

Good Afternoon Chair Barron, and Members of the Higher Education Committee.

My name is Jane Bowers. I am the Interim Executive Vice Chancellor and University Provost at the City University of New York. In this role, I serve as CUNY's chief academic officer, responsible for all of CUNY's academic programs, student affairs, faculty affairs, academic technology, libraries, and institutional research. As a sign of the importance we give to today's topic, Pursuing Health Careers at City University of New York, I am joined by three college presidents, Jennifer Raab of Hunter College, which offers CUNY's largest nursing program; Marcia Keizs of York College, whose recent focus has been on the development of new master's level health-related programs responsive to current employer needs; and Vincent Boudreau of the City College of New York, home of CUNY's Medical School.

They will each address the excellent educational opportunities at their institutions, and I will begin by giving an overview of health education at the University.

Arguably, the quality of health care depends on the skills and education of the health workforce. To a substantial extent, health care in New York City depends on CUNY and its graduates. CUNY is committed to providing high quality academic programs to prepare a pipeline of culturally diverse students to fill critical roles in health care. About 10% of all undergraduate students and 10% of graduate students at CUNY are pursuing a degree in health

and human services. In academic year 2017-2018, more than 5,100 students (2300 associate and 2800 baccalaureate) graduated with an undergraduate degree in a health-related field. 1,300 of them earned a degree in nursing. At the graduate level, another 1,500 students earned masters or doctoral degrees in the same year. In 2017, CUNY graduates comprised more than a third of all newly licensed RNs in New York City.

We offer more than 150 undergraduate and graduate certificate and degree programs in health and human services areas, including nursing and allied health. We are justly proud of the academic quality of our health programs. In 2017 the combined CUNY pass rate on the NCLEX (the state licensing exam for nurses) was 86%: higher than the combined NCLEX pass rate of 83% for all other NYC-based nursing programs. Likewise, City Tech's first-time licensure rates in dental hygiene are consistently 95% or better.

Most of this education is offered in-person on our campuses, but through the CUNY School of Professional Studies we also offer online BS programs in nursing, health information management, and health services administration as well as online MS programs in nursing education, nursing informatics, and nursing organizational leadership, through the CUNY School of Professional Studies. CUNY also offers more than 50 non-degree adult and continuing education programs for the health care workforce. These programs provide opportunities for non-traditional students to prepare for emerging careers in the healthcare sector. New programs include the state's first credit-bearing certified recovery peer program developed in response to the opioid epidemic; a community health worker apprenticeship program created

for 1199 and Bronx Lebanon Hospital; and a health coach program for Community Care of Brooklyn.¹

We have invested significantly in health care education in recent years, launching the Graduate School of Public Health and Health Policy in 2015 and the CUNY School of Medicine in 2016. We are also in the process of searching for a new University Dean of Health and Human Services who will provide academic leadership and coordinate cross-campus initiatives for the CUNY colleges and graduate schools that offer health education. Of critical importance, the dean will network with large employers to increase clinical opportunities for students. Currently there is an insufficient number of clinical placements to meet student demand and this shortfall limits the number of otherwise qualified students we can admit to certain health majors – particularly nursing.

CUNY nursing graduates come from diverse cultural and linguistic backgrounds. Nearly 64% of our associate degree graduates are people of color (21% Asian, 28% of African American/Black, 16% Latinx, and 36% White) as are more than 70% of our bachelor's degree graduates (23% Asian, 33% African American/Black, 14% Latinx, and 30% White). A majority of undergraduate nursing students who attain a degree are foreign born. CUNY's nursing students are often residents of the same urban neighborhoods as the patients they ultimately serve. Many of our other health programs are equally diverse. For example, the New York City College of

¹ Community Care of Brooklyn is the Maimonides-led performing provider system which provides collaborative care for Medicaid patients

Technology runs the largest dental hygiene program in the region and graduates significant numbers of underrepresented students in a field that has limited minority representation.

Graduation from a CUNY health-related program provides aspiring students with a road to the middle class through employment in a respected profession. Jobs in the health care field represent about 12% of all jobs in New York State, and many of the fastest growing occupations are in the healthcare industry. The New York State Department of Labor expects that the state economy will add almost 125,000 health care jobs between 2016 and 2026, a growth rate of 21% (nine percentage points higher than the projection of 12% growth for all occupations). Particularly strong job growth of 30% or more over the course of the decade is expected among Physician Assistants, Physical Therapists, and Nurse Practitioners. These positions all require graduate degrees. Greater than 30% growth is also expected among Occupational Therapy Assistants and Physical Therapy Assistants, positions which require associate degrees.

According to a data match between CUNY and the New York State Department of Labor, students who earn associate degrees in nursing or respiratory therapy typically earn salaries in the mid-seventy thousands, while those who earn associate degrees in radiologic technology or as emergency medical technicians or paramedics typically make around \$60,000 per year three years after graduation. With a bachelor's degree, CUNY nursing and physicians assistants typically make salaries in the low-to-mid-nineties three years after graduation. Median annual earnings for graduates with medical technology and occupational therapy degrees are just over \$60,000.

To be sure, students encounter financial challenges on the way to these careers, despite CUNY's affordable tuition. Financial aid may not cover the reduced course load many students must take in order to complete their challenging and time-consuming clinical classes. Students may pay out of pocket for required background checks or drug panels, for licensure prep courses, for NCLEX licensing exam, and for the New York State license itself. To make it slightly easier to bear these costs, CUNY supports its health students by covering the costs of liability insurance for their clinical placements. We would like to do more because investments made in these students benefit not only them, but also their families and New York City.

CUNY must be prepared to navigate the dynamic and changing health care landscape by adapting its mix of academic program offerings, by securing clinical placement slots for our students, and by providing the necessary academic support to ensure that students can manage the appropriately rigorous health program curricula. I am confident that we will rise to these challenges.

Thank you for this opportunity.

The CUNY School of Medicine

The recently accredited CUNY School of Medicine (CSOM), built on the 45-year tradition and success of the Sophie Davis Biomedical Education Program (SD), is determined to address the following critical challenges in health care and medical education:

- 1) the limited number of physicians who seek to serve our underserved communities and in areas of greatest need (e.g. primary care);
- 2) The limited opportunity that is provided to young men and women from underserved communities (many of whom are underrepresented minorities) to successfully pursue a medical education.

We address these challenges through:

- 1) a unique seven-year program that recruits high school graduates from New York State who demonstrate an understanding and embrace of our social mission);
- 2) the establishment of a comprehensive, nurturing environment, and
- 3) a curriculum that centers on the patient and focuses on creating compassionate and caring physicians who appreciate, value and respect diversity.

Why the Shift to the CUNY School of Medicine?

In its old structure, the Sophie Davis Program (hereafter, SD) operated under a “cooperating school model.” During their first five years in the program, students completed a baccalaureate degree together with the didactic components of the first two years of traditional medical school. Students then

transferred as third year medical students to one of six cooperating medical schools to complete two years of clinical education (clerkships).

Unfortunately, despite its extraordinary mission and outstanding record of accomplishments, our partner medical schools frequently placed greater emphasis on specialty practice areas over careers in primary care, diluting the potency of our students' commitment to primary care for the underserved. In addition, changes in medical education, expansion of class sizes in other medical schools and the consumption of clerkship slots by offshore medical schools significantly reduced the capacity of clinical training for our students and made our model obsolete.

Our New Model

In developing our new model, we were particularly concerned about the long-term financial viability of the educational program, and simultaneously, not being an additional burden to the State health care infrastructure. We built a structure without ownership of a hospital, but with an affiliation agreement between the medical school and our clinical partners in New York (hospitals and other health care facilities). The clinical faculty members are employees of and are paid directly by the hospital, significantly decreasing the potential financial obligations for the school. This affiliation model presents the greatest degree of separation between the medical school and the hospital, and the least amount of risk and financial liability to our parent institution, The City College of New York (CCNY) and CUNY and the State for delivering the clinical components of medical education.

Who we Are:

The CUNY School of Medicine, like the Sophie Davis program is committed to diversifying a profession that has often been insufficiently representative. We work, in particular, to make sure that patients in underserved communities have doctors and physicians' assistants who are attuned to their needs. One way to do this is by recruiting medical students from the communities they will serve, students who are

committed to providing healthcare to the underserved. With these goals in mind, our program has been a significant source of a diverse body of physicians working in New York State's underserved communities, especially in primary care:

- 65% of SD graduates practice medicine in New York (the most of any medical school in New York State);
- 41% of SD graduates pursue careers in a primary care medical specialty. These figures place SD among the top 10 medical school in the United States in producing primary care physicians; if this trend continues it will make the CSOM the number one school providing primary health care physicians in New York State;
- 26% of SD graduates are practicing in Health Professional Shortage Areas (HPSAs) in New York State (compared to state figures indicating that only 14% of physicians work in HPSAs);

Over the course of the 45 years as the Sophie Davis program and now as the CUNY School of Medicine, 33% of its students have been from underrepresented minorities (URMs). Over the past 10 years, this number increased to 42% of enrolled students.

The transformation of the Sophie Davis Program into the CUNY School of Medicine has not diminished our accomplishments in this area. Over the last 2 years, 58% of our admitted students have come from under-represented demographic groups (African Americans and Latinos). 63% of students in attendance are from under-represented groups (defined here as African American and Latino, and so not counting people of Asian descent).

At the last meeting (fall 2017) of the Association of American Medical Colleges (AAMC) in Boston, our school was cited for being in the top five schools in the United States in terms of

recruitment of African American students, preceded only by four Medical Schools in Historically Black Colleges and Universities: Howard, Meharry, Morehouse and Charles Drew.

I'd like to put these figures in the context of student recruitment at other medical schools, represented as percentages of national averages.

- The average percentage of African American Students in medical schools nationwide is 7%; at the CUNY School of Medicine, it's 39%;
- The average percentage of Latinos in medical school is 6.5%; at the CUNY School of Medicine, it's 24%;
- We have more than the average number of women in school than the national average (48.% nationally v. 62% at the CUNY school of medicine.

Charts representing these figures in more detail, appear in an appendix to this testimony.

Faculty and Administrative Diversity:

Although the CSOM is well above diversity attainment figures for medical schools nationwide, we have work to do in this area. This has been an issue that the students themselves have raised. In response to student input and their concerns that we further diversify our faculty, we now have students on every hiring committee (they have long since served on admission committees for much the same reason). The school is in the midst of a build out process, and we anticipate that it is the one place on the CCNY campus that will be hiring in numbers in the near future—meaning that there is a real chance to build on our diversity figures.

- Nationally, medical school faculty are 4.8% Latino and 3% African American. At the CSOM, 12.4% of our faculty are Latino and 9% are African American.
- 60% of our faculty are women, as compared to a 39.5% nationwide.

- 25% of our Department chairs are from under-represented groups, as compared to 12% nationwide.
- 25% of the school's deans and 29% of its senior administrative staff are either African American or Latino.

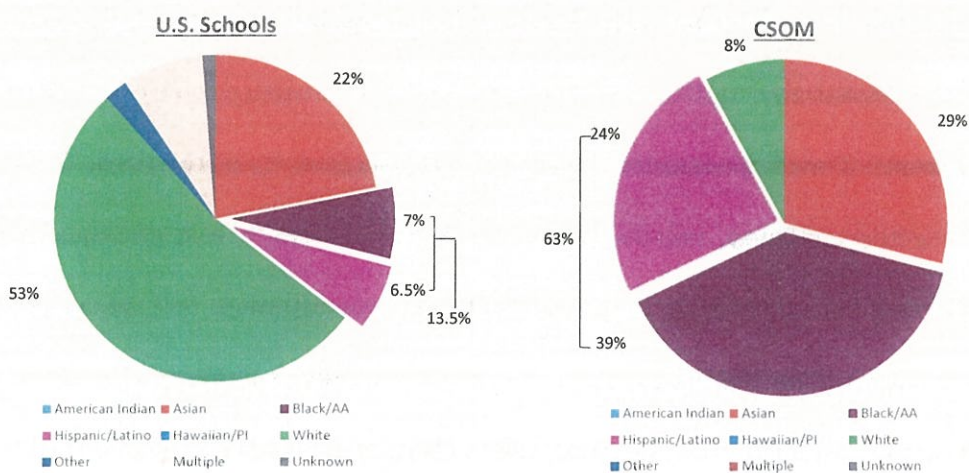
Conclusion:

The CUNY School of Medicine passed its intermediate accreditation review last year, and will graduate its first class of doctors in the spring of 2020. At this writing, the school is still assembling the instructional and administrative staff for the school, people that will manage some of the more complicated elements of medical education, including clinical placements and rotations. Our research operation is just getting underway, and the fact that we have more hires to make give us ample opportunity to strengthen our diversity figures for faculty and administration. Still, we are excited to be able to serve the needs of our city, and our state. The mission to provide more sensitive and effective primary health care in underserved communities, and to diversify the medical profession by bringing the whole people into medical school is, in fact, a single, unified mission. We look forward to serving this mission for our city, our state and our people.

Appendix:

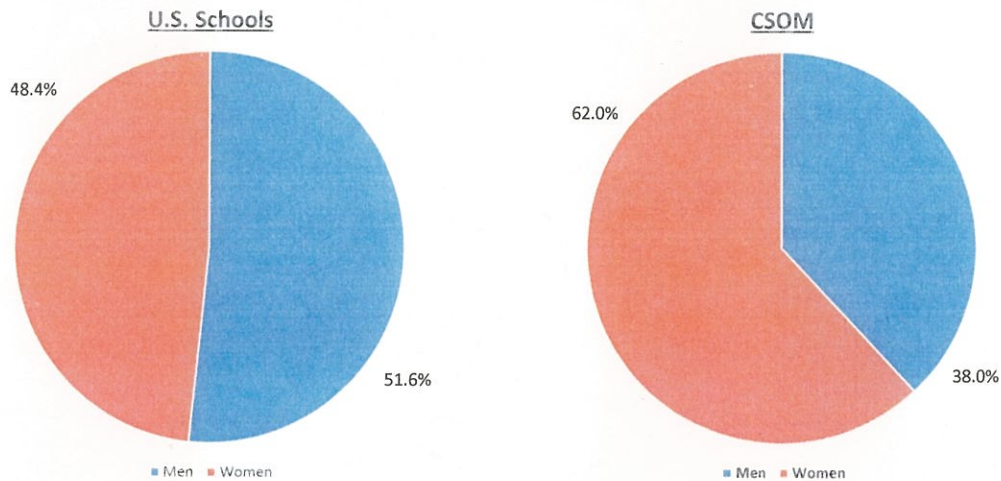
The figures below provide more details regarding the racial, ethnic and sex characteristics of our latest entering class and an overall temporal trend in the recruitment of underrepresented minorities in the past 15 years.

CUNY School of Medicine 2017 Entering Class by Race and Ethnicity



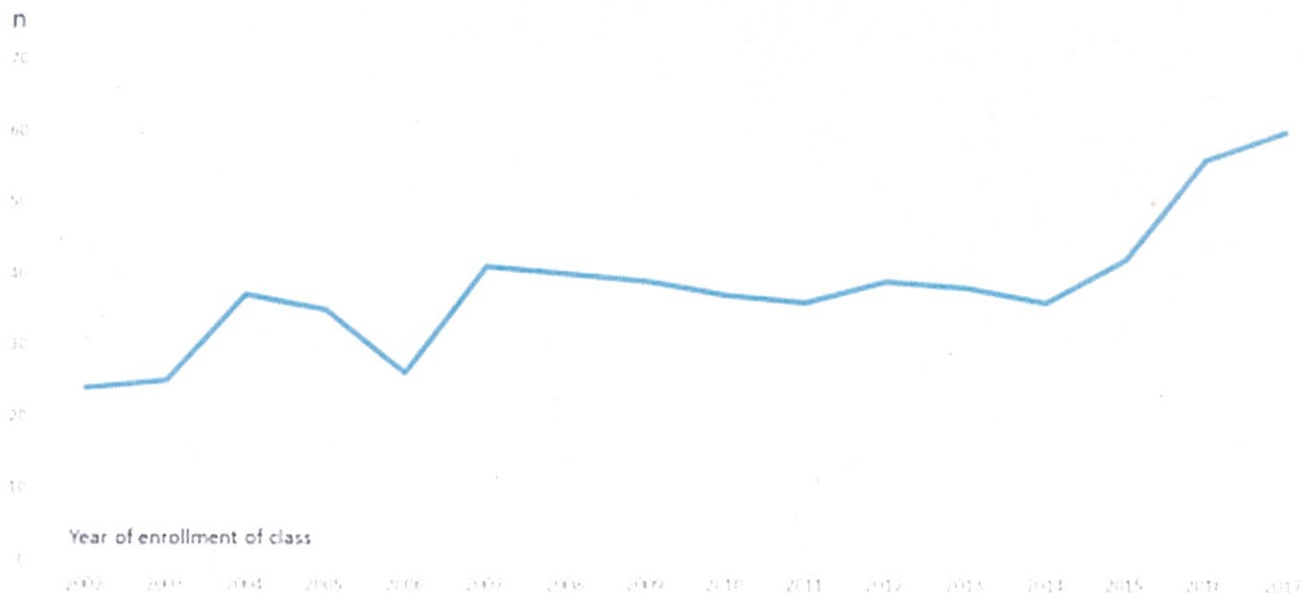
For CSOM, the entering class are the students enrolled in the first year of the 7-year program

CUNY School of Medicine 2017 Entering Class by Sex



For CSOM, the entering class are the students enrolled in the first year of the 7-year program

CUNY School of Medicine URMs students Admitted(2002-2017)





Testimony of Marcia V. Keizs

President

York College/CUNY

New York City Council Committee on Higher Education

“Pursuing a Career in Health Care at the City University of New York”

January 17, 2019

Good Morning Chairperson Barron and all the members of the Committee on Higher Education. Thank you for the opportunity to testify on York College's role in preparing nursing professionals for the workforce in New York City. I am Marcia Keizs, President of York College.

Background

As you are well aware, for over fifty years York College has been the academic nucleus of the diverse Southeast Queens community. Our students, many of them immigrants, or children of immigrants, represent more than 100 different nations of origin, speaking almost as many different languages. In keeping with Jamaica's emergence as one of the city's busiest transportation centers, we partner with the Port Authority of New York and New Jersey and are home to the CUNY Aviation Institute. The Northeast Regional Laboratory of the U.S. Food and Drug Administration (FDA) also shares our 50-acre campus, providing a thriving partnership anchoring our health and science programs. We are also excited to be part of the Jamaica Downtown Revitalization Initiative (DRI) and Governor Cuomo's JFK Redevelopment.

York College is organized into three schools: the School of Arts & Sciences, the School of Business & Information Systems, and the School of Health Sciences & Professional Programs (SHSPP). The Department of Nursing resides in the School of Health Sciences and Professional Programs and delivers a two pronged nursing program: Baccalaureate in Science (BS) RN to BS and the Generic BS nursing. Both programs are accredited by the Accreditation Commission for Education in Nursing (ACEN) and the NYS Department of Education Office of Professions. I am pleased to tell you our program received the full eight-year ACEN accreditation in 2014. At the present time, York's nursing program is the sole accredited Baccalaureate granting CUNY Program in the Borough of Queens, which as you know has a population of more than two million people. On the horizon for us at York by the year 2020 is the launch of a Master's in Nursing program, that will be the only Master's program in CUNY within the Borough of Queens.

York is pleased with the performance of our nursing graduates on the National Council Licensure Examination (NCLEX). In 2018, we had a 94 percent first time pass rate, above the New York State average rate of 87 percent. There were 36 of our nursing students seated for the NCLEX exam, and 34 students passed the test on their first try (94 percent rate). The remaining 2 students passed the test on the second seating. In 2017, we had a 100 percent first time pass rate on the NCLEX.

The Focus on our Nursing Programs

As mentioned above, York College provides two pathways for nursing preparation.

a) The first is the RN to BS completion program that provides associate degree nurses with preparation to complete the baccalaureate degree. York has been offering this program since 1985 and the focus of our preparation is in leadership, management, and primary preventative care. In 2012 York sought and received approval from the State Education Department to establish the RN to BS Dual Degree program. This is a variation on the existing RN to BS completion program that offers a seamless transition for associate degree community college students who dually enroll (at the same time) in both the associate and bachelor's program. The dual degree program minimizes barriers to student completion for example reducing the challenges of the application process, reducing taking unnecessary credits, and reducing the unnecessary use of financial aid.

b) Our second program the Generic Nursing Program launched in 2011, reflects the College's commitment to the 2010 Institute of Medicine (IOM) report "The Future of Nursing: Leading Change, Advancing Health," and the recognized need in Queens and New York City to increase the total number of baccalaureate-prepared nurses entering the workforce. York's first cohort of Generic BS students graduated in December 2013. We have had 137 students graduate from our Generic Nursing Program since 2013.

Recruitment/Admissions/Outreach to Community Colleges and Public Schools

The York College Admission's recruitment plan is centered on an inside-Queens, outside-Queens approach. The majority of new first-time student applications/commitments/registrations come from Queens, followed by Brooklyn, and other (Manhattan, Bronx, and Long Island). The majority of the high school visits is focused in Queens to maximize relationships with local high schools, small business organizations, and community boards. Then there is a broadening out to the other Boroughs. York College through our office of academic affairs establishes and renews articulation agreements with our sister community colleges.

Current Status of Nursing Program

There are currently 130 full-time Generic nursing students, 22 RN to BS students, and 3 Queensborough Community College (QCC) dual degree students enrolled at York College. The ethnicity of the students in the Generic Nursing Program is: 30 % Black, 49% Asian or Pacific Islander, 11% Hispanic, 9% White, Non-Hispanic, and 1% Native American/Native Alaskan. The gender breakdown is 24% male and 76% female.

Generic Nursing Program – Total 130 Students

<u>Gender</u>	<u>Number of Students</u>	<u>Percentage % of Students</u>
Male	31	23.8%
Female	99	76.2%
<u>Ethnicity</u>	<u>Number of Students</u>	<u>Percentage % of Students</u>
Black	40	30.8%
Asian or Pacific Islander	64	49.2%
Hispanic	14	10.8%
White (Non-Hispanic)	11	8.5%
Native American/Native Alaskan	1	0.7%

York's Department of Nursing is transforming the education of our nursing students through the use of simulation in our state of the art simulation lab. Students are prepared to meet the complex needs of patients in the current healthcare system and to function in the role as future nurse leaders.

Our students learn to collaborate and to lead by example by our faculty where 7 out of 8 full-time faculty hold PhD degrees and the remaining one faculty is enrolled in a PhD program. The faculty guide our students through the nursing research process and prepare them for participation to present their research in professional conferences hosted regionally, nationally and internationally.

Students present their research at professional conferences hosted by national and international nursing organizations in the form of panel discussions, poster presentations and explanation of how their experiences teach them to become advocates for change, better practitioners and full partners of the healthcare team. Through these activities students in the nursing programs are challenged to become change agents to eliminate healthcare disparity.

A core value for all York College students is community engagement and experiential learning. Of course our nursing students, as part of the clinical training, are required to practice their skills under professional supervision in hospitals, nursing homes, clinics and other healthcare facilities. Our nurses have additional opportunities and I am pleased to note to that since 2013, for six consecutive years, York College nursing students have participated in a summer two-weeks three-credits course in Haiti where York College students work alongside healthcare professionals in a service-learning experience. Under the leadership and guidance of nursing faculty Dr. Margaret Alexandre, York College nursing students get on-the-ground experience in providing care and education to an underserved, under-resourced population at the Mission of Grace Orphanage, Grace Community School, and Grace Community Medical Clinic located in Carries, Haiti.

A second example of a collaboration closer to home is York's Department of Nursing that is working with the Joseph P. Addabbo Family Health Center in Jamaica and Far Rockaway, Queens in a service learning partnership that provides the center with Associate Degree Registered Nurses, licensed to practice in New York State, who are pursuing a Bachelor's degree. Starting in Fall 2019, 12 students will have 6 – 8 hours per day clinical placement at one of the center's locations. The Addabbo Health Center

will receive the benefits of having registered nurses and the students will receive course credit towards a BS degree.

The Future of Nursing at York College

As we look to the future of York College, we see growth in both of our existing programs the RN to BS and the Generic Nursing baccalaureate. We also see the launch of the Masters of Nursing by the year 2020. In order to build that capacity York College will need additional resources. As you are well aware, accredited programs must comply with very strict regulations of the New York State and the ACEN. For instance, the ACEN requires in our nursing program a faculty to student clinical ration 8:1 and lab ratio of 15:1. So for instance were we at York want to expand the nursing class by an additional cohort of 25 students we would need an additional 8 full time faculty, 2 part time faculty and clinical lab faculty, roughly to the tune of \$1 million.

Further we want to encourage our Graduates to think long term about their careers and to think about being leaders in the field. We consider our chairperson a great example. You may remember her from the hearing in 2016. Dr. Valerie Taylor-Haslip, Chair of York's Nursing Department, obtained her undergraduate degree from an HBCU; but pursued a Master's in Nursing at Lehman College and a PhD from the CUNY Graduate Center. She then moved into the ranks of junior faculty in a community college, and on to department chair at York. Our students are encouraged to model her professional trajectory. Our Master's program, to be launched by 2020 will help us on that journey. And down the road, maybe our nursing students will be able to earn the doctorate right here at York College, as is the case at the College of Staten Island.

Thank you for the opportunity to provide this testimony.



Testimony of:

Jo Wiederhorn, President & CEO
Associated Medical Schools of New York (AMSNY)

Oversight – Pursuing a Career in Health Care at the City University of New York

A Hearing of
the Committee on Higher Education

New York City Council

January 17, 2019 10:00 am

250 Broadway, 14th Floor Committee Room, New York, NY

Good morning, Chairwoman Barron and other distinguished members of the committee. Thank you for this opportunity to testify on pursuing health careers at the City University of New York.

My name is Jo Wiederhorn, President & CEO of the Associated Medical Schools of New York (AMSNY), the consortium of the sixteen public and private medical schools in New York State, eight of which are located within New York City's five boroughs. AMSNY works in partnership with its members to promote high-quality and cost-efficient health care by ensuring that New York State's medical schools provide outstanding medical education, patient care and biomedical research.

AMSNY strongly believes in the importance of a multifaceted strategy to meet the growing demand for primary care and specialty physicians, while simultaneously tackling the current need to decrease access issues in underserved areas. As such, through our *Diversity in Medicine* Program AMSNY has overseen diversity programs designed to increase the number of underrepresented students going into medicine and biomedical sciences since 1985. CUNY School of Medicine (CUNY), formerly Sophie Davis School of Biomedical Education, is one of our member institutions and we have been supporting programs at both CUNY and the City College of New York (CCNY) for close to 20 years.

AMSNY's Diversity in Medicine Program

According to the SUNY Albany Center for Health Workforce Studies, while African American/Blacks and Latino/Hispanics make up 31% of the New York State population, they accounted for approximately 12% of the State's physician workforce between 2011-2015.

Increasing racial and ethnic diversity among health professionals is important because evidence indicates that diversity is associated with improved access to care for racial and ethnic minority patients, greater patient choice and satisfaction as well as better educational experiences for health professions students. As such, increasing the number of physicians from communities underrepresented in medicine (URIM) practicing in the state is vital to the health of New Yorkers.

Since 1985, AMSNY has supported an array of pipeline programs across the state with the intent of expanding the pool of students choosing careers in health and medicine. The goal of these programs is to provide academic enrichment and support to students from educationally and/or economically underserved backgrounds. These programs provide an opportunity that a majority of participants would not have had due to cultural and financial barriers.

AMSNY oversees six core programs as part of its *Diversity in Medicine* grant that ultimately leads students into medical school, including a post-baccalaureate program at the Jacobs School of Medicine &

Biomedical Sciences, University at Buffalo (UB); and three master's degree post-baccalaureate programs at SUNY Upstate Medical University, Renaissance School of Medicine at Stony Brook University, and New York Medical College. These programs are unique in that students must first apply to a New York State medical school and be interviewed by the school's admissions committee. If the admissions committee believes the student would be a good addition to the school, they will recommend him/her to one of the four post-bac programs. If, upon completion of the post-baccalaureate program, the student meets the program and the referring school's requirements, he/she will automatically be accepted into the referring medical school. As you will see in the attachment, 93% of students that participate in AMSNY's UB post-baccalaureate program enter medical school, and 85% graduate. In our master's degree post-baccalaureate programs, 94% of the students enter medical school.

The other core programs provide support for an academic learning center at CUNY School of Medicine – a seven-year BS/MD program that students enter directly from high school; and a research program at CCNY that links junior and senior undergraduate students with NIH-funded researchers to prepare them for careers in medical school and/or the basic sciences.

CUNY School of Medicine Academic Learning Center

AMSNY supports the CUNY School of Medicine Learning Resource Center (LRC) which provides academic support to students who enter the seven-year school directly from high school and graduate with a BS/MD degree. Since its inception, the LRC has provided thousands of counseling and workshop hours to CUNY students.

The LRC provides educational and academic support services and resources to all of the CUNY School of Medicine students, whether they are in the "undergraduate" (first three years leading to a BS degree) or "graduate" (last 4 years leading to an MD degree) portion of the school. Some of the key services offered through the LRC include: academic counseling and coaching through a pre-matriculation workshop which helps incoming freshmen transition to an accelerated college program, tutoring which is often provided in a peer-to-peer setting, as well as problem-based learning skills seminars, and early academic evaluation and intervention of "at-risk" students through standardized learning assessments. The LRC also provides seminars for the United States Medical Licensing Examination (USMLE) and mini-boards.

Funding through the AMSNY helps the LRC meet the increasing needs and demands for academic and clinical support services from our undergraduate and medical students, especially students whose pre-college education has not sufficiently prepared them for the rigors of an accelerated college program, and subsequent medical curriculum.

CUNY School of Medicine is also unique in that the students come from New York State, most are from racial and ethnic backgrounds which are underrepresented in medicine, and the school focuses on preparing students for careers in primary care. AMSNY and the LRC help prepare the next generation of physicians from New York to care for the population of New York City.

City College of New York Pathways to Careers in Medicine and Research Program

The Pathways to Careers in Medicine and Research Program at CCNY provides stipend support to undergraduate science majors who are conducting research in laboratories within the Division of Science or in outside research facilities. In the past we have also been able to provide a small stipend to their mentors. Students engaged in research must spend a minimum of ten hours per week in the laboratory. Traditionally, most of the students must work in order to pay for their educational expenses at the sacrifice of research experience. The stipend support makes it possible for students to participate in research and still earn money, giving them the option not to work. The mentor support helps to cover research laboratory expenses.

The purpose of the Pathways to Careers in Medicine and Research Program is to increase the likelihood that students who express an interest in a career in medicine or research are successful in their pursuit. The research component of the program helps to define their interests and set them apart from other graduate and medical school applicants.

The students in the AMSNY/DOH Pathways to Careers in Medicine and Research Program present posters of their projects at scientific and professional conferences where they make connections with graduate and professional schools and programs, government agencies and research institutions. Presenting also assists students with interviewing skills, scientific fluency and strengthens all aspects of their graduate school applications.

AMSNY has been following Pathways students as they move on from CCNY and have found that many of the students do pursue careers in the health sciences. From 2008 to 2018, 26 students have gone on to medical school and/or an MD/PhD program, 35 students have sought careers in the biomedical sciences, including PhD and master's degree programs, working in research labs, as well as teaching, and 10 students have gone on to other health careers such as optometry and as physician assistants.

In the 2017-2018 academic year, 13 students participated in the program each semester (At its height, AMSNY supported 30 students and mentors per semester). Of those students, the mean GPA was 3.51

with the students majoring in Biology, Chemistry, Biochemistry and English/Pre-Medical. All of the students presented scientific posters at the City College Academy for Professional Preparation (CCAPP) and three students presented at the Annual Biomedical Research Conference for Minority Students (ABRCMS). One student received a Fulbright Fellowship Award and another student was awarded an American Chemical Society Award.

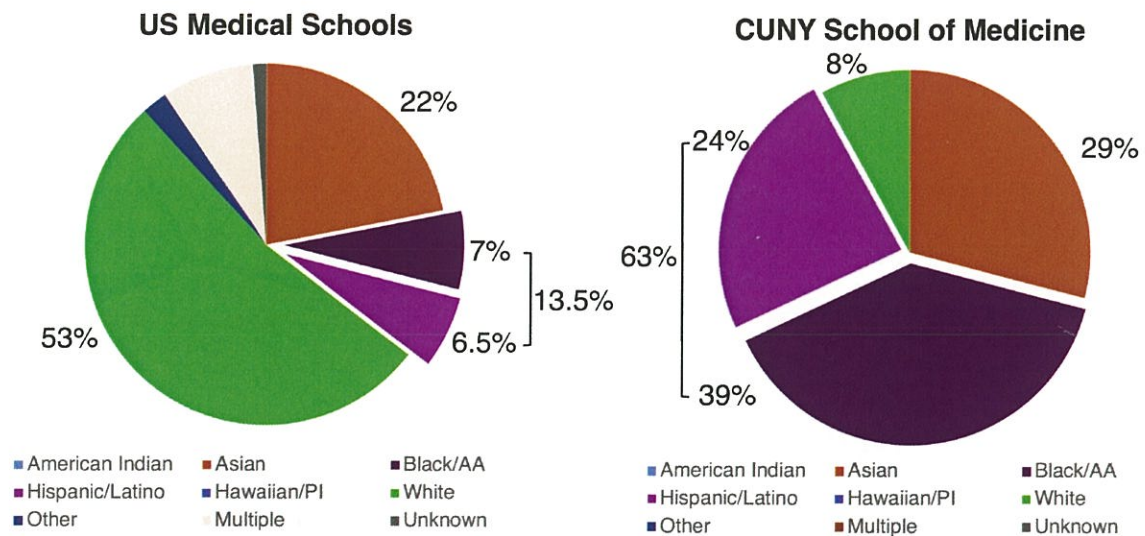
In closing, I want to thank you for giving me the opportunity to testify this morning. As you can see, AMSNY has been overseeing two very successful programs at CUNY—both of which are for underrepresented students who are interested in pursuing careers in the health professions. To further support these students and to aid them in their education we would like to expand our scholarship program to students who are in their final four years of CUNY School of Medicine and to increase the stipend for and number of students who participate in our Careers in Medicine and Research Program at CCNY. The expansion of these programs can be designed to include an obligation to work in New York City once the individual has completed his/her education.

Thank you once again. I will be happy to answer any questions.

Jo Wiederhorn

CUNY School of Medicine

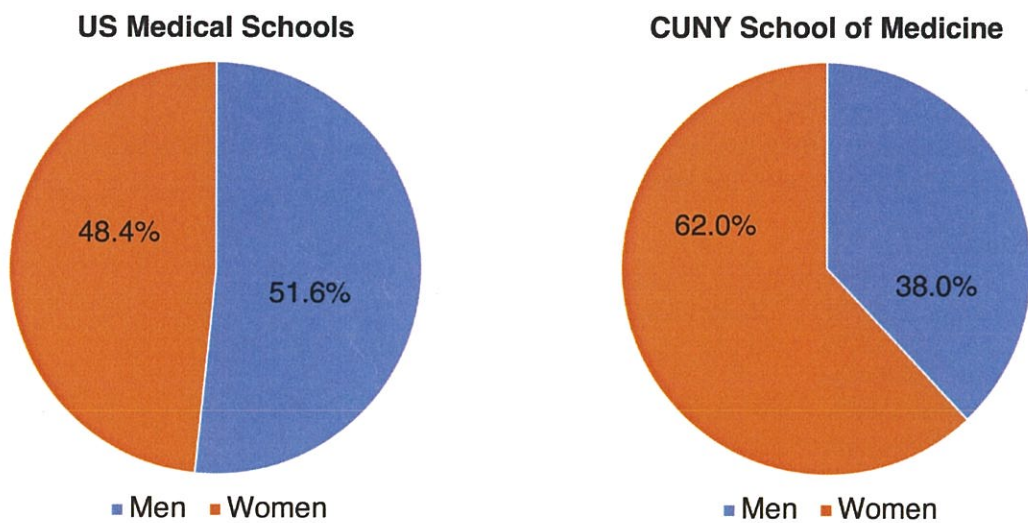
2017 Entering Class, by Race and Ethnicity



For CSOM, the entering class are the students enrolled in the first year of the 7-year program

Source: CUNY School of Medicine

2017 Entering Class, by Gender



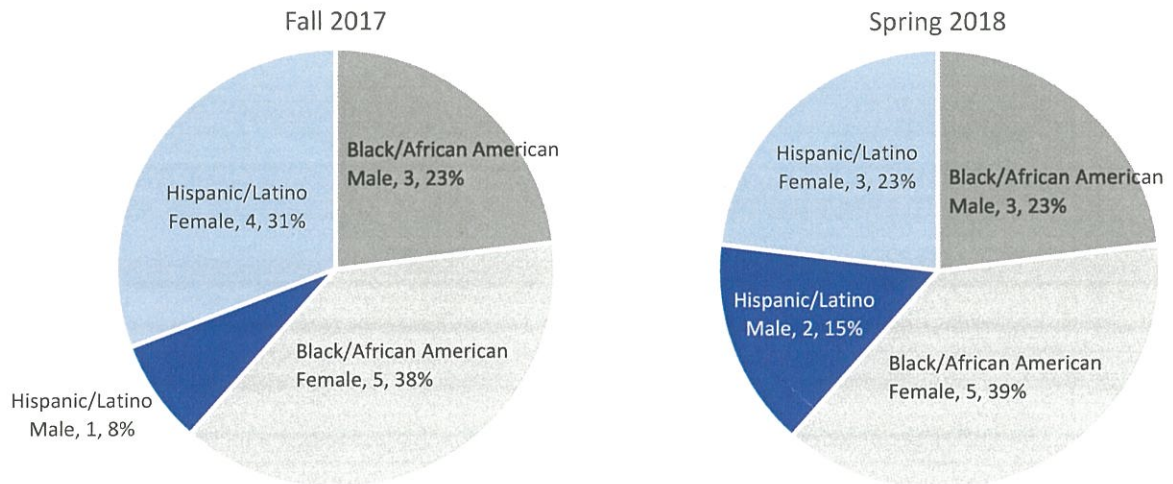
For CSOM, the entering class are the students enrolled in the first year of the 7-year program

Source: CUNY School of Medicine

**CUNY City College of New York
Pathways to Careers in Medicine & Research Program
AMSNY Diversity in Medicine Program**

SINGLE-YEAR OUTCOME DATA. 2017-2018

Student Demographics



Student Accomplishments

Poster Presentations

- Presented scientific posters at the Annual Biomedical Research Conference for Minority Students (ABRCMS) [3 students]
- Presented scientific posters at the City College Academy for Professional Preparation (CCAPP) Conference [all students]

Awards

- Fulbright Fellowship Award [1 student]
- American Chemical Society Award [1 student]

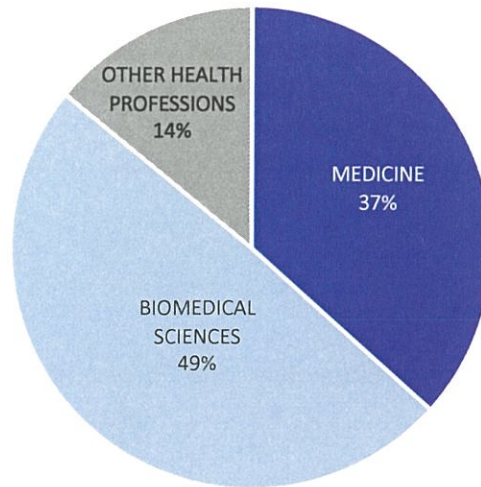
Academic Profiles

- Mean of Grade Point Average (GPA) = 3.51
- Undergraduate Majors
 - Biology
 - Chemistry
 - Biochemistry
 - English/Pre-Medicine

MULTI-YEAR OUTCOME DATA.

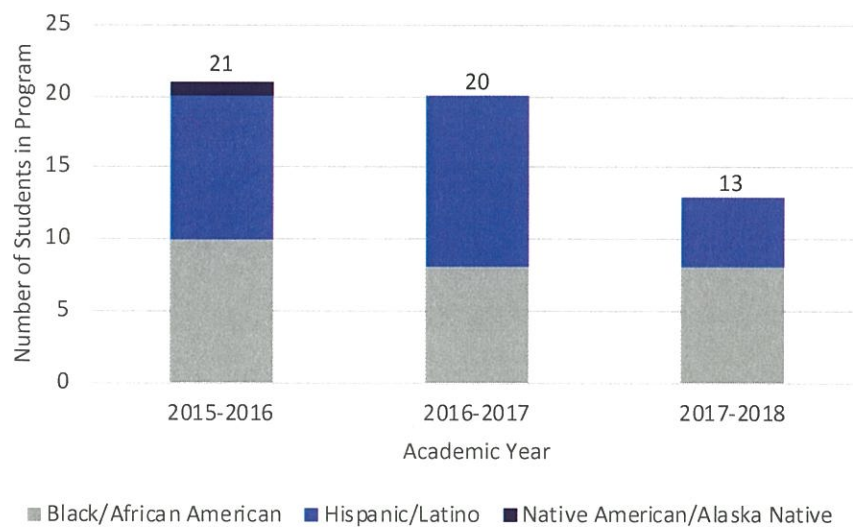
Program Graduates

2008-2018. Data represents the 69 students tracked (out of 149 students total).



The profession *Medicine* includes MD, DO, and MD/PhD pathways. *Biomedical Sciences* entails PhD, MS, work as researchers, science education and academia, all in the STEM fields. *Other Health Professions* includes Optometry, Physician Assistant, Pharmacy, Physical Therapy, Dentistry, and Podiatry.

Student Enrollment and Demographics



About the Associated Medical Schools of New York

The Associated Medical Schools of New York (AMSNY) is the consortium of the 16 public and private medical schools throughout New York State. AMSNY's mission is to be the voice of medical education in New York State, advancing biomedical research, diversity in medical school and the physician workforce, and high quality, cost-efficient patient care. New York State's medical schools are global leaders, educating 10% of the nation's medical students, and training nearly 15% of its resident physicians. New York's medical schools are likewise leaders in biomedical research, bringing \$2 billion annually in National Institutes of Health awards into the state, and conducting groundbreaking research across a broad range of diseases.

Albany Medical College

Albert Einstein College of Medicine

Columbia University Vagelos College of Physicians and Surgeons

CUNY School of Medicine

Icahn School of Medicine at Mount Sinai

Jacobs School of Medicine and Biomedical Sciences, the University at Buffalo

New York Institute of Technology College of Osteopathic Medicine

New York Medical College

New York University School of Medicine

Renaissance School of Medicine at Stony Brook University

SUNY Downstate Medical Center

SUNY Upstate Medical University

Touro College of Osteopathic Medicine

University of Rochester School of Medicine and Dentistry

Weill Cornell Medicine

Zucker School of Medicine at Hofstra/Northwell

Jennifer J. Raab, President

Testimony by Jennifer J. Raab, President of Hunter College

The City Council Higher Education Committee

January 17, 2019

Good morning Chair Barron and members of the Higher Education Committee of the City Council. Thank you for the opportunity to testify before you regarding the status of nursing and other healthcare related programs at Hunter College. I am Jennifer Raab, President of Hunter College. Hunter College has played and continues to play a vital role in preparing a skilled healthcare workforce to serve New York City. It has been one of our strategic goals to recruit a diverse student body, with an emphasis on under-represented minority groups, in order to diversify the future workforce, enhance their cultural competence and address the comprehensive healthcare needs of New Yorkers.

Nursing education began at Hunter College in 1943, although the first four-year collegiate program was established in 1955. The Hunter College School of Nursing is the oldest and largest School of Nursing within the CUNY system. We have been preparing nurses for practice in urban environments with diverse populations for more than sixty years.

The vision for the School of Nursing was to establish a comprehensive, wide-ranging and multi-layered approach to nursing education. We have established programs that range from a Bachelors degree in Nursing to a doctorate in nurse practitioner education. This reflects our commitment to preparing practitioners from entry level positions to highly specialized practice and leadership positions in nursing.

The School offers four undergraduate programs:

- (1) BS in Nursing
- (2) A specially created Honors Program that attracts talented High School graduates who have an interest in pursuing a nursing career. A cohort of 20 students are recruited in their Freshmen year and receive scholarships, academic mentoring and advising as they prepare for advanced careers in nursing.
- (3) RN-to-BS program for individuals with an Associates degree in nursing
- (4) An accelerated Second-Degree Nursing program designed for those with non-nursing degrees who are interested in changing careers to nursing.

The Masters program offers several specializations, some of which include:

- (1) Adult/Gerontology Clinical Nurse Specialist and Gerontological/Adult Nurse Practitioner
- (2) Community/Public Health Nursing
- (3) Psychiatric-Mental Health Nurse Practitioner and a post-master's Psychiatric-Mental Health Nurse Practitioner certification

The Doctor of Nursing Practice (DNP) program prepares nurses for advanced practice and leadership positions in health care.

We were actively and substantively engaged in the creation of the Ph.D. in Nursing program, offered through the CUNY Graduate Center. Our faculty and administrators provided leadership and guidance on its development and implementation.

All programs are fully accredited by the Commission on Collegiate Nursing Education. The pass rate for our graduates on the NCLEX-RN Nursing Exams (the National Council Licensing Exam for nursing) was over 91% in 2018. In recognition of our contributions to the field of nursing, we received the 2018 Nursing Champion Award from NYC Health and Hospitals Corporation (HHC).

Student Diversity

The Hunter School of Nursing has a diverse student population, with over 17% African American, 10% Hispanic and 33 % Asian students in our combined programs. Our Masters and Doctoral programs are even more diverse, with 23% African American students in our Masters programs and 35% African American students in our doctoral programs. We are also proud of the fact that 97% of our nursing graduates report that they work in New York City after graduation.

Our success in increasing student diversity has been the result of strategic and coordinated efforts to create seamless pipelines for students graduating from High School and those with an Associates Degree in Nursing, including RN's, to undergraduate and graduate degree programs in nursing. It reflects our commitment to creating a continuum of educational opportunities for potential and current students at Hunter.

The School of Nursing has been working consistently with High Schools, Community Colleges, NYC hospitals, healthcare facilities and local government to recruit students with a High School Diploma or an RN to pursue higher education at the Bachelors, Masters and doctoral levels at Hunter. We also strive to support and retain our students once they come to Hunter. Our attrition rate in 2018 for the Bachelors programs was barely 2.5% and for our Masters program was 1%. These recruitment and retention processes have been institutionalized as best practices within Hunter and serve as examples for other professional schools at Hunter.

One example of our innovative efforts at creating pipelines to nursing education at Hunter is the BESt (Becoming Excellent Students in Transition to Nursing) program. Instituted in 2004, this program was funded by the Federal Health Resources and Services Administration (HRSA) to increase nursing education opportunities for individuals from educationally and economically disadvantaged backgrounds by providing student stipends, scholarships, tutoring, counseling, and opportunities for mentorship. Over the course of this program, 131 students obtained their RN certification and currently serve in the 5 boroughs of NYC. In 2016, the average licensure pass rate for this group was 90% compared to the NY State average of 81%.

Another example of our best practice methods is the partnership we have forged with Community Colleges. In 2011, we established a collaboration with Queensboro Community College to recruit their RN students into our Bachelors of Nursing program. We have now expanded that successful collaboration to La Guardia Community College. We have secured nearly \$300,000 from the Carrol and Milton Petrie Foundation to help finance this pipeline program. We hope to expand this initiative to include BMCC in the near future.

In addition to our extensive nursing programs, Hunter also offers several undergraduate and graduate programs in other healthcare-related disciplines. We are proud to highlight the Medical Laboratory Sciences program which prepares students for advanced practice in hospital and private diagnostic labs, academic research laboratories and pharmaceutical and biotechnology companies. This program has been quite successful in attracting students from under-represented populations. Currently, 26.6% of the undergraduate students and 20% of the graduate students in this program identify as African American or Hispanic.

With respect to our other healthcare-related programs, over 14% of students in Nutrition and Food Science, almost 13% of graduate students in the Doctorate of Physical Therapy program and almost 10% of graduate students in Speech Language Pathology identify as African American or Hispanic.

In my tenure as the President of Hunter College, I have raised \$15.5 million from various foundations, trusts, individual donors and alumni to support the School of Nursing. In Fiscal Year 2019, nearly \$320,000 in scholarships will have been awarded to nursing students. Additional funds are used to recruit and retain high achieving faculty and nationally renowned researchers.

Faculty Diversity

At Hunter College, we are not only committed to increasing student diversity, but faculty representation as well. We believe that diverse faculty not only benefit Hunter College through their teaching, scholarship and service, but also serve as role models for our students. Among the 23 tenure-track and tenured faculty in Nursing, nearly 9% identify as African American or Hispanic. We have extended our commitment to diversity among our adjunct faculty (mostly practitioners) as well. Forty-two (42%) of our adjunct faculty identify as members of under-

represented groups, with 27% of our adjunct faculty who identify as African American and 15% who identify as Hispanic.

As part of our commitment to increase faculty diversity, we recently submitted an RCMI (Research Centers in Minority Institutions) grant application to NIH. If funded, this grant will allow us to strengthen our efforts in recruiting African American and Hispanic scholars and researchers working in the field of healthcare to Hunter College.

Serving under-resourced communities

At Hunter College a critical part of our mission is to support the health and wellness of low-income, under-resourced communities in New York City through faculty and student engagement. This enhances our graduates' commitment to return and serve in these communities.

Let me give you a few examples of how we have engaged with communities in order to enhance their health and well-being: Two of the communities that the School of Nursing and our other health-related programs are embedded in are East and West Harlem.

Hunter's commitment to East Harlem has been long standing and its importance was further cemented by the move of the Silberman School of Social Work to that neighborhood in 2011. Since then Hunter College has significantly expanded its engagement with the East Harlem community. Some examples of our student engagement in East Harlem include:

- (a) 12 nursing students from Community Nursing and Pediatric Nursing specializations are placed in PS 7. They work collaboratively with the teachers in the classroom to conduct health assessments and teach personal hygiene skills.
- (b) In collaboration with Weill Cornell's Clinical and Translational Science Center, our nursing students teach CPR and opioid overdose prevention to community residents.
- (c) Students also provide cardio-vascular risk screening and counseling to people in East Harlem in partnership with Weill Cornell and Heart-to-Heart Clinics.
- (d) Dr. Judith Aponte, a Hunter College alum and an East Harlem resident is a leading Latina practitioner, scholar and researcher in the field of nursing. Dr. Aponte collaborates with the Union Settlement Association and Carter Burden-Leonard Covello Senior Program to explore how technology could be utilized by older adults to help manage their diabetes.

In West Harlem, our Rudin Professor of Nursing, Dr. Elizabeth Cohn is the co-founder of Communities of Harlem Health Revival, which is Faith-Based and Community Based Organizations working together to improve the spiritual, physical and mental health of Harlem residents. This project is a partnership with Reverend Calvin Butts and the Abyssinian Baptist Church's Health Ministry. She is also the Community Engagement Lead for the NIH-funded *All of Us* Research Program which has enrolled over 10,000 participants since May 6, 2018 and 66%

of whom are underrepresented in biomedical research. This study aims to improve the relevance, treatments and care provided to minority populations including the effect of the social determinants on health.

Let me end by sharing a couple of our student success stories with you:

Rachel Nurse-Baker is the daughter of immigrants from Trinidad and Grenada who grew up in Bedford Stuyvesant, Brooklyn. She is a graduate of Clara Barton High School. She is the first generation in her family to attend college. While at Hunter, she was the Vice President of the Hunter Student Nurses' Association. Today Rachel is a Registered Nurse at New York Presbyterian – NY Methodist Hospital.

Mariel Acosta Melo, a 2017 graduate who is Hispanic came to Hunter through one of our signature pipeline programs - the BESt program. She was a research assistant to Dr. Judith Aponte, who I mentioned earlier, and who served as a mentor and role model for Mariel. She is presently an RN at Mt. Sinai in the Cardiovascular Intensive Care Unit. She looks forward to returning to Hunter for her graduate education to become a Certified Nurse Anesthetist.

These students and our commitment to nursing and healthcare education exemplify our Hunter College motto - *Mihi cura futuri* – the care of the future is mine!

Thank you for the opportunity to speak with you this morning about Hunter College's contribution to healthcare education in New York City.

**THE COUNCIL
THE CITY OF NEW YORK**

Appearance Card

I intend to appear and speak on Int. No. _____ Res. No. _____

☐ in favor ☐ in opposition

Date: _____

(PLEASE PRINT)

Name: Jo WIEDERHORN

Address: 1270 AVE of the AMERICAS

I represent: ALSOX

Address: _____

**THE COUNCIL CUNY Panel 404
THE CITY OF NEW YORK**

Appearance Card

I intend to appear and speak on Int. No. _____ Res. No. _____

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Date: 1/17/19

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Name: Vincent Boudreau, President

Address: _____

I represent: City College / CUNY

Address: _____

**THE COUNCIL CUNY Panel 304
THE CITY OF NEW YORK**

Appearance Card

I intend to appear and speak on Int. No. _____ Res. No. _____

☐ in favor ☐ in opposition

Date: 1/17/19

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Name: Marcia Keizs, President

Address: _____

I represent: York College / CUNY

Address: _____

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THE COUNCIL CUNY Panel 1 of 4
THE CITY OF NEW YORK

Appearance Card

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Date: 1/17/19

(PLEASE PRINT)

Name: Jane Bowers

Address: Interim Executive Vice Chancellor and University

I represent: Provost - CUNY

Address: _____

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THE COUNCIL CUNY Panel 2 of 4
THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. _____ Res. No. _____

☐ in favor ☐ in opposition

Date: 1/17/19

(PLEASE PRINT)

Name: Jennifer Raab, President

Address: _____

I represent: Hunter College/CUNY

Address: _____

Please complete this card and return to the Sergeant-at-Arms