

COUNCIL OF THE CITY OF PHILADELPHIA
COMMITTEE ON COMMERCE AND ECONOMIC
DEVELOPMENT

Room 400, City Hall
Philadelphia, Pennsylvania
Monday, March 25, 2024
2:24 p.m.

PRESENT:

COUNCILMEMBER MARK SQUILLA, CHAIR
COUNCILMEMBER MICHAEL DRISCOLL
COUNCILMEMBER JAMIE GAUTHIER
COUNCILMEMBER CURTIS JONES, JR.
COUNCILMEMBER NICOLAS O'ROURKE
COUNCILMEMBER JEFFERY YOUNG, JR.

RESOLUTION 240031 - Resolution authorizing the
Committee on Commerce and Economic Development
to conduct a hearing on the City of
Philadelphia's capacity to prepare individuals
of all educational backgrounds for careers in
the growing life sciences industry...

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1 3/25/24 - COMMERCE - RES. 240031
2 COUNCILMEMBER SQUILLA: Good
3 afternoon, everyone. Good afternoon,
4 everyone. The Committee on Commerce and
5 Economic Development, today is Monday,
6 March 25th, 2024. Welcome to the
7 hearing.

8 I note that the hour has come
9 and a quorum of the Committee is present.
10 To my left is Councilmember Gauthier. To
11 my right is Councilmember Jones and
12 Driscoll.

13 The hearing is now called to
14 order. This is a public hearing on the
15 Committee of Commerce and Economic
16 Development regarding Resolution No.
17 240031.

18 Mr. McMonagle, can you please
19 read the title of the resolution.

20 THE CLERK: Resolution No.
21 240031, authorizing the Committee on
22 Commerce and Economic Development to
23 conduct a hearing on the City of
24 Philadelphia's capacity to prepare
25 individuals of all educational

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2 backgrounds for careers in the growing
3 life sciences industry, with a focus on
4 the cell and gene therapy subsector.

5 COUNCILMEMBER SQUILLA: Thank
6 you so much.

7 Before we call the testifiers,
8 I'd like to recognize Councilmember
9 Gauthier for comment.

10 COUNCILMEMBER GAUTHIER: Thank
11 you, Mr. Chair.

12 I authorized today's hearing on
13 life sciences and workforce because I'm
14 excited about this growing industry's
15 promise to create jobs for residents from
16 all walks of life.

17 The life sciences industry
18 encompasses businesses and organizations
19 whose work centers on the study of living
20 things. It includes a diverse array of
21 fields like biotechnology,
22 pharmaceuticals, and medical research.

23 One of the most dynamic sectors
24 within the life sciences is cell and gene
25 therapy. Companies in this field are on

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2 the cutting edge of medicine, pioneering
3 treatments that can cure conditions like
4 congenital blindness and certain forms of
5 cancer.

6 Given the groundbreaking work
7 that is taking place only a few minutes
8 from here, it comes as no surprise that a
9 2022 report ranked Philadelphia as the
10 fifth best city in the country for life
11 sciences, jumping four spots since 2021,
12 a reflection of the robust talent and
13 resources throughout our region.

14 In 2022, the Greater
15 Philadelphia region was also ranked No. 2
16 among 14 cell and gene therapy hubs
17 across the U.S. And Philadelphia has the
18 fifth highest number of life sciences
19 researchers in the country, and I know
20 that the colleges and universities in my
21 district play a major part in this
22 statistic.

23 While our city's life sciences
24 companies haven't escaped the
25 consequences of the global economic

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2 struggles brought about by the pandemic,
3 the sector's future still shines bright.
4 The breakthroughs happening in this
5 industry will transform healthcare, and
6 these kinds of scientific advancements
7 will not be undone by rising interest
8 rates. And our life sciences industry
9 continues to move at a breakneck speed.

10 In October 2023, the U.S.
11 Economic Development Administration
12 designated Philadelphia as a Regional
13 Technology and Innovation Hub, or a Tech
14 Hub, making the Philadelphia area
15 eligible for significant federal funding
16 on top of the \$9 billion already invested
17 by the private and public sectors in
18 recent years.

19 2024 is shaping up to be
20 another milestone year for the life
21 sciences industry. Already this year
22 Governor Shapiro unveiled his
23 Pennsylvania Gets It Done plan, the
24 Commonwealth's first economic development
25 strategy in over 20 years, which uplifts

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2 the life sciences as one of its five
3 pillars.

4 Iovance, who is here with us
5 today, received FDA approval for their
6 cell therapy that treats certain kinds of
7 melanoma. The West Philadelphia Skills
8 Initiative received \$4 million from the
9 MacKenzie Scott Foundation to further
10 grow its workforce training capacity.
11 And the Keystone Life Sciences
12 Collaborative funded by the Good Jobs
13 Challenge federal grant was launched with
14 a participation of over 50 private and
15 public partners.

16 My deep interest in the life
17 sciences comes not only from the
18 potential for transformative discoveries
19 and historic economic growth but also
20 from the industry's once-in-a-lifetime
21 potential to generate family-sustaining
22 jobs for constituents from every single
23 background.

24 The life sciences job market
25 has been explosive. According to the

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2 Bureau of Labor Statistics, between 2010
3 and 2020, Philadelphia County's
4 biotechnology research and development
5 sector added 4,510 jobs, an increase of
6 nearly 800 percent. And according to the
7 Chamber of Commerce for Greater
8 Philadelphia, the region's cell and gene
9 therapy sector doubled over the past five
10 years.

11 Unlike the tech boom, life
12 sciences companies will hire employees
13 from several different educational
14 backgrounds. For instance, as companies
15 grow out of their R&D phase and receive
16 FDA approvals, their manufacturing arms
17 often have openings for individuals with
18 only high school degrees. These are
19 high-quality jobs that residents can feel
20 good about while also supporting their
21 families. And if we are smart and start
22 now, we can use them to uplift our
23 residents out of poverty and into
24 prosperity.

25 Shortly we will hear from many

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2 different stakeholders, City departments,
3 non-profits, and life sciences companies,
4 all collaborating to provide life
5 sciences training for Philadelphians.
6 Right now the forecasted demand for
7 employees far outstrips the City's
8 capacity to train residents for these
9 positions. We only have a few years to
10 get this right. We do not have the
11 option to sit by and let this opportunity
12 to uplift our residents slip through our
13 fingers.

14 I look forward to hearing from
15 the practitioners on the front lines of
16 this industry and to receiving feedback
17 about what should be done to prepare our
18 constituents for the lucrative jobs that
19 will come online soon.

20 We have a responsibility to
21 ensure that Philadelphians in the highest
22 need neighborhoods have the tools and
23 supports they need to get these jobs, and
24 I look forward to working with everyone
25 in this room to get that done.

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2 Lastly, I want to acknowledge
3 Mayor Parker for her interest in our
4 city's life sciences sector. From our
5 conversations on this topic, I know she
6 will continue to be our steadfast partner
7 in this work.

8 Thank you so much.

9 Thank you, Mr. Chair.

10 COUNCILMEMBER SQUILLA: Thank
11 you, Councilmember. Great job.

12 As we start, we're going to
13 call the first panel, and when you start,
14 we're going to read them in order as your
15 name is called. Just state your name for
16 the record and then proceed with your
17 testimony.

18 Mr. McMonagle, please call the
19 names on the first panel.

20 (Witnesses already seated at
21 witness table.)

22 THE CLERK: Dr. Bryan Tsao,
23 Cait Garozzo, and Jill Gilburg.

24 DEPUTY SECRETARY GILBURG: Jen
25 Gilburg.

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2 THE CLERK: Jen. I apologize.

3 COUNCILMEMBER SQUILLA: Doctor,
4 you want to start first. Just state your
5 name for the record and proceed.

6 DR. TSAO: My name is Bryan
7 Tsao. Thank you, everyone, for having me
8 here today to testify on behalf of our
9 businesses here in Greater Philadelphia
10 for life sciences and its impacts in the
11 region.

12 So my name is Bryan Tsao. I am
13 the Manager of Life Science and
14 Healthcare Initiatives at the Chamber of
15 Commerce for Greater Philadelphia.

16 As many of you know, over two
17 decades ago gene and cell therapy
18 research was pioneered here in Greater
19 Philadelphia region, and over the last
20 decade, the first FDA approved cell-based
21 gene therapy, directly administered gene
22 therapy, and also cell therapy in solid
23 tumors was developed right here in
24 Philadelphia. Today, I am pleased to
25 discuss how we can leverage our past

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2 successes to create a brighter future for
3 Philadelphians.

4 The Chamber began its work to
5 support life sciences industry in 2017.
6 At that time, regional leaders recognized
7 that we needed to capitalize on our
8 innovation assets to compete and grow.
9 That consensus was supported by a
10 Brookings Institute that was released
11 later that same year. The report
12 catalyzed the regional call to action
13 that suggested that local leaders could
14 collectively address some of the greatest
15 impediments to Greater Philadelphia's
16 global competitiveness by collaborating
17 and coordinating at scale.

18 In response to this clear call
19 to action, the Chamber developed the
20 private-sector led and funded action plan
21 that, among other things, leveraged
22 Philadelphia's precision medicine sector
23 and, in particular, our cell and gene
24 therapy assets. We focused on launching
25 a multi-year effort to drive the

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2 perception and reality of growth in the
3 life sciences sector in the region. And
4 today, Greater Philadelphia is home to
5 more than 60 cell and gene therapy
6 research and development and related
7 companies, up from 30 in 2019, and
8 interest in expanding in our region
9 continues to grow.

10 Over the last five years, the
11 Chamber has supported more than 370
12 business expansion projects in
13 collaboration with the City Commerce
14 Department, the Commonwealth of
15 Pennsylvania, and other regional
16 partners. Almost 45 percent of those
17 were in the life sciences sector.

18 Our partners -- sorry. Our
19 efforts continue to fuel interest in our
20 region, which has contributed to life
21 science conventions and meetings being
22 40 percent of the business at PA
23 Convention Center, and that often inspire
24 long-term business opportunities. We can
25 see that collaborative, cross-sector, and

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2 intergovernmental efforts can produce
3 tangible results.

4 The sector growth and interest
5 in our region continues. This progress
6 is based on several factors that position
7 the region for its current and future
8 success. The Chamber's 2020 comparative
9 analysis, which was done with the support
10 of Econsult Solutions, Greater
11 Philadelphia ranked second in the country
12 out of 14 hubs in the U.S. doing work in
13 the cell and gene therapy sector.

14 Because research, development,
15 and manufacturing in these subsectors
16 require a concentration of resources,
17 location really matters for these
18 businesses. Two important features that
19 gave our region a competitive advantage
20 are the proximity to research
21 institutions and access to talent.

22 As a testament to our region's
23 strengths, we were recently awarded a
24 Tech Hubs designation for precision
25 medicine from the CHIPS and Science Act,

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2 which is continuing to fuel our growth as
3 well as attract more funding and
4 businesses to the region.

5 Additional areas of competitive
6 advantages that were outlined in our
7 written testimony include research
8 infrastructure, innovation output,
9 commercial activity, value proposition,
10 and human capital. And talent is very
11 critical to the success of this industry,
12 and Greater Philadelphia is among those
13 metros with the highest concentration of
14 R&D talent. And based on the recent
15 Campus Philly report, we also retain
16 50 percent of the graduates from local
17 colleges and universities, giving us a
18 major competitive advantage over other
19 regions like Boston.

20 Equally exciting is the
21 non-degreed talent our region is
22 beginning to develop. Since 2019, the
23 Chamber has convened a table of cell and
24 gene therapy employers who have been
25 willing to collaborate on shared talent

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2 solutions. As a result of their
3 collaboration, we have seen the launch of
4 multiple training programs focused on
5 preparing adults for high-quality roles
6 at those regional life science companies
7 over the last 18 months alone. From the
8 employer-customized programs between
9 Wistar and West Philadelphia Skills
10 Initiative and Iovance or Vintabio, the
11 Community College of Philadelphia and
12 WuXi Advanced Therapies, opportunities
13 for non-degreed talent are being
14 realized. With successful youth and
15 adult career exposure programs being
16 offered by the University City Science
17 Center and the Philadelphia Education
18 Fund, we are building a pipeline that
19 will remain robust into the future. And
20 these are just a handful of examples
21 among many being developed across the
22 community.

23 All of these efforts will be
24 further amplified through the recent
25 regional collaborations that have come

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2 together to pursue a large federal grant
3 opportunity. Most notable for today's
4 discussion is Greater Philadelphia's
5 successful application to the EDA's Good
6 Jobs Challenge, spearheaded by
7 Philadelphia Works. The funding secured
8 through this initiative catalyzed the
9 creation of the Keystone LifeSci
10 Collaborative, which is being led by a
11 diverse core team comprising of the
12 Chamber of Commerce for Greater
13 Philadelphia, West Philadelphia Skills
14 Initiative, The Wistar Institute,
15 Montgomery County Community College, and
16 Life Sciences Pennsylvania.

17 On March 9th, the Keystone
18 LifeSci Collaborative convened over 20
19 regional biotech leaders and
20 pharmaceutical employers alongside over
21 30 stakeholders in the workforce
22 development ecosystem to identify
23 critical gaps within our life science
24 ecosystem and to help fuel the growth in
25 the workforce. From this meeting, we

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2 identified five priorities our region
3 needs to tackle to improve our ecosystem,
4 and these are strengthening the
5 business-to-business connectivity;
6 developing coordinated strategy for
7 building a talent pipeline; influence
8 policy at local, city, and state levels;
9 raise awareness of life science careers;
10 and marketing the region as a life
11 sciences hub.

12 The stakeholders in the
13 Keystone LifeSci Collaborative will work
14 together to address these challenges over
15 the next three years in hopes to provide
16 equitable economic opportunities for
17 everyone in Greater Philadelphia.

18 Using this type of growing
19 regional collaboration to create and
20 expand innovative workforce models will
21 allow Greater Philadelphia to realize the
22 full potential of this industry. That
23 full potential will create not just
24 life-saving cures but life-saving
25 economic opportunities for residents

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2 throughout our region.

3 We look forward to continuing
4 to work with our partners to advance our
5 shared goals of growing this industry,
6 not just effectively but inclusively.

7 Thank you.

8 COUNCILMEMBER SQUILLA: Thank
9 you so much for your testimony.

10 Ms. Garozzo.

11 MS. GAROZZO: Thank you. My
12 name is Cait Garozzo. Thank you for
13 having me today. I am the Executive
14 Director of the West Philadelphia Skills
15 Initiative, a workforce development
16 intermediary which is a subsidiary of
17 University City District.

18 For the past 13 years, the
19 Skills Initiative work has focused on
20 connecting some of Philadelphia's most
21 prominent employers to our city's
22 greatest asset, the talent that resides
23 in our neighborhoods. For us, the life
24 science industry's promising growth
25 presents both immediate and long-term

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2 opportunities to connect our city's
3 residents to high-quality careers within
4 our neighborhood.

5 University City's world-class
6 institutions and research centers are
7 hubs of discovery, and those discoveries
8 are spawning new ventures within the
9 fields of life sciences, biotech and
10 more. As those ventures grow, career
11 opportunities are created, particularly
12 when companies scale and manufacture
13 their unique therapies, whether that
14 capacity is developed on site or done
15 through a contract development and
16 manufacturing organization, or CDMO.

17 The technicians that work to
18 manufacture these therapies represent our
19 greatest near-term opportunity for
20 driving more Philadelphians without
21 degrees into this industry. To provide a
22 sense of scale, 75 percent of the
23 employees at some of the largest cell and
24 gene therapy-focused companies are
25 biomanufacturing technicians, and this

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2 role is projected to grow to about 500
3 jobs in the next five years here in
4 Philadelphia.

5 Based on the Skills
6 Initiative's work with the region's life
7 science employers, we know that there's
8 an immediate need for biomanufacturing
9 technicians. That need is currently
10 being addressed by programs offered by
11 the Community College of Philadelphia and
12 the Skills Initiative's partnership with
13 The Wistar Institute, to name a few.
14 However, to more fully address the
15 projected needs, now is the time to
16 prepare for the future of
17 biomanufacturing. We see several
18 critical areas that will allow
19 Philadelphia to fully capitalize on the
20 opportunity before us.

21 First, we must ensure that
22 Philadelphians are academically prepared
23 to take advantage of the available
24 training programs, with math skills being
25 especially critical. The Skills

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2 Initiative and The Wistar Institute have
3 operated three life sciences training
4 programs to date. Two have been through
5 the Navy Yard Skills Initiative, our
6 partnership with PIDC, and the third has
7 been based in University City with
8 Children's Hospital of Philadelphia. We
9 learned in running these programs that
10 only 46 percent of the applicants to the
11 program scored at an 11th grade math
12 level in their assessments, which is the
13 level required to successfully perform in
14 training and ultimately a life sciences
15 career. To address this gap,
16 contextualized math programs for both
17 youth and adult learners need to be
18 further developed to match the life
19 science industry requirements.

20 Second, we know that training
21 programs are most successful when they
22 mimic the environment in which the
23 trainees will be working, and we found
24 that Philadelphia lacks the necessary and
25 affordable lab training spaces as we

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2 continue to grow. In a recent report
3 published by the National Institute for
4 Innovation in Manufacturing
5 Biopharmaceuticals, or NIMBL, the authors
6 note that good biotechnology training
7 programs mimic industry and, as such,
8 require specialized laboratory spaces
9 that accommodate cell culture,
10 instrumentation, biomanufacturing,
11 laboratory stations, chemical storage,
12 and prep rooms. Specialized
13 instrumentation and expensive reagents
14 are needed to fill these spaces so that
15 students can master the techniques used
16 in the industry, making follow-on funding
17 for consumables essential.

18 Finally, flexible, high-quality
19 childcare and reliable transportation are
20 especially critical for workers in the
21 industry. Manufacturing environments are
22 on 24-hour schedules, so securing second
23 and third shift childcare and safe,
24 efficient transportation to sites can be
25 an additional hurdle for many

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2 Philadelphians.

3 There is much to do to address
4 these challenges, but we have made great
5 strides as a community, many of us here
6 today. Thanks to the efforts of
7 Philadelphia Works, the region was
8 awarded a Good Jobs Challenge Grant from
9 the U.S. Economic Development
10 Administration to build regional
11 workforce systems focused on high growth
12 industries, including life sciences. The
13 Skills Initiative is leading the life
14 sciences sector work, and in that role,
15 we have brought together a team of
16 experts to build the Keystone LifeSci
17 Collaborative, a regional sector
18 partnership focused on supporting
19 Southeastern Pennsylvania's growing life
20 sciences industry.

21 In coordination with
22 Philadelphia Works and in partnership
23 with the City's Commerce Department, the
24 Chamber of Commerce of Greater
25 Philadelphia, Life Sciences PA, and The

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2 Wistar Institute, among other regional
3 entities, the Keystone LifeSci
4 Collaborative brings senior leadership
5 from regional life science firms to the
6 table to surface key needs that our
7 public and community partners can
8 collectively address.

9 On March 6th, we held the first
10 gathering of the Collaborative, and 23
11 C-suite leaders came together to offer
12 new ideas and potential solutions to the
13 issues that we face. The group of
14 executives clearly identified talent as
15 one of their primary growth concerns and
16 committed to working collaboratively to
17 address that challenge. As the group
18 continues to work together, we look
19 forward to sharing our findings and
20 progress with this body.

21 In closing, the Philadelphia
22 region is uniquely positioned to continue
23 to be a top-tier life sciences hub, and a
24 coordinated, strategic approach will be
25 required to ensure the creation of

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2 equitable economic opportunity.

3 The Skills Initiative is
4 committed to not just advancing its own
5 programs in this space, but to bringing
6 together the employers, communities,
7 educators, and government partners that
8 will be required to craft such a
9 collaborative approach. We look forward
10 to working together.

11 Thank you.

12 COUNCILMEMBER SQUILLA: Thank
13 you so much.

14 Ms. Gilburg.

15 DEPUTY SECRETARY GILBURG: Good
16 afternoon. I am Jen Gilburg. I am the
17 Deputy Secretary of Technology and
18 Entrepreneurship for the Department of
19 Community and Economic Development for
20 the State of Pennsylvania, a long title.

21 All right. First of all, thank
22 you so much, Chair Squilla and
23 Councilwoman Gauthier, for having us
24 here. I think we've been excited about
25 this since December. So thanks. We're

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2 so glad it finally happened.

3 I'd like to kind of talk and
4 testify about what the state government
5 is doing to assist in workforce
6 development for life sciences here in
7 Philadelphia and of course elsewhere in
8 the Commonwealth.

9 As Councilwoman Gauthier said,
10 Governor Josh Shapiro announced in
11 January his new ten-year economic plan,
12 and as we began the process of writing
13 this plan, we traveled around the
14 Commonwealth, including Philadelphia, and
15 held roundtables attended by local
16 business leaders, economic development,
17 and non-profit partners, legislators, all
18 to help inform what the needs are for
19 each of Pennsylvania's regions.

20 One thing we heard universally
21 is the need to support workforce
22 development from high school to trade to
23 college graduates. With an aging
24 workforce, drop in female workforce
25 participation, and out-migration, we run

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2 the risk of over 700,000 unfilled
3 positions within a decade, and that is
4 unacceptable, because then we won't
5 attract businesses.

6 This especially rings true for
7 life sciences here in Philadelphia. For
8 our startups to grow and not be forced to
9 move to states like Massachusetts, New
10 Jersey, New York often as a requirement
11 to receive venture capital, we need to
12 prove as a region that we can create a
13 pipeline of skilled employees.

14 For young people and families
15 to stay in the Commonwealth and to stop
16 that out-migration, they need
17 opportunities for high-paying jobs
18 regardless of their educational
19 achievement. Governor Shapiro strongly
20 believes that Pennsylvanians should be
21 able to chart their own course to
22 success.

23 In his 2024-25 budget, Governor
24 Shapiro has focused on creating
25 opportunities for Pennsylvanians to get

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2 good-paying jobs, championing
3 skilled-based hiring and workforce
4 development. This budget invests
5 2.2 million to support workforce
6 development and workforce needs of
7 Pennsylvania's workers and businesses,
8 respectively.

9 It has \$2 million for Career
10 Connect, which is an investment that will
11 connect employers with talented workers,
12 help create thousands of internships,
13 keep young people in our Commonwealth,
14 and enable Pennsylvanians to secure
15 family-sustaining jobs.

16 He has earmarked 2 million to
17 help businesses transition to
18 skills-based hiring practices away from
19 arbitrary degree requirements.

20 He has \$2 million to build a
21 one-stop shop for career pathways by
22 having a single digital location for all
23 career, education, and training
24 resources. All Pennsylvanians,
25 regardless of whether they are middle

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2 school or mid career, can find resources
3 they need to plan a better, brighter
4 future for themselves and their families
5 all in one place.

6 And he has earmarked half a
7 million to expend and improve the
8 Department of State's Military
9 Occupational Crosswalk, which connects
10 veterans and civilian -- sorry; which
11 connects veterans with civilian career
12 opportunities equivalent to their
13 military experience, something very
14 important for Pennsylvania as well.

15 Relative to life sciences in
16 Philadelphia, we will continue to partner
17 with and to amplify the amazing work of
18 the organizations here. And lots of
19 friends I have formed with the people in
20 the galley there, as everyone is working
21 hard on this. I'm going to call out
22 some. I'm probably going to miss some.
23 This is going to be my Oscar moment where
24 I miss the most important partners, so
25 apologize in advance, but Wistar's

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2 Biomedical Technician Training program,
3 West Philadelphia's Skills Initiative,
4 Community College of Philadelphia,
5 Montgomery College of Philadelphia [sic],
6 HelaPlex Biotechnology Workforce
7 Development Training program, University
8 City Science Center's Building and
9 Understanding of Lab Basics, or BULB
10 program, of course the Skills Initiative,
11 the Chamber. Again, in addition to our
12 world-class research institutes, these
13 programs really train participants in the
14 specific skills for jobs in life sciences
15 within the region.

16 We are looking also beyond PA
17 to what other states are doing who have
18 strong growth in life sciences to see if
19 programs they are running can be
20 replicated in the state. So we're
21 looking at NC Biotech, Mass Life Sciences
22 Center, Pathmaker. Those are examples of
23 training programs that support the needs
24 of life science industry partners to
25 ensure skills of the students map to the

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2 job requirements.

3 And then just details of the
4 budget can be found at the
5 Shapirobudget.pa.gov. Details of the
6 economic plan can be found at
7 PAgetsitdone.com, just for further
8 details of this.

9 So, again, it will be difficult
10 to achieve the economic growth we are
11 worthy of as a Commonwealth without a
12 robust workforce, and the Governor's
13 Administration remains committed to
14 ensuring every Pennsylvanian has access
15 to family-sustaining jobs.

16 Thank you.

17 COUNCILMEMBER SQUILLA: Thank
18 you so much for your testimony.

19 Before we ask for any
20 questions, Councilmember Jones.

21 COUNCILMEMBER JONES: Yes.
22 Thank you, Mr. Chairman, and I want to
23 thank the author of the resolution for
24 leaning in and being forward-thinking
25 about the workforce needed in the City of

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2 Philadelphia.

3 And thank you, all of you, for
4 what you do in your respective roles to
5 bring this about.

6 My question is twofold. First
7 of all, I left this morning EMSCO. That
8 is a brand new office building designed
9 to deal with bio --

10 COUNCILMEMBER YOUNG: They're
11 here.

12 COUNCILMEMBER JONES: They're
13 here?

14 See, I shouted you out without
15 you asking.

16 But that is proof positive for
17 me that this industry is on its right
18 trajectory. That's number one.

19 But there's also Budd Biotech
20 that we're trying to develop in Hunting
21 Park. I know the Third District has all
22 of the great firms, but we have a few
23 too.

24 COUNCILMEMBER GAUTHIER: Yeah,
25 absolutely.

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2 COUNCILMEMBER JONES: So my
3 question is, where is the connect between
4 our high schools? I know I probably was
5 the last class that actually had a
6 working Bunsen burner and little tubes
7 and experiments. Have you reached down
8 granularly into the high schools to
9 see -- you mentioned 11th grade math, but
10 other skills that we can retro-engineer
11 into the schools with equipment to feed
12 this workforce need that you're having?
13 And I know you'll have great answers for
14 that.

15 MS. GAROZZO: I think you're
16 going to hear some other testimony today
17 that will be well aligned to that
18 question. The work that the Skills
19 Initiative is focused on with our
20 partners at The Wistar Institute is for
21 folks 18 and over, just because that's
22 the world that we work in. I know our
23 friends at The Wistar Institute do high
24 school programs. Our friends at the
25 Science Center have high school and below

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2 exposure programs, and I think you'll
3 hear from a lot of partners today that
4 are doing that good work.

5 But you bring up a very good
6 point of ensuring that folks that are in
7 school that are interested in this career
8 both are exposed to it as an
9 understanding what is the career, what
10 are the opportunities, where do you need
11 to focus, and that the work that they're
12 doing in the classroom can be as
13 contextualized as possible.

14 I think what we have found is
15 that folks were really -- in our very
16 specific example around math, these folks
17 are very concerned about taking a math
18 class, but we worked with Temple
19 University's WELL program, and they
20 developed a contextualized math program
21 where all of the math that was taught
22 over nine weeks was relevant to the work
23 they'd be doing in the life sciences
24 industry, and that made it accessible,
25 appropriate, and had a goal attached to

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2 it of getting that job, and that was a
3 great success.

4 So that would be my answer to
5 that particular question.

6 COUNCILMEMBER JONES: Come on,
7 Commonwealth.

8 DEPUTY SECRETARY GILBURG: So
9 we do have a number of programs that we
10 fund around apprenticeship and
11 pre-apprenticeship. We have a lot
12 related to manufacturing where we have
13 high school students engaged with
14 manufacturers to solve some problems, and
15 that can include life science
16 manufacturing. So we do have a number of
17 programs that are encouraging.

18 From DCED, we're sort of mostly
19 focused on after high school, but I'm
20 sure Department of Education has a lot
21 that they're doing with the high school
22 and below even, and I can find out more
23 about that and owe you that answer.

24 COUNCILMEMBER JONES: If you
25 could provide that connection between our

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2 Department of Education and the state and
3 give that to the Chair and the author of
4 this legislation, I think we can kind of
5 make peanut butter and jelly come
6 together and make some bread. So I think
7 that's important, because otherwise we're
8 in a constant cycle of importing people
9 to fit the role of the workforce as
10 opposed to growing them organically from
11 within.

12 DEPUTY SECRETARY GILBURG: And
13 Cait made a very strong point about
14 exposing kids to why they need math, and
15 I see this in manufacturing a lot where
16 kids will have this "aha" moment about
17 how, wow, I always thought math was a
18 waste of my time and now I see how I
19 could use it. And so I think whatever
20 programs we can create as a community and
21 with state support to reach down and show
22 kids why they need to have 11th grade
23 math aptitude for these great jobs and
24 why they need to lean in to math.

25 COUNCILMEMBER JONES: I forget

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2 the school. It's in Lehigh,
3 Pennsylvania, but it's a regional CTE
4 school, and we went to visit this place
5 and they were doing experiments at a
6 young age in the sciences, and they were
7 doing tool and die cutting that was going
8 to wind up on the Space Shuttle, and I
9 literally rode home with municipal envy
10 thinking how they grow their workforce as
11 opposed to what we might be able to do.

12 So any way that you can make
13 those connections, I think that would be
14 worthwhile to the workforce in Philly.

15 DEPUTY SECRETARY GILBURG:

16 Yeah. Thank you.

17 COUNCILMEMBER JONES: Thank
18 you, Mr. Chairman.

19 COUNCILMEMBER SQUILLA: Thank
20 you, Councilmember.

21 Councilmember Gauthier.

22 COUNCILMEMBER GAUTHIER: Thank
23 you, Mr. Chair.

24 First, Deputy Secretary
25 Gilburg, I just wanted to thank you and

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2 Governor Shapiro for everything that
3 you're doing to promote the life sciences
4 in our state and everything that you're
5 doing to support our city. I know I've
6 been with the Governor twice in
7 University City over the last several
8 months, and it's just a very clear
9 indication of his commitment to helping
10 us grow and train people for this sector.

11 We're very excited about
12 Governor Shapiro's plan PA Gets It Done,
13 in particular the investments into
14 workforce development. You know, I think
15 you succeeded at your Oscar's moment and
16 you named all of the high-performing --

17 DEPUTY SECRETARY GILBURG: I'm
18 sure someone is going to get me at the
19 end.

20 COUNCILMEMBER GAUTHIER: You
21 named and gave credit to all of the top
22 performing programs that are in the City
23 and that we have here today, but I wanted
24 to take an opportunity for them to hear
25 from you on what we should be doing to

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2 take advantage of the resources that the
3 state is making available for workforce
4 training and development.

5 DEPUTY SECRETARY GILBURG: So I
6 often make the comment that it is
7 apparent that our state was founded by
8 Quakers, because we're not good at
9 self-promotion. And so I think part of
10 the task ahead to get kids into the top
11 of the funnel, if you will, is really to
12 promote all of the opportunities and the
13 access to that. And I think where one of
14 our biggest gaps is as a state and since
15 we're in Philly today, we'll say in
16 Philly, is that very beginning of the
17 funnel of the pipeline. So how do you
18 get someone who doesn't think they could
19 do this job to step up and get the
20 training so that they can do the job.
21 And I don't know that I have answers
22 today, but that's an area that I
23 personally am hyper-focused on, is how do
24 we get those who don't have parents that
25 work or have a single parent who works

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2 all the time and isn't showing them a
3 pathway, how do we get them to believe
4 that they can do this type of job.

5 And so I think that is a
6 marketing, it's how do we get a bunch of
7 Gen Zers on staff to do a great TikTok --
8 well, I guess we can't do TikTok, but a
9 great Instagram --

10 COUNCILMEMBER GAUTHIER: I
11 think we still can.

12 DEPUTY SECRETARY GILBURG: --
13 Instagram campaign and how do we really
14 think creatively on how we get those kids
15 to the like baseline, and then we have
16 the programs to take them through.

17 It's just that one area I think
18 is -- and it's a struggle everywhere, but
19 how do we get these kids that don't think
20 they could have a high-paying job in life
21 sciences to step up or take that first
22 step.

23 COUNCILMEMBER GAUTHIER: Yeah.
24 I can personally attest to what you're
25 describing and what Councilmember Jones

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2 talked about. I have a 16-year-old that
3 wants to be a biomedical researcher, but
4 that's because of what he was exposed to
5 in school, right? I do not have a
6 science brain. It was him getting
7 involved with the Science Center's
8 Firsthand program when he was in middle
9 school and then Stepping Stones that sort
10 of opened up a whole world. So I think
11 we have to really invest in that
12 exposure.

13 Deputy Secretary, you talked a
14 little bit about what's going on in other
15 states. I wanted you and others who are
16 interested on the panel to share a little
17 bit more about what we should be learning
18 from other regions and what is our
19 government doing, our local government,
20 doing well right now and what are lessons
21 that we should be adopting as we move
22 forward.

23 DR. TSAO: So when I first
24 joined in May of 2022, one of my first
25 tasks was to help develop a plan to

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2 advocate for an innovation fund for the
3 State of Pennsylvania, and thankfully
4 that has come to fruition from Governor
5 Shapiro's budget.

6 When we were doing research
7 into this, we looked at Boston;
8 Cambridge, Massachusetts; and also North
9 Carolina, and as you -- many of you may
10 know, Boston started investing in life
11 sciences back in 2009, a billion over ten
12 years, and has been renewed a couple
13 times since then. So we kind of closely
14 followed their trajectory, how they
15 started with the one billion fund going
16 around Massachusetts and kind of brought
17 the biotech industry out of Cambridge,
18 and then we kind of followed their
19 trajectory of workforce development as
20 well, which is a big part of their
21 Massachusetts Life Science Center now.
22 And I think Deputy Secretary Gilburg
23 mentioned earlier about the Pathway
24 program, which is one of the cornerstones
25 of the workforce development in

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2 Massachusetts that really helps a student
3 or trainee map out their trajectory
4 through the careers. So that's something
5 that we could definitely do.

6 And then for North Carolina,
7 the Research Triangle, they have a
8 state-certified program that they have
9 from -- at the State College of North
10 Carolina and also the community college
11 that people could join in, get the
12 training for biotechnology, and that
13 certification is available to get
14 positions everywhere, anywhere in North
15 Carolina. So it would be really helpful
16 to have something similar, but we
17 definitely want to do it the PA way. So
18 that's really up to the budget and kind
19 of how that policy shakes out.

20 COUNCILMEMBER GAUTHIER: Thank
21 you.

22 Do you want to add anything,
23 Ms. Garozzo?

24 MS. GAROZZO: I will just plus
25 what Dr. Bryan Tsao said in that the

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2 theme is that there is kind of an
3 agreed-upon-by-industry set of
4 credentials. That's what the Pathmaker
5 program is out of Massachusetts Life
6 Science Center. That's what Bryan was
7 describing.

8 Coming out of North Carolina
9 is, that industry has agreed, right, that
10 these non-degree programs achieve a
11 certain set of knowledge, skills, and
12 aptitude, and that that is agreed upon to
13 be a credential of some sort to get in.

14 We're on our way. We're moving
15 in that direction, but I think that is
16 one of the biggest lessons learned, from
17 my perspective, that we should bring
18 here.

19 DEPUTY SECRETARY GILBURG: I
20 would say I've spent a fair amount of
21 time with the woman that runs the NC
22 Biotech at the North Carolina Biotech,
23 and the community colleges -- they have
24 56 community colleges, which is a lot, I
25 think, a lot more than we have, and

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2 they're centrally kind of mandated, but
3 they do partner with manufacturers in
4 their regions and get equipment in. So
5 they're doing practical training on the
6 exact equipment that the students would
7 go and get jobs working.

8 So they have a good
9 public-private partnership with -- and
10 I'm sure Mass does too, but that was one
11 thing that really stood out from the
12 North Carolina program.

13 COUNCILMEMBER GAUTHIER: Wow.
14 Who is paying for that equipment?

15 DEPUTY SECRETARY GILBURG: I
16 think the companies donate the equipment,
17 because it saves them a lot of money in
18 training costs if the students are
19 trained on the exact equipment, so then
20 they don't have to spend three weeks when
21 they get to the job to train. So I think
22 they did the cost analysis and it seemed
23 to work in their favor.

24 COUNCILMEMBER GAUTHIER: Thank
25 you.

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2 Thank you, Mr. Chair.

3 COUNCILMEMBER SQUILLA: Thank
4 you.

5 Thank you all for your
6 testimony. Much appreciated and looking
7 forward to the continued growth.

8 Mr. McMonagle, can you please
9 read the next panel to testify.

10 And while we're waiting for the
11 next panel to come up, before you do
12 that, I want to recognize Councilmember
13 Young is present for the hearing.

14 THE CLERK: Can we please have
15 Unique Stephens, Tylier Driscoll, Veton
16 Meas, and Shawmar Pitts. And I apologize
17 if I butchered anyone's name.

18 (Witnesses approached witness
19 table.)

20 COUNCILMEMBER SQUILLA: Thank
21 you. We'll start with Unique, if you
22 just want to say your name for the record
23 and then proceed with your testimony.

24 MS. STEPHENS: Good afternoon.
25 My name is Unique Stephens.

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2 COUNCILMEMBER SQUILLA: Just
3 bring the mic closer to you.

4 MS. STEPHENS: My name is
5 Unique Stephens. Currently I am a senior
6 at Cheyney University and I intern at
7 Wistar Institute as a lab assistant. I
8 appreciate the opportunity, one, to be
9 here and share my experiences and
10 insights with you today.

11 I am here to discuss my journey
12 through the Biomedical Research Method
13 class at Cheyney University, my summer
14 internship at Wistar, and my current
15 position at Wistar.

16 The Biomedical Research Method
17 class at Cheyney University played a firm
18 role in shaping my understanding of the
19 life sciences. The program provided me
20 with a solid foundation in research
21 methodologies in numerous techniques,
22 equipping me with the skills and
23 knowledge necessary for success in the
24 field, including cell culturing, which is
25 the process of growing cells in a

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2 controlled environment, which is
3 extremely necessary to conduct many
4 experiments. This is a process that many
5 scientists of all levels have to do in
6 order to complete their research.

7 In my current role, I culture
8 my cells because the cells that I use
9 emit a measurable response when exposed
10 to various drugs. In my research, we are
11 using novel plant extracts from South
12 Africa to see what the cellular response
13 will be after extended exposure.

14 Prior to the start of the
15 course, I was worried about what the
16 course would entail, because I had very
17 limited lab experiences, especially
18 because I began college during COVID-19,
19 so all of our lab courses were online. I
20 believe that the professors expected me
21 to have a higher level of skills than I
22 did, but they were extremely thorough in
23 explaining all of the expectations that
24 they had. So all of the techniques, the
25 math, it was very easy for me to

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2 understand and digest.

3 Following my time in the
4 course, I had the privilege of
5 participating in a summer research
6 internship, which further expanded my
7 scientific knowledge with hands-on skills
8 and allowed me to be heavily involved in
9 research efforts taking place in a lab.
10 I learned many techniques that go beyond
11 scientific skills, such as adequate
12 note-taking, collaboration,
13 communication, time management, and
14 patience.

15 My current position at Wistar
16 has both been challenging but extremely
17 rewarding. It has exposed me to
18 progressive research, such as having the
19 chance to work on the creation and
20 testing of a protocol that would help
21 resource-constraint labs analyze data
22 using equipment readily available to them
23 opposed to having to spend tens of
24 thousands of dollars on new equipment.

25 My involvement in life sciences

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2 at Wistar has allowed me to contribute to
3 meaningful projects that have the
4 potential to impact lives positively, and
5 this journey has solidified my passion
6 for the life sciences and fueled my
7 desire to be a part of a team that
8 strives to make a difference.

9 My interest in this specific
10 role in life sciences in general was
11 sparked by the education I was provided
12 in a career and technical education
13 course, CTE course, in high school. This
14 course was called Health-Related
15 Technologies, and it was the first course
16 that broke down the sciences and the
17 anatomy of the human body, but allowed me
18 to also gain hands-on and career
19 experience in healthcare-centered
20 environments.

21 Deciding to continue my science
22 journey in college, this collaboration
23 between Cheyney University and Wistar
24 reminded me heavily of that class that I
25 took in high school and has been a major

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2 factor in encouraging me to continue to
3 learn and be involved with research.

4 Life sciences is an
5 ever-growing field, especially in Philly
6 with many state-of-the-art research
7 institutes and universities present in
8 the City. I wouldn't have imagined that
9 I would be participating in the work that
10 I am doing now back in high school,
11 because there were many factors that had
12 deterred me from gaining interest, such
13 as my reluctance to be involved in any
14 after-school programs because I needed to
15 have a job at the time of the offered
16 programs, and it seemed far fetched that
17 someone from my limited science
18 background would succeed in the field.

19 It is important that positions
20 within the life sciences are open to
21 fresh eyes and have a diverse workforce.
22 Increasing collaborations between
23 education institutes and industry
24 professionals will act as an introductory
25 and transitional bridge for students and

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2 others who want to become involved in the
3 life sciences. Also, the encouragement
4 of employees to offer and endorse
5 on-the-job training for introductory
6 positions and compensation that allows
7 employees the ability to comfortably
8 afford common expenses and help eliminate
9 additional employment barriers;
10 introducing inexpensive or cost
11 retraining in skill development programs
12 such as workshops, seminars, and courses
13 that can also encourage enrollment of
14 these fields and help people who wish to
15 develop these skills.

16 Overall, investing in STEAM
17 education, which stands for science,
18 technology, engineering, art, and math,
19 especially in research-constrained public
20 schools, will encourage the employment of
21 the youth and students of the
22 Philadelphia education system to continue
23 to be inspired to pursue life science
24 careers.

25 And since I wrote this in

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2 December, I've actually been extended a
3 full-time offer once I graduate in May at
4 The Wistar Institute, so I'm very
5 thankful for that.

6 - - -

7 (Applause.)

8 - - -

9 COUNCILMEMBER SQUILLA:

10 Congratulations. That's great to hear.

11 MS. STEPHENS: Thank you.

12 COUNCILMEMBER SQUILLA: Before
13 we move to the next testifier, I'd like
14 to recognize Councilmember O'Rourke, who
15 is present for the hearing. Thank you.

16 Tylier, if you want to state
17 your name for the record and then proceed
18 with your testimony.

19 MR. DRISCOLL: Hello, everyone.
20 My name is Tylier Driscoll. I am
21 currently a laboratory technician at
22 Bioanalysis. It's a gene therapy startup
23 company and biophysics company, and I am
24 also a student at Temple University. So
25 I'm just going to be giving my experience

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2 coming into STEM or STEAM.

3 So as a child growing up in the
4 City of Philadelphia, no matter where I
5 looked to or who I turned to, there was
6 always someone in need of help. The
7 people of my community would struggle
8 oftentimes medically, and subsequently
9 that would lead me to asking myself when
10 I grow up, who do I want to be and how
11 could I best help those around me. Now,
12 even though I wouldn't find the answers
13 to those until years later, I would
14 gradually be drawn to the life sciences
15 as I grew up and aged.

16 I learned about science from my
17 mother, who was a medical assistant, and
18 she would speak to me about what
19 scientists and researchers did in
20 laboratories with their desire and drive
21 to help others. This was one of the many
22 driving factors that pushed me to the
23 answers that I would ask myself all those
24 questions years ago, which was of course
25 STEAM.

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2 Once I got to college, I
3 decided to major in biology at CCP, and
4 eventually an opportunity presented
5 itself to me when my biology professor
6 recommended that I apply to the BTT
7 program rather emphatically. So during
8 my time in the BTT program, which is
9 Biomedical Technician Trainee program at
10 The Wistar Institute, I was given the
11 opportunity to apply knowledge that I had
12 gained during high school and college in
13 a state-of-the-art research lab.

14 The first couple weeks were
15 spent learning various laboratory
16 techniques that would prepare us for two
17 upcoming lab internships or rotations.
18 It was here that trainees like me built a
19 foundation for the upcoming rotations
20 through learning and applying molecular
21 biology techniques and concepts. These
22 include simple techniques from
23 micro-pipetting to polymerase chain
24 reaction, plasma introductions, ELISAs,
25 and the list goes on and on.

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2 I had one rotation that was
3 spent in an academia laboratory and
4 another at an industry laboratory. My
5 first rotation was spent in my current
6 job, which is Bioanalysis, where I was
7 introduced to analytical testing
8 techniques such as AUC and HPLC, which
9 stand for analytical ultracentrifugation
10 and high-pressure or performance liquid
11 chromatography.

12 The structure of the BTT
13 program was key to my success while I was
14 at Bioanalysis and my second rotation at
15 the Montaner Lab, of course. The weeks
16 that Dr. Shuda McGuire and a few others
17 spent guiding us built my confidence
18 going into Bioanalysis and was the
19 foundation of my success during my time
20 there.

21 While working with scientists
22 and QA professionals, I was tasked with
23 giving a presentation after my rotation
24 and also instructed to write a paper
25 where I detail my experiences and

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2 research that I participated in. These
3 two assignments aided in my curiosity and
4 desire to know more about the techniques
5 and principles that I was learning.

6 BTT helped me by giving me the
7 tools needed to succeed while
8 simultaneously allowing me the freedom to
9 learn, which was really important.

10 Overall, I'd like to ask the
11 City Council to keep my story in mind, as
12 I am one of many students who share a
13 passion for the life sciences and story
14 with the BTT program. I genuinely
15 believe that programs such as the BTT
16 program and future programs in the
17 Wistar -- at The Wistar Institute like
18 the Biomedical Research Technician
19 program deserve greater visibility and
20 representation in Philadelphia high
21 schools and colleges.

22 As a Philly native who attended
23 Science Leadership Academy High School,
24 if I had access to a program such as this
25 one earlier, I'd be even further along in

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2 my career, because I'd have gotten an
3 invaluable experience in programs catered
4 to applying my pre-existing knowledge in
5 STEM. Of course I'd also have the
6 opportunity to further develop that
7 knowledge as well. And, most importantly
8 to me, like I didn't have -- I didn't
9 know what it looked like to exist or work
10 in a lab, because we didn't have the
11 opportunity. So I'd also have been able
12 to experience what a STEAM career looks
13 like in the real world.

14 Thank you.

15 COUNCILMEMBER SQUILLA: Thank
16 you. Thank you so much for your
17 testimony. Great job.

18 Veton, I guess state your name
19 for the record and then you can proceed.
20 Just pull the microphone a little closer
21 to you.

22 MS. MEAS: Sure. Hello,
23 Councilmembers. My name is Veton Meas,
24 also known as V, and I am a graduate and
25 alumni of the biomedical program from The

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2 Wistar Institute and the West

3 Philadelphia Skills Initiative.

4 I'm currently an aseptic
5 manufacturing technician at Iovance
6 Biotherapeutics. I would like to first
7 thank Iovance and everyone involved for
8 giving me the opportunity to speak about
9 my experience.

10 My journey in the life science
11 interest started off with me searching
12 for more purpose in life. I've always
13 had an affinity for science, but I had
14 personal setbacks that did not allow my
15 dream to come into fruition.

16 Before working at Iovance, I
17 was actually working as a barista at a
18 cafe in Kensington and I was struggling
19 to make day-to-day -- I was struggling to
20 make ends meet day-to-day. I remember I
21 was commuting for almost an hour to work
22 every morning on the Market-Frankford
23 Line and walking under Huntingdon Station
24 and observing my surroundings and just
25 feeling totally demoralized because of my

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2 environment. I just felt like I was busy
3 surviving and not living. I felt like I
4 was constantly at my wits' end.

5 A lovely regular of mine from
6 that cafe that I was working at would
7 empathize with my struggles, and she
8 provided me a brochure on the biomedical
9 program that I'm now an alumni of. By
10 happenstance, I was able to turn my life
11 around, and the rest was just history.

12 I can say that I now have more
13 purposes now that I have a role in aiding
14 patients who are afflicted by cancer.
15 Because I was able to change my life
16 through happenstance, my big question
17 today is, how can the City of
18 Philadelphia support more people to find
19 out about these specialized programs, be
20 admitted and complete the training?

21 I often hear my peers and
22 colleagues emphasizing how we are in the
23 same place in life, but the difference is
24 that they have a degree, with
25 insurmountable debt, and I merely have a

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2 high school diploma. If they knew that
3 they did not have to go through rigorous
4 courses in local colleges or prestigious
5 universities, they may have opted for a
6 program that my cohort and I completed.

7 After much research, I've
8 learned that furthering skill sets or
9 education comes with a big price, and
10 there are not enough avenues to advance
11 in careers in the life science industry
12 without accumulating debt.

13 Students grade 9 to 12 should
14 have access to information and resources
15 on these specialized programs if they
16 aspire to have a career in the life
17 science industry, and local universities
18 and colleges should try to partner up in
19 their cities to provide students more
20 information on these specialized
21 programs.

22 Thank you.

23 COUNCILMEMBER SQUILLA: Well,
24 thank you. And all your testimony too
25 shares not only the challenge but the

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2 opportunities that are out there for our
3 young folks, and hopefully we could get
4 that information out there by having a
5 hearing such as this.

6 Councilmember Gauthier.

7 COUNCILMEMBER GAUTHIER: We
8 have one more.

9 COUNCILMEMBER SQUILLA: We have
10 one more? Oh, yeah. I'm sorry.
11 Shawmar.

12 MR. PITTS: Shawmar, yes.

13 Hi, everybody. Good afternoon.
14 I got a little cold, so my throat is
15 hurting a little bit.

16 But first thing I want to do is
17 acknowledge these youngsters up here
18 today. Man, I'm so proud of y'all, for
19 real, seriously. I'm really proud of
20 y'all.

21 - - -

22 (Applause.)

23 - - -

24 MR. PITTS: The hard work that
25 y'all doing, an example that you're

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2 setting.

3 I'm here today -- my name is
4 Shawmar Pitts and I'm a lifelong
5 Philadelphian and I'm the Co-Manager and
6 Director of Philly Thrive, and I'm
7 commenting today on this resolution
8 because Philly Thrive as an environmental
9 justice and housing justice organization,
10 we represent hundreds of Philadelphia
11 residents, mostly based in Grays Ferry
12 but not limited to Grays Ferry. And I
13 will be talking about the effects life
14 science developments have on our
15 neighborhood and the need for early job
16 training and community investment and how
17 life science developments can support
18 green jobs and real community engagement.

19 As mentioned in the resolution,
20 many life science developments are
21 located immediately next to high poverty
22 and high unemployment neighborhoods.
23 According to the 2022 American Community
24 Survey, the 19145 zip code in our
25 neighborhood has an employment rate of

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2 only 60 percent. Grays Ferry in South
3 Philly is surrounded by five planned or
4 already existing life science and
5 biotechnology developments with budgets
6 totalling over \$1 billion.

7 These existed developments are
8 already putting significant pressure on
9 our community. Rising housing costs are
10 forcing out long-term Black residents.

11 Between 2016 and 2021, the
12 median home prices doubled in Grays
13 Ferry. Rents increased, and wealthier
14 residents moved in. The median household
15 income went from \$32,000 to \$58,000 and
16 particularly in the neighborhood track
17 that doesn't include PHA housing. Black
18 residents decreased from 71 percent of
19 the population to just 33 percent in just
20 five years.

21 We support increasing job
22 opportunities for low-income
23 Philadelphians, but what good will those
24 jobs be if those same residents are
25 getting pushed out of the neighborhood?

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2 We need development and job
3 programs to go hand in hand with policies
4 that keep long-term residents in their
5 homes, such as home repairs and truly
6 affordable housing. And I'd like to call
7 it low-income housing, because affordable
8 got a few different definitions, you
9 know, depending on who you ask, right?

10 Now, when it comes to job
11 training, we applaud the School District
12 for emphasizing STEM education. And I
13 just learned a new acronym from them
14 today, STEAM education, right, as well as
15 career and technical programs.

16 These are the type of programs
17 we need in our K through 12 schools.
18 These programs and investments in
19 education will not only prepare students
20 for well-paying jobs in the life science
21 industry, but also serve to reduce gun
22 violence.

23 A study done by the City in
24 2021 found that there is a strong
25 correlation between high unemployment and

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2 rates of gun violence geographically in
3 Philadelphia. And I'll use myself as an
4 example. I went to Audenried High School
5 at 32nd and Tasker Street, and when I
6 went there, it was a school that prior to
7 was a junior high school, and it was old
8 and it was in disrepair and it was like
9 crumbling like right around us. We
10 didn't have a robust budget for
11 after-school or extracurricular
12 activities or like the sports programs
13 and things of that nature.

14 And since then, Audenried,
15 since I've been there -- that was a long
16 time ago, right? Time flies. But since
17 then, right, Audenried, they tore it down
18 and they built a new school, and the
19 whole mindset, you could see a change in
20 the students in the whole mindset.

21 When I went there, it was like
22 get ready to gang war. That was the
23 whole atmosphere. Just get ready for the
24 gang war when you get there, just how dim
25 the lights was and how dull the paint was

1 3/25/24 - COMMERCE - RES. 240031
2 and just how it was just falling down and
3 dilapidated. It just was a bad space to
4 be in. It brought bad energy to us.

5 So now they built the new
6 Audenried, and it became a charter
7 school. And shout-out to Audenried,
8 because now our girls basketball team,
9 you know, we contending for the state
10 title now, right? And we won the public
11 league title, right, two years in a row,
12 where as though you couldn't even think
13 of that back in the day, because why?
14 Because it's not in the budget. But now
15 you see just a little bit of investment
16 what can happen, right?

17 So we need investment in our
18 schools and we need investment in our
19 community, because I want my community
20 members and the youngsters in my
21 community to turn out like these young
22 people right here, right? And, you know,
23 it gives me great -- I just feel great
24 just sitting up here with them, right?
25 Like this is a possibility in my

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2 neighborhood. And I wish I could have
3 brung the kids that come to the
4 children's program at Philly Thrive just
5 to see people that look like them and
6 that come from where they come from and
7 what they're doing in front of City
8 Council right now testifying about life
9 science and how it affected them and how
10 it benefited them.

11 And I believe with my community
12 now where we stand with life science
13 campuses like literally surrounded my
14 whole community, that we need to invest
15 heavily in our communities so that --
16 because what happens is in the past,
17 things will come and things will go
18 because there's no investment in our
19 community, so those opportunities just
20 not going to be there for us.

21 But now we know it's coming.
22 It's here already. So let's invest in
23 our community where we can have the
24 turnout for a lot of children to be just
25 like them. This is an example right

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2 here. We know it could be done. They
3 here -- living proof right here, right?

4 So I just wanted to say that,
5 because now -- let me get back on track.

6 Our newly elected Mayor said it
7 best. We want Philadelphia to be the
8 safest, cleanest, greenest big city in
9 America. Investing in job training in
10 low-income neighborhoods will make our
11 city safer. Life science developments
12 also give us the opportunity to make our
13 city the greenest big city in America.

14 All new large developments must
15 be fossil fuel free. And when I say
16 "fossil fuel free developments," I mean
17 more green jobs, not just inside the life
18 science developments but on the outside,
19 doing the building.

20 The City needs to focus on not
21 only training our young people for jobs
22 in the life science industry but also on
23 green jobs. Philadelphia can be a leader
24 on that front as well.

25 Finally, Philly Thrive has been

1 3/25/24 - COMMERCE - RES. 240031
2 negotiating with Hilco on the Bellwether
3 District for close to four years. The
4 City can support its own job training
5 programs and equitable hiring practices,
6 and the City can enforce best practices
7 when it comes to developers.

8 Philly Thrive had to work for
9 three years to achieve an in-person
10 public community meeting for the
11 Bellwether District, and there's no way
12 that should be the case.

13 We still haven't gotten the
14 answers to the questions that we asked at
15 that public meeting coming up on a year.
16 It says here over six months ago, but
17 it's close to a year now. The current
18 experience of our RCO leaders, the
19 registered community organizers, is that
20 developers come in and always promise
21 jobs that never come. We still don't
22 have transparency on Hilco's hiring of
23 who is working over at the Bellwether
24 District now or what the job training
25 program is going to look like.

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2 Community benefits agreements
3 can be a key strategy to ensuring that
4 job training programs and hiring
5 practices benefit both the community and
6 the developer. However, our current
7 experience is that the power dynamic at
8 the negotiating table is uneven. We need
9 Councilmembers to support -- we need the
10 Councilmembers' support to queue the
11 process in the earliest phase of
12 development right away, like our
13 Councilmember Gauthier, like she has
14 done, to ensure that there is an adequate
15 amount of time for the process. It is
16 through CBAs and community input that we
17 can have even more successful job
18 training and employment opportunities for
19 the communities that need it most.

20 We at Philly Thrive, we know
21 that Philadelphia has the potential to be
22 the safest, the greenest big city in
23 America. Life science development has
24 the potential to help us get there, but
25 only if done with equity at the

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2 forefront. Job training and employment
3 programs for the neighborhoods with high
4 poverty and high unemployment rates must
5 go hand in hand with policies that keep
6 people in those neighborhoods and not
7 pushed out.

8 Job training must begin at the
9 high school level, and I even say at the
10 middle school level, which can play a
11 role in decreasing gun violence among our
12 young people. We must think about green
13 jobs, installing solar and renewable
14 energy, to make sure that all new
15 development is fossil fuel free.

16 Finally, Councilmembers need to
17 offer incentives for developers to
18 actively and transparently engage with
19 the community to ensure it is those
20 community members receiving the good
21 green jobs we all need and deserve.

22 Thank you so much.

23 COUNCILMEMBER SQUILLA: Thank
24 you so much for your testimony, and I
25 know Council President Johnson has been

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2 very in tune with what's going on there
3 and helping to work the community to
4 engage with Hilco.

5 But I do know that we do have a
6 couple of -- the Chair recognizes
7 Councilmember Gauthier.

8 COUNCILMEMBER GAUTHIER: Thank
9 you all for your testimony. I did want
10 to -- thank you, Shawmar. Thank you,
11 Mr. Pitts, for your testimony. I think
12 it was really important, and I think
13 that's the reason why we're here today,
14 right, to make sure that there is equity
15 in this.

16 Even thinking about in my
17 district, the University City Townhomes
18 was demolished the other day.

19 MR. PITTS: Yes.

20 COUNCILMEMBER GAUTHIER: That's
21 partly -- part of that story has to deal
22 with the growth of the biotech and life
23 sciences sector up and down Market
24 Street, right, because it becomes more
25 lucrative for someone to opt out of

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2 low-income housing to potentially build a
3 research campus or some type of life
4 sciences development. But the reason why
5 I and this Council stood up for those
6 families is because we're not going to
7 throw people away in the name of economic
8 development.

9 So it's imperative that we
10 invest in training so that people can get
11 these jobs. It's imperative that we
12 undertake anti-displacement strategies to
13 make sure that people, Black and brown
14 people specifically, remain in our
15 neighborhoods.

16 And so for me, the opportunity
17 here is to show something different,
18 right? We've seen cities where tech has
19 exploded, for example, displacing lots of
20 folks as the economy grew, but this can
21 be an opportunity for Philadelphia to
22 show how people can grow with industry
23 and how we can use the growth of industry
24 to lift our current residents, not people
25 that we're going to replace them with,

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2 right, current residents out of poverty.

3 So thank you very much for
4 coming and giving that context, because
5 that's a big part of why we're here in
6 the first place.

7 And I want to say to all of you
8 guys, we're so proud of you. We're so
9 proud of you. It was so inspiring to
10 hear all of your testimonies, and you're
11 blazing a path that other young people in
12 our city can follow, right? There is no
13 reason with the growth of science and
14 biotech and cell and gene therapy that
15 Philadelphia shouldn't be turning out the
16 most scientists in the country, the most
17 scientists of color in the country. So
18 that's a new goal, right, for young
19 people to be able to follow in your
20 footsteps because of all of the
21 opportunity in this space.

22 I wanted to ask you all --
23 Unique, you gave some excellent
24 recommendations for how we can be
25 supporting folks who are trying to get

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2 into this sector, but I wanted to ask the
3 rest of you, and if you want to expound
4 too, Unique, what services or supports do
5 you wish that you had while you were
6 pursuing this career in the life sciences
7 sector? And what should the City be
8 providing for learners and jobseekers
9 that do want to follow in your footsteps?
10 Anybody can start first.

11 MS. STEPHENS: So similar to
12 what Shawmar said, I went to Sayre --

13 COUNCILMEMBER SQUILLA: Can you
14 just state your name. Before you speak,
15 just state your name again.

16 MS. STEPHENS: Okay. Unique
17 Stephens.

18 Similar to what Shawmar said, I
19 went to Sayre High School in West Philly.
20 So we weren't really exposed to science.
21 Of course we had chemistry, physics,
22 biology, but I never got the chance to
23 dissect a frog like a lot of people do.
24 So my experience in science was very
25 limited to just the teacher telling us

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2 what was supposed to happen instead of
3 having hands-on experience.

4 So I think it's important to
5 have that hands-on experience while also
6 making sure that the students are able to
7 understand what you're trying to teach,
8 because a lot of times the teacher -- I
9 remember in biology she would put on a
10 song to try to get us to understand what
11 the organelles within a cell are in.
12 Sure enough, about eight years later I
13 still remember that song. So it's all
14 about accessibility and making sure that
15 you're getting hands-on experience as
16 well.

17 I think that it's hard for me
18 in high school to see myself here,
19 because I didn't see myself going to
20 college, and I think that's a similar
21 story for a lot of other people. So
22 having programs where college isn't the
23 only way to get there will also be very
24 important to helping that situation grow.

25 COUNCILMEMBER GAUTHIER: Thank

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2 you so much.

3 Veton.

4 MS. MEAS: My name is Veton

5 Meas.

6 Something that I think that the
7 School District of Philadelphia and other
8 resources can accommodate students in the
9 future is having a lot of professional
10 mental and emotional support for
11 students. In my personal experience, a
12 lot of my setbacks actually started back
13 in high school.

14 For background, I went to
15 Franklin Learning Center, and my major
16 back in high school was health-related
17 technology. So my affinity for and love
18 for science actually started back then.
19 However, I went through a lot of personal
20 challenges that prevented me to actually
21 further that. So I believe that mental
22 health and counseling should be provided
23 for students.

24 COUNCILMEMBER GAUTHIER: Thank
25 you so much.

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2 Tylier.

3 MR. DRISCOLL: Tylier Driscoll.

4 So in my experience, I went to
5 Science Leadership Academy, which was, as
6 many of you could guess, was dedicated to
7 learning science. So, you know, in my
8 experience, we had a lot of science
9 classes, but some of them weren't
10 necessarily -- like our biology and
11 chemistry classes were combined, and
12 that's -- going into college, I would
13 have preferred them to be separate,
14 because I had to relearn biology and
15 chemistry a little bit separately.

16 I think to support other people
17 and future students in the Philadelphia
18 area, I would say there needs to be a lot
19 of outreach. I know -- I have brothers
20 that are in Boys' Latin High School.
21 They don't have the programs that I had
22 access to in high school. Additionally,
23 I also had to work a job in high school
24 at a senior center, so I couldn't even
25 really partake in a lot of these programs

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2 that were offered to me. So I think if
3 there was more incentives financially for
4 students to be able to participate in
5 these programs, that would be great.

6 COUNCILMEMBER GAUTHIER:
7 Councilmember Young, were you in line for
8 questions?

9 COUNCILMEMBER YOUNG: Yeah. I
10 just have a couple of questions for the
11 young people on the panel.

12 The opportunities that you
13 participate in today, like how did you
14 hear about them?

15 MS. STEPHENS: So I actually
16 heard about it -- do I have to say my
17 name again?

18 COUNCILMEMBER YOUNG: No.

19 COUNCILMEMBER GAUTHIER: No.

20 MS. STEPHENS: So I heard about
21 the partnership with Wistar because of my
22 advisor at Cheyney University. So
23 because there is the biomedical research
24 course at Cheyney University, my advisor
25 said, Unique, I think that you would be a

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2 good fit for this course. Otherwise, I
3 don't think I would have enrolled in it.

4 And then the full-time position
5 at Wistar will actually be what they did
6 a couple years ago, which is the research
7 apprenticeship. So I heard about that
8 because as I was doing my work in the
9 internship, the person who is over me
10 said, Unique, I think you would be a good
11 fit for the apprenticeship, so then I
12 applied for that as well.

13 MS. MEAS: As I said earlier, I
14 actually knew about the BTT program
15 through a regular of mine at a cafe. So
16 I learned about this opportunity by
17 chance.

18 MR. DRISCOLL: Yeah. So for
19 me, my biology professor was very, very
20 clear on making me apply to the BTT
21 program. So that's how I heard about it.

22 COUNCILMEMBER YOUNG: Thanks.
23 And I only ask that question because it
24 seems like it's something that -- these
25 are opportunities where jobs pay six

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2 figures, but it seems like our
3 communities have no idea that they exist.
4 And for us as a body, we want to make
5 sure that we do our part in making sure
6 that our constituents know, but for me
7 personally, I believe it's on the
8 industry as well to let the communities
9 know, the communities that they're moving
10 into, that these opportunities exist.

11 And so I just wanted to hear
12 that, because no one said, oh, yeah, I
13 heard about this from the institution,
14 from the place that actually hired me. I
15 found out about this opportunity from
16 them. They came into this part of our
17 community or that part of our community
18 or even come to my school to tell us
19 these opportunities exist. Your schools
20 had to tell you about it.

21 And I think that if our city is
22 going to continue to grow in this field,
23 I think we need to put a little bit more
24 pressure on some of these institutions,
25 some of these places that are going to be

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2 doing this hiring and outreach to do a
3 little bit more to reach out to
4 communities that actually need these
5 particular jobs.

6 So that's the only reason why I
7 asked that, so we can get that on the
8 record.

9 So I thank you so much for
10 testifying. Again, we are all proud of
11 the things that you are doing. For our
12 communities, we know that we have to see
13 something in order for us to believe that
14 it's real. In looking at you all, your
15 neighbors in your community can see that
16 these jobs exist, this is a real
17 opportunity if we pursue it other than
18 those that we see on TV.

19 So I appreciate you four
20 sticking with science. I actually wanted
21 to be a doctor growing up, but I had a
22 horrible science teacher, right, and that
23 kind of just killed my dreams, so I just
24 became a lawyer. So I understand the
25 importance of this particular field, and

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2 we have to have people who look like you
3 to continue to push and champion this
4 field, because these jobs are never going
5 away. Science is always evolving,
6 technology is always evolving, and we
7 need folks from our communities to fill
8 those positions.

9 So, again, I thank you for
10 testifying today.

11 COUNCILMEMBER SQUILLA: Thank
12 you, Councilmember.

13 Councilmember Driscoll.

14 COUNCILMEMBER DRISCOLL: Thank
15 you, Mr. Chairman.

16 You know, I just wanted to
17 comment of how impressed I am with this
18 young panel. I mean, clearly, you guys
19 are talented, you work hard. Each one of
20 you told your story about how hard it is,
21 but yet you persevered.

22 So I think, Councilwoman
23 Gauthier and Councilman Young and
24 Councilman Squilla, I think it's fair to
25 say that we have some talent coming to

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2 the City and staying in the City.

3 Our earlier panel with Dr.

4 Bryan said that 50 percent of his

5 participants are staying right here in

6 the City. So this is boding very, very

7 well for Philadelphia. So I'm excited.

8 And, Mr. Driscoll, I do like

9 your last name. And just so you know,

10 last week was St. Patrick's Day and your

11 name traces back to County Cork, Ireland.

12 So thank you all for being

13 here.

14 COUNCILMEMBER SQUILLA: Thank

15 you, Councilmembers.

16 And thank you again for

17 testifying. It was really uplifting and

18 it was great to hear. Keep up the great

19 work. Thank you all.

20 (Thank you.)

21 COUNCILMEMBER SQUILLA: We

22 would like to call the next panel to

23 testify. Panel 3 is Anne Brooks and

24 Dr. Sharon Willis. Make your way to the

25 table, and we can start, Anne, with you,

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2 if you just want to state your name when
3 you get up here and then just start
4 proceeding with your testimony.

5 (Witnesses approached witness
6 table.)

7 MS. BROOKS: Good afternoon,
8 Councilmembers. My name is Anne Brooks
9 and I am the Senior Vice President of
10 U.S. Commercial at Iovance
11 Biotherapeutics. Thank you for the
12 opportunity to share my thoughts with you
13 today.

14 Iovance Biotherapeutics aims to
15 be the global leader in innovating,
16 developing, and delivering tumor
17 infiltrating lymphocytes, or TIL, cell
18 therapy for people with cancer. On
19 February 16th, the Food and Drug
20 Administration approved AMTAGVI or
21 Lifileucel suspension for intravenous
22 infusion. AMTAGVI is a tumor-derived
23 autologous T cell immunotherapy indicated
24 for the treatment of adult patients with
25 unresectable or metastatic melanoma

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2 previously treated with a PD-1 blocking
3 antibody, and if BRAF V600 mutation
4 positive, a BRAF inhibitor with or
5 without a MEK inhibitor. This indication
6 is approved under an accelerated approval
7 based on overall response rate and
8 duration of response. Iovance is also
9 conducting TILVANCE-301, a Phase 3 trial
10 to confirm clinical benefit.

11 Cancer is among the leading
12 causes of death worldwide. In 2023
13 alone, it is estimated that there will be
14 nearly 8,000 U.S. patient deaths due to
15 melanoma. Our technology seeks to
16 utilize a patient's own immune cells to
17 deliver a personalized approach to
18 fighting cancer. When cancer is
19 detected, the immune system creates cells
20 called tumor infiltrating lymphocytes to
21 locate, attack, and destroy cancer cells
22 in the body. If cancer prevails, TIL are
23 unable to perform their intended
24 function. That's where we come in. At
25 our Iovance cell therapy center in the

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2 Navy Yard, our employees manufacture
3 novel cancer cell therapies from a
4 process that rejuvenates and multiplies a
5 patient's TIL cells so that they can be
6 returned to the patient to fight cancer.

7 We are strategically located
8 here in Philadelphia, the birthplace of
9 cell and gene therapies and the home of
10 leading academic institutions active in
11 research. Greater Philadelphia's support
12 for workplace training and development
13 will be essential to allowing the region
14 to capture future growth in cell and gene
15 therapy versus competing areas.

16 Since breaking ground at the
17 iCTC in 2019, Iovance has expanded from
18 less than 15 employees in Philadelphia to
19 more than 200 in the completed facility
20 today. We currently supply TIL therapies
21 for patients in clinical trials, and as
22 of February 19th, are now manufacturing
23 our first commercial product. We expect
24 significant growth to continue as we
25 expand our manufacturing capacity and

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2 staffing to maintain commercial demand of
3 our first-in-class cell therapy in the
4 U.S. and as we serve additional
5 geographies, types of cancer, and next
6 generation therapies.

7 Iovance employs a diverse
8 workforce that resembles the Greater
9 Philadelphia community. A variety of
10 backgrounds, as well as a broad range of
11 academic experiences, are represented
12 across the organization, including
13 manufacturing technicians, scientists,
14 and management professionals. We also
15 collaborate with local academic
16 institutions to train and develop the
17 next generation of talent. Our
18 relationship with the Community College
19 of Philadelphia, for example, assists in
20 preparing CCP students for roles in the
21 biopharmaceutical industry.

22 A group of CCP students
23 recently toured our facilities and
24 participated in an interactive Q&A
25 session to find out more about our

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2 qualifications for hiring. We have also
3 partnered on a skills initiative with
4 Wistar, the West Philadelphia Skills
5 Initiative, the Chamber of Commerce, and
6 PIDC for the Biomedical Technician
7 Training program.

8 Philadelphians with at least a
9 high school equivalency are eligible to
10 participate in class and lab-based
11 training followed by a 12-week externship
12 at Iovance. Participants who
13 successfully complete the program are
14 considered for employment at Iovance as
15 associate aseptic manufacturing
16 technicians. We hired ten program
17 graduates from the inaugural cohort last
18 year, and a second class of participants
19 just graduated last Friday. We hope our
20 collaborations with local schools and
21 organizations will serve as a model to
22 build deep, diverse life sciences talent
23 pipelines across Greater Philadelphia and
24 beyond.

25 We are constantly evaluating

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2 the right locations to grow our business
3 and have explored expansions across the
4 U.S. as well as globally. We chose to
5 make Philadelphia our manufacturing hub.
6 We encourage the City and the State to
7 advance policies that incentivize new and
8 existing biotech development in the
9 region to cement Philadelphia's position
10 as a leading hub for cell and gene
11 therapy.

12 For example, we urge the City
13 to consider ways to advance workforce
14 support and technical training that
15 prepare prospective employees for
16 success. With the rise of cell and gene
17 therapy biotech companies in the region
18 and as these companies expand their
19 manufacturing footprints, there will be
20 significant demand for employees with
21 appropriate technical training on precise
22 methodologies for manufacturing novel
23 therapies. Employers need to access a
24 rich candidate pool of capable
25 technicians who have mastered key skills

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2 and who are focused on technical
3 excellence. For non-degreed workers,
4 skills initiatives such as our
5 Manufacturing Technician program can
6 offer a potential career opportunity in a
7 well-paid role for non-exempt hourly
8 workers.

9 We'd be happy to be a resource
10 to the Committee as it continues these
11 discussions and evaluates ways the City
12 can promote growth in the biotech
13 industry.

14 Thank you.

15 COUNCILMEMBER SQUILLA: Thank
16 you.

17 Please state your name and then
18 proceed.

19 DR. WILLIS: Thank you. My
20 name is Dr. Sharon Willis. I am a
21 co-founder and the Vice President of
22 Sales and Customer Relations at Integral
23 Molecular. Thank you so much for the
24 opportunity to speak with you this
25 afternoon.

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2 Integral Molecular is a
3 biotechnology company that was born and
4 raised in Philadelphia. We are built on
5 innovation and driven by the desire to
6 make a positive impact on the scientific
7 community and on human health.

8 Our products and services are
9 used to identify therapeutic molecules
10 for diseases such as cancer. The
11 molecules we discover can be used as
12 critical building blocks for cell
13 therapies.

14 Over 20 years ago, we were a
15 group of scientists who met at the
16 University of Pennsylvania. We started
17 Integral Molecular in the Science
18 Center's incubator space. We were two
19 people, two desks, and one lab bench.
20 Since then, we have grown and stayed in
21 Philadelphia and now have over 100
22 employees. Last year we moved into our
23 beautiful new space at One uCity Square
24 in University City. Phase 2 of our
25 expansion is underway. With our

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2 expansion comes hiring. We expect to
3 double our workforce in the next five
4 years.

5 For many years, we focused on
6 research and development, relying on the
7 contributions of scientists with
8 bachelor's and advanced degrees. We're
9 now transitioning to a production-heavy
10 phase with SOP-driven work. These roles
11 are well suited to training and
12 certifications that do not require
13 traditional four-year degrees.

14 Two entry-level roles I would
15 like to highlight are lab management and
16 our research technician. Our lab
17 management team provides the foundation
18 for our lab work. The team makes
19 solutions, keeps supplies stocked, and
20 keeps critical equipment functioning
21 throughout the lab.

22 Our research technicians are
23 responsible for following well-documented
24 SOPs to produce the products that we sell
25 and carry out the services we provide.

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2 These roles also involve working with
3 robotics for precision liquid handling
4 where employees transfer very small
5 quantities of liquid, often smaller than
6 a drop.

7 In this environment, things
8 occur at a molecular level and a lot of
9 processes are essentially invisible. For
10 example, a tube of DNA dissolved in water
11 looks pretty much like a tube of water.
12 Attention to detail is critical to ensure
13 that steps are precisely followed and
14 irregularities are seen and reported.
15 It's not necessarily obvious if a step is
16 missed. It's not like being in the
17 kitchen where if you're not sure if you
18 added salt instead of sugar, you can
19 taste the batter. You can't do that in a
20 lab, so attention to detail is really,
21 really critical. Math is also a very
22 important skill for calculations to make
23 solutions and analyze and graph data.

24 In our talent searches, we
25 train and hire Drexel co-op students and

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2 attend career fairs at local institutions
3 and post on online job boards. In
4 addition, we continue to rely on the
5 talent pool coming from the training
6 programs run by The Wistar Institute and
7 Community College of Philadelphia. Our
8 need, in addition to our fellow companies
9 in Philadelphia, is increasing. We need
10 to increase these programs. Workforce
11 development programs are a great way for
12 Philadelphians to get training for jobs
13 that provide family-supporting wages.
14 Workforce training providers are doing a
15 good job of finding and reaching out to
16 people who might be interested in their
17 programs.

18 While the workforce development
19 programs for adult learners are amazing,
20 the pipeline also must start before that.
21 We can teach our trainees to follow one
22 of our protocols. For example, weigh out
23 five grams of sodium chloride, add 100
24 milliliters of water and a magnetic stir
25 bar and stir the solution for three

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2 minutes.

3 What we can't teach is how not
4 to be anxious about the calculations that
5 need -- that are needed to make that
6 solution. To be successful in our
7 environment, the fundamentals of math and
8 communication are so important, and that
9 really begins in grade school and
10 continues through middle and high school.

11 We're very proud to be part of
12 the thriving biotech community in
13 Philadelphia whose contributions to human
14 health are amazing. There is a diversity
15 of jobs in this environment, and the
16 talent coming out of the technical
17 programs is fantastic, but there is a
18 need to support the growth of this to
19 really support the growth of our biotech
20 industry, and that talent pipeline needs
21 to start with all children getting a
22 strong educational foundation in the K
23 through 12 years.

24 Thank you.

25 COUNCILMEMBER SQUILLA: Thank

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2 you so much for your testimony.

3 The Chair recognizes

4 Councilmember Gauthier.

5 COUNCILMEMBER GAUTHIER: Thank

6 you, Mr. Chair.

7 And thanks to both of you for

8 your testimony.

9 I wanted to congratulate

10 Iovance on the recent FDA approval.

11 That's amazing and follows Philadelphia's

12 history, right, and trailblazing in this

13 area. And I want to congratulate both of

14 you on the growth of your companies.

15 I know that both of your

16 companies have partnered with local

17 workforce providers to develop and --

18 define and develop talent. Can you share

19 the critical elements of a successful

20 workforce partnership from your

21 perspective as an employer. What makes

22 those programs useful and valuable to

23 you?

24 MS. BROOKS: This is Anne

25 Brooks.

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2 Yeah. I think one of the
3 things that is really critical for these
4 partnerships is just good collaboration
5 and communication between the academic
6 institutions as well as with Iovance.
7 And so when we outline sort of the skills
8 that we're looking for from the students,
9 they're able to really help curate that
10 curricula.

11 We couldn't be more proud of
12 our externship graduates. You know,
13 obviously we're very proud of V and the
14 other graduates that are part of the
15 program.

16 So I think that collaboration
17 and communication is very critical.

18 DR. WILLIS: This is Sharon
19 Willis.

20 I agree. We're brought in
21 early in the process to help review what
22 the students are learning and suggest lab
23 techniques that are critical for success
24 at our site. So I think that
25 communication and collaboration.

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2 And one thing I always bring up
3 also is the soft skills, how can we help
4 these students who maybe didn't have a
5 chance to develop those soft skills in
6 their K through 12 training, how can we
7 add that to the programs, because
8 communication is just so critical.

9 It's okay, I always say, it's
10 okay if you can't come to work one day,
11 as long as you communicate that, but not
12 showing up to work and not letting your
13 supervisor know that you're not coming to
14 work is not okay.

15 So how can we start to
16 incorporate that into training and even
17 before they get to these programs so that
18 they are comfortable in a workplace and
19 are comfortable communicating challenges
20 that they have with maybe coming to work
21 or support that they need during work or
22 things that they don't understand so that
23 we can help them become the best
24 employees that they possibly can be.

25 COUNCILMEMBER GAUTHIER: Thank

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2 you.

3 Thank you, Mr. Chair.

4 COUNCILMEMBER SQUILLA: Thank

5 you.

6 Councilmember Young.

7 COUNCILMEMBER YOUNG: Thank

8 you.

9 So from my understanding, this
10 is my own anecdotal thoughts, that
11 essentially our School District isn't
12 educating our students enough to fit your
13 needs. That's basically what I just
14 heard, right? So for me, I think that's
15 an issue, because if you have the jobs --
16 if you are providing the jobs of the
17 future, we have to make sure that our
18 students are well equipped for those
19 jobs.

20 One just suggestion or
21 comment -- question I have, rather, is
22 because these jobs, many don't require
23 more than just a high school diploma,
24 what opportunities are available or what
25 opportunities do you provide for current

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2 high school students so they can get that
3 exposure for the things that you need
4 them to do in the future?

5 DR. WILLIS: We have a number
6 of summer internship opportunities. So
7 we do work with Firsthand at the Science
8 Center and their high school program, and
9 we have had their high school students
10 tour our labs and we did have a high
11 school intern last summer through that
12 program. I know Wistar has a high school
13 program.

14 So we are actively working with
15 the organizations that we know of in the
16 City that have high school programs so
17 that we can provide hands-on activities
18 and experiences for those students.

19 COUNCILMEMBER YOUNG: And I
20 guess this question is for Ms. Brooks.
21 Your training program, you said you just
22 hired ten from that cohort. From those
23 who you do not hire, are those skills or
24 abilities that they learn at that
25 program, how transferable are they to

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2 another science facility?

3 MS. BROOKS: Yeah. I think

4 some of the skills are transferable.

5 Other skills are more bespoke to the

6 Iovance processes. So I think it's a

7 nice blend of -- we want to obviously

8 train our employees to help us with our

9 very specific technology, but at the end

10 of the day, it is Biomedical

11 Manufacturing Technician program, so

12 teaching aseptic technique, that is

13 absolutely transferable to any other cell

14 and gene therapy or life sciences

15 company. So I think it's some of both.

16 COUNCILMEMBER YOUNG: Thank

17 you.

18 Thank you, Mr. Chair.

19 COUNCILMEMBER SQUILLA: Thank

20 you. Thank you, Councilmember.

21 And thank you so much for your

22 testimony. Much appreciated.

23 Mr. McMonagle, can you please

24 read the next panel to testify.

25 THE CLERK: Can we please have

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2 Sam Woods Thomas, Dr. Linda Powell, and
3 H. Patrick Clancy.

4 (Witnesses approached witness
5 table.)

6 COUNCILMEMBER SQUILLA: Thank
7 you. I guess we'll start with Sam Woods
8 Thomas. Just state your name for the
9 record and you can proceed with your
10 testimony.

11 MR. THOMAS: Good afternoon,
12 Chairman Squilla and members of the
13 Commerce and Economic Development
14 Committee. My name is Sam Woods Thomas,
15 Senior Director of Business Development
16 for the Philadelphia Department of
17 Commerce. I am testifying today on
18 behalf of my colleague, Dr. Rebecca
19 Grant, who is the Director of Life
20 Sciences and Biotechnology.

21 I'm here to testify on
22 Resolution No. 230530 authorizing a
23 hearing on Philadelphia's capacity to
24 prepare individuals of all educational
25 backgrounds for careers in the life

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2 sciences industry, particularly the cell
3 and gene therapy subsector. As we all
4 know, this is a rapidly expanding
5 industry.

6 Philadelphia has the largest
7 concentration of life science companies
8 in the region, thanks to our healthcare
9 systems and institutions. This growth
10 presents an enduring career pipeline with
11 immediate job opportunities across skill
12 levels and steady job creation looking
13 forward. There are a range of non-degree
14 opportunities such as aseptic technician,
15 biomanufacturing, quality assurance, and
16 quality control. Training more workers
17 will drive the creation attraction and
18 expansion of companies in Philadelphia.
19 In turn, those companies will create more
20 jobs and so on.

21 Several years ago, Commerce
22 identified life sciences as a priority
23 industry. Around the same time, Spark
24 Therapeutics was expanding in
25 Philadelphia. Among other early

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2 partners, we quickly recognized this
3 sector's potential.

4 For our 2018 real estate study,
5 we learned that Philadelphia had many
6 companies, but commercial lab real estate
7 was about 98 percent occupied, meaning
8 the demand was high, but we could not
9 accommodate it. Since then, much more
10 lab real estate has been built, and we
11 now see an increased demand for
12 workforce. We recognized the gap and
13 immediately catalyzed partnerships to
14 support the increased workforce demand.

15 Our work is focused on
16 attraction, retention, technical
17 assistance, policy, and partnerships.
18 Building relationships is paramount to
19 this work. We regularly convene and
20 connect employers to workforce trainers.
21 We're happy to report some recent
22 successes. This past year, Commerce
23 funded two workforce programs focused on
24 life science jobs, Community College of
25 Philadelphia's Aseptic Technician

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2 Training and the University City Science
3 Center's Building Understanding of Lab
4 Basics, BULB.

5 Commerce launched a life
6 science workforce training solutions
7 convening, which has forged important
8 relationships and removed silos.
9 Commerce collected B.Labs in Schuylkill
10 Yards and the School District of
11 Philadelphia, Dobbins CTE High School, to
12 create an ongoing industry exposure
13 program starting in 2023.

14 Our region received a Good Jobs
15 Challenge reward and a Regional Tech Hub
16 designated. These are a testament to our
17 regional cooperation and the importance
18 of Philadelphia's diversity. These
19 success stories are encouraging but not
20 enough. So how do we meet the moment?
21 We recommend the following:

22 First, Philadelphia must not
23 only prioritize STEM in education, but
24 also focus on adult learners. We should
25 further invest in cohesive engagement and

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2 marketing strategies that involve both
3 school-age youth and adults in our
4 community.

5 Second, this industry is
6 expensive. Training organizations need
7 more funding to scale existing programs
8 to meet the current need. Likewise,
9 laboratory training space and hiring
10 skilled trainers are costly endeavors.
11 We must consider new strategies and
12 funding to create more training
13 opportunities and new training
14 facilities.

15 Lastly, public-private
16 partnerships are essential. We must
17 partner with industry to create space and
18 scale programs. Two great examples of
19 this are the partnerships in Iovance,
20 Wistar, and the West Philadelphia Skills
21 Initiative and the partnership between
22 WuXi AppTec, Integral Molecular, and CCP.

23 I want to thank Councilwoman
24 Gauthier for her leadership on this
25 issue. Today I'm joined by my colleague

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2 Gianna Grossman, who is a Senior Director
3 of Workforce Development. We're happy to
4 take any questions.

5 COUNCILMEMBER SQUILLA: Thank
6 you. Thank you for your testimony.

7 Dr. Linda Powell.

8 DR. SHAH: So I'll be going
9 first. My name is Dr. Vishal Shah and I
10 am the Dean of Math, Science and Health
11 Careers at Community College of
12 Philadelphia. Good afternoon, members of
13 the Council, and thank you for the
14 opportunity to share our experience in
15 preparing individuals from diverse
16 backgrounds for careers in larger life
17 sciences ecosystem in Philadelphia.

18 I'll be providing an overview
19 of the training opportunities in cell and
20 gene therapy area, and Dr. Powell will be
21 providing a large-scale picture of how
22 CCP is making an impact.

23 For cell and gene therapy
24 subsector to grow, we will need workforce
25 involved in research and development and

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2 for product delivery, be it in research
3 labs, manufacturing, testing facilities
4 or in hospitals. The journey for the
5 majority of those employed in the
6 subsector starts with the classes at the
7 undergraduate level through our
8 up-to-date curriculum that is directly
9 tied to the workforce needs and
10 transferred to four-year institutions.
11 The digly programs in biology, chemistry,
12 engineering or mathematics provides many
13 Philadelphians with the only viable part
14 to obtain a degree, and for some, the
15 last available option.

16 Graduating students either
17 enter directly into cell and gene therapy
18 industry or they graduate with a
19 bachelor's degree and then enter into
20 cell and gene therapy.

21 Community College of
22 Philadelphia is a minority-serving
23 institution, a predominantly Black
24 institution and an emerging
25 Hispanic-serving institution that

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2 provides City residents access to high
3 quality, low cost option for degree
4 programs and workforce training.

5 We are proud to play an
6 important role in providing the part for
7 students of color to careers in cell and
8 gene therapy industries. Last year, the
9 College launched a new program to provide
10 training for entry-level positions in
11 cell and gene therapy industries. The
12 program, probably one of the most unique
13 in the country, lowered the entry
14 requirements to a short essay on why the
15 students are interested in the program
16 and a reference letter attesting their
17 aptitude and skill sets. We removed the
18 requirement for high school degree
19 diploma and any mathematics entrance
20 test.

21 The underlying philosophy
22 behind our approach was to increase
23 access to impart knowledge and skill sets
24 to the students no matter the level of
25 their proficiency. The curriculum was

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2 designed in close collaboration with our
3 industrial partners, WuXi and Integral
4 Molecular, and meets our students where
5 they are.

6 The enrolled students in this
7 new program included taxi drivers,
8 traditional students, and citizens
9 working in retail sectors and were from
10 all age groups, teenagers to
11 grandparents.

12 I am pleased to state that many
13 of our graduating students are now
14 working at WuXi and Integral Molecular in
15 Philadelphia as aseptic technicians,
16 manufacturing associates, and other
17 similar roles. We thank the City
18 Department of Commerce for the funding of
19 the training program.

20 Members of the Council, the
21 Community College of Philadelphia has the
22 expertise and the facilities needed for
23 training the workforce for the future
24 cell and gene therapy jobs. We look
25 forward to continuous collaboration with

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2 the agencies, organizations, and
3 industries across the City and further
4 the growth.

5 I would like to now turn over
6 to Dr. Powell, the Special Assistant to
7 Provost for STEM Outreach and Engagement,
8 to provide an overview of CCP's training
9 impact in the larger life sciences
10 ecosystem.

11 Thank you.

12 DR. POWELL: Good afternoon,
13 Councilmembers.

14 The growing life science
15 industry in Philadelphia not only
16 requires workers at the bench, be it in
17 product development or clinical trial
18 stages, we also need personnel to get
19 products out of those labs and to those
20 in need.

21 Community College of
22 Philadelphia has a longstanding history
23 of producing phlebotomists, medical lab
24 technologists, nurses, and other allied
25 health professionals. People in these

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2 positions are needed to deliver
3 treatments to those receiving the
4 products coming out of the growing
5 research sector of this city. It also
6 involves those supporting regulatory
7 requirements documenting specific
8 protocols that are to be followed besides
9 those personnel in direct patient-facing
10 roles.

11 The faculty in the Biology
12 Department have just hosted the Second
13 Annual Clinical Research Conference at
14 Community College of Philadelphia's main
15 campus last week. This effort brought
16 together clinical research leadership
17 from the Greater Philadelphia region.
18 They informed our students about
19 opportunities in this sector and had a
20 job fair providing internships and job
21 placements in their respective
22 organizations.

23 The College has also been
24 working on a pipeline program to increase
25 students coming out of the 6th to 8th

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2 grades, increase their knowledge and
3 understanding of STEM. We have a junior
4 STEM academy housed at our West Regional
5 Campus that does outreach covering a
6 variety of STEM topics. Hundreds of
7 Philadelphia students have participated
8 in this programming.

9 The life science industry has a
10 growing realization that some of its
11 needs can be met by individuals pursuing
12 associate's degrees. Efforts in both our
13 credit and non-credit course offerings
14 are underway to meet Philadelphia's life
15 science personnel needs in our hospital
16 research and industry spaces. The
17 College has the facilities and the
18 personnel with the required expertise to
19 train Philadelphians and train these
20 jobs.

21 In my role as Board Chair of
22 Greater Philadelphia Health Action Inc.,
23 as well as in my role with Community
24 College of Philadelphia, I see former
25 students excelling in the life sciences.

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2 We are indeed the path to possibilities.

3 Thank you for this opportunity
4 to speak today.

5 COUNCILMEMBER SQUILLA: Thank
6 you.

7 H. Patrick Clancy.

8 MR. CLANCY: So last but not
9 least. Thank you, Councilman,
10 Councilwoman, and Councilman again.
11 Thank you very much for bringing this to
12 light, and I say that because as
13 President and CEO of Philadelphia Works,
14 our job is to really look at the state
15 and federal investments that the City
16 gets and how do we maximize our return,
17 right? How do we put money into programs
18 that are really high quality, that are
19 outcome based, and that there's a future.

20 And just as another aside, I am
21 a very proud Board member of the
22 Community College of Philadelphia. I sit
23 a lot on their workforce development
24 stuff. So these conversations happen
25 pretty frequently among Board members,

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2 because I think what we're trying to
3 figure out as a city is how do we do two
4 things - one, get in front of the curve
5 with -- you heard a lot today about CTE
6 and how that education has to start at an
7 earlier age, but then also how do we
8 transition adults who may be looking for
9 that opportunity to move into life
10 sciences.

11 One of the things that we did
12 most recently is, we funded the West
13 Philadelphia Skills Initiative to start
14 this brand new collaborative. You may
15 have heard it last week. It was the
16 launch of the Keystone Life Science
17 Collaborative, first one in its -- first
18 type of sector-based strategy in the
19 region and in the state. Because for us,
20 it's not always about the data. It's
21 about the employers, right, who is
22 hiring, what are their needs. So how do
23 we match up data with employer
24 engagement.

25 It is the cooperative nature of

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2 everybody at the hearing today and the
3 panel that's after us about how do we
4 build this system so it's long term,
5 right, and how do we make sure that it's
6 not just something that is open to some
7 but open to all.

8 So I would suggest that as we
9 continue to hear other panelists, I would
10 leave you with a few things. One is
11 investing in better literacy training as
12 a whole in our city. We have to get math
13 and reading up. The stats of adults who
14 are not as literate as they need to be is
15 alarming, so we need to work on that.

16 Secondly, we have to have
17 career exposure. We have to have better
18 strategies for both young people and
19 people who we're not aware of. I think I
20 heard it earlier from the Councilman that
21 you only -- you see what you do, right?
22 If you don't visualize it, it's hard to
23 find yourself there.

24 And then, thirdly, it really is
25 about maximizing funding and also

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2 collaboration, right? There's a lot of
3 good programs going on in our city, and I
4 think part of it is is how do we work
5 with each other and maximize its output.

6 So I look forward to any
7 questions you may have, but once again,
8 thank you very much for the opportunity
9 to testify today.

10 COUNCILMEMBER SQUILLA: Thank
11 you.

12 Thank you all for testifying.
13 Appreciate your testimony.

14 The Chair recognizes
15 Councilmember Gauthier.

16 COUNCILMEMBER GAUTHIER: Thank
17 you, Mr. Chair.

18 First, I want to thank all of
19 you for being here today but also for
20 your work in this area.

21 Mr. Woods Thomas, thanks to you
22 and Dr. Grant for doing the very
23 important convening work to move this
24 workforce development effort forward. We
25 really appreciate you.

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2 And thank you so much to
3 Dr. Vishal and Dr. Powell for everything
4 that you're doing at CCP. CCP is such a
5 critical partner in this effort, and I
6 especially appreciated how you're
7 breaking down barriers, right, to meet
8 our residents where they are.

9 I quickly wanted to hear a
10 little bit more about how many students
11 have flowed through your program, how
12 much do you think you can grow, and what
13 support do you need from the City? And
14 that's for CCP.

15 DR. SHAH: So we had two
16 cohorts, graduates through the program.
17 A total of 21 students graduated. I know
18 Sharon was here. They hired a graduate
19 and WuXi hired eight students already.
20 So nine students have already found
21 employment.

22 COUNCILMEMBER GAUTHIER: That's
23 great.

24 DR. SHAH: Five students are
25 going through the interview process, and

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2 others have delayed, that they wanted the
3 spring semester to be over and then look
4 for a job. So we hope to reach around 70
5 to 80 percent employment by the time
6 everybody goes through the interview
7 process.

8 The two big lessons we learned
9 to the process, as Sharon rightly said,
10 talking to the industry early matters.
11 Like the jobs they are going to have is
12 what we are training them for, and
13 training them on the curriculum of the
14 past does not help. So as we ran through
15 the process is when we realized it's okay
16 for the students not to have the skills,
17 like we were talking about, the math
18 skills or the English skills, but how do
19 we train them. It has to be a time when
20 we start saying, you don't have the
21 skills, so you can't enter into the
22 field. No. We will provide the
23 training, and the key support that we
24 need is the students are taking time off
25 from the work they do for the training,

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2 and the support the students need for
3 them to go through the training program
4 is very critical, and to add a barrier of
5 cost of the training program makes a lot
6 of this training program prohibitive.

7 So supporting the students is
8 one of the most critical things that I
9 observed would make Philadelphia
10 different.

11 COUNCILMEMBER GAUTHIER: Thank
12 you.

13 Dr. Powell.

14 DR. POWELL: I would have two
15 big recommendations. Some of our
16 panelists have shown their language use
17 is very technical, but we need -- the
18 students need to see them and they need
19 to come to the places where students are
20 first, and then once the students have
21 gone through some initial training, get
22 to these facilities so the students can
23 see this is a place that I can fit in.
24 And it's also helpful if there are people
25 who look like them and sound like them

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2 that are meeting them when they're coming
3 to these places.

4 COUNCILMEMBER GAUTHIER: Thank
5 you so much.

6 And, Mr. Clancy, first, thank
7 you so much for being here. I'm being
8 told that you're fresh off of a plane
9 from like a national convening for
10 workforce. Somebody told me that you had
11 your suitcase and stuff.

12 MR. CLANCY: I did. It's over
13 there. I would never miss this
14 opportunity. I live for this really.

15 COUNCILMEMBER GAUTHIER: Yeah.

16 MR. CLANCY: Plus I did go to
17 high school with Councilman Squilla.
18 He's much smarter.

19 COUNCILMEMBER GAUTHIER: He's a
20 very smart guy.

21 We appreciate you being here.
22 So I wanted to ask you, since you're just
23 back from this convening, do you have a
24 sense of how does our workforce board's
25 participation in the growth of this

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2 sector and workforce development
3 opportunities compare to what other work
4 boards are doing in their involvement and
5 are there things that we can learn and
6 implement from what other regions are
7 doing?

8 MR. CLANCY: That's a really
9 good question, so -- not to brag, but I
10 will a little bit. I mean, I really
11 believe we are one of the top workforce
12 boards in the country and mainly because
13 we spend a lot of time at the U.S.
14 Congress of Mayors Workforce Committee,
15 which is a group of our colleagues from
16 across the country.

17 So I would say we were the
18 early investors in biomedical technician
19 training at Wistar. I've been doing this
20 work about 30 years. We were investing
21 with The Wistar Institute probably about
22 ten years ago. And I do think we also
23 worked along with the Greater
24 Philadelphia Chamber of Commerce on
25 developing a life science initiative two

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2 years ago.

3 So I really believe the data
4 showed us that we needed to be in this
5 space, and I think we continue to grow.

6 I would say to you we do check
7 in with our colleagues from Boston, who
8 sometimes nudge us out a little bit as
9 far as their activity, but I do think
10 it's about how do we get the basis of
11 that early learning and early exposure
12 done. And I think if we -- if there's
13 anything I would suggest we really focus
14 in on is very much like the doctor said,
15 like how do we give exposure to
16 individuals to see the workplace, right,
17 to see what it really is to be in a lab
18 on your feet doing the type of work that
19 they're doing.

20 But I would suggest to you we
21 have a great working relationship with
22 the Commerce Department. This is -- I
23 think there's all hands on deck when it
24 comes to figuring out not just life
25 science but, you know, all the industries

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2 that are growing in our city.

3 COUNCILMEMBER GAUTHIER: Okay.

4 Thank you. And it's okay to brag. The
5 Deputy Secretary told us we have to
6 unlearn some of our Quaker ways in terms
7 of modesty, so we're being a little more
8 boastful.

9 I wanted to talk next about the
10 need for training facilities. We've
11 heard a lot about that today. So we've
12 heard about this need for facilities, but
13 we also are hearing that they are
14 extremely expensive, hard to keep updated
15 with the latest scientific equipment. So
16 I'd like for anybody who wants to weigh
17 in to share your perspectives on, A, the
18 need for additional training space; B,
19 what would it take to create adequate
20 training space and who should lead on
21 that, and if we build the space, what
22 process should we put in place to ensure
23 that it stays up to date.

24 MR. CLANCY: So I'll start and
25 then hand off.

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2 So I would say to you as a
3 Board of Trustee for Community College,
4 this is a very active topic. We had a
5 chance to work with Econsult on this
6 strategy, like what would it take if we
7 really wanted to embark upon another
8 facility and another place of learning.

9 So we're in the beginning
10 stages of that, but I would suggest that
11 my colleagues from the Community College
12 could probably answer a little bit better
13 than me.

14 DR. POWELL: As someone who
15 spent quite a bit of time building that
16 space, you need to talk to the people who
17 are going to use the space besides just
18 building it independently. And in the
19 laboratory spaces that are heavily used,
20 and we have a lot of people who come
21 through and look at the quality of the
22 labs at Community College of
23 Philadelphia, is because the faculty who
24 came out of industry gave input into the
25 spaces so that they work academically but

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2 they also meet industry needs. So that
3 combination is critical.

4 DR. SHAH: I think one of the
5 most important things as we look at the
6 life science cell and gene therapy both
7 is we double up the space, but it's not
8 the space, it's what's inside the space
9 that's critical, because the
10 accoutrements and the tools that we would
11 say, okay, let's train the students on X,
12 Y, and Z instrument, that will be
13 outdated in two years.

14 So while we invest one time to
15 set up a state-of-the-art facility, the
16 key is how to be sustainable and remain
17 state of the art. That plays a key role.
18 And one of the good examples is, there
19 were times when we used to use
20 micro-pipettes in training high school
21 students, but in most of the advanced
22 labs, they all use robotics. Robotics
23 are used for all the pipetting stuff.

24 So we need to make sure we are
25 training in the state-of-the-art

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2 instrument and making sure we remain
3 ahead of all the things, and as was said
4 earlier, that's where Boston and North
5 Carolina are one step ahead of
6 Philadelphia. They have the labs that
7 are constantly upgraded through the
8 support from the state and the region.

9 MR. CLANCY: So I would just
10 add, if we don't do it, we're going to
11 lose, right? It's either we're in this
12 game to win it or we're going to fall
13 behind. So I don't think -- we know that
14 this is great opportunities for our
15 residents. We know that the businesses
16 are really enjoying and liking the space
17 or the region. So if we don't invest,
18 I'm afraid to say that we're going to
19 fall behind.

20 COUNCILMEMBER GAUTHIER: But
21 you all are in agreement that the space
22 doesn't exist today and that we need more
23 training facility space?

24 DR. SHAH: Correct.

25 MR. CLANCY: Yes.

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2 COUNCILMEMBER GAUTHIER: And do
3 you have any ideas on what it would take
4 to create adequate space, how much
5 funding that would take, the type of
6 partnerships that would demand, and who
7 should lead on creating the training
8 facility space?

9 MR. CLANCY: Where is
10 Dr. Generals when you need him?

11 (Simultaneous crosstalk.)

12 MR. CLANCY: I would say that,
13 one, partnerships are critical, right?
14 We can't do this without everybody that's
15 behind us or part of the fabric of life
16 science already. So anything that I
17 think gets built really needs to be
18 totally collaborative and totally
19 understand like what do we have already
20 and what do we really need and then how
21 do we find ways that we all either share
22 in it or invest in it.

23 I would suggest to you if
24 you're looking at a new building, then
25 you're looking around the \$30 million

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2 range.

3 COUNCILMEMBER GAUTHIER: Okay.

4 Okay.

5 MR. CLANCY: At least that's my

6 gut.

7 COUNCILMEMBER GAUTHIER: Okay.

8 Thank you.

9 Did anybody else want to weigh
10 in on that?

11 MR. CLANCY: Everybody is
12 afraid of Dr. Generals, aren't you? See,
13 I don't really work for him. I'm on his
14 Board.

15 MR. THOMAS: Sam Thomas from
16 Commerce again.

17 Our office works in attracting
18 and retaining businesses in the biotech
19 sector. Dr. Grant leads that effort
20 forward.

21 It's imperative when we look at
22 what brings life science companies to a
23 city, I think there's really three things
24 that they look at, and the first thing is
25 the strength of the ecosystem, which we

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2 have. We're very good at life sciences.
3 Getting past our Quaker roots, we're
4 really good at life sciences.

5 The second thing is real
6 estate, which we addressed. We had a
7 lack of that. We built it.

8 And the third thing that
9 companies ask us when they come to us is
10 how quickly can we fill these labs with
11 qualified workers. So by doing this, by
12 really engaging with this, we are going
13 to be able to answer all three of those
14 questions for companies, really making
15 Philadelphia, I believe, the intuitive
16 choice.

17 COUNCILMEMBER GAUTHIER: Thank
18 you. So we definitely need to make this
19 investment if we're going to seize this
20 opportunity.

21 And, Mr. Clancy, you say in
22 gest, but it sounds like you're halfway
23 serious about CCP being like a great
24 partner to be at the middle of this.

25 MR. CLANCY: Yeah. I mean, I

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2 do joke a little bit. But this is
3 serious. And I would agree with you.
4 Having a chance to be on the Board for
5 seven years now at the Community College,
6 like they're deeply invested in finding
7 ways to be as creative and as flexible
8 and getting people back to work. So I
9 would suggest it's not just their life
10 science strategy, but it's their advanced
11 manufacturing strategy, the nursing
12 strategy. But like they really
13 understand the value and what it means to
14 our communities, because we have multiple
15 campuses too, right? We have a Northwest
16 campus, we have a West campus, which is
17 beautiful, as you well know in your
18 district.

19 COUNCILMEMBER GAUTHIER:

20 Absolutely.

21 MR. CLANCY: Then of course we
22 have the Center City jewel.

23 So for us, it's about how do we
24 build what's already here and enhance it,
25 along with our other partners. We have

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2 some great life science partners in the
3 City as well.

4 COUNCILMEMBER GAUTHIER: Thank
5 you.

6 Thank you, Mr. Chair.

7 COUNCILMEMBER SQUILLA: Thank
8 you.

9 Councilmember Young.

10 COUNCILMEMBER YOUNG: Thank
11 you.

12 So we all are talking about a
13 conversation of investment, investment,
14 but my question for you all is, who
15 should make the investment? Where does
16 this investment come from? Should it be
17 the City? Should it be the industry?
18 Should it be state, philanthropic? Like
19 who should make these investments and I
20 guess what does that look like
21 monetarily, right, to get the City where
22 we need it to be to fill the capacity
23 that we have?

24 MR. CLANCY: So I'll start and
25 then pass it off again.

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2 Historically these types of
3 investments have been multi-pronged. So
4 the state has invested what they call
5 RACP funds. Then there's other private
6 partners and then there's the Community
7 College fundraising as well. So, you
8 know, there is already a template in
9 place for the West Philadelphia center.
10 I don't have all the specifics, but my
11 gut is it's three to four different types
12 of, you know, utilizing either grant
13 funding from the Commonwealth or other
14 funding, whether it be private or other
15 philanthropic funds.

16 But you're right, I think what
17 the College doesn't want to do is build
18 it and hopes people come or build it and
19 charge the tuition so high that no one
20 can come. So I think it's all about how
21 do we really analyze the relevancy of it
22 all and see if it's the right investment.

23 COUNCILMEMBER YOUNG: Thank
24 you.

25 Another question. I guess this

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2 is probably more geared toward the
3 Commerce Department. But have there been
4 any impediments to our land use and
5 zoning code for these types of places to
6 come to the City?

7 MR. THOMAS: Not major
8 impediments. There are certain things
9 that Dr. Grant and myself are working on
10 to make it easier to do this, and we can
11 sort of get you that information on what
12 those are.

13 COUNCILMEMBER YOUNG: Thank
14 you.

15 And one more question. I know
16 we're all talking about space and
17 training programs, but some schools in
18 our district do have some CTE programs.
19 Do you think that this is an area where
20 students can participate in this arena as
21 a CTE program? I'm just saying that
22 particularly because folks saying that
23 space is needed. I have a school in my
24 district, Dobbins, that has plenty of
25 space that is empty for -- because

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2 programs have essentially left the School
3 District.

4 So do you feel -- can that be a
5 space where students can get this type of
6 exposure to the industry?

7 MR. THOMAS: I'm going to let
8 my colleague Gianna Grossman take that
9 one.

10 MS. GROSSMAN: Hello. Gianna
11 Grossman, Senior Director of Workforce
12 and Commerce.

13 And, yes, we've been working
14 with Dobbins and Roxborough specifically.
15 Those are the two schools that have the
16 CTE biotech program. We have people here
17 today from B+Labs that just did a program
18 this fall with Dobbins, and then for CTE
19 Month, which is February, we just had an
20 exposure awareness event for life
21 sciences, bringing in the students in all
22 of the biotech and life science CTE
23 programs. So that is from Dobbins,
24 Roxborough, and then Saul students came
25 to quorum University City Science Center

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2 to really see what other types of
3 opportunities were out there, from
4 training programs to employers, to really
5 just get that exposure and awareness so
6 that students can see themselves in these
7 roles, but we've been working with the
8 District specifically to build out and
9 bring in industry engagement to the
10 biotechnology CTE program, and because of
11 that, there's been growth in the program.
12 I think they're hoping to add a third
13 school next year.

14 So I think that as we've gotten
15 industry involved, there's a lot more
16 opportunity, and they really want to
17 support these CTE students. And I think
18 two people here are going to talk about
19 that a little bit later, but it's been
20 really great to work with Dobbins
21 specifically. The students are very
22 interested in how to actually realize the
23 types of roles they can go into
24 post-graduation that they don't
25 necessarily need a degree for.

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2 COUNCILMEMBER YOUNG: Thank

3 you.

4 And is there data on, I guess,
5 the number of students who participate in
6 these CTE programs who go directly into
7 the workforce in the biotech field?

8 MS. GROSSMAN: Yeah. We can
9 get the District what they have. I think
10 it's hard to track the data once students
11 leave, especially if they go into the
12 field a few years after, but we can
13 follow up with the School District and
14 send that over to you.

15 COUNCILMEMBER YOUNG: Thank

16 you.

17 Thank you, Mr. Chair.

18 COUNCILMEMBER SQUILLA: Thank

19 you.

20 Councilmember Gauthier.

21 COUNCILMEMBER GAUTHIER: Thank

22 you.

23 I wanted to respond to
24 Councilmember Young's question about
25 difficulties in development. I mean, you

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2 know, the various firms would have to
3 describe that themselves. However, one
4 thing I do think we should work on --
5 because I've seen this sort of
6 transforming my district up and down
7 Market Street and in different areas. We
8 work to try to negotiate community
9 benefit agreements that sort of bake in
10 some of these workforce and job goals
11 that we have, but I think as a city, we
12 should do better at that. As the
13 physical landscape continues to change,
14 as the life sciences sector grows, I
15 think that we do need to bake in more of
16 these job commitments. So it would be
17 something I'd love to talk about more
18 with the Committee.

19 COUNCILMEMBER YOUNG: Thank
20 you.

21 COUNCILMEMBER SQUILLA: Thank
22 you so much, and thank you all for your
23 testimony. Much appreciated.

24 Mr. McMonagle, can you please
25 read the next panel to testify.

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2 THE CLERK: Yes. Can we please
3 have Dr. Tia Lyles-Williams, Katie Nash,
4 Dr. Kristy Shuda McGuire, and also
5 waiting in the wings, Dr. Anthony Green,
6 please.

7 (Witnesses approached witness
8 table.)

9 COUNCILMEMBER SQUILLA: Dr. Tia
10 Lyles-Williams, if you want to start
11 first. Just state your name for the
12 record and you can proceed with your
13 testimony.

14 DR. LYLES-WILLIAMS: Yes. I'm
15 Dr. Tia Lyles-Williams.

16 All right. So just a little
17 bit about myself. I'm the first African
18 American queer woman to own a
19 biomanufacturing manufacturing company
20 68 years after the first African American
21 man, Dr. Percy Lavon Julian with his
22 company, Julian Laboratories, in Chicago,
23 Illinois.

24 I received my Bachelor's of
25 Science in Biology from Howard

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2 University, Master of Science in
3 Entertainment Business from Full Sail
4 University, a Master in Regulatory
5 Science from University Southern
6 California, and Honorary Doctor in the
7 Sciences from the Sidney Kimmel Medical
8 College at Thomas Jefferson University.

9 I've dedicated my career to
10 this industry via bioprocessing
11 development, building large-scale
12 bioprocessing facilities, developed
13 training and leading teams in
14 commercialized and proprietary biological
15 assets being a goal of regulatory
16 affairs.

17 I've been working in the
18 biotechnology/biopharma industry for a
19 little over 23 years, including formerly
20 interning at the National Institutes of
21 Health as well as a former contractor at
22 Walter Reed Army Institute of Research.
23 My former employers include Human Genome
24 Sciences, which is now GSK, AMGEN
25 Incorporated, Baxter Bioscience, which is

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2 now Takeda, Avid Bioservices, Lonza
3 Pharma and Biotech, and most recently my
4 last employer was Jazz Pharmaceuticals
5 here in Philadelphia.

6 I'm a three-time life science
7 startup founder of LucasPye BIO, a
8 contract development manufacturing
9 organization, founders fee of HelaPlex,
10 the first commercial life science
11 accelerator program for underserved life
12 science startup founders, and founder and
13 CEO of Jackson Taylor Therapeutics, a
14 genomic AI/ML therapeutic drug R&D firm.

15 In October '22, I represented
16 LucasPye BIO as well as the City of
17 Philadelphia as a panel speaker at the
18 White House discussing President Biden's
19 bioeconomy initiative, including the role
20 within the U.S. biotech industry.

21 For background, LucasPye BIO is
22 a subsidiary of my financial holding
23 company, Goffman Bougard, and a member of
24 a joint venture with a minority-owned
25 real estate development firm named

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2 Urbane, and our joint venture is entitled
3 Southwest Biocare. Together, we are
4 developing a life science park in
5 Southwest Philadelphia on 61st and
6 Lindbergh.

7 The City of Philadelphia as
8 well as the State of Pennsylvania has
9 been explicitly supportive of Southwest
10 Biocare. More specifically, Councilwoman
11 Jamie Gauthier and Councilmember Andrew
12 Goodman were instrumental in working with
13 my team to secure and maintain our land
14 reservation via the Philadelphia Housing
15 Development Corporation for the past
16 three years.

17 Councilwoman Jamie Gauthier and
18 Councilmember Andrew Goodman were also
19 instrumental in supporting our team in
20 working with PA Democratic House Speaker
21 Joanna McClinton, Senator Anthony H.
22 Williams, and former Governor Tom Wolf to
23 help us secure a 2.5 RACP grant. With
24 their collective support, we were able to
25 secure the funding on our first attempt

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2 via our first application.

3 Recently, Councilwoman Jamie
4 Gauthier and Councilmember Andrew Goodman
5 were also instrumental in supporting my
6 team to gain permission from PHDC to
7 allow us to apply and accept a grant from
8 PIDC for environmental monitoring Phase 1
9 testing operations at that Lindbergh
10 site. More specifically, Councilmember
11 Andrew Goodman attended every virtual
12 meeting with PHDC and PIDC to advocate on
13 our behalf as Southwest Biocare.

14 When Governor Shapiro visited
15 University City and took a tour of
16 University City Science Center, his team
17 members contacted Councilwoman Jamie
18 Gauthier to ensure that I was present for
19 the tour, including being able to meet
20 with his cabinet members to discuss our
21 life science park. We're participating
22 in ongoing discussions concerning how the
23 state government can help best support
24 our work and bring our life science park
25 to market, and we greatly appreciate

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2 Governor Shapiro's luminous budgetary,
3 which you heard earlier today, \$3 million
4 designated for the PA Life Science
5 Greenhouse Initiative and his
6 \$500 million PA sites proposal, which
7 includes a \$20 million budget to support
8 entrepreneurs who have historically
9 lacked access to venture capital funding,
10 and 2.2 million has been budgeted for
11 workforce development.

12 The City of Philadelphia
13 recently received designation as a U.S.
14 EDA Tech Hub for precision medicine
15 entitled PROPEL. HelaPlex as well as my
16 non-profit, Black-Latinx Institutes of
17 Health, known as BLIH, are two of over 20
18 co-applicants that applied for the U.S.
19 EDA Tech Hub opportunity in partnership
20 with primary applicant, Ben Franklin Tech
21 Partners of Southeastern Pennsylvania.

22 Ms. Mariya Khandros, Chief of
23 Staff for Councilwoman Gauthier's office,
24 as well as team members of PA Democratic
25 House Speaker Joanna McClinton and

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2 Governor Shapiro have attended all of our
3 internal meetings in preparation for us
4 to apply to Phase 2 of that grant, which
5 includes a \$45 million budget to support
6 the Greater Philadelphia region bio
7 startup ecosystem, including our
8 development of biotech workforce
9 development ecosystem. We submitted that
10 grant on the 29th of February of this
11 year.

12 The support of Ms. Khandros
13 along with Councilwoman Gauthier and the
14 financial support of Life Science Cares
15 Philadelphia has also helped us to kick
16 off BLIH's programming for bioworks in
17 partnership with Urban Affairs Coalition.
18 Life Science Cares, the non-profit
19 partner of U.S. Big Pharma, activates the
20 financial and human capital of life
21 science industries and partners with
22 non-profits to disrupt the cycle of
23 poverty and inequality in our
24 communities.

25 With over 375,000 Philadelphia

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2 residents living below the poverty line,
3 Life Science Cares Philadelphia is
4 committed to help provide access to basic
5 needs, access to education, and access to
6 opportunity. More specifically, Life
7 Science Cares Philadelphia issued BLIH's
8 first grant of 25,000 to help implement
9 our community engagement program that
10 will support the recruitment of our
11 fellow underserved community members for
12 employment training via bioworks,
13 including making a commitment to
14 galvanize Greater Philadelphia's
15 bio-pharma employees to hire our trainees
16 post-graduation from bioworks.

17 Last, but not least,
18 Ms. Khandros has been attending our
19 biotech workforce development meetings to
20 support the collaborative efforts for
21 developing our biotech workforce
22 development ecosystem under the
23 leadership of Dr. Rebecca L. Grant,
24 Director of Life Sciences and
25 Biotechnology at the Department of

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2 Commerce for the City of Philadelphia.
3 In summary, the City of
4 Philadelphia, more specifically
5 Councilwoman Jamie Gauthier and her team,
6 have been explicitly supporting the
7 Philadelphia life science biotech
8 ecosystem, but Councilwoman Gauthier and
9 her team cannot do it alone. We as a key
10 driver for the City of Philadelphia need
11 to support all of our members of the
12 local government via their respective
13 roles. And although our local government
14 will set a precedent via their
15 partnership, this is a traditional
16 pathway for developing a successful life
17 science ecosystem in cities like Boston,
18 Massachusetts, RTP North Carolina, and
19 San Francisco, California.

20 Now is our time in the City of
21 Philadelphia to build upon our success
22 via Spark and Iovance and all the other
23 companies here and create a blueprint for
24 an equitable life science ecosystem, one
25 that not only promotes inclusivity and

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2 diversity for workforce development, but
3 one that promotes equity for our
4 workforce and support our life science
5 startups and small business supply chain
6 vendors.

7 In order to promote equitable
8 financial prosperity via life science and
9 biotech in Philadelphia, leaders within
10 our local government must require equity
11 via lawful regulation on behalf of its
12 future financial and commercial real
13 estate initiatives for non-profits that
14 train our workforce and Big Pharma that
15 will offer employment to sustain our
16 local workforce. This simple act would
17 allow the City of Philadelphia to jump
18 from No. 6 to No. 1 seed in the U.S.
19 biotech market within the next five
20 years.

21 Here's my call to action:
22 Let's bet on Philly to be No. 1 in five
23 years by building an equitable biotech
24 workforce to support a sustainable
25 economy and access to prosperity for all.

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2 Thank you.

3 COUNCILMEMBER SQUILLA: Thank
4 you so much for your testimony.

5 Councilmember Gauthier.

6 COUNCILMEMBER GAUTHIER: Thank
7 you, Mr. Chair.

8 I just wanted to interject
9 quickly first to say thank you so much,
10 Tia, for being here. I and my entire
11 team are so proud to be working with you
12 and so excited that you're going to be
13 growing your company in the Third
14 District.

15 I did want to note for the
16 record that Andrew Goodman is our
17 Director of Equitable Development. He's
18 not a Councilmember. However, sometimes
19 I think Andrew is more popular than I am,
20 so I definitely understand. I definitely
21 understand the promotion for sure. But
22 thank you so much for testifying.

23 COUNCILMEMBER SQUILLA: Thank
24 you so much.

25 Kate, Ms. Nash, if you want to

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2 state your name for the record and then
3 proceed.

4 MS. NASH: Good afternoon,
5 Councilmembers. My name is Katie Nash
6 and I serve as the Senior Director of
7 External Affairs at the University City
8 Science Center. I want to thank Chair
9 Squilla and the members of the Committee
10 for allowing me to provide testimony
11 today on this important topic.

12 In particular, the Science
13 Center thanks Councilmember Gauthier for
14 leadership on this topic and for working
15 to engage all stakeholders in the
16 conversation with this hearing today and
17 the discussions going forward.

18 The Science Center is a
19 60-year-old non-profit that operates at
20 the intersection of startups, life
21 sciences, and community to help bright
22 ideas turn into the thriving businesses
23 that create inclusive economic growth.
24 Since the 1960s, the Science Center has
25 identified and filled gaps in the

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2 region's innovation ecosystem, including
3 talent gaps.

4 I don't need to tell you the
5 opportunity the growth of the life
6 sciences industry holds for Philadelphia.
7 My colleagues' testimony today has
8 clearly outlined with stories and numbers
9 how many jobs there will be at all levels
10 of educational attainment.

11 The Science Center sees three
12 pivotal areas that can drive increased
13 employment for Philadelphians from all
14 educational backgrounds. First is to
15 provide increased support for young
16 adults after high school as they explore
17 the many existing paths into life
18 sciences, whether through further
19 education, training or employment.

20 Second is to better connect
21 Philadelphians who are seeking a life
22 sciences career path to the training,
23 education or job that is their best next
24 step, like we have done with our adult
25 workforce program over the past four

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2 years, positively impacting the lives of
3 112 Philadelphians.

4 Third is to show new and
5 growing life sciences companies,
6 startups, the value of local hiring and
7 to lower barriers to hiring
8 Philadelphians.

9 Based on research that shows
10 that middle school is a pivotal time for
11 career exploration, the Science Center's
12 work in career pathways begins in the
13 middle school and continues into high
14 school with our award-winning free STEM
15 out-of-school time education program,
16 Firsthand. You can't be what you can't
17 see, so we make sure students see
18 scientists in action.

19 Building out of the Firsthand
20 learning lab after high school, we
21 connect young adults to opportunities
22 with local STEM companies, ensuring that
23 they can take their first step towards a
24 STEM-related profession. This is a
25 fragile moment for young adults and a

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2 huge opportunity. We recommend a
3 substantial investment in post-secondary
4 support for Philadelphia's young adults,
5 with a focus on career navigation in the
6 complicated life sciences industry.

7 In our recently published
8 economic impact report, the Science
9 Center identifies that the median salary
10 across all jobs at companies supported by
11 the Science Center is \$105,000,
12 83 percent higher than the regional
13 median income. This underscores the
14 value of this industry as a driver of
15 inclusive economic growth. But not
16 everyone walks past the shiny lab and
17 office buildings across our city and
18 feels a connection to and understanding
19 of what happens inside them. You can't
20 be what you can't see.

21 Our work has shown us the
22 importance of fostering a general
23 understanding of what jobs exist in the
24 life sciences industry and how adults
25 with diverse educational backgrounds can

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2 be successful in these positions. We
3 need to do a better job as an industry
4 and city at marketing life sciences as a
5 career option. Broad-based marketing of
6 employment success stories can help
7 encourage more Philadelphians to seek out
8 these career paths.

9 As one of the many partners in
10 the region who help new life science
11 companies start and grow in Philadelphia,
12 the Science Center makes it a priority to
13 highlight to the companies we support the
14 value of local hiring and community
15 engagement. Many stakeholders, including
16 the Chamber of Commerce for Greater
17 Philadelphia, have been working hard to
18 generate employer engagement around local
19 hiring. Building on all our work, more
20 support is needed to encourage inclusive
21 and local hiring.

22 The City of Philadelphia can
23 and should play a leading role in the
24 growth of the life sciences workforce
25 ecosystem. The Philadelphia Department

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2 of Commerce's Workforce Solutions grant
3 program has created a powerful community
4 of practice that supports strong,
5 impactful programs. With over \$9 million
6 in requests for \$1 million in funding
7 this year, this key City program needs
8 more support to achieve its full
9 potential. The region's Good Jobs
10 Challenge Award from the EDA is funding
11 an industry-sector partnership in life
12 sciences that is a critical piece of the
13 puzzle. The City has also an untapped
14 resource in the First Source Jobs policy,
15 which could drive local hiring.

16 Thank you for your time and
17 attention today and for considering our
18 recommendations.

19 COUNCILMEMBER SQUILLA: Thank
20 you. Thank you so much.

21 Please proceed. State your
22 name for the record and proceed with your
23 testimony, Dr. McGuire.

24 DR. MCGUIRE: Thank you. My
25 name is Dr. Kristy Shuda McGuire and I'm

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2 Professor and Dean of Biomedical Studies
3 at The Wistar Institute, our nation's
4 first biomedical research institute.

5 I was born in Philadelphia and
6 after earning a Bachelor of Science
7 Degree in Biology from Loyola University
8 in Maryland, I returned to Philadelphia,
9 taking a position as a Research Assistant
10 at Drexel University College of Medicine
11 while working on my master's degree in
12 the science of instruction. I loved the
13 research I was doing in a human genetics
14 lab at Drexel, so I decided to pursue my
15 Ph.D. in genetics at Thomas Jefferson
16 University.

17 My connection to Wistar began
18 when I was a faculty member in the
19 Biology Department at Community College
20 of Philadelphia. In order to address
21 Wistar's own workforce needs for
22 laboratory technicians, Dr. Bill Warner
23 started Wistar's Biomedical Technician
24 Training program, or BTT program, for
25 students from Community College of

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2 Philadelphia back in 2000. I started
3 helping with the program in 2010 and
4 served as the Academic Coordinator from
5 2013 until I left CCP in 2018.

6 As Dr. Warner was moving toward
7 retirement, Wistar recruited me as
8 Associate Dean to expand our education
9 and training initiatives, especially the
10 BTT program. The BTT program had been
11 tremendously successful between 2000 and
12 2019 with 160, or 77 percent of students,
13 having completed the program, including
14 52 percent from underrepresented races of
15 ethnicities and 71 percent women. Of
16 those students who successfully completed
17 what was then a two-summer program,
18 46 percent started related positions and
19 64 percent continued their education in
20 the year following completion. Forty-six
21 percent and 64 percent actually add up to
22 greater than 100 percent and what I
23 always considered to be one of the
24 strengths of the program, that students
25 could continue their education while

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2 working in the field they wanted to
3 pursue.

4 In 2017, Wistar extended the
5 BTT program to what is now our Fox
6 Biomedical Research Technician
7 apprenticeship, or BRT. Wistar's BRT
8 apprenticeship was the first
9 non-traditional apprenticeship in the
10 field registered in the Commonwealth of
11 Pennsylvania. This then allowed Wistar
12 to register our Biomedical Technician
13 Training program as a pre-apprenticeship
14 in 2019.

15 Upon starting at Wistar in the
16 fall of 2019, I helped finalize plans for
17 the renovation of our state-of-the-art or
18 really state-of-the-science dedicated
19 training lab. We recruited a cohort of
20 12 CCP students who thought they would
21 start the BTT program in May of 2020 and
22 finish in August of 2021. However, due
23 to the COVID-19 pandemic, we could not
24 start a new cohort in the summer of 2020.
25 Instead, I did a deep dive into our data

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2 and realized that even many of the
3 students who had not completed the BTT
4 program were often success stories.
5 Either one summer of the BTT program was
6 sufficient for them to obtain employment
7 or they transferred to a college or
8 university where they were not able to
9 return the following summer to complete
10 the program.

11 I applied for and received one
12 of the inaugural grants from GSK's
13 Philadelphia's STEM Equity Collective, a
14 ten-year initiative to increase the
15 number of Black, Latinx, and women
16 Philadelphians pursuing STEM careers.
17 With that funding, we piloted an
18 accelerated one-summer version of the BTT
19 program, allowing some of the students
20 accepted in 2020 to still complete the
21 program on their original timeline in
22 August of 2021. We were astounded with
23 the results. All 12, or 100 percent of
24 the students, completed the BTT program,
25 with 66.7 percent starting related

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2 positions and 91.7 percent continuing
3 their education within the year.

4 With this success and grants
5 from the National Science Foundation
6 Advanced Technological Education program
7 and Pennsylvania Department of Labor and
8 Industry PAsmart Program, we have been
9 expanding the BTT pre-apprenticeship from
10 a cohort of 12 students to 20 students
11 per summer. However, in order to have
12 enough Community College students to fill
13 these positions, we needed to expand to
14 other community colleges in the Greater
15 Philadelphia region.

16 To add additional cohorts
17 outside the summer, in 2022 we received a
18 vocational skills training contract from
19 Philadelphia Works and partnered with
20 West Philadelphia Skills Initiative to
21 launch our BTT program for adults living
22 and learning in Philadelphia, or ALL in
23 Phil. WPSI received hundreds of
24 applications for our first cohort with
25 Iovance Biotherapeutics, but the pool was

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2 drastically decreased by selection for
3 those who placed at 11th grade reading
4 and math levels. In order to have a
5 competitive life science workforce in
6 Philadelphia, first and foremost we need
7 to make sure Philadelphia students
8 graduate high school with sufficient
9 literacy and mathematics skills.

10 From that first cohort, 13
11 students, or 76 percent, completed the
12 program and 10, or 77 percent, were
13 offered positions at Iovance starting at
14 \$23 per hour. Nine participants from a
15 second BTT for ALL In Phil cohort with
16 Children's Hospital of Philadelphia
17 completed the pre-apprenticeship at the
18 end of 2023. We just celebrated another
19 cohort of 12 students at Iovance
20 Biotherapeutics on Friday and have our
21 fourth cohort with the Skills Initiative
22 and new employer Vintabio currently in
23 progress.

24 It is crucial that Philadelphia
25 supports programs with a history of

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2 proven success and that these programs
3 scale in proportion to the needs of the
4 life science workforce in Philadelphia.

5 We have limited our cohorts to
6 both the number of positions available at
7 partner employers and the amount of
8 funding awarded, but have capacity to
9 both expand the size of each cohort and
10 the number of cohorts at Wistar per year.

11 You heard from some of our past
12 trainees working in the life science
13 industry today, Unique Stephens from
14 Wistar's program with Cheyney University,
15 Tyler Driscoll from Community College of
16 Philadelphia and the BTT program, and
17 Veton Meas from our first cohort of the
18 BTT program for ALL In Phil with the
19 Skills Initiative and Iovance
20 Biotherapeutics.

21 As a world-renowned biomedical
22 research institute that serves as both an
23 employer and training provider in the
24 life sciences, Wistar is best able to
25 meet the growing needs of the life

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2 science industry in Philadelphia while
3 continuing to innovate in science as well
4 as education and training.

5 Thank you.

6 COUNCILMEMBER SQUILLA: Thank
7 you. Thank you so much.

8 We have Dr. Anthony Green.

9 DR. GREEN: Yes. Good
10 afternoon. I'm Dr. Anthony Green, Chief
11 Scientific Officer at Ben Franklin
12 Technology Partners of Southeastern
13 Pennsylvania. And in context here, I
14 started my scientific career at The
15 Wistar Institute as a high school student
16 over 50 years ago. Don't ask. I was
17 also one of the first employees of
18 Centocor when they started at the Science
19 Center and before anybody knew where
20 Malvern even was. I appreciate the
21 opportunity to support this important
22 resolution.

23 As today's last speaker sort of
24 leaves it to me to help figure out how do
25 we pull all these programs together that

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2 you've heard about today. The U.S.
3 Economic Development Administration's
4 Tech Hub implementation program is one
5 such opportunity, which I and Ben
6 Franklin have had the privilege of
7 leading on behalf of the region, and this
8 does represent the entire Greater
9 Philadelphia region, including South
10 Jersey and Delaware.

11 We applied for and received one
12 of 31 official Hub designations in
13 October from over 350 proposals.
14 Designation allowed the region to compete
15 for federal funding, up to \$75 million
16 over five years. As Tia mentioned, on
17 February 29th, we submitted an
18 \$80 million five-year proposal with a
19 ten-year vision to create PROPEL, the
20 National Center for Precision Medicine.
21 We have over 70 committed partners and
22 over 100 total organizations in our Hub
23 community, ten of whom have participated
24 in this afternoon's hearing.

25 In addition to matching funds

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2 from the Commonwealth for \$5 million, \$1
3 million from Delaware, we're also pleased
4 to get a million dollar commitment from
5 the City of Philadelphia, all over five
6 years.

7 Critical to City Council and to
8 the region, a significant percentage of
9 the funding will be deployed here in
10 Philadelphia. We estimate the economic
11 impact of the Hub to include a projected
12 7,500 new, sustainable, high-paying
13 precision medicine jobs with average
14 salaries ranging from 85,000 to 125,000.
15 This translates to over 20,000 total
16 jobs, earnings of \$2 billion and over 175
17 million in taxes to the region.

18 The Hub is built as a
19 public-private partnership focused on
20 precision medicine and life sciences. It
21 addresses the gaps of the region's
22 well-known but continuously
23 underrecognized and undersupported life
24 science assets, where groundbreaking new
25 technologies emerge from our research

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2 institutions and life science companies
3 every day.

4 In addition to these
5 institutions and companies, the Hub
6 incorporates industry, economic
7 development, industry workforce
8 organizations, community colleges and
9 HBCUs, medical centers, hospital systems,
10 and city, county, and state governments.
11 Relevant to today's discussion, the
12 workforce component has been selected as
13 one of four critical projects for
14 funding, which includes biomanufacturing,
15 entrepreneurship, and healthcare access,
16 each necessarily and purposely integrated
17 into each other.

18 The Hub is also home to many
19 supporting companies and organizations
20 essential to commercialization -
21 manufacturing, instrumentation, data
22 management, clinical trials, market
23 research, prototyping and fabrication,
24 robotics, cyber security, and artificial
25 intelligence.

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2 But each of these elements
3 needs its own diverse technologically
4 competent workforce. The need to build
5 and maintain this workforce is acute.
6 Life science companies, including many
7 funded by Ben Franklin, are desperate to
8 fill positions at all levels, especially
9 at bench-level science, manufacturing
10 automation, clinical trial management,
11 and software.

12 Our lead workforce partners,
13 Philadelphia Works and the Tech Council
14 of Delaware, have proposed bold new
15 initiatives to leverage the breadth of
16 programs and building on expanding
17 programs you've heard about today that
18 start at the middle/high school level,
19 continue to students from the region's
20 community colleges and HBCUs through to
21 adults from all educational backgrounds
22 and those in the workforce looking to
23 upskill the skills they already possess.

24 These efforts again join many
25 of the programs you heard about today,

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2 the Keystone Life Science Initiative, the
3 Philadelphia Works Good Job Challenge,
4 Wistar's program, the Science Center's
5 Firsthand program, all designed to
6 develop that next generation of
7 technologically competent workforce.
8 Even companies that are more advanced
9 will benefit from programs from the
10 Delaware Valley Industrial Resource
11 Center through the MEP program of NIST.

12 These are all great programs,
13 but we need more, in order of magnitude
14 more, to meet the demand. The Hub's
15 workforce plan will focus on programs for
16 participants to obtain technical skills
17 based on industry standards and can be
18 expanded to accommodate the region's
19 entire life science community, not those
20 just in precision medicine. This
21 combination of exposure and experiential
22 learning has a cumulative effect of
23 enhancing participants' readiness for and
24 transition into more advanced programs in
25 high demand careers regardless of their

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2 starting point.

3 Ideas are created in labs.

4 Products are built in companies.

5 Populations benefit from both, but people

6 make it happen. The proposed Tech Hub

7 integrates the collective experience of

8 all of our partners, including those

9 providing comment today, to share how the

10 pieces of this community of innovation,

11 industry, and workforce connect and the

12 understanding that advancing an

13 innovation agenda requires an equal

14 advance in workforce development, which

15 accrues to the economic benefit, growth,

16 resiliency, and security of Philadelphia

17 and the region.

18 Again, on behalf of Ben

19 Franklin Technology Partners, we are

20 pleased to support any effort to build

21 that next generation of workforce.

22 Thank you.

23 COUNCILMEMBER SQUILLA: Thank

24 you so much.

25 And thank you all for your

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2 testimony as we get through this hearing,
3 and I thank you for also being patient
4 enough to hang in there to be testifying
5 at this late hour, but it really means a
6 lot to hear what you have to say, so it's
7 important.

8 Councilmember Young.

9 COUNCILMEMBER YOUNG: Thank
10 you.

11 So my question is for
12 Dr. Lyles-Williams. Good to see you
13 again. How supportive is the life
14 science industry and that private sector
15 to minority entrepreneurs, particularly
16 dealing with funding and contracting
17 opportunities?

18 DR. LYLES-WILLIAMS: I mean,
19 it's no secret that minorities all
20 received a lesser end of the pot as far
21 as investment in startup, including in
22 biotechnology. So we have some work to
23 do there. Thanks to somebody's other
24 point earlier made the comment of making
25 sure that the workforce has soft skills I

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2 think in that nature, but we also need
3 training on the employer side, right?

4 So I'm just being transparent.

5 We got a lot of issues in my industry as
6 far as building relations with minority
7 groups and making sure that there's an
8 inclusive and equitable workforce, but I
9 believe we're on track here in the City
10 of Philadelphia. Definitely the
11 community has come together and become a
12 lot closer, at least since I've been here
13 in 2021 from what I can see, but we do
14 have some work to do, but it is -- it's
15 getting there. That's how I'll answer
16 that question.

17 COUNCILMEMBER YOUNG: Thank
18 you.

19 COUNCILMEMBER SQUILLA: Thank
20 you, Councilmember.

21 Councilmember Gauthier.

22 COUNCILMEMBER GAUTHIER: Thank
23 you, Mr. Chair.

24 I first wanted to commend Tia,
25 because what she didn't say was that when

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2 we were working with that on the land
3 reservation in Southwest, part of the
4 reason why we were so excited to do that
5 with LucasPye BIO, beyond the fact that
6 you're what we're talking about when we
7 say people need to be able to see what
8 they can be, but Tia and her company also
9 put together a really robust community
10 benefits agreement that specifies what
11 they're willing to do and commit to
12 around training, around jobs, and I think
13 that's what we should be going for as
14 this industry grows. So I just wanted to
15 add my praise in there, because you
16 didn't speak about that part.

17 DR. LYLES-WILLIAMS: You know,
18 sometimes I can boast, sometimes I don't.
19 But, yes, we made a commitment. We know
20 we got to hire around 250 people when
21 LucasPye BIO is up and running. We made
22 a commitment for the majority of that
23 workforce to come from locally in the
24 City of Philadelphia.

25 COUNCILMEMBER GAUTHIER: I just

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2 wanted to ask each of you -- all of you
3 are critical pieces of this ecosystem and
4 also embody the promise that's present
5 here. I wanted you to talk about
6 barriers to growth for your programs and
7 organizations.

8 MS. NASH: One barrier is
9 money. One of the hats I wear at the
10 Science Center is government fundraising.
11 So looking at from private, non-private
12 sources, how do we sustain this important
13 work. Sometimes there's work that's
14 happening behind the scenes by entities
15 like GSK or the Philadelphia Education
16 Fund, who are backbones, whose whole job
17 is to bring people together and convene.
18 And it has been a challenge in the past
19 to find and sustain funding for a good
20 program. It's often like, oh, well,
21 they're doing well and they're getting
22 these great grants, so they're kind of
23 taken care of, but we don't want somebody
24 to have a perfect model and then have to
25 continually change it to keep getting new

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2 grants.

3 So really finding sustaining
4 funding, which I know the state is
5 looking into. Alignment with Department
6 of Labor efforts and pre-apprenticeship
7 and apprenticeship really help for these
8 programs, but, again, we're always trying
9 to find ways to sustain what's working
10 and not to always have to be looking for
11 something new.

12 COUNCILMEMBER GAUTHIER: Thank
13 you.

14 DR. McGUIRE: I would echo
15 that. These training programs are
16 expensive just because of the people who
17 have to be qualified to be able to teach
18 them and also to be able to have the
19 equipment, the science equipment, the
20 reagents for the students to actually be
21 pipetting that DNA in water, not just the
22 water, right, to be learning these things
23 in authentic context. And I would echo
24 what Katie said, a lot of us have great
25 programs, but we are constantly chasing

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2 the funding for not just expanding and
3 adding on additional cohorts but just
4 maintaining what we have. We're really
5 good at braiding funding sources, but
6 that is a constant challenge.

7 The other thing I think is this
8 underutilization. So you mentioned the
9 two CTE programs earlier. Both of the
10 CTE at Roxborough and Dobbins are
11 under-enrolled, right? We're running
12 cohorts with less than the number of
13 participants that can fit in our training
14 lab. And there's different reasons for
15 that. For us, the one thing is that we
16 want to scale in proportion to the
17 industry needs. We don't want to be
18 training people for jobs that don't just
19 exist right now, right? We want to make
20 sure that as those jobs come online,
21 we're preparing people to take those
22 jobs. But there is still a lot of work
23 to be done to get people interested in
24 this as a career path.

25 DR. GREEN: This gives me an

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2 opportunity to put on my Ben Franklin
3 hat. As investors in early-stage
4 companies, obviously it's about the
5 money, where is the money coming from.
6 Our organization as a non-profit venture
7 capital, we only invest in Southeast
8 Pennsylvania, and the companies are all
9 here and, in theory, all the jobs will be
10 there.

11 So the more money -- and Jen
12 Gilburg is gone already, but we do get
13 our core funding from the state, but it's
14 not the only support that we get.

15 The other piece that you
16 mentioned, and this is another gap that I
17 believe can be addressed, the Hub is one
18 approach to doing this, is the corporate
19 connection in this region and getting the
20 corporates to really play a much more
21 significant role in building the region's
22 ecosystem. People talk about Boston
23 versus Philadelphia. I don't want to be
24 Boston. I don't like Boston. I'm a
25 Philly guy. All right? So I think what

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2 we have here is different, and we have an
3 opportunity to exploit what's unique
4 about this region, but we need the
5 corporates here to think about technology
6 as a means to an end, and that's a tough
7 sell. We have not done a good job of
8 making that sell to the big corporations
9 and even the philanthropic organizations
10 in this region. Sustainability is only
11 going to happen when the money is here.

12 One last point. Tia brought
13 this up. The gap in minority access to
14 venture capital is just embarrassing. It
15 still only represents maybe two percent
16 of all the venture capital money. That's
17 up from one percent. Now, you can decide
18 whether that's a 100 percent jump or just
19 less embarrassing, but we need to build
20 programs that can promote
21 entrepreneurship in the minority
22 communities.

23 We are doing that. We have
24 programs in the Hub built out for that.
25 We're already doing that with a program

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2 that we've put together with PACT, with
3 Dean Miller's organization, called Mentor
4 Connect. But we need to build that,
5 expand that entrepreneurial base in a
6 very real way. That will draw the
7 venture money that we need to help get it
8 from the other side, which is how do you
9 get these companies to grow.

10 COUNCILMEMBER GAUTHIER: Okay.
11 Thank you.

12 DR. LYLES-WILLIAMS: I'm on
13 board with everything as far as funding,
14 but I'll go back that we definitely need
15 legal or lawful regulations to require
16 employers to have a certain percentage of
17 their employees come from minority
18 neighborhoods. And not only that but
19 also the supply chain, right? You have
20 tons of small businesses that can already
21 contribute to the life science ecosystem
22 or it can pivot and add one more thing to
23 what they already do to be able to
24 contribute to the life science ecosystem.

25 So when we talk about

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2 workforce, let's not just only think
3 about people that can come in here and
4 work on the shop floor. Let's also think
5 about executives or the surrounding small
6 business owners that can also contribute
7 to the ecosystem.

8 COUNCILMEMBER GAUTHIER: Thank
9 you so much.

10 Thank you, Mr. Chair.

11 COUNCILMEMBER SQUILLA: Thank
12 you.

13 Thank you again for your
14 testimony.

15 I do see we have some names for
16 public comment.

17 COUNCILMEMBER YOUNG: Mr.
18 Chair?

19 COUNCILMEMBER SQUILLA: Oh, I'm
20 sorry. Councilmember Young.

21 COUNCILMEMBER YOUNG: Sorry.

22 So we had folks from CCP come
23 and testify. Can y'all tell me how
24 the -- tell us rather, I'm sorry, how
25 have the other eds and meds in our city

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2 been contributing to your industry as far
3 as workforce, as far as research goes and
4 things like that?

5 MS. NASH: So the Science
6 Center has the benefit of having a very
7 close relationship with in particular
8 academic and research institutions,
9 because our founding as a non-profit
10 included shareholders, and the
11 shareholders are 31 of Pennsylvania,
12 Delaware, New Jersey's leading academic
13 and research institutions.

14 We see the eds and meds playing
15 a huge role when it comes to seeding new
16 companies. So Pennovation, our Temple's
17 new NEST that they --

18 COUNCILMEMBER YOUNG: INEST.

19 MS. NASH: Yeah, iNEST that
20 they just opened are examples. Those are
21 the nurseries where these companies
22 start, and those are the places where
23 especially if they're encouraging
24 founders of color, local Philadelphians
25 to be starting and growing companies and

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2 providing them support.

3 The company that starts in
4 Philadelphia and has roots in
5 Philadelphia and wants to be in
6 Philadelphia is going to want to stay and
7 hire in Philadelphia, and the eds and
8 meds have done a great job of being
9 hotbeds of innovation and really focusing
10 on lab-to-market commercialization. They
11 see it as -- more and more it's not just
12 about publishing research papers. It's
13 about getting these fabulous ideas out of
14 the lab and into the marketplace where
15 they can improve people's lives. So
16 they've really led the way, and a lot of
17 the organizations, especially sitting
18 around the table today, are working to
19 fill gaps that they might not be
20 covering. So if you're at one of the
21 major institutions, you probably have
22 access to a more robust tech transfer,
23 a/k/a getting your idea out of lab and
24 into the market support, but for some of
25 the smaller institutions, they need sort

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2 of support from outside the organization,
3 and that's when the Science Centers and
4 the Ben Franklins and others come in to
5 provide the extra support. That's sort
6 of organization agnostic, I'll say.

7 DR. LYLES-WILLIAMS: I would
8 just say it's been very helpful. Jackson
9 Taylor, my therapeutic company, just got
10 accepted to the accelerator program at
11 Drexel University. And so the whole
12 basis of that program is to extend out
13 all of those resources that those
14 students on campus have access to is now
15 being provided to minorities with tech or
16 biotech startups that don't necessarily
17 come from Drexel. I mean, we're not
18 alumni of Drexel. We have no attachment
19 to Drexel until now for that program.
20 And I know PACT is doing something
21 similar and knocking on my door now.

22 So it's been helpful, but we
23 definitely still got to do some work as
24 far as what they said with the funding
25 piece and then just making sure that

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2 there are actual financial resources to
3 minority startup founders outside of just
4 mentorship. That is a huge barrier that
5 we have to -- not only us, but other
6 cities around the United States have to
7 figure out, but especially us.

8 What brings the money into life
9 sciences is not just R&D. It's the
10 manufacturing piece, right? R&D is
11 investment, it's grants, and may even be
12 philanthropic donations, but when it
13 comes to manufacturing, that's investment
14 too, but that creates the most bang for
15 your buck. That creates jobs. So you go
16 from an R&D bench that may -- let's say
17 how Iovance said they started out, right,
18 15 people. I'm pretty sure as they grew
19 manufacturing, there was the whole
20 purpose of partnering with Wistar,
21 because eventually they're going to have
22 the bigger manufacturing plan that can
23 actually afford the capacity or the
24 demand that their product is going to
25 start to incur, right?

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2 Another example, Spark
3 Therapeutics. Their manufacturing is
4 done, I believe, down in North Carolina.
5 They were looking for a partner here. I
6 was involved in those conversations, just
7 couldn't get my facility up fast enough,
8 right? And so now they've decided to
9 take on manufacturing and do it
10 themselves, and that's great, but that's
11 not going to be every biotech company's
12 story or ability.

13 Roche was very unique in doing
14 it. They haven't invested in a
15 manufacturing facility in I don't know
16 how long. So for them to do that tells
17 you the amount of capital they're willing
18 to put up, but it also tells you the
19 amount of demand and the amount of job
20 opportunities that comes with that for
21 them to say, okay, we'll go ahead and do
22 it ourselves since we can't find a
23 partner.

24 So that's the things we need to
25 be thinking about when it comes to

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2 workforce and life sciences. If we can
3 find a way to bring the commercial side
4 of biotech and life sciences away from
5 the R&D bench into Philadelphia, that
6 will equal economic prosperity for
7 everyone involved.

8 COUNCILMEMBER YOUNG: Thank
9 you.

10 COUNCILMEMBER SQUILLA: Thank
11 you. Thank you so much, and thank you
12 for that answer.

13 Thank you all for your
14 testimony. Much appreciated.

15 Now it looks like we'll go to
16 public comment. There are three names
17 that I see, Bob Rovinsky, Lake Paul, and
18 Patrick Oates, if you want to make your
19 way to the table if you're here.

20 MR. ROVINSKY: I'm Bob
21 Rovinsky. I will be redundant.

22 (Speaking without microphone.)

23 COUNCILMEMBER SQUILLA: Okay.
24 Thank you. Thank you for that.
25 Appreciate it.

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2 That was Bob Rovinsky. Is
3 Patrick Oates here?

4 Patrick, just step up to the
5 table, if you'd like.

6 (Witness approached witness
7 table.)

8 DR. OATES: Yes. Thank you so
9 very much. My name is Dr. Patrick Oates
10 and I have the wonderful pleasure of
11 serving as the Chairman of PHL Life
12 Sciences Advisory Board, but my 9:00 to
13 5:00 is I'm the Senior Vice President of
14 Business Development and Corporate
15 Strategy for EMSCO Scientific. EMSCO
16 Scientific is probably the oldest African
17 American-owned and operated life science
18 company in the City of Philadelphia and
19 probably in the State of Pennsylvania.
20 Since 1980, we've sourced laboratory
21 supplies, laboratory equipment,
22 chemicals, and other essential tools used
23 in biomedical research to the likes of
24 the University of Pennsylvania,
25 Children's Hospital, Temple University,

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2 Thomas Jefferson, and even companies like
3 Merck Pharmaceutical company and Bristol
4 Myers Squibb.

5 So since 1980, since our
6 founding by an African American woman by
7 the name of Evie Minor, we've been
8 sourcing these essential tools. Evie
9 sold the company just about eight years
10 ago to a group of African American men
11 and brought me on board to run the
12 company. It's been now eight years, and
13 we've grown the company from -- when we
14 acquired it in 2015, we were selling --
15 we were probably at about \$8 million in
16 sales per year. Now last year we were at
17 \$60 million per year in sales.

18 So we're excited, because we've
19 worked with a number of the folks that
20 spoke today. We're extremely excited
21 about the work that Councilwoman Gauthier
22 is doing in the life sciences and
23 bringing the City's awareness or offering
24 information to the City so that everyone
25 can be aware of the many opportunities

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2 here in the City of Philadelphia in the
3 area of life sciences, specifically in
4 light of the cell and gene therapy
5 research that's taking place in Philly
6 and the many opportunities that are going
7 to stem from that innovative research
8 that's taking place.

9 So I would agree with what was
10 said today. I think it's absolutely
11 essential that there be a collaboration,
12 there be a sense of awareness created by
13 this body, encouraging others to really
14 realize that Philadelphia is ideally
15 positioned to be the life science
16 ecosystem -- the number one life science
17 ecosystem in the City of Philadelphia.
18 And certainly with the Mayor's interest
19 in this area, the members of City
20 Council, and the members of the Chamber
21 of Commerce, we are primed and positioned
22 for success.

23 Thank you.

24 COUNCILMEMBER SQUILLA: Thank
25 you so much for your testimony. And

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2 before you leave, the Chair recognizes
3 Councilmember Gauthier.

4 COUNCILMEMBER GAUTHIER: Thank
5 you so much for being here and thank you
6 for the work that you're doing. We were
7 just together earlier. EMSCO is in
8 Councilmember Jones' district in West
9 Philadelphia.

10 After hearing this full
11 conversation, do you have anything to add
12 about what we really need to do as a city
13 to prepare our workforce and what role
14 the City of Philadelphia can play in
15 that?

16 DR. OATES: I think it's just
17 essential that our young people really
18 see for themselves what's available to
19 them and what opportunities exist and
20 that this industry calls for more than
21 just Ph.D.s or M.D.s, but it calls for
22 men and women who are genuinely
23 interested in assuming a career in life
24 science. We need to really educate them
25 on what exactly is life science. All

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2 right? So we need to make it -- we need
3 to deliver a message that it's palatable
4 to everyone, not just the researchers at
5 Penn or Temple, but young men and women
6 in schools, in high schools across the
7 City.

8 I started my career at -- I was
9 a student at WB Saul High School years
10 ago, and at that time, I knew -- I became
11 interested in science. I knew I was good
12 at it. And so along with my parents and
13 teachers, many teachers encouraged me and
14 said, hey, you could do it.

15 That's what we need to be
16 intentional about, is encouraging our
17 students, letting them know they're
18 capable and they can achieve in the
19 sciences, and then give them some idea
20 what these careers look like.

21 Here in Philly, West
22 Philadelphia, as I said, we've been in
23 existence since 1980. We just completed
24 a new 70,000 square foot facility that we
25 built from the ground floor up, and we

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2 welcome all of you to come and see it.
3 We had the pleasure of having the
4 Councilwoman there this morning along
5 with Councilman Curtis Jones. And that's
6 just an example of what men and women
7 with a like-mind and like-thought can do,
8 and ultimately to employ men and women of
9 all communities in Philadelphia to work
10 in this thriving economy.

11 COUNCILMEMBER GAUTHIER: Thank
12 you so much. We're really proud of you
13 and we hope to help you grow even more.
14 Thanks so much for being here today.

15 COUNCILMEMBER SQUILLA:
16 Councilmember Young.

17 COUNCILMEMBER YOUNG: Yes.
18 Thank you.

19 Thank you, Dr. Oates. Just one
20 question. Have you seen -- you've been
21 listening to the testimony today. Have
22 you seen similar issues around workforce
23 development at your particular company
24 and finding the right people to do those
25 jobs?

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2 DR. OATES: What I find most
3 challenging -- and thank you for your
4 question, Councilman Young. What I found
5 most challenging is finding men and women
6 from across the City of diverse
7 backgrounds. I remember at one time I
8 needed someone -- this is probably about
9 five to six years ago. I needed an
10 account manager to handle the account at
11 the University of Pennsylvania, and that
12 called for a person to come and to
13 actually walk the halls and to meet with
14 researchers, and I needed -- I preferred
15 someone of color. So I put a call out
16 to -- I think I used Indeed. And I was
17 flooded, flooded with resumes, but, you
18 know, as a minority company, we want to
19 try to do our best to identify men and
20 women of color to work in the life
21 science industry, because historically
22 it's white dominated. And so we wanted
23 to identify men and women of color to
24 work in this space. But we had many,
25 many candidates that applied, but no one

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2 of color, quite frankly.

3 And so that's been our biggest
4 challenge, is to really find men and
5 women from Black and brown communities
6 throughout Philadelphia who are able to
7 work and who are skilled and able to
8 assume a role within the company.

9 So now we've been -- what I've
10 tried to do is to look at the talent
11 that's coming out of schools. I ended up
12 hiring a young Hispanic woman out of
13 Thomas Jefferson University to fill that
14 role, and she came to me through a
15 recommendation from someone else.

16 COUNCILMEMBER YOUNG: Thank
17 you.

18 COUNCILMEMBER SQUILLA: Thank
19 you.

20 Thank you so much for your
21 testimony, and we really appreciate
22 everyone's testimony today on this great
23 subject.

24 Thank you, Councilmember
25 Gauthier, for your hard work and bringing

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2 this to the attention of the City as a
3 whole and looking forward to improving it
4 and making it better.

5 There being no further
6 questions from any members of the
7 Committee and no other witnesses to
8 testify, I'll ask if there's anyone
9 present in this hearing whose name we
10 have failed to call and wishes to offer
11 testimony on this resolution being
12 considered today?

13 (No response.)

14 COUNCILMEMBER SQUILLA: Hearing
15 none and seeing none, this concludes the
16 business before the Committee on Commerce
17 and Economic Development. We will now
18 recess the hearing to the call of the
19 chair.

20 Thank you all very much for
21 your attendance. Have a great day.

22 - - -

23 (Committee on Commerce and
24 Economic Development concluded at 5:22
25 p.m.)

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CERTIFICATE

I HEREBY CERTIFY that the proceedings, evidence and objections are contained fully and accurately in the stenographic notes taken by me upon the foregoing matter, and that this is a true and correct transcript of same.

Michele L. Murphy

MICHELE L. MURPHY
RPR-Notary Public

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