that.

5 CHAIRPERSON VALLONE: And, Council
6 member Barron, I know you've got your hand up, so
7 let's turn the floor over the Council member Barron.

8 SERGEANT-AT-ARMS: Time starts now.

9 COUNCIL MEMBER BARRON: Thank you very
10 much. Thank you to the Chair and thank you for the
11 presentation. Just a couple of, I guess, very
12 targeted questions. How many students-- When did
13 the program begin?

14 SUSAN ROSENTHAL: The program began five
15 years ago.

16 COUNCIL MEMBER BARRON: Okay. How many
17 students--

18 SUSAN ROSENTHAL: The announcement.

19 COUNCIL MEMBER BARRON: Okay. How many
20 students have applied or what is the average per
21 year? I guess it's grown. The applications, I
22 imagine, have grown since better knowledge, greater
23 knowledge, of the program has been shared.

24 SUSAN ROSENTHAL: So, the great news is
25 that thousands-- Well, I mean, thousands of students

2 apply for that program every year and I would say
3 somewhere between one and 2000 students each year.
4 It really is a mix of how many students apply as well
5 as the roles that are open from host companies. And
6 so we have had a goal-- and actually, Chair Vallone,
7 this is also to help clarify from your initial opener
8 about the internships program. We have a goal of
9 1000 interns over 10 years. So that's a goal of 100
10 interns per year. And over the past four years, we
11 have reached over 400 interns. And so, we are
12 achieving that goal and then some and we are really
13 thrilled that we have this continued funding to
14 support the ongoing program as well as potentially
15 expanding it.

16 COUNCIL MEMBER BARRON: So, with this
17 expansion, the increase that you are getting for the
18 new year coming up, do you intend to expand the
19 number of participants you have? You're getting
20 double the money. Do you plan to double the number
21 of participants?

22 SUSAN ROSENTHAL: Well, so let's clarify
23 a little bit in terms of the source of funding. So,
24 on the expanded funding for Life Sci NYC, \$10 million
25 of that expanded funding is operating expenses. Of

2 that, half of it over the course of three years will
3 be used to support the internship program and so that
4 is expanded funding for the internship program but it
5 is not-- the full billion dollars is not expense
6 money. It is different sources of funding and so,
7 with that expansion, we are working with Upper West
8 Strategies which is just the operator I mentioned
9 earlier to look into what that expansion could be for
10 the coming year.

11 COUNCIL MEMBER BARRON: So, you don't yet
12 have a targeted number of applicants or participants
13 that will be expected based on this expansion?

14 SUSAN ROSENTHAL: No. Not at this time.

15 COUNCIL MEMBER BARRON: We need to get
16 some kind of gauge, you know, with doubling the
17 money, but only seeing, what? Five percent? 10
18 percent? 50 percent increase in the number of
19 students. And, as we know, the objective is to
20 actually reach the students and provide them with
21 that, so I would like to see if we can't get that
22 number presented to us and we will know exactly how
23 it is expanded.

24 SUSAN ROSENTHAL: Sure.

2 COUNCIL MEMBER BARRON: You mentioned--
3 How many host companies do you have?

4 SUSAN ROSENTHAL: Well, over the course
5 of the four years we have had, we have had over 100
6 host companies.

7 COUNCIL MEMBER BARRON: Okay. And how
8 many have remained over a period of multiple years?
9 Do they come in one year and then they move out or do
10 they have some longevity with the program?

11 SUSAN ROSENTHAL: Many of them are
12 continued partners and continued to take interns year
13 over year. Some of them have not, but the majority
14 have stayed with us. I would request to follow up
15 with you on that data because it does require a
16 little extra precision from what I know at the top of
17 my head.

18 COUNCIL MEMBER BARRON: And do you know
19 why they are no longer participating in? Do we have
20 an idea as to what are the reasons that they don't
21 continue to participate? Something that might be
22 offered or adjusted that would make it more enticing
23 for them to continue?

24 SUSAN ROSENTHAL: So, we will look into
25 that. I will share that, as part of our funding

2 mechanism, we have a mix of companies that are at
3 different stages of their own growth and so we don't
4 want to have companies feel that they cannot
5 participate in the internship program because they
6 are limited in their own financial-- And so, as part
7 of the funding that we have asked for for the
8 internship program actually goes towards stipends for
9 the interns to be paid because we feel it is critical
10 to make sure that these opportunities are available
11 and we also feel like it is required were critical to
12 make sure those interns are paid.

13 COUNCIL MEMBER BARRON: And what is the
14 average amount of the stipend that the interns
15 receive?

16 SUSAN ROSENTHAL: I would have to look
17 into that to follow up.

18 COUNCIL MEMBER BARRON: Okay. And do you
19 have any disaggregated information as to the
20 ethnicity of those who are participating in your
21 program?

22 SUSAN ROSENTHAL: Yes. So, to date, 16
23 percent of them are black, 14 percent are Latino, 25
24 percent are white, and the rest are either Asian or
25 have answered that they are more than one race.

2 SERGEANT-AT-ARMS: Time expired.

3 COUNCIL MEMBER BARRON: Okay. Thank you.

4 Just to briefly wrap up if I may, Mr. Chair?

5 CHAIRPERSON VALLONE: Of course.

6 COUNCIL MEMBER BARRON: Thank you. I
7 would like to know the numbers of participants and
8 how that reflects on the totality of students who did
9 apply. So, you have 16 percent black that you say
10 were participants. Of the applicants? Is there a
11 correlation between that?

12 SUSAN ROSENTHAL: We can look into that.
13 That is really interesting question that I would love
14 to also answer with you.

15 COUNCIL MEMBER BARRON: Okay. Great. And
16 I want to echo what my colleague has said in terms of
17 not just targeting the college level, but looking to
18 see how we can make sure that our high school
19 students are also aware and involved in encouraged to
20 participate in into the degree that they can. Thank
21 you, Mr. Chair, for allowing me the extra time and
22 thank you to the presentation.

23 CHAIRPERSON VALLONE: So, Susan, let's
24 pick up from the internship's actual employment and
25 job numbers. So with the initial investment, you

2 know, there was some lofty numbers of like, I think,
3 expecting 40,000 jobs or so. Can you identify how
4 many jobs were created or what type of pipeline we
5 can expect from the original program?

6 SUSAN ROSENTHAL: Sure. So, the original
7 program, as you mentioned earlier, led to the
8 projections of 16,000 jobs over the course of 10
9 years. And of that initial \$500 million in
10 investment, to date, 192 of it has been contracted
11 and committed and we have forecasted 3458 jobs as a
12 result. The rest of the funding to reach that
13 initial \$500 million, we have visibility to either in
14 the form of RFPs that are out now or have potential
15 pipeline for IDA funding that are-- that go along
16 with them. So, we would anticipate the delivery of
17 the remaining of the portfolio and that pipeline of
18 jobs in the future.

19 CHAIRPERSON VALLONE: So, what are some
20 of the RFPs that you are excited about that are out
21 there now? Is there any opportunity now for those
22 RFPs still continuing or are there other still
23 coming?

24 SUSAN ROSENTHAL: Yes. So, there are a
25 few RFPs that are outstanding and they are

2 outstanding not just because they are out and about,
3 but because they are fantastic. The first one is the
4 life sciences innovation infrastructure RFP that was
5 announced as part of this expanded announcement a
6 couple weeks ago and for that, in a moment, I will
7 ask Dr. Carlo Yuvienko to share more about it. He
8 has been leading this effort and has been
9 instrumental in standing up this RFP. We also have
10 the Pandemic Response Institute RFP that is open now
11 that we are thrilled to really be setting up the city
12 for future public health emergency is and connecting
13 with the different agencies and with the private
14 sector in a more robust way moving forward. And we
15 anticipate making an award for that pandemic response
16 Institute towards the end of the summer. IDA program
17 remains open and we hope and see visibility to a
18 pipeline of developers. We are hoping to put in
19 place additional campuses and incubators for the life
20 sciences industry. Carlo, would you like to add a
21 little bit more about the infrastructure innovation
22 RFP?

23 CHAIRPERSON VALLONE: Yeah. And if you
24 could, those are two great points there. I mean,
25 that RFP for additional campus space is something

2 that I think each of the Council members, if we can,
3 identify a five borough approach to that, that would
4 be really able to link the hub and the new Avenue
5 that is in Manhattan with the-- you know, it is the
6 outer boroughs, but every borough is [inaudible
7 00:38:22] to the success and the growth of it. I
8 think that would really bring the four of the
9 boroughs to that and the second point would be with
10 those RFPs, our nonprofits able to bid on that and
11 how does that work?

12 SUSAN ROSENTHAL: Do you want to start
13 and I will follow up?

14 CARLO YUVIENKO: Sure. Thanks, Sue.
15 Thanks, Council members. So, just to set a little
16 bit of context in terms of the RFP that is right now
17 in the city capital and life sciences innovation
18 infrastructure RFP, this is somewhat related to our
19 2008 RFP entitled The Applied R&D Facilities request
20 for proposals. That was specifically to find the
21 establishment of specialized infrastructure projects
22 that would help advance commercial research and
23 development into a new therapeutic medicines and, as
24 a reminder to folks that this being for city capital,
25 it was restricted to not for profits. It was

2 actually geared towards old lady not for profits, but
3 that could be in a form of a joint venture or
4 partnerships with for-profit entities. As indicated
5 in the January announcement, we issued out for awards
6 for 38 million across those nonprofit institutions.
7 This is one that is out now that we released earlier
8 this month will specialize similarly in
9 infrastructure projects to help commercial R&D in the
10 life sciences. Specifically, expanding the scope of
11 what can be accomplished beyond therapies and
12 medicines. If anything, Covid has impressed upon us
13 that it takes more than a breakthrough medicine to
14 answer the call of the pandemic or a disease or play
15 again, and this case, we are expanding the scope to
16 include medical device diagnostics, research tools,
17 and also biomaterial. We are seeing a lot of
18 activity in the life sciences right now and dovetails
19 very nicely with New York City's incumbent strengths
20 and design and fashion. And so, that is just sort of
21 the just of the RFP that is out right now and that is
22 capped at \$20 million per award and will be accessing
23 the pool love original 150 million in city capital
24 from the 2016 announcement and whatever is left over

2 after the 38 million that we have digitally awarded
3 in January.

4 CHAIRPERSON VALLONE: And so, Carlo,
5 how do you see that vision? How do you see the
6 vision of those RFPs breaking out? Is that going to
7 be new locations? Expansions of existing locations?
8 Growth on the success of the previous? Are we
9 looking to get, as you said, post pandemic we have a
10 different view on things on the types of careers and
11 possibilities and technologies. How do you see that
12 breaking?

13 CARLO YUVIENKO: Yeah. I mean, it is a
14 very exciting time for this particular RFP because
15 the New York City life sciences is in its infancy and
16 so, with every year, it is an entirely new landscape
17 that we get to calibrate to and leverage. And so,
18 when we released that first RFP, the footprint of
19 life sciences, as has been already alluded to on this
20 meeting, that really exists along life sciences
21 corridors and around the existing academic
22 institution. But even in just three years, what we
23 are seeing is a pop up of both private and public
24 private real estate development in both other

2 neighborhoods within Manhattan, but also in the outer
3 boroughs. The Bronx and in Long Island city.

4 CHAIRPERSON VALLONE: How do we
5 integrate that? And I think we can hear from the
6 Council members like maybe there is even a lack of
7 knowledge of what is happening with in the outer
8 boroughs within this new sector that is linking
9 together in this one title of life science. It is
10 wonderful and it is growth, but it is also a little
11 bit for into the current landscape of how the city is
12 working with its employment.

13 CARLO YUVIENKO: Yeah. Our hope is that,
14 with this RFP and also other types of procurement
15 that we will be able to enable the continued seating
16 of those new neighborhoods with that type of capital
17 infrastructure that they need to connect, for
18 example, academic researchers that are on the leading
19 edge of certain companies in commercializing
20 technologies to have a presence in those new
21 clusters. And so, that shares the wealth, if you
22 will, of not just like the capital in the
23 infrastructure, but also the intellectual capacity of
24 our great institution. And so, that one to \$2
25 billion of NIH funding that everyone touts and sort

2 of a question of like why it is not unlocking more
3 commercial ventures, having that have a footprint of
4 activity in those outer boroughs, that is our hope
5 with this RFP and also other types of--

6 CHAIRPERSON VALLONE: You know what?
7 And, if I may, I could just give you a real quick on
8 how it goes from backroad a micro. So, you have--
9 and I know what happens in our district. We have
10 schools that are desperate for afterschool programs
11 for their students. We call them CASA programs and
12 we link up with some of the larger institutions and
13 some of those smaller nonprofits. With that type of
14 capital investment, you can build in an almost
15 automatic afterschool program with the lower schools
16 in the high schools and colleges so that in the areas
17 where you foresee some of the growth that the
18 students and the pathways to these jobs are from day
19 one. And sometimes what we do is we miss that
20 opportunity and it takes years before we link up a
21 school with this new industry and this is something
22 that I am not just saying it is, quote, internships
23 and jobs, but there's a way to-- because it is so
24 new, there is not many of this excitement that we can
25 create a brand-new investment post pandemic that is

2 so needed from day one because we have already done
3 it with other afterschool CASA programs and college
4 programs and getting kids write it from day one with
5 these new companies in the new RFPs that it would
6 just be my advice that using the success of previous
7 types of programs with this, we don't need to like
8 find another 25,000 from any particular Council
9 member or something. We could just be built right in
10 with our colleges and with our CUNY, though with our
11 high school, with that area and you will have an
12 amazing buzz from the students to know that they are
13 getting into this and these new opportunities, post
14 pandemic, that the city is right on it and they are
15 excited for this. But, you know, it's, you know,
16 like one step away from linking it altogether as the
17 speed up this is happening. I think you are tapping
18 into some of the, you know-- I'm not just speaking
19 for myself. There is a lot of excitement out there
20 with each of the Council members' districts, the
21 school districts, the parents. They are asking where
22 do our kids go now in this new virtual, new
23 educational world? And here we have it. You know,
24 Carlo and Susan, you are outlining this exciting new
25 capital investment and careers and jobs, so it's just

2 kind of a matter of bringing it down from whatever,
3 quote, operator is doing that to really linking it
4 down to an educational-- we have a pipeline here. I
5 don't know if you want to chime in on those thoughts,
6 but I think that was what I would foresee that next
7 step to be. I think that that's--

8 SUSAN ROSENTHAL: Chair Vallone--

9 CHAIRPERSON VALLONE: Go ahead, Susan.

10 SUSAN ROSENTHAL: Yeah. I feel you have
11 an honorary seat on our project teams.

12 CHAIRPERSON VALLONE: I'm in. I'm
13 going to have some time on my hands soon.

14 SUSAN ROSENTHAL: Yeah. You know, every
15 project-- we shifted over the past couple of years
16 that every project we do is more than a building. Is
17 more than the space. Every project we do has to have
18 programming that goes with it and talent development
19 that goes with it. And so, I'm going to use an
20 example which doesn't touch on K-12 programming at
21 this very moment, but in the future could, are our
22 partnership at Deerfield Management for Cure at 345
23 Park Avenue South. We actually have a collaboration
24 with Deerfield on talent programming that has
25 specific funding for talent programming. And I will

2 share a great example that took place over this past
3 year. Deerfield launched a program called the Exceed
4 Award and that award is for seed funding for women
5 and minority founders to help catalyze their business
6 for word. They awarded five businesses, five
7 startups, \$100,000 each to support the growth of
8 their business this past March.

9 CHAIRPERSON VALLONE: I think that is
10 exactly what Council member Barron was alluding to,
11 too. It is linking it to small businesses and
12 startups and careers and improvement in every
13 neighborhood and that is a perfect example.

14 SUSAN ROSENTHAL: Great. And so, we
15 will do that. It is incumbent on us to make sure
16 that we are baking in those tell it programs and
17 setting up the next generation for using those spaces
18 and starting their companies and taking their ideas
19 and their science forward.

20 CHAIRPERSON VALLONE: And I think,
21 Susan, I'm now putting my parent hat on. I think
22 there is another opportunity to get that information
23 out to New York families and to let them know.
24 There's a lot of-- fear is not the right word. I
25 guess it is just we are all reeducating ourselves in

2 the post pandemic world and I have two kids coming
3 out of college. I have a little one now in grammar
4 school and they do ask that very difficult question
5 to the parents, what do we do now? So, you know, the
6 career they may have thought they were going for has
7 now kind of shifted and changed and that job market
8 is changed. So, this is the type of light that is
9 post pandemic that kids can wrap their head around
10 and say, that is what I want, but how do I do it?
11 And that is what I think we are missing. While we
12 are launching this, I think that there is a larger
13 message that can come from it and I think that we can
14 tap into-- and you guys never do, but we don't need
15 to reinvent the wheel. You already have that in
16 place. It's just using those resources to let the
17 school districts know and let the parents know and
18 let the colleges and CUNY know that this is what's
19 coming in this life science. You know, 1 billion--
20 you know, \$500 million has been done. A new \$500
21 millions-- and this is how if you are interested,
22 you can get into that because the job is waiting for
23 you. It literally is.

24 SUSAN ROSENTHAL: Well, if I can share
25 two responses to that. The first is you are

2 absolutely right. If you ask the average New Yorker
3 about life-sciences, they would say, I don't know
4 what that is. And so, we have some work ahead of us
5 to make sure that New York City knows what life-
6 sciences is and that there is something there for
7 them. And I hope that you will share with your
8 children that they have many opportunities ahead
9 because the city has so many great building blocks in
10 life-sciences and we are creating those opportunities
11 for them when they grow up and choose work to do with
12 their career. It is something that they can be
13 really excited and look forward to being a part of.

14 CHAIRPERSON VALLONE: And I think that
15 is part of the challenge today on how we spend these
16 last six months together and, hopefully-- you know,
17 Council member Barron had one last question with all
18 its relevant to this exactly, but how do we know the
19 next administration and its Council will continue
20 this type of path? So is any of this going to be
21 baselined? Is any of this going to be included in a
22 budget that will survive us and the crew that is on
23 here?

24 SUSAN ROSENTHAL: Well, my understanding
25 is that, with OMB, we have-- this was declared as

2 part of the city's budget. And so, the city capital
3 and the financial support and the operating expenses
4 have been captured in the city budget to date. We
5 can certainly follow up to make sure and confirm that
6 that is in the book or post this administration. I
7 would also hope that having been through the past 15-
8 16 months together, that the next administration
9 would also see the importance both of the industry
10 for helping prep and get through something like Covid
11 19, but also the resiliency that is brought forward.
12 Ultimately, investing in life-sciences is really
13 about investing in a healthier and stronger New York
14 City.

15 CHAIRPERSON VALLONE: So, I guess Carlo
16 and Susan-- I don't see Peter Koo with his hand up
17 or any other Council members, but if I do see another
18 Council member's hand pop up, I will change. So, I'm
19 just continuing on unless someone else has a
20 question. Oh. Raised hand. Council member Barron.
21 Inez, do you want to follow up?

22 COUNCIL MEMBER BARRON: Yes. Yes. thank
23 you so much. Just a quick question. I'm glad that
24 you asked that question because we want to make sure
25 that we don't-- we are not at the mercy of the whims

2 of others who may be coming behind to pick at this
3 project or not the importance or elevated to the
4 status that it needs. And back to my other question
5 about the data that shows us the ethnicity. I would
6 also like to know the breakdown by borough for
7 children who apply because we say it is based,
8 basically, in Manhattan and Long Island City and we
9 want to make sure that, as we are getting the word
10 out about the spread that the other boroughs are also
11 aware that it is not just restricted to those
12 [inaudible 00:51:49] and partners that are in the
13 city and in Long Island City.

14 SUSAN ROSENTHAL: Okay. Thank you,
15 Council member Barron. Can you clarify for your
16 question when you say--

17 COUNCIL MEMBER BARRON: The data--

18 SUSAN ROSENTHAL: Are you asking about--

19 COUNCIL MEMBER BARRON: The data--

20 SUSAN ROSENTHAL: the internships
21 program?

22 COUNCIL MEMBER BARRON: Regarding the
23 children-- Yes. Regarding the internship. The data
24 for the applicants. I would like to have it also
25 disaggregated by borough.

2 SUSAN ROSENTHAL: Okay.

3 COUNCIL MEMBER BARRON: I had asked for
4 this to be [inaudible 00:52:12] to also know by
5 borough.

6 SUSAN ROSENTHAL: Got it. Well, I do
7 know and share off the top of my head as in my notes
8 on the right that of the internships to date, nine
9 percent of them have been for students in Manhattan,
10 29 percent have been in Queens, 22 percent have been
11 in Brooklyn, nine percent have been in the Bronx, and
12 the remained in Staten Island.

13 COUNCIL MEMBER BARRON: Okay. Great.
14 Thank you. Thank you, Mr. Chair.

15 SUSAN ROSENTHAL: Thank you.

16 CHAIRPERSON VALLONE: Thank you,
17 Council member. And your work with students and
18 education is something that is going to be a legacy
19 for many Council members to come, you and your
20 husband. I think our two families have served quite
21 a long time together and we can be proud looking back
22 on that. So, I guess for the team that is there, how
23 did you see, with the new investments that are being
24 made and committed, which are wonderful, it also
25 comes after we are coming out of the pandemic. So,

2 how did this shift, I guess, with the original 500
3 million in your eyes become in a post pandemic world
4 that we can most utilize those new investments?

5 SUSAN ROSENTHAL: So, I will say with an
6 immense amount of pride that, unfortunately, the
7 pandemic showed the value of this industry. It was
8 such a hard time and we really got through it by
9 having many industry partners come together, whether
10 that was in diagnostics or in vaccines or in the
11 therapeutics that would be used to either treat Covid
12 or the effects of Covid. And we learned a couple of
13 things over the past few years. Even before the
14 pandemic as we were learning as life-sciences was
15 evolving. The first was that there were all our
16 opportunities to be had for clusters across the city
17 and that we will, as mentioned earlier, support the
18 expansion of clusters that exist either on Life Sci
19 Avenue or on the west side, but also putting in place
20 investment in Brooklyn and Queens and in the Bronx,
21 etc. And so, that is really important to us to make
22 sure that the opportunity to develop and grow in life
23 sciences happens across the five boroughs. The
24 second learning that is really an evolution of the
25 industry over the past several years is coming back

2 to that definition of life sciences. I mentioned
3 that it is really the intersection of biology and
4 technology and we are seeing that grow and expand in
5 definition more so every day, whether that is in
6 bioinformatics which is the study of DNA and RNA and
7 the use of technology with that data or in the use of
8 technology in-- will use the example of Open Trons
9 which is a robotics company that helped us build the
10 Pandemic Response Lab. So, using technology to
11 develop new therapies, new technologies themselves to
12 expand the use of biology and deploy that whether in
13 the use of therapeutics or the more technical nature
14 of devices and robotics, but also the adjacent
15 industries that could be the food industry, that
16 could be the energy industry. There are many
17 different applications that biology has and our great
18 universities are studying these things and we now
19 want to make sure that we are expanding the effort to
20 accelerate that growth for New York City and bring
21 that opportunity and keep it here.

22 CHAIRPERSON VALLONE: You know, I
23 just-- As you mentioned robotics and the students, I
24 have a group called the Robo Pandas out in PS 94. We
25 are about as far as you can go before you get to

2 Nassau County and they do this great citywide
3 competition with Legos and robotics and they put
4 these things-- but it's really based on a format
5 from maybe like 10 or 20 years ago, right? This
6 would be a perfect new-- you can create this new,
7 maybe next year, given those groups, the citywide
8 groups that compete on that Robo Tronic panel to see
9 what they come up with all in this new life science
10 course where they can now take something that they
11 have been working on for years and give it to this
12 new technology. Like you say, it is always connected
13 and you had these kids that are six, seven, and
14 eighth grade and already thinking about futuristic--
15 with Legos and robots and combining the two and how
16 they can do a bio dome or something new. They are
17 amazing. Every year they invite me out to judge on
18 it and I hate it because they all look like winners
19 to me. But it is a perfect example of like how you
20 can trickle down. They are already doing it. If you
21 give them just like from middle school, high school,
22 college type plans to work with that, you've already
23 got these great kids waiting for you. I see--

24 SUSAN ROSENTHAL: Yeah. That is--

25 CHAIRPERSON VALLONE: Council member--

2 SUSAN ROSENTHAL: the age that kids can
3 decide what they can do. So--

4 CHAIRPERSON VALLONE: I have a Lego
5 wall downstairs. It's really just medieval times and
6 city. Nothing like what these kids are doing with
7 robotics and combining it. It is pretty amazing.
8 Council member Cornegy, I see you have your hand back
9 up my friend.

10 SERGEANT-AT-ARMS: Time starts now.

11 COUNCIL MEMBER CORNEGY: I'm sorry. I
12 tried my best not to get too far in the weeds on
13 this, but I am concerned that you have the breakdown
14 of the jobs. Are they primarily in manufacturing?
15 Because you mentioned, which is absolutely true, that
16 during the pandemic, we suffered from and you guys
17 picked up a lot of the slack-- but we suffered from
18 the inability to produce things and turn that around
19 quickly. So I know that manufacturing, but we know
20 that there are opportunities on our commercials
21 campuses, especially in Brooklyn. I've got to, you
22 know, [inaudible 00:57:56] in Industry City and in
23 the Navy Yard, the ability to create light
24 manufacturing that includes everything from scalpels
25 to PPE. Do you have a breakdown of what actually

2 goes into what bucket and how much goes into each
3 bucket in terms of jobs and manufacturing?

4 SUSAN ROSENTHAL: So, I don't have a
5 specific breakdown in terms of percentages or numbers
6 to share. I can follow up on that with you
7 afterwards. What I will share, though-- and this is
8 one of the reasons to make an investment like this
9 for New York City is that our calculations estimate a
10 range of different types of skills and different
11 types of jobs. So, for example, there may be what
12 you would expect for scientists and doctors in life-
13 sciences, but there are also, myself included, from
14 experience, there are many, many jobs in business and
15 manufacturing and operations and then there is a halo
16 effect to the neighborhoods that life-sciences
17 clusters sit with in and, if you look at the recent
18 economic downturns, whether that is this past one
19 that we were in or back in 2009, across life
20 sciences, the industry weathers that storm more
21 resiliently. And so, that is something where we want
22 to make sure that we are investing both for the
23 health of New York City, but also for the opportunity
24 for economic resiliency. We know those two are just

2 totally intertwined. That both the health and the
3 economic opportunity.

4 COUNCIL MEMBER CORNEGY: And just
5 lastly, when I thought of life-sciences, I certainly
6 thought about the fight that we have around
7 resiliency in our waterfronts, around reducing our
8 carbon footprint, overgrown all of those types of
9 things and certainly our alternative energy. Does
10 that fall into this life science model, as well?

11 SUSAN ROSENTHAL: So, I think were there
12 are direct applications of biology and technology, it
13 would certainly overlap. I think that there is-- at
14 UDC, we have a number of different industry pillars
15 and we also have, as part of that, focus on various
16 different environmental and sustainable city efforts.
17 And so, if there is more information that you would
18 like on the effort from EDC for that, we would
19 certainly be happy to follow up.

20 COUNCIL MEMBER CORNEGY: Yeah. I mean,
21 in another life, I'm hoping to be able to create a
22 resiliency plan for our waterfronts as the maritime
23 city and as a maritime borough and I just wondered
24 that if-- and I always wondered where I get that
25

2 money from, but if it is already available through
3 your programming, that would be pretty awesome.

4 CHAIRPERSON VALLONE: See, that? They
5 linked it right to you, Council member Cornegy.

6 COUNCIL MEMBER CORNEGY: Yeah. Yeah.
7 I've been sitting and trying not to do this, Chair,
8 but I have to ask.

9 CHAIRPERSON VALLONE: Listen, you've
10 got great visions for your borough, my friend.

11 COUNCIL MEMBER CORNEGY: Yes, sir.

12 SUSAN ROSENTHAL: Yeah. And I will tell
13 you waterfront resiliency is not my personal area of
14 expertise, but I do know that EDC feels it's
15 incredibly important, as well. So, we can certainly
16 follow up offline on that.

17 COUNCIL MEMBER CORNEGY: Thank you so
18 much. Thank you, Chair, for your indulgence.

19 CHAIRPERSON VALLONE: Perfect. Again,
20 maybe if we could just kind of-- because we're
21 coming up to your hour. I don't want to keep you too
22 much past that. You mentioned the Pandemic Response
23 Institute. So, is that something that is going to be
24 out of an actual building? Is that going to be a
25 larger scale so it is going to link the different

2 campuses together? You know, there is always a
3 little creeping in the back of all of our heads of
4 what if something happens again, how will we pivoted
5 and do it differently and better? So, when that you
6 are taking those steps now because it would be naïve
7 to think that there won't be something else coming
8 down the road. It is just that something always
9 seems to come these days. So, we prepare for it.
10 What is this division? What is actually invested to
11 it and how do you see the Pandemic Response
12 Institute?

13 SUSAN ROSENTHAL: So, I don't know if
14 you heard me take a deep breath as you said I hope
15 this never happens again. I also hope this never
16 happens again. Unfortunately, with climate change
17 and with the circumstances that led to Covid, for
18 example, I hope it never happens again, but we can't
19 act as if it definitely won't. And so, it is really
20 imperative for this city to make sure that we are
21 bringing together the various agencies and the
22 various both public and private sector actors, the
23 community business organizations and taking a hard
24 time now and focusing on learning from previous
25 pandemics, including Covid 19. And really focusing

2 on how to stem health emergency use and make sure
3 that we are more integrated into the community and
4 bringing forward connectivity and data and trust as
5 part of that as we move forward. And so, the
6 Pandemic Response Institute is meant to address those
7 issues whether that is for making sure communities
8 have what they need and being connected for being on
9 the forefront of innovation. You know, I think back
10 to last year as EDC was helping stand up supply
11 chains for test kits and overlap for Covid testing.
12 That is not necessarily what you would expect members
13 of EDC to do and so we hope that having a pandemic
14 response Institute will put in place some more
15 dedicated team that is a commitment across the public
16 and the private sector to be that already and to be
17 better prepared if and when something does happen in
18 the future to be able to act very quickly to minimize
19 how long the impact of that pandemic might have on
20 the city. And so, I'm not going to comment too much
21 on the specific set up of the Institute because we
22 are in the middle of the procurement and we have
23 received some really incredible responses to it that
24 we are in the review of now, but we do anticipate it
25 to have a physical presence and to have a robust

2 network. And I would love to take this opportunity
3 to get some really great credit to our partners at
4 the Department of Health and Mental Hygiene to the
5 New York City Emergency Management Team for coming to
6 get there with us and thinking about how can we
7 engage together as a city, as the government actors
8 for the city, but also with our community business
9 partners and to the private sector to bring this
10 forward.

11 CHAIRPERSON VALLONE: So, do you have a
12 general timeline of what you envision that might look
13 like or at least two conceptually think what that
14 would look like in the near future?

15 SUSAN ROSENTHAL: Oh, sure. Sure. We
16 moved very fast. The procurement was released within
17 the past few months. The deadline for submissions
18 was on June 4 and we have just started reviewing
19 those proposals. We anticipate making contingent
20 award with \$20 million of city capital. Or up to \$20
21 million of city capital by the end of this summer and
22 we actually expect the Institute to be putting
23 activities forward at least virtually at the very
24 beginning before the end of this year.

2 CHAIRPERSON VALLONE: Do you see that
3 occupying existing space or do we have to create a
4 new building for it?

5 SUSAN ROSENTHAL: It well really depend
6 on the proposal. The proposals each have their own
7 flavor to them of what they--

8 CHAIRPERSON VALLONE: Well, we don't
9 need an actual-- I mean, you already have the people
10 and the folks already have pivoted post pandemic to
11 do this already. So, if something were to, God
12 forbid, happen sooner rather than later, we are
13 already prepared because you already did it. And I
14 would have to say that that whole interagency
15 cooperation has been something I have been clamoring
16 about for eight years and it always comes from one
17 hearing to the next, oh, this agency does that, so
18 when you have already incorporated that, that makes
19 us happy. You already win. So, with that, I thank
20 you guys for giving us great information. These are
21 the good news is that the city needs in these times
22 and I think, like I said, we have a responsibility to
23 do it a bit better in passing that word on and giving
24 that hope in this time that is happening. This is
25 exactly what we need in the post pandemic world and

2 how the city will continue to rebound. I know we
3 have some panels that have been waiting to go, so I
4 am going to turn it back over to our committee
5 chair-- counsel for Alex to take us through that.
6 So, Susan and Carlo and the team, as always, thank
7 you for your questions and answers today.

8 SUSAN ROSENTHAL: Thank you, Chair
9 Vallone and everyone.

10 COMMITTEE COUNSEL: Thank you, Chair
11 Vallone. We will now turn to the public testimony
12 portion of the hearing I would like to remind
13 everyone that, unlike in our typical Council
14 hearings, we will be calling individuals one by one
15 to testify. Each panelist will be given 10 minutes
16 to speak. Please begin your testimony once the
17 Sergeant has started the timer. Council members who
18 have questions for a particular panelist should use
19 the zoom raise hand function and we will call on you
20 in the order you raise your hand after that panelist
21 has completed their testimony. For panelists, once
22 your name is called, a member of our staff will
23 unmute you and the sergeant-at-arms will set the
24 timer and then give you the go-ahead to begin.
25 Please wait for the sergeant to announce that you may

2 begin before delivering your testimony. I would now
3 like to invite Morais Brown to testify. After Morais
4 Brown, I will be calling on Samuel Sia followed by
5 James Nguyen. Morais Brown, you may begin when the
6 sergeants call time.

7 SERGEANT-AT-ARMS: Time starts now.

8 MORAIS BROWN: Hello. I'm Morais
9 Brown. I'm a biochemistry PHD student at the Albert
10 Einstein College of Medicine in the Bronx and
11 currently interning as an analyst at Hibiscus Bio
12 Adventures, a position I obtained through the Life
13 Sci NYC internship program. I'd like to thank the
14 City Council for welcoming me today as well as the New
15 York City Economic Development Corporation for
16 launching and supporting the internship program.
17 Thank you, Carlo and Sue, as well as the rest of Life
18 Sci NYC team. New York attending Brooklyn Technical
19 High school followed by Florida International
20 University. I was thrilled to return home to New
21 York City to attend Einstein. For a long time, I
22 felt that the weight to have a largest impact on
23 eliminating or at least stymieing modern diseases was
24 through scientific hard work by my own hands. This
25 led to my decision to pursue a PhD in biochemistry.

2 Along my scientific journey, I became inspired by
3 nonscientist like Elon Musk in the energy sector and
4 Ken Frazier at MERK who made impacts and their
5 respective STEM fields without being scientists
6 themselves. Their work made me realize that for my
7 own goals, contributing to global improvement in
8 health doesn't necessarily mean creating the effect
9 of drug. Expertise in other areas such as business
10 development, market research, and marketing are
11 necessary for that successful drug to have its
12 largest global impact. I feel like Life Sci NYC
13 recognizes this, as well, and seeks to provide
14 interns with opportunities needed to develop these
15 skills. As a science student, there are well marked
16 pathways that guide one towards medical school or to
17 pursue the research path via a PhD, however, at any
18 level of science education, it is not always clear
19 how to pursue other pathways within the Life Science
20 industry or even what many of those alternate
21 pathways might be. The Life Sci NYC internship
22 program--

23 SERGEANT-AT-ARMS: Time expired.

24 MORAIS BROWN: issue by providing New
25 York City students with one place where they can

2 learn about opportunities at dozens of companies,
3 many of them startups that would otherwise be under
4 the radar. Then via a single application, students
5 can apply for these positions via a centralized
6 process. I would not have known about most of the
7 opportunities listed by the program without this set
8 up in these companies would not have known how to
9 find me either. Having gained my internship through
10 the program, I have also had the opportunity to
11 attend this three day boot camp where I met and
12 connected with many of the other 120 plus students
13 participating in the program this summer and heard
14 from industry leaders who presented on a range of
15 important topics. I feel that participating in this
16 internship program, I will develop a much more well-
17 rounded skill set in my ultimate pursuits to
18 eradicate the worst of the diseases that infected
19 humanity and I will get to do that here in New York
20 City. Thank you for supporting Life Sci NYC.

21 CHAIRPERSON VALLONE: Wow, soon to be
22 Dr. Brown, you just made this whole hearing
23 worthwhile. That is exactly what we wanted to hear,
24 so congratulations to you. So, if I were to deputize
25 you today and say, okay, Morais, you're going to run

2 this program and make it better or expand it, what
3 would you like to see for the next step of this
4 program? Because this is the team that is on today
5 that can make that happen and, as you can see, we
6 want to expand this to as many students as possible.

7 MORAIS BROWN: That is a good question
8 because I was actually looking for an internship. I
9 had it in my brain and so I sought out-- I did a
10 Google search myself and so I think maybe the
11 advertisement to-- like, for example, I went to Tech
12 and I didn't know directly what I would want to be.
13 Like I didn't know I would want to be a scientist,
14 but if this was like on a poster or like posted over
15 the intercom or something that I was aware of, I
16 would've made my planning much more streamlined even
17 though I found my way eventually and I could be a big
18 improvement. Like just getting the word out in a
19 more efficient manner.

20 CHAIRPERSON VALLONE: Yeah. I agree
21 with you. I think there is such a great template for
22 the growth of this, but I think we are missing some
23 of those on the street and on the school -type
24 details that we can bring that information out to the
25 students and the principles and, you know, it should

2 really be the student's responsibility to search and
3 find it. It should be our responsibility to get it
4 to you and then give you that clear path, especially
5 now, right, as things change. So, what grade do you
6 think would be best impacted to start seeing these
7 opportunities? What age do you think would be best?

8 MORAIS BROWN: I would think junior
9 year of high school because Brooklyn Tech does
10 something unique where they kind of modeled their
11 system based on the college system where your junior
12 and senior years you have a major, quote unquote, so
13 that is really when we kind of-- the age whereas
14 high school students decide and really start thinking
15 about who we want to be when we get out there and of
16 the real world and I think that is the stage we kind
17 of have the idea of the kind of work we want to do an
18 internship we want to apply to.

19 CHAIRPERSON VALLONE: Morais, I think
20 you for spending the time and waiting. I would love
21 to follow up with you today. We've got these two
22 great teams in our office. City Council and EDC and
23 Susan and Carlo, his whole team. So, maybe that is
24 something when all the semesters are done and in the
25 calm of the summer we can think about how to grow

2 this in the fall and the spring-- especially with
3 the new investments that are coming in. I'd love to
4 talk to you more, if that's okay.

5 MORAIS BROWN: Yeah. For sure.

6 CHAIRPERSON VALLONE: Thank you for
7 coming today. Thank you.

8 COMMITTEE COUNSEL: Thank you, Mr.
9 Brown. Next up is Samuel Sia followed by James Flynn
10 and Ben Dubin-Thaler. Samuel Sia, you may begin when
11 the Sergeants call time.

12 SERGEANT-AT-ARMS: Time starts now.

13 CHAIRPERSON VALLONE: And I am just
14 going to jump in, Samuel. Council member Keith
15 Powers is going to be closing out the hearing, one of
16 our committee members also for that. So, thank you,
17 everybody for this hearing. I see Keith Powers
18 smiling and ready to go. So--

19 COUNCIL MEMBER POWERS: I'm ready. Thank
20 you.

21 CHAIRPERSON VALLONE: for the following
22 folks who are going to testify, Council member Powers
23 will have it. God bless everyone. Have a good
24 summer.

25 COUNCIL MEMBER POWERS: Thank you, Chair.

2 SAMUEL SIA: Well, good afternoon,
3 Chairman Vallone and Councilman Powers and members of
4 the committee. My name is Sam Sia. I am the founder
5 of Harlem Bio Space. Harlem Bio Space is an NYC EDC
6 sponsored initiative that opened its doors in 2012 as
7 a shared lab incubator in New York City. At the
8 time, there was a lack of commercial lab space for
9 start up companies, even in Manhattan at that time,
10 almost no affordable commercial lab space. Because
11 of NYC EDC support, we opened up the space to allow
12 innovative companies to pursue their ideas at an
13 affordable rate of less than \$1000 per month. We
14 opened up to a full roster of companies on day one
15 and we have been full over the last eight years of
16 operation. We are proud to have incubated over 60
17 bio tech companies that have raised many millions of
18 dollars in investment. We have also worked with
19 community leaders in Harlem and in all five boroughs
20 to bring STEM to K-12 students from underrepresented
21 backgrounds, including a high school program in
22 collaboration with Columbia University that has walk-
23 in students from all five boroughs, STEM programs to
24 over 600 students in NYC DOE classrooms, a program
25 for elementary school girls called Hypotho-Sisters,

2 and currently bringing a science club to residents of
3 NYCHA housing in the outer boroughs with a focus on
4 Staten Island where we have seen full representation
5 of applicants to our high school major program.
6 Today, not everyone is aware, but New York City is an
7 international pillar in basic research and life
8 sciences. I have worked with Sue, Carlo, and the NYC
9 EDC life sciences team over the last eight years and
10 have seen their incredible efforts to open up for
11 more commercial lab spaces and attract investors to
12 the city. But there are still important gaps such as
13 growth spaces for medium-sized biotech companies and
14 mechanisms to share ideas and infrastructure across
15 research centers. Biotech innovation is happening at
16 a fast and furious pace. It is a large and growing
17 component of tomorrow's economy. New York City has
18 all the ingredients of intellectual, people, capital,
19 and--

20 SERGEANT-AT-ARMS: Time expired.

21 SAMUEL SIA: to be the number one life
22 sciences city in the world. Thank you.

23 COUNCIL MEMBER POWERS: Thank you. Thanks
24 for all you are doing with all the education and the
25 economy are New York City.

2 COMMITTEE COUNSEL: Thank you, Mr. Sia.
3 Seeing no Council member hands raised, we will move
4 on to the next panelist. Next up we have James Flynn
5 from Deerfield Management followed by Ben Dubin-
6 Thaler and Ari Espinal. Mr. Flynn, you may begin
7 when the sergeants call time.

8 SERGEANT-AT-ARMS: Time starts now.

9 JAMES FLYNN: Good morning. It is a
10 pleasure to be with you today and share how
11 Deerfield's CURE is helping to drive New York City's
12 ascent in healthcare innovation. Deerfield has been
13 advancing healthcare or investment, information, and
14 philanthropy for more than 25 years. Today, because
15 of our strong partnership with EDC and folks like Sue
16 that is been amazing, the Care, New York City's new
17 multidisciplinary healthcare innovation campus was
18 made possible. The flexible real estate of the Cure
19 is more than just a physical space to collaborate.
20 It empowers innovators through state-of-the-art
21 technology and extensive programming. As examples,
22 it fosters interactions to support nascent companies,
23 provides professional development and opportunities
24 to learn for entrepreneurs and managers, and
25 cultivate synergies between large and small

2 healthcare companies. Each floor at the Cure is lab
3 ready and digitally cabled in order to support all
4 types of healthcare focused companies. And with
5 these 12 floors, including the collaboration
6 residency, a space where we all come together, the
7 Cure has the capacity for at least 80 companies. We
8 are truly bringing together innovators across
9 academia, government, private, not-for-profit
10 organizations, scientists, engineers, patients,
11 students, and researchers within one campus to
12 achieve the singular mission of enabling everyone
13 that lead a healthier life. The Cure has five
14 classrooms which can convert into a large hybrid
15 enabled conference space, large enough for almost 500
16 people and will provide an egalitarian learning
17 environment where one can be in the far Bronx and
18 Brooklyn and have the same experience as sitting in
19 the room. Through our programming, women will feel
20 heard and supported through initiatives like Break
21 Into the Boardroom and Women in Science, programs
22 committed to addressing the gender gap in life
23 science. And the collective diversity of the
24 healthcare ecosystem--

25 SERGEANT-AT-ARMS: Time expired.

2 JAMES FLYNN: reflect New York City's own
3 population through programs like the Deerfield
4 Fellows Program and companies such as Humanity
5 Health. I will finish up real quick here. With the
6 Cure unique structure of integrating all stakeholders
7 in one ecosystem, it can create unique opportunities
8 for not-for-profit healthcare organizations to
9 benefit from state-of-the-art technology. For
10 example, Deerfield Catalyst, the Cures for profit med
11 tech incubator, will support Code of the Cure, public
12 charity focused on developing children's
13 cardiovascular devices that would not normally be
14 able to make it to market. We have a lofty goal with
15 the powerful mission. During the next decade, we
16 will create a life science and healthcare ecosystem
17 based in New York City which will educate more than
18 100,000 people and include more than 500,000 members.
19 With all this, Cures startups and stakeholders are
20 enabled to turn their ideas and hard work into
21 products and services that serve the collective
22 purpose to and disease. Thank you.

23 COUNCIL MEMBER POWERS: Thank you. And I
24 didn't get the-- I meant to ask you what is the
25 location of the Cure?

2 JAMES FLYNN: We are at 345 Park Avenue.

3 COUNCIL MEMBER POWERS: 345. Okay. You
4 are right out of my district, but that is okay. Good
5 location. And just the status of that? It sounded
6 like you were talking prospectively. So, that is
7 coming online or you are--

8 JAMES FLYNN: So, we have been building
9 furiously during the pandemic. We have a couple of
10 floors that are operational. We are just starting to
11 build out the first labs. The collaboration
12 residency where a lot of the great stuff will occur
13 will be open around September an additional
14 collaboration spaces on the roof, additional lab
15 space will be complete towards the end of the year.

16 COUNCIL MEMBER POWERS: Got it. And is
17 there any reason for that exact location? Was it
18 existing space that you decided to convert or is
19 there any other sort of location based for where you
20 are?

21 JAMES FLYNN: Yeah. We actually looked
22 very extensively in Long Island city. We looked in
23 Brooklyn and we looked at a lot of places. Because
24 we are converging a lot of stakeholders and have
25 relationships with, for example, Columbia, Cornell,

2 Rockefeller, Memorial, Sloan-Kettering, a lot of the
3 academic organizations that, from which the
4 intellectual property columns, we needed to be at
5 some place where everyone could converge. So, when
6 we found the availability of this property, it seemed
7 to fit that bill. Yeah.

8 COUNCIL MEMBER POWERS: Okay. Great.
9 Thank you for testifying and good luck and hope to
10 see you guys get off the ground. Thank you.
11 Appreciate you testifying here today.

12 JAMES FLYNN: Sure. Thank you.

13 COMMITTEE COUNSEL: Thank you, Mr.
14 Flynn. Next stop will be Ben Dubin-Thaler followed
15 by Ari Espinal and Nancy Kelly. Mr. Dubin-Thaler,
16 you may begin when the sergeant calls time.

17 SERGEANT-AT-ARMS: Time starts now.

18 BEN DUBIN-THALER: Council members, thank
19 you so much for the opportunity to speak in support
20 of the Life Sci NYC internship program. Life Sci NYC
21 has been instrumental in Bio Bus's efforts. I am the
22 founder and Executive Director of Bio Bus, the
23 science education nonprofit. Life Sci NYC has been
24 instrumental in our efforts to create a more diverse
25 and inclusive life sciences community and ultimately

2 a more equitable life sciences economy like we have
3 been discussing in this hearing. We have had 26
4 college students in the program since 2018 and we
5 have focused-- Bio Bus focuses on students that have
6 fewer education and research opportunities and the
7 super majority of our students are students of color.
8 Life Sci NYC interns have completed sophisticated
9 research projects, solidifying their own identities
10 as scientists. They have honed their entrepreneurial
11 skills through their work at Bio Bus. One student in
12 particular, [inaudible 01:22:30], exemplifies this
13 work. She designed and implemented a rigorous series
14 of experiments that reveals how and's intent I work
15 and [inaudible 01:22:22] overcame many challenges
16 during her work at Bio Bus through the Life Sci NYC
17 program. Her queen aunt died twice. She confronted
18 the ethics of experimentation on ants to which you
19 actually grown quite attached. [Inaudible 01:22:35]
20 later told us that facing those challenges would
21 support but also independence from her mentors that
22 Bio Bus gave her the confidence and skills to truly
23 consider herself a scientist. This kind of
24 transformation is common in our program. A key
25 indicator is that 96 percent of our former interns

2 responding to a survey have remained on a science
3 career path. And as we have discussed, it is a
4 pathway. Our interns also help work with the 50,000
5 young scientists that come to Bio Buses other
6 programs through our partnerships at DOE and DYCD.
7 And, finally, they also help run public events where
8 we are providing people young, old, in person, an
9 online in all five boroughs with inspiration to
10 join--

11 SERGEANT-AT-ARMS: Time expired.

12 BEN DUBIN-THALER: with inspiration the
13 joy New York's thriving and growing life sciences
14 community.

15 COUNCIL MEMBER POWERS: Thank you.

16 BEN DUBIN-THALER: [inaudible 01:23:33] and
17 thank you for your time.

18 COUNCIL MEMBER POWERS: Thank you. I just
19 for clarification, Bio Bus is a mobile lab? Is that
20 what it is or what is the--

21 BEN DUBIN-THALER: Yeah. We have two
22 mobile apps. We are not just a bus, though. We also
23 have brick-and-mortar labs in partnership with
24 Columbia University and also on the lower East side

2 and we actually just received city Council funding to
3 expand to Queens.

4 COUNCIL MEMBER POWERS: Got it. And where
5 are you on the lower East side?

6 BEN DUBIN-THALER: Well, we are partnering
7 with schools all across the Lower East Side including
8 East Side Community High School, PS 34, and pretty
9 much every school in district 1.

10 COUNCIL MEMBER POWERS: Got it. Okay. I
11 appreciate it. I see Council member Barron has a
12 question. So, we can get to her. Can we unmute
13 Council member Barron, please?

14 COUNCIL MEMBER BARRON: Thank you. Thank
15 you so much. I was listening because I was attending
16 to other matters and I heard the panelist mentioned
17 the Bio Bus and I've had direct experience with them
18 about maybe three or four years ago at our Juneteenth
19 program. We had the Bio Bus, and it was parked
20 outside of the venue where we were having our event
21 and we encourage the community to go on to the Bio
22 Bus and go on to envisage and see the exhibits that
23 they had and see the work. So, I'm glad to have a
24 specific example in one that was quite relevant and
25 quite appropriate and quite exciting and to know that

2 that is a part of the funding that this program is
3 doing. So, I want to support that, acknowledge the
4 great involvement, and we look forward to continuing
5 to have the Bio Bus come to events in our district
6 and encourage people to participate. Thank you.

7 COUNCIL MEMBER POWERS: Thank you, Council
8 member Barron. Appreciate that context and support
9 for that. Thank you. Thank you for your testimony
10 and we will head over to the next panelist. Thanks.

11 COMMITTEE COUNSEL: Thank you, Council
12 members. Next up we will hear from Ari Espinal
13 followed by Nancy J. Kelly and George James. Ari
14 Espinal, you may begin when the sergeants call time.

15 SERGEANT-AT-ARMS: Time starts now.

16 ARI ESPINAL: Good afternoon and thank you,
17 Chair Vallone and Councilman Powers for the
18 opportunity to testify before this committee. I am
19 testifying on behalf of the Construction and General
20 Building Laborers Local 79 to express our strong
21 support for the growth and development of life
22 sciences industry as part of the NYC economic
23 recovery. Local 79, which serves the five boroughs
24 has over 10,000 active and retired members and is the
25 largest laborers local in North America. We believe

2 our city will benefit from an industry poised to
3 create tens of thousands of good paying jobs that
4 CUNY students and young people and New Yorkers from
5 disadvantaged backgrounds can be training for. In
6 addition, as you know, this industry creates
7 lifesaving cures and treatments for diseases. That
8 is why we support development projects focused on
9 growing the life sciences industry which can also
10 improve the health of NYC communities by building
11 with union jobs that provide family health benefits.
12 One key life sciences development project city
13 government should fully support its Center East, the
14 planned expansion to reiterate New York blood Center
15 on Being used to 67th Street. The New York Blood
16 Center is the leading supplier of blood to area
17 hospitals and has worked for decades on lifesaving
18 cures and treatments for sickle cell and other
19 diseases impacting black New Yorkers another New
20 Yorkers of color. The development partner,
21 Longfellow, is a top life sciences developer
22 committing to thoughtful, inclusive development
23 building with union labor and creating jobs for New
24 Yorkers of color and low income households. They
25 have committed to working with local 79 to ensure

2 local residents from these adventurous communities
3 have access to careers both in union construction in
4 life sciences sector. Opponents of this project
5 complain that the new people will crowd their space.
6 We think that people, like our members, New Yorkers
7 of color, public housing, residents, and immigrants
8 looking to work in the upper Eastside medical
9 corridor or simply to seek medical care should be--

10 SERGEANT-AT-ARMS: Time expired.

11 ARI ESPINAL: not kept and excluded.

12 Center East can boost wages for various Harlem, South
13 Bronx, Queensbridge, and other neighborhoods hit hard
14 by Covid. City government cannot afford to allow
15 opposition from multi elites to stand in the way of
16 thousands of family sustaining jobs for communities,
17 life-saving cures, and treatment. Thank you for the
18 opportunity and for me to express our support. Thank
19 you.

20 COUNCIL MEMBER POWERS: Nice to see you,
21 Ari Espinal. I hope you are doing well. Thank you
22 for the testimony and all your work on behalf of
23 working New Yorkers here. So, I appreciate it and I
24 think your [inaudible 01:28:21] there, as well. All
25

2 right. Thanks so much. We will go to the next
3 panelist.

4 COMMITTEE COUNSEL: Thank you, Council
5 member. Next, we will hear from Nancy J. Kelly
6 followed by George James and then Maria Gotch. Nancy
7 Kelly, you may begin when the sergeants call time.

8 SERGEANT-AT-ARMS: Time starts now.

9 NANCY KELLY: Hi, Councilman Powers and
10 members of the committee. My name is Nancy Kelly and
11 I am founding member of NYC Builds Bio. NYC Builds
12 Bio is a nonprofit whose mission is to bring the life
13 science and real estate communities together in order
14 to foster growing life science cluster in New York
15 such as those found in Boston and San Francisco. At
16 a moment when the importance of developing life
17 science infrastructure has been made starkly clear by
18 the Covid pandemic, it is critically important that
19 New York continues to invest in its capacity to
20 support this growing industry. Global crisis has
21 demonstrated the importance of laboratory space and
22 life science and biotech research to develop timely,
23 effective vaccines, but also the potential for
24 biotech to solve many of the planetary problems
25 associated with climate change and other things.

2 2020 was a pivotal year for life science in New York
3 City and in the global market as the industry
4 continuously rose to the challenge is that this
5 critical juncture in our history. Two of New York's
6 leading biotech Pharma companies, the Pfizer and
7 Regeneron, led the way to new vaccines and
8 therapeutics for Covid 19. Pfizer launched the
9 Pfizer Breakthrough Growth Initiative with a \$500
10 million commitment to funding new breakthroughs. The
11 company joined a host of private equity firms that
12 raised or committed over \$6 billion to invest in
13 biotech research and companies post pandemic.
14 Several New York City, such as Schrödinger, Black
15 Diamond Therapeutics, AI Analytics, and Innovation
16 Bio were among those completing IPOs last year and a
17 record number of New York companies raised
18 substantial rounds of private equity during the
19 pandemic, including C16 Bio Sciences, Callie Opie,
20 Red Pin Therapeutics, Compass Pathways, MUA, and
21 Elevation Oncology. Though this hearing is focused
22 on life sciences in New York City in general, I would
23 like to take a moment to speak on the New York Blood
24 Setters proposal which would provide significant
25 additional space for institutional partners and

2 biotechnology firms. This project is a tremendous
3 opportunity for the life science infrastructure here
4 in our city. Needless to say, the Wide Center plays
5 a critical role, not only in New York's life sciences
6 industry, but our national healthcare ecosystem,
7 supplying blood to millions of people and serving as
8 a hub for lifesaving biological research. Thank you
9 for the opportunity to testify on the importance of
10 the life sciences industry to the future of New York
11 City and voice my support for the New York Blood
12 Center essential project and for New York City's
13 continued investment in life sciences.

14 COUNCIL MEMBER POWERS: Thank you. Thanks
15 for the testimony and we will now head to, I think,
16 George James next.

17 COMMITTEE COUNSEL: That is correct,
18 Council member. George James followed by Maria Gotch
19 and George infinite. Mr. James, you may begin when
20 the sergeant calls time.

21 SERGEANT-AT-ARMS: Time starts now.

22 GEORGE JAMES: My name is George James.
23 I am an urban planner. In 2016, New York City had a
24 problem. Investing in life sciences was a priority,
25 but zoning for life science research labs was use

2 group 17, which is an industrial land use which made
3 them very hard to cite, consequently. Deputy Mayor
4 Alicia Glenn had a memo produced to that effectively
5 changed research labs to use group 9, allowing them
6 in most commercial districts. Also in 2016, the
7 Department of Health change to the health code to
8 require that research labs register because, quote,
9 the Department is concerned that an accident at a New
10 York City based high containment research laboratory
11 could have catastrophic consequences, unquote. This
12 year, I have [inaudible 01:32:52] that listing of
13 registered research laboratories. Department of
14 Health rejected the foil because, quote, to release
15 the names and addresses of these facilities would
16 constitute an untenable security risk. So, on one
17 hand, New York City is making these uses easier to
18 cite saying they can co-locate with residences in
19 elementary schools well, on the other hand, New York
20 City is saying that these facilities are too
21 dangerous to even disclose an accident could cause
22 catastrophic consequences. Now, I don't know a lot
23 about this industry, but I do now that we do not make
24 land use policy by decree. I also know that citing a
25 facility that could cause catastrophic harm alongside

2 sensitive uses is land-use malpractice. Deputy Mayor
3 glands memo changing where these facilities may be
4 cited was improper, while the DOB interprets zoning
5 if they want to change their 50 year interpretation,
6 that is changing law and if an agency wants to change
7 law, they must involve the city Council. Considering
8 the potential of catastrophic consequences, I hope
9 counsel will--

10 SERGEANT-AT-ARMS: Time expired.

11 GEORGE JAMES: require the
12 administration to go back and follow our land-use
13 process. Thank you.

14 COUNCIL MEMBER POWERS: Thanks, George.
15 Good to see you.

16 GEORGE JAMES: Thank you.

17 COMMITTEE COUNSEL: Thank you, Mr.
18 James. Next up we will hear from Maria Gotch
19 followed by George Infinite and Najah Valera. Ms.
20 Gotch, you may begin when the sergeants call time.

21 SERGEANT-AT-ARMS: Time starts now.

22 MARIA GOTCH: Good afternoon. I am very
23 excited to be here to testify about life sciences
24 which we believe is one of the great potential growth
25 sectors of the New York City economy, particularly

2 coming out of Covid. We have had a long-standing
3 partnership with the city, EDC, Sue and her team to
4 try to make this belief a reality and we put our
5 money where our mouth is and we have invested over 40
6 percent of our fund and various investments to
7 support the growth of life sciences in New York. We
8 have been tracking the growth of the sector and, when
9 it comes to employment, business formation, and
10 growth city product or economic output, the numbers
11 over the last five years since the city made its
12 investment are all up relative to where the overall
13 city economy is. And, in particular, New York City
14 has done a very good job of attracting investment
15 capital and that is really the key thing because it
16 is the investment capital in the individual companies
17 that allow those companies to create jobs and
18 supports the internship program that we all think is
19 so important to the city. So, in 2020, the city
20 attracted \$2.3 billion of venture capital. That is
21 up three times from the number the year before and
22 that money is ongoing to support the entrepreneur
23 companies in New York City. And how the city is
24 thinking about the future growth and not current
25 proposal to do \$500 million is really about making an

2 investment in the two sides of the equation. The
3 money to support the growth of real estate is an
4 investment in the industry. It is not supporting an
5 individual company, but it is building the
6 infrastructure that multiple companies can use over
7 the coming years to grow their companies, do their
8 research within their wet lab space. And then, the
9 internship program, which we have heard a lot about,
10 we think it is critical for bringing in making sure
11 that a wide variety of people in New York have access
12 to a job. So, we think, in general, a very well-
13 crafted plan by the city--

14 SERGEANT-AT-ARMS: Time expired.

15 MARIA GOTCH: life sciences. And then just
16 a final word that the city's investment is within the
17 context of other groups coming to support the
18 industry. The state has made a big commitment. We
19 have invested in a life sciences incubator program
20 called Indy Bio which every year is cre-- bringing
21 and supporting 20 companies and we believe that will
22 be an important engine to support both the real
23 estate that is being built and also to create jobs
24 and potential internships that the city is paid for.
25 So, we think, again, to conclude, life sciences has

2 great prospects and we think it will be a big growth
3 sector for the city post-Covid. Thank you.

4 COUNCIL MEMBER POWERS: Thank you. Thanks
5 for your testimony and your work here to help been
6 make investments from life sciences here in New York
7 City, as well. Hope you are doing well. We will go
8 to the next panelist.

9 COMMITTEE COUNSEL: Thank you, Council
10 members. Thank you, Ms. Gotch. Next, we will hear
11 from George Infinite followed by Najah Valera and
12 Martin Bell. Mr. Infinite, you may begin when the
13 sergeants call time.

14 SERGEANT-AT-ARMS: Time starts now.

15 ANTHONY GEORGE: Good morning. Thank you
16 for the opportunity to testify before this committee.
17 My name is Anthony George and I am a member of Local
18 79. I am here to express my strong support for the
19 growth and development of the life science industry.
20 As a lifelong New Yorker who grew up in public
21 housing, I believe the city would benefit from tens
22 of thousands of good paying career opportunities for
23 New Yorkers from disadvantaged areas and lifesaving
24 cures and treatments for diseases. One key life
25 science project city Council should fully support is

2 the City East, the expansion and innovation of the
3 New York Blood Center on East 67th Street. The New
4 York Blood Center is the leading supplier of blood
5 for that area hospitals in New York and that
6 development and treatment of sickle cell and other
7 diseases impacting black New Yorkers and New Yorkers
8 of color. In addition, its public health mission,
9 this project will generate thousands of construction
10 jobs with area sustaining wages and benefits to
11 support workers and their families. The development
12 partner, Longfellow, is committed to thoughtfully and
13 inclusive development building with union labor and
14 creating jobs for New Yorkers of color and low income
15 households both union, construction, and in the life
16 science sector. Opponents of this project are
17 complaining about the people crowding their
18 neighborhoods, like many local 79 members that have
19 grown up in Queens Bridge housing in Long Island city
20 just across the bridge from the proposed center. I
21 helped that people like me looking for work in the
22 Upper East Side medical corridor or simply to seek
23 medical care on the [inaudible 01:39:17] residents
24 and residents of East Harlem, South Bronx, and other
25 neighborhoods hit hard by Covid. The city government

2 cannot afford to allow opposition from wealthy elites
3 to stand in the way of thousands of family sustaining
4 jobs for our community and life saving treatments.
5 Thank you again for the opportunity to express my
6 support.

7 COUNCIL MEMBER POWERS: Thank you. Thanks
8 for being here.

9 COMMITTEE COUNSEL: Thank you, Mr.
10 George. Next, we will hear from Najah Valera and
11 then Martin Bell. As a reminder, if you still wish
12 to testify but have not heard your name called,
13 please raise your hand in the zoom chat. Thank you
14 very much. Mr. Valera, you may begin when the
15 sergeant calls time.

16 SERGEANT-AT-ARMS: Time starts now.

17 NAJAH VALERA: Hi. Thank you so much.
18 On behalf of the Greater New York Laborers Employers
19 Cooperation and Education Trust in support of the
20 life sciences industry. Greater New York LECET is a
21 jointly managed trust fund of the Mason tenders
22 District Council of Greater New York. In New York
23 City, we represent 17,000 hard-working men and women
24 in construction and 1200 signatory contractors. I
25 just want to echo what some other folks have said.

2 We want to advocate for a life site sector that will
3 not only work on science sector internships and
4 lifesaving treatments, but will also contribute to
5 the health of our communities by building with union
6 labor that provides family sustaining health benefits
7 and family sustaining wages. Again, I want to echo
8 what folks have said about supporting a key project
9 which is Wanted Center Beast on East 67th Street.
10 The developer is committed to working with Local 79
11 on local hired to being thoughtful and inclusive in
12 the neighborhood and building with union jobs and
13 creating career opportunities for our members and for
14 new internship opportunities and apprenticeship
15 opportunities for new people. We hope that the Upper
16 East Side would welcome people like our members who
17 are largely immigrants and people of color and that
18 our members would also benefit from the lifesaving
19 treatments and cures that the blood center works on.
20 Again, thank you so much for the opportunity to
21 testify.

22 COUNCIL MEMBER POWERS: Thanks for the
23 testimony.

24

25

2 COMMITTEE COUNSEL: Thank you. And now
3 our final panelist will be Martin Bell. Mr. Bell,
4 you may begin when the sergeants call time.

5 SERGEANT-AT-ARMS: Time starts now.

6 MARTIN BELL: Hi. My name is Marty Bell.
7 I support life science. I work in life science, but
8 I am violently opposed to one proposed project you
9 have already heard about which is attempting to use
10 life science bandwagon as a Trojan horse to get
11 approved. I am talking about the Blood Centers
12 propose 334 foot mid-block tower on a narrow side
13 street up a set of the school and a park. As this
14 committee knows, life science hubs can and should go
15 in many locations, but not in every location and the
16 blood center site on East 67th Street is perhaps the
17 worst possible site. It is directly opposite Julia
18 Richmond Educational Complex which is six schools,
19 including one school for children with autism with
20 2000 students drawn from every city Council District
21 throughout the city. That school complex currently
22 enjoys, as you know, Council member Powers-- you
23 were there at the rally. It enjoys bright sunshine
24 all day long. This tower would put it in permanent
25 darkness. It is opposed by every principal and every

2 teacher in every student in that school. You can't
3 be for school children and support the blood center
4 project. It is not possible. The blood center is
5 also across from a park which-- in the tower would
6 put most of that park in shadows all afternoon when
7 it is most use by local seniors and families with
8 school-age children. I would ask that this Council
9 qualified support of life science hubs by requiring
10 that they take into account the direct impact on the
11 neighborhood in which the project is being proposed
12 and the sentiments of the local community. Let me
13 repeat again. You can't support and be in favor of
14 schoolchildren and support the blood center project.
15 It is just not possible. Thank you.

16 COMMITTEE COUNSEL: Thank you, Mr.
17 Bell.

18 COUNCIL MEMBER POWERS: Thank you.
19 Thanks, Marty.

20 COMMITTEE COUNSEL: Seeing no
21 additional hands raised, at this time, once more, I
22 would just like to save your name has not been called
23 and you still wish to testify, please raise your hand
24 using the zoom raise hand function. Seeing no

2 additional hands raised, I will turn it to acting
3 Chair Council member Powers for closing remarks.

4 COUNCIL MEMBER POWERS: Thank you.

5 Thanks, everyone for being here. We have heard a lot
6 of different examples and I think thoughts and ideas
7 around the growth of the life sciences industry here
8 in the future. I think we all recognize its place
9 and importance in our long term economic growth year.
10 So I appreciate and say thank you to EDC and everyone
11 who came to testify here today and to talk about what
12 is the future. Where, how, and what is the role
13 relative to New Yorkers here particularly in our
14 education system. So, I want to say thank you to all
15 the staff from the Economic Development Committee
16 here at the Council. So, thanks to the EDC and
17 thanks for everyone being here today. With that, I'm
18 not Chair Vallone, but I will close the hearing out
19 and thanks everyone for being here.

20 [gavel]

21 COUNCIL MEMBER POWERS: That is me
22 gaveling out. Thanks so much, guys. Thanks so much.

23

24

25

C E R T I F I C A T E

World Wide Dictation certifies that the foregoing transcript is a true and accurate record of the proceedings. We further certify that there is no relation to any of the parties to this action by blood or marriage, and that there is interest in the outcome of this matter.



Date _____ July 26, 2021 _____