Testimony of:

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

At a Joint Budget Hearing of
The New York State Assembly/Senate Committees on Health
&
The New York State Senate Committee on Finance &
The New York State Assembly Committee on Ways and Means

February 8, 2022
Good afternoon Chairwomen Kruger and Weinstein, Chairmen Rivera and Gottfried and other distinguished members of the State Legislature. Thank you for this opportunity to testify on the Executive proposed budget for fiscal year 2022-2023.

My name is Jo Wiederhorn, President & CEO of the Associated Medical Schools of New York (AMSNY), a consortium of the seventeen public and private medical schools in New York State. AMSNY works in partnership with its members to promote high quality and cost-efficient health care by assuring that New York State’s medical schools provide outstanding medical education, patient care and biomedical research.

The Need for a More Diverse Physician Workforce
For many years I have come before the Legislature asking for either a restoration of funds or for more funds for our Diversity in Medicine Programs. Each year this body has supported these programs to the best of your ability. I am truly grateful. In fact, for the first time, the aggregate number of underrepresented students in New York State’s 17 medical schools’ entering classes has reached over 21%, and the total percentage of underrepresented students in all years is over 18%. Whereas we still have a long way to go, the upward trend that these figures represent can be correlated with your support.

Increasing the diversity of the physician workforce is one means to tackle the acute health disparities that are seen throughout the State. There have been many studies that have shown that a diverse workforce will improve the nation’s health disparities and as such, the nation’s health (Jackson, 2014). Other studies demonstrate that physicians from racial or ethnic backgrounds underrepresented in medicine are more likely to practice primary care and practice in underserved areas while treating a larger number of minority patients. Furthermore, when given a choice, racial and ethnic minority patients are more likely to select physicians who share their racial/ethnic background and in doing so, report receiving higher quality care (Kington, 2001).

AMSNY strongly believes in the importance of a multi-faceted 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. AMSNY’s Diversity in Medicine programs, in large part funded through the NYS Department of Health, was developed with these two visions in mind.

AMSNY’s Diversity in Medicine Program
While underrepresented\(^1\) in medicine populations (URIM) make up 36% of the New York State population, they account for approximately 21% of the state’s medical students and approximately 12% of New York State’s practicing physicians.

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.

\textit{Diversity in Medicine Program}

The New York State Senate and Assembly have been very supportive of these programs. When necessary, the Legislature decoupled the Executive’s proposed “workforce pools” and provided a line item allocation for the programs. When possible, the Legislature restored the cuts that have been in the Executive Budget. In 2018 the Legislature took the additional step of providing scholarship funds for 10 students who have successfully completed one of AMSNY’s other programs.

\textit{Core Diversity Programs}

AMSNY oversees six core programs as part of its \textit{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; and three Master’s degree post baccalaureate programs at SUNY Upstate, the Renaissance School of Medicine at Stony Brook University and New York Medical College. These programs were the first of their kind to provide guaranteed admission to medical school. Students must apply to a New York State medical school and be interviewed by the schools’ admissions’ committees. If the admissions’ committees believe 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. 94% of the students in our Master’s degree post baccalaureate programs enter medical school.

The other core programs are offered along the educational continuum: support of an academic learning center at CUNY College of Medicine (CUNY) – a seven-year BS/MD program that students enter directly from high school – and a program at the City College of New York that links junior

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\(^1\)“Underrepresented in medicine means those racial and ethnic populations that are underrepresented in the medical profession relative to their numbers in the general population.” AAMC’s Executive Council, June 2003
and senior baccalaureate students with NIH-funded researchers to prepare them for careers in medical school or the basic sciences.

Attached to this testimony are charts and graphs that demonstrate the success of our programs; as well as a synopsis of the demographics of medical school students in New York State.

State Fiscal Year 2022-2023 Funding
This year, unlike any year since 2007, the Executive budget included an increase in funds for AMSNY’s Diversity in Medicine Programs. The Executive budget that has been proposed for SFY 2022-2023 provides an additional $1.2 million over SFY 2021-2022 funding. We are pleased the Executive understands the importance of these programs and has seen to increase their budget. We ask that the Legislature accept this increase, which will allow AMSNY to provide much needed investments to the programs and expand the capacity and breadth of the portfolio.

For FY 2022-2023, we are requesting the Legislature to support the increased funding allocation proposed in the Executive Budget of $2.444 million dollars and to ensure it is accepted into the enacted budget.

DOH Scholarship in Medicine Program
Paying for medical school is a daunting challenge. A majority of medical school graduates complete their education with the assistance of student loan financing. The median level of principal debt for students graduating in 2020 was $200,000 (based on public and private MD-granting schools, including undergraduate debt). If one were to add in accrued interest, the median student debt level is over $230,000.

In SFY 2017-2018, AMSNY received a $500,000 investment from the State to start a Diversity in Medicine scholarship program to help address the gap in physician diversity. The scholarship—indexed to the average cost of SUNY medical school tuition—helps students from backgrounds underrepresented in medicine by eliminating the financial barrier to medical school enrollment. In 2021-2022, the legislature increased the funding to $550,000.

The increase in funding has allowed AMSNY to award 11 scholarships annually to students who have completed one of the Diversity in Medicine post-baccalaureate programs. In return, the scholarship awardees commit to working for at least two years in an underserved area in New York. The program, which is patterned after the National Health Service Corp, is very competitive. There are always more students applying for the positions than number of slots. For the SFY 2020-2021 over 25 students applied for 10 positions. Scholarship students are entering all fields of medicine: Primary Care, Internal Medicine, Emergency Medicine, Anesthesiology, Urology to name a few. These students are highly committed to practicing in underserved areas of New York State — areas where all of these specialties are needed.
The Diversity in Medicine Scholarship Program is a legislative add-on. As such, we ask that you continue to fund this important program. It is very well received by the students and will continue to provide physicians within the specialties and localities where they are most needed.

**We urge the legislature to provide at least $550,000 to maintain our current number of scholarship students.**

**New York State Stem Cell Program (NYSTEM)**

AMSNY is deeply concerned about the language in the 2021-2022 budget which affirmatively eliminated the New York State Stem Cell Science (NYSTEM) program and its future funding. NYSTEM was established to position New York State as a global leader in stem cell research by driving new therapies for New Yorkers and spurring growth in our life sciences sector. It has funded significant and groundbreaking discoveries throughout New York State.

Since the start of the program NYSTEM has issued 25 Requests for Applications and made more than 400 awards totaling approximately $400 million in stem cell research, training, infrastructure and education at 39 New York State institutions. Research that began with NYSTEM has resulted in approximately $170 million in funding from other governmental and philanthropic sources. The program also has advanced the state’s objective of bringing more venture-capital funding to life sciences companies. NYSTEM-funded research has spawned multiple startups, including BlueRock Therapeutics, which formed in 2016 to expand on stem cell research by Memorial Sloan Kettering Cancer Center. Pharmaceutical company Bayer bought the company for $600 million in 2019, in a deal that valued BlueRock at about $1 billion.

NYSTEM-funded researchers have developed promising new clinical therapies for diseases that disproportionately impact communities of color and the economically disadvantaged in New York. Many of the researchers have just reached the stage where their funding is coming into fruition. Clinical trials are now starting to determine appropriate therapeutics in diseases such as sickle cell, multiple scolious, adult macular degeneration, Parkinson’s’ disease and others. Unfortunately, now, without funding, entire lines of research are threatened and projects with years of research behind them have no future.

NYSDOH issued a new Request for Applications in June 2020, to which more than 100 scientists throughout the state responded and were subsequently informed that their applications would not be reviewed, and that funding would not be available. These applications required hundreds of hours of preparation by the researchers. To have those applications simply discarded is unconscionable and, most importantly, prevents promising research seeking progress on such diseases as Alzheimer’s, diabetes, glioblastoma and colorectal cancer.
NYSTEM is also a program that creates jobs, boosts the life sciences sector and makes a substantial contribution to the medical research workforce in New York State. It is a vital source of funding for laboratories in New York. NYSTEM funding has helped leverage funding from other sources, including the National Institutes of Health and venture capital funding, in ways that no other program has been able to.

Research funded by the NYSTEM program has led to many significant breakthroughs since the program was launched. Though NYSDOH has not funded NYSTEM at levels consistent with annual budget appropriations, the accomplishments are nonetheless substantial and the stem cell research community remains poised to rapidly expand its work with a renewed commitment to the program. The health and economic impacts of New York State's investment in stem cell research are clear and progress in these areas will be exponentially important as the State emerges from the most devastating public health emergency in a century.

Now is a particularly inopportune time to terminate NYSTEM funding. California voters recently approved $5.5 billion in new state funding for stem cell research. Texas, Florida and Massachusetts have all made investments in stem cell science. Funding opportunities in these states, while there is none in New York, creates a climate in which it will be very difficult to recruit and retain scientific talent.

In conclusion, we ask you and your colleagues to consider the following questions related to NYSTEM as you proceed with forming a budget for the upcoming fiscal year:

- Should New York State terminate its flagship extramural medical research program, the findings from which are on the cusp of developing new treatments and therapeutics?
- Should New York State stop the progress that stem cell research has made towards developing clinical therapies for diseases that impact the most economically disadvantaged of our population?
- Should New York State cut off a proven source of scientific innovation that is bringing hundreds of millions of dollars in federal research and private venture capital life sciences investment to New York State?
- Should New York State seek to end a program that trains the scientific workforce and has generated hundreds of jobs at a time when we begin to pursue the economic and public health recovery from the pandemic?

We believe the answer to these questions is emphatically "no."

Again, we applaud the Legislature and the Governor for having invested in this initiative by consistently appropriating $44.8 million annually for this program since 2007.

We urge the legislature to include Article 7 language that will reinstate the NYSTEM Program and provide full funding $44.8 million in FY 2022-2023. In addition, we urge the
State to maintain its commitment to fully funding the remainder of the $600 million program.

Closing
Thank you for the opportunity to testify today and for your continued support of medical education. I welcome any questions you may have.

Respectfully Submitted:

Jo Wiederhorn

The Associated Medical Schools of New York (AMSNY) is the consortium of the seventeen public and private medical schools in the state. The organization’s mission is to promote high quality and cost-efficient health care by ensuring that the NYS medical schools can provide outstanding medical education, care and research.

AMSNY Member Institutions

- Albany Medical College
- Albert Einstein College of Medicine of Yeshiva University
- CUNY School of Medicine
- Columbia University Vagelos College of Physicians & Surgeons
- Icahn School of Medicine at Mt. Sinai Medical Center
- Jacobs School of Medicine & Biomedical Sciences, University at Buffalo, SUNY
- New York Institute of Technology College of Osteopathic Medicine
- New York Medical College
- New York University Grossman School of Medicine
- New York University Long Island School of Medicine
- SUNY Downstate Medical Center
- SUNY Upstate Medical University
- Stony Brook University School of Medicine
- Touro College of Osteopathic Medicine
- University of Rochester School of Medicine & Dentistry
- Weill Cornell Medicine
- Zucker School of Medicine at Hofstra/Northwell
Addendum
2021-2022 DOH Diversity in Medicine Scholarship Recipients ($n = 11$)

### Medical Schools that Recipients Attend
- Albany Medical College
- Albert Einstein College of Medicine
- New York Medical College
- Renaissance School of Medicine at Stony Brook University
- SUNY Downstate Health Sciences University
- SUNY Upstate Medical University

### Year in Medical School
- MS1, 3
- MS2, 1
- MS3, 3
- MS4, 4

### AMSNY Post-Baccalaureate Program Attended
- AMSNY Post-Baccalaureate Program, Jacobs School of Medicine & Biomedical Sciences, the University at Buffalo
- Basic Medical Science Program, New York Medical College
- Master of Science in Physiology and Biophysics, Renaissance School of Medicine at Stony Brook University
- Medical Scholars Program, SUNY Upstate Medical University

### Race/ Ethnicity
- Black, 6
- Hispanic/Latino, 2
- Black & Hispanic/Latino, 2
- Asian & Black, 1

### Gender
- Male, 5
- Female, 6
The Associated Medical Schools of New York (AMSNY) is the consortium of the 17 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.
In this context, URIM (underrepresented in medicine) is defined as students who identify as any of the four ethnic/racial categories, either as single or multi-ethnic/racial: American Indian/Alaska Native, Black/African-American, Hispanic/Latino, Native Hawaiian/Other Pacific Islander.

*Values at the bottom of each bar represent the number of URIM students that academic year.

**Data unavailable for academic years 2011-12, 2012-13, 2015-16, and 2016-17.
2020-2021 Medical Student Enrollment at All 17 New York State Medical Schools by Race/Ethnicity (n = 11,193)

- White, 4943, 44.2%
- Asian, 3282, 29.3%
- African-American/Black, 841, 7.5%
- Hispanic/Latino, 741, 6.6%
- Native Hawaiian/Other Pacific Islander, 8, 0.1%
- Unknown/Unreported, 553, 4.9%
- 2+ Ethnicities/Races, 659, 5.9%
- Foreign, 154, 1.4%
- American Indian/Alaska Native, 12, 0.1%
- 2+ Ethnicities/Races

2020-2021 Medical Student Enrollment at All 17 NYS Medical Schools, by Gender (n = 11,193)

- Female, 5745, 51.3%
- Male, 5448, 48.7%
2020-2021 Medical Student Enrollment at All 17 NYS Medical Schools,
Breakdown by Black Race (n = 841)

- Black: African-American, 421, 50.1%
- Black: Afro-Caribbean, 70, 8.3%
- Black: unspecified, 300, 35.7%
- Black: 50, 5.9%

2020-2021 Medical Student Enrollment at All 17 NYS Medical Schools,
Breakdown by Hispanic/Latino Ethnicity (n = 741)

- Hispanic/Latino: Central American, 8, 1.1%
- Hispanic/Latino: Cuban, 27, 3.6%
- Hispanic/Latino: Dominican, 32, 4.3%
- Hispanic/Latino: Mexican, 78, 10.5%
- Hispanic/Latino: Puerto Rican, 44, 5.9%
- Hispanic/Latino: South American, 80, 10.8%
- Hispanic/Latino: not specified, 472, 63.7%
Medical Students who Identify as Multi-Ethnic/Racial at All 17 NYS Medical Schools, 2020-2021 (n = 659)

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<td>American Indian/Alaska Native AND Hispanic/Latino</td>
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<td>3 or more Races/ Ethnicities</td>
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</tr>
</tbody>
</table>

* value depicts number of students
* charts are independent of one another

Medical Student Demographic Breakdown of Six Ethnic/Racial Categories Across All 17 NYS Medical Schools, 2020-2021

- American Indian/Alaska Native AND Other: 36
- American Indian/Alaska Native: 12
- Hispanic/Latino AND Other: 274
- Hispanic/Latino: 741
- Native Hawaiian/Other Pacific Islander AND Other: 22
- Native Hawaiian/Other Pacific Islander: 8
- Asian AND Other: 264
- Asian: 3282
- Black/African-American AND Other: 139
- Black/African-American: 841
- White AND Other: 431
- White: 4941

* value depicts number of students
* charts are independent of one another
Female Medical Students at All 17 NYS Medical Schools, by Race/Ethnicity, 2020-2021 (n = 5,745)

- White, 2,354, 41.0%
- Asian, 1,746, 30.4%
- African-American/Black, 530, 9.2%
- Hispanic/Latino, 367, 6.4%
- Native Hawaiian/Other Pacific Islander, 4, 0.1%
- Foreign, 82, 1.4%
- Unknown/Unreported, 274, 4.8%
- 2+ Ethnicities/Races, 383, 6.7%

Male Medical Students at All 17 NYS Medical Schools, by Race/Ethnicity, 2020-2021 (n = 5,448)

- White, 2,589, 47.5%
- Asian, 1,536, 28.2%
- African-American/Black, 311, 5.7%
- Hispanic/Latino, 374, 6.9%
- Native Hawaiian/Other Pacific Islander, 4, 0.1%
- Foreign, 72, 1.3%
- Unknown/Unreported, 279, 5.1%
- 2+ Ethnicities/Races, 276, 5.1%
In this context, URIM (underrepresented in medicine) is defined as students who identify as any of the four ethnic/racial categories, either as single or multi-ethnic/racial: American Indian/Alaska Native, Black/African-American, Hispanic/Latino, Native Hawaiian/Other Pacific Islander.
Entering 1st-Year Class at All 17 NYS Medical Schools, by Race/Ethnicity, 2020-2021 (n = 2,589)

- White, 1,111, 42.9%
- Asian, 734, 28.4%
- African-American/Black, 208, 8.0%
- Hispanic/Latino, 195, 7.5%
- Native Hawaiian/Other Pacific Islander, 0, 0.0%
- American Indian/Alaska Native, 1, 0.0%
- 2+ Ethnicities/Races, 188, 7.3%
- Unknown/Unreported, 133, 5.1%
- Foreign, 19, 0.7%

Male to Female Ratio of Entering 1st-Year Class at All 17 NYS Medical Schools, by Race/Ethnicity, 2020-2021

- American Indian/Alaska Native: 100% Male, 0% Female
- Asian: 45% Male, 55% Female
- African-American/Black: 38% Male, 63% Female
- Hispanic/Latino: 57% Male, 43% Female
- White: 49% Male, 51% Female
- Unknown/Unreported: 50% Male, 50% Female
- 2+ Ethnicities/Races: 43% Male, 57% Female
- Foreign: 53% Male, 47% Female