

Touro Scholar

GSBMS Dean's Report

NYMC Publications

Spring 2022

Dean's Report-Spring 2022

Marina K. Holz

Follow this and additional works at: https://touro scholar.touro.edu/nymc_gsbms



Part of the [Medical Education Commons](#), and the [Medical Sciences Commons](#)



Dear students, faculty, alumni and friends:

As we welcome the growth that the spring season brings, the Graduate School of Basic Medical Sciences (GSBMS) at New York Medical College (NYMC) celebrates the growth of our excellent students and the tremendous achievements of our faculty and programs. These recent months have given us pride in our students' research accomplishments, in their presentations at the 33rd annual Graduate Student Research Forum, and several international meetings, such as the 2022 Experimental Biology Annual Meeting. We are also proud of our students' generous response to the needs of our local and worldwide communities, from their participation in our local blood drives to their munificent response to the Ukraine Humanitarian Drive.



In this issue of the GSBMS Dean's Report, you will learn how the GSBMS and School of Medicine's (SOM) participation in the Associated Medical Schools of New York (AMSNY) has helped to increase diversity in the field of medicine, about upcoming changes to the highly successful Accelerated Master's Program in stride with the SOM and about the faculty leading these programs. This is also the time of year that we celebrate the milestones of our students as they advance through their accomplishments in research, their acceptances into medical schools, preparations for commencement and the start of new careers. It is a marvelous journey.

Sincerely,

Marina K. Holz, Ph.D.
Dean of the Graduate School of Basic Medical Sciences
Interim Chair, Biochemistry and Molecular Biology

Follow GSBMS on Facebook

Follow GSBMS on Twitter



The 33rd Annual Graduate Student Research Forum Showcases Recent Research Advances

The 33rd Annual Graduate Student Research Forum (GSRF) returned to an in-person format, as a magnificent collection of research conducted by students in the GSBMS was presented in front of their peers, faculty and alumni. The day-long forum featured meaningful scientific discussion as participants showcased their research through both oral and poster

presentations. [Read the full article and view the GSRF photo gallery.](#)

2022 Experimental Biology Annual Meeting

The [2022 Experimental Biology Annual Meeting](#) took place in person April 2-5 in Philadelphia with GSBMS Dean Marina Holz and several Ph.D. candidates in attendance. Thousands of scientists from all over the world met over four days to attend lectures, join in workshops and share their research. With pride, we would like to recognize Ph.D. candidate, **Arax Tanelian**, whose abstract, “Alterations in Microbiota-Gut-Brain Axis and Susceptibility or Resilience to Traumatic Stress” was accepted for an Oral Spotlight Presentation, which included a talk followed by Q&A. She also presented her research poster, which tied for first place in the 33rd Annual Graduate Student Research Forum. Additionally, Ms. Tanelian was awarded a Travel Grant to the meeting in further recognition of her excellence in research. Her abstract will be published in the FASEB Journal.



Anish R. Maskey, a Ph.D. candidate in the laboratory of XiuMin Li, M.D., M.S., professor of pathology, microbiology and immunology, was selected as a top ten finalist to compete in the [“Science in a Flash” talk competition organized by American Society for Biochemistry and](#)



[Molecular Biology \(ASBMB\)](#). Mr. Maskey presented "Natural Medicine as a Rich Resource for the Treatment of Allergy" at the virtual event on March 22 and was the runner-up of the competition.

Ukraine Humanitarian Drive

More than 20 student organizations came together to support Ukrainian citizens affected by the Russian military invasion. Members of the NYMC community responded generously to the call with more than 2,500 donations of food, clothing, maternity, infant care and medical supplies placed in donation bins across campus.



Read: [Stand with Ukraine Humanitarian Drive Nets More Than 2,500 Donations](#)

The River Journal - 3/31/2022

Tetyana Cheairs, M.D., M.S.P.H., assistant dean for Ph.D. programs and assistant professor of pathology, microbiology and immunology, and **Anthony Sozzo, M.A., M.S.Ed.**, associate dean for student affairs and director of student financial planning and student activities.

Listen: [Special Podcast: Talking with Colleagues: NYMC Ukraine Humanitarian Drive](#)

Anthony Sozzo, M.A., M.S.Ed., associate dean for student affairs and director of student financial planning and student activities, **Tetyana Cheairs, M.D., M.S.P.H.**, assistant dean for Ph.D. programs and assistant professor of pathology, microbiology and immunology, and **Lila Kagedan, M.Ed.**, director of the Biomedical Ethics and Humanities Program



Accelerated Basic Medical Science Master's Program Undergoes Changes

The SOM's curriculum is undergoing a significant systems-based redesign. Brian B. Ratliff, Ph.D., associate professor of physiology and medicine, Accelerated Master's Program (AMP) director, and co-director of the medical physiology course, has been part of the design process, assuring the ongoing enrollment of AMP students in SOM classes.

Students in the AMP will continue to engage in a hybrid curriculum, learning foundational knowledge alongside medical students in classes that are being revamped, and continuing to gain a deeper understanding of physiological

processes by taking graduate-level courses alongside our doctoral students. This new and exciting curriculum will allow our students to showcase their enhanced skillsets within a curriculum designed for today's learners and will allow them, ultimately, to flourish in a medical school program as they prepare to become leaders in their desired healthcare discipline.

Changing of the Guard – Stewardship changes in the GSBMS



AMSNY/NYMC Diversity in Medicine Program

Victor Garcia, Ph.D., will assume leadership of the NYMC/AMSNY Diversity in Medicine Program.

Since its inception in 2009, NYMC has participated in the AMSNY Diversity in Medicine Program. The goal of this program is to help enhance the preparation and recruitment of individuals from underrepresented groups in medicine. Internally identified students who successfully complete one of our GSBMS master's programs are offered linkage acceptance into the NYMC

SOM. This program has had demonstrably high rates of success for enrolled students. As of this spring, 36 of the 37 students (24 women and 13 men), enrolled during the first eight years of the program will have received their M.D.'s, including one M.D./Ph.D., yielding a 97 percent success rate. In the following years, an additional 15 students have been enrolled in the program. Four students are scheduled to graduate from the SOM this year, one having received notice of an early match into the urology residency at Westchester Medical Center.

The success of this program is due in large measure to the leadership of **Francis L. Belloni, Ph.D.**, who has offered his guidance and mentorship to these students for the past several years. With his upcoming retirement, Dr. Belloni is sharing his valuable experience and accumulated knowledge of the program with Victor Garcia, Ph.D., assistant professor of pharmacology, who will assume these responsibilities. Dr. Garcia has been working with the students in the AMSNY program and looks forward to continuing the tradition of excellence and achievement among its students. "As a principal investigator at NYMC, my goal is to not only teach students scientific techniques but to encourage them to follow their passions whether it is basic science research or a profession in medicine. It is now my intention to fully support the next generation of scientists as I have the opportunity to provide training, mentorship and support to students like me who came from underrepresented and financially disadvantaged backgrounds. With that said, being part of the AMSNY linkage program is an incredible honor and I am so excited to provide such an amazing opportunity for our students who work so hard and are so driven at NYMC," said Dr. Garcia.



New Director for the Dental Linker Program

John T. Pinto, Ph.D., will assume leadership of the the Dental Linker Program (DLP).

Since its inception four years ago, Francis L. Belloni, Ph.D., has been the director of the **Dental Linker**



Program, (DLP), an accelerated master's program developed in partnership with the Touro College of Dental Medicine (TCDM). This program allows individuals identified by TCDM as candidates for admission to develop their learning skills by participating in both dental and graduate school courses as they prepare for dental school. Students who successfully complete this program earn a master of science (M.S.) in basic medical sciences and linkage acceptance to TCDM. We are currently in the fifth year of this program, admitting up to six students per year with an 87 percent success rate of admission to the dental school. With Dr. Belloni's pending retirement, John

T. Pinto, Ph.D., has recently taken on the role of director of the DLP. We look forward to the ongoing success of this enhancer program under Dr. Pinto's stewardship.

New Director for the Interdisciplinary Basic Medical Sciences Program

Austin Guo, PhD., will assume leadership of the Interdisciplinary Basic Medical Sciences Program (BMS).

Known by students for his warmth, availability and dedication, **Kenneth M. Lerea, Ph.D.**, associate professor of cell biology and anatomy and assistant dean of M.S. programs, has long been the director of the extremely popular Interdisciplinary Basic Medical Sciences Master's program (BMS). The BMS has a long history of preparing students for admission to a variety of professional programs such as medicine, dentistry, physician assistant or academic programs linked to a research career. With new responsibilities in the SOM, Dr. Lerea is handing the reins of the BMS program into the capable hands of **Austin M. Guo, Ph.D.**, assistant professor of pharmacology. Dr. Guo has stepped up to the role of BMS program director, conducting information sessions online for the BMS program and reviewing applications and advising students.



Dr. Guo shares his thoughts on his new position. "The two-year interdisciplinary BMS Master's program at NYMC has served as a critical bridge for students who are interested in careers in health allied professions with many years of success. I am excited and ready to take on the responsibility as its new program director. Currently, I am working closely with Dr. Lerea to assure a smooth transition into this challenging role. I aim to build upon the success under Dr. Lerea's leadership in the past to continue supporting the students to the best of my ability to ensure they will excel academically in the program and receive the best advisement and guidance onto the

ultimate educational and career path they choose to pursue."

On March 17, the GSBMS joined forces with the Student Veterans of America (SVA) to present a GSBMS Information Session to veterans of our military services currently in undergraduate schools across the country. Several presenters from NYMC lent their voices in this outreach to those who have proudly served our country. Mill Etienne, M.D.'02, M.P.H., vice chancellor for diversity and inclusion, associate dean of student affairs and associate professor of neurology and of medicine, spoke to the attendees as Captain in the U.S. Navy who continues to serve in the U.S. Naval Reserves, addressing the challenges and advantages of being a student and a veteran. Dr. Lerea spoke about the M.S. programs and the variety of careers and opportunities that are available to our graduates in the biomedical science disciplines. Dr. Guo spoke on the BMS program whose students go on to pursue careers in research, industry, medicine, dentistry and more. Dr. Ratliff detailed the benefits of our one-year AMP leading to great success in medical school, while Debbie Isabella, M.T., SC (ASCP), coordinator of the Clinical Laboratory Sciences (CLS) master's program presented an informative overview of our CLS and explained the high demand for qualified professionals in this interesting and rewarding career.



Attendees were advised of NYMC's commitment to those who have served our country in uniform through our Yellow Ribbon program participation. Please see our [Veterans Affairs](#) page or contact gsbms_apply@nymc.edu for more information.



GSBMS Admissions Update

The GSBMS Office of Admissions has been working with Touro University (TU) on the implementation of a new unified student communication and tracking system, CRM (customer relationship management system), also known as TouroOneConnect. This new system includes tools for marketing, recruitment, applications and admissions and allows both automated and coordinated personal communications and engagement of our students from their first contact with us through graduation and on through their relationship with our school as alumni. Several TU schools are undergoing this major transformation together in a coordinated, yearlong effort to increase efficiency and organization with the goal of improving service to our students. Other changes to our processes include the move to using PostBac CAS for both our AMP and BMS applications. Although Ph.D. applications are closed for Fall 2022, applications for our master's programs are still open. U.S. applicants have until May 1 to apply to our CLS, and until June 15 for all other master's programs using existing application systems. International students must complete applications by May 1.



The Best of Both Worlds: Chandra Shekhar Bakshi, DVM, Ph.D., Lives His Passion for Research and Teaching

Chandra Shekhar Bakshi, DVM, Ph.D., associate professor of pathology, microbiology and immunology, began his career studying veterinary medicine because of his love of animals but soon became involved in bacteriology research, developing a passion for it. The only thing that rivals his interest in those two subject matters is being able to spread his knowledge and experience to students. [Read the full article on Dr. Bakshi.](#)

STUDENT FEATURES



Ellen Nicole (Nikki) Huhulea, left, M.S. candidate in basic medical sciences, was an award winner at the 33rd Annual Graduate Student Research Forum (GSRF). Ms. Huhulea shares her experiences in research, interests and involvement at NYMC and her plans for the future.

“I was a behavioral neuroscience major at Lehigh University where I first became interested in neuroscience. I worked in a lab that studied the neurodegenerative disease Amyotrophic Lateral Sclerosis (ALS) in a drosophila model. After graduation, I wanted to gain more clinical and research experience and take graduate level classes prior to applying to medical school. My first

year [in the GSBMS], I worked at a Northwell Urgent Care as a scribe and was an ambassador to the Graduate Student Association (GSA). I met so many kind and encouraging students through the GSA, which inspired me to provide the same guidance and support to the incoming first years. I joined the e-board in my second year and began working in Dr. Christopher Leonard’s [Ph.D., interim chair and professor of physiology] lab that studies the neurocircuitry of morphine addiction and narcolepsy in a mouse model.

“My research focus was on modulating medial prefrontal cortex outputs using DREADD technology in order to understand the role of the mPFC in modulating cataplexy, a symptom of narcolepsy. I didn’t have the opportunity to present a poster at Lehigh because of COVID-19 restrictions, so I was eager to participate in the GSRF this year. I had never done a poster and did not know what to expect, but it was a wonderful experience. I got to speak to so many knowledgeable faculty members and learn about the exciting research being conducted at NYMC. Being on the e-board of the GSA gave me a unique perspective into all of the work that went into putting together this in-person event. Creating my poster was truly a team effort between myself, Elizabeth Berry, Ph.D. candidate, and Dr. Leonard. I am delighted to have won this award and to have represented the Leonard lab.

“In the future, I plan to continue merging my passion for neuroscience research with my ultimate goal of becoming a physician. I was very inspired by the GSRF keynote speaker Stephen R. Hammes, M.D., Ph.D., who spoke about his experience doing an M.D./Ph.D.

Until recently, I had not [considered pursuing an M.D./Ph.D.], but now I am open to exploring that possibility. I am very grateful to NYMC for the opportunities it has given me to prepare for a future profession in medicine,” said Nikki Huhulea, M.S. candidate.



Lindsey Singer
Department of Pathology, Microbiology and Immunology
Master of Clinical Laboratory Sciences
Master Dissertation Defense
Title: “Rapid bacterial identification and antimicrobial susceptibility testing from positive blood cultures and its impact on patient care”

Lindsey Singer will be graduating this May from the CLS master’s program. She enrolled in the program after completing a Bachelor of Science (B.S.) in biology from SUNY Geneseo. Her master dissertation defense in the Department of

Pathology, Microbiology, and Immunology on March 24 was the first thesis defense by a CLS student.

The CLS Program Director Carol A. Carbonaro, Ph.D., SM, MLS^{CM} (ASCP), says, “The Clinical Laboratory Sciences Program is delighted to report the accomplishments of Lindsey Singer, a member of our second (2022) graduating class. Lindsey is the first of our students to conduct, report and defend a M.S. Capstone Research Thesis. She is preparing her work for submission to a peer-reviewed journal and is planning to submit it for presentation at an upcoming meeting of the American Society for Microbiology. Ms. Singer took time to reflect on her experience. “I have always had a passion for the sciences, and I knew that I wanted to be a part of the clinical setting,” Ms. Singer said. “Clinical laboratory science is a job field that is not well known to society and I happened to discover the career through an article, which listed top STEM Jobs. I knew this career would be something that would complement my personality as well as my passion for science and helping others. The M.S. in CLS is a program that allowed me to launch this into reality. The program is unique because it allows students to rotate through all areas of the clinical laboratory including hematology, chemistry, microbiology, molecular/virology and Blood Bank. We learn how to perform tests in each area, how to operate all machinery and ultimately how to release results to physicians and how the results relate to the patient’s infection.”

“I was passionate about all areas of the laboratory, but the microbiology lab work is something I relish. As I was completing my internship in this section, I was offered the opportunity to carry out a research project with Dr. Pandey [Utsav Pandey, M.D., clinical assistant professor of pathology, microbiology and immunology. We decided to use the project for my own master’s thesis as well as for publication. I decided to carry out the research as it allowed for more hands-on time in the laboratory as well as the opportunity to perform a validation study and see the effects of my data,” Ms. Singer said.

“My career has launched as I now work with a permit at Westchester Medical Center as a full-time clinical laboratory technologist. I have been working there since September and will continue while I prepare for the license exam. I have learned so much and I continue to learn every day, and that is what makes this career and this program so meaningful. My data collection is complete currently, and I am looking forward to publishing as well as attending the American Society of Microbiology Convention with Bruker (Corporation) as my sponsor.”

COMMENCEMENT CEREMONIES

The GSBMS is making preparations and is looking forward to the upcoming commencement celebrations. Activities will take place on campus and are by invitation only.

GSBMS Awards and Hooding Ceremony

John W. Nevins, M.D. '44, Auditorium, [Medical Education Center](#)

Tuesday, May 24, 2022

10:00 a.m. – 11:30 a.m.

Commencement for the GSBMS and the School of Health Sciences and Practice

[Sunshine Tent](#), and will also be streamed online

Tuesday, May 24, 2022

1:00 p.m. – 3:00 p.m.

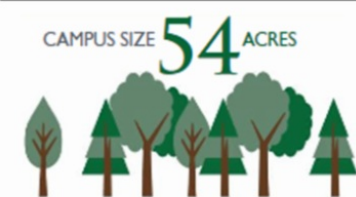
FACTS AND FIGURES

184 STUDENTS
(As of Spring 2022)

Academic Programs:

- M.S. Interdisciplinary Basic Medical Sciences (Traditional and Accelerated)
- M.S. and Ph.D. in Biochemistry and Molecular Biology
- M.S. and Ph.D. in Cell Biology
- M.S. and Ph.D. in Microbiology and Immunology
- M.S. and Ph.D. in Pathology
- M.S. and Ph.D. in Pharmacology
- M.S. and Ph.D. in Physiology
- Biomedical Science and Management (BSM) Master's in six disciplines
- M.S. in Clinical Laboratory Sciences
- Dual degree program — M.D./Ph.D. with the NYMC School of Medicine

\$1,236
TUITION PER CREDIT



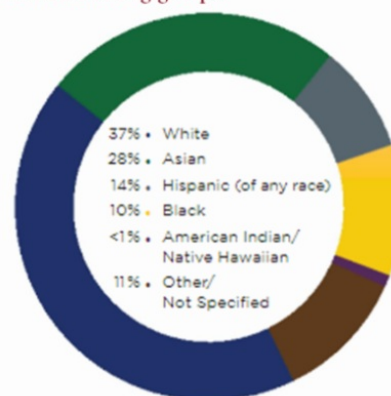
100 FACULTY MEMBERS

67% FEMALE
33% MALE

GSBMS Diversity Numbers:

- 24% of GSBMS students self-reported as part of a group currently underrepresented in the sciences

GSBMS students self-reported as members of the following groups:



Visit our
Website



[Unsubscribe public_relations@nymc.edu](#)

[Update Profile](#) | [Constant Contact Data Notice](#)

Sent by public_relations@nymc.edu in collaboration
with



Try email marketing for free today!