

# Touro Scholar

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GSBMS Dean's Report

NYMC Publications

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Spring 2019

## Dean's Report - Spring 2019

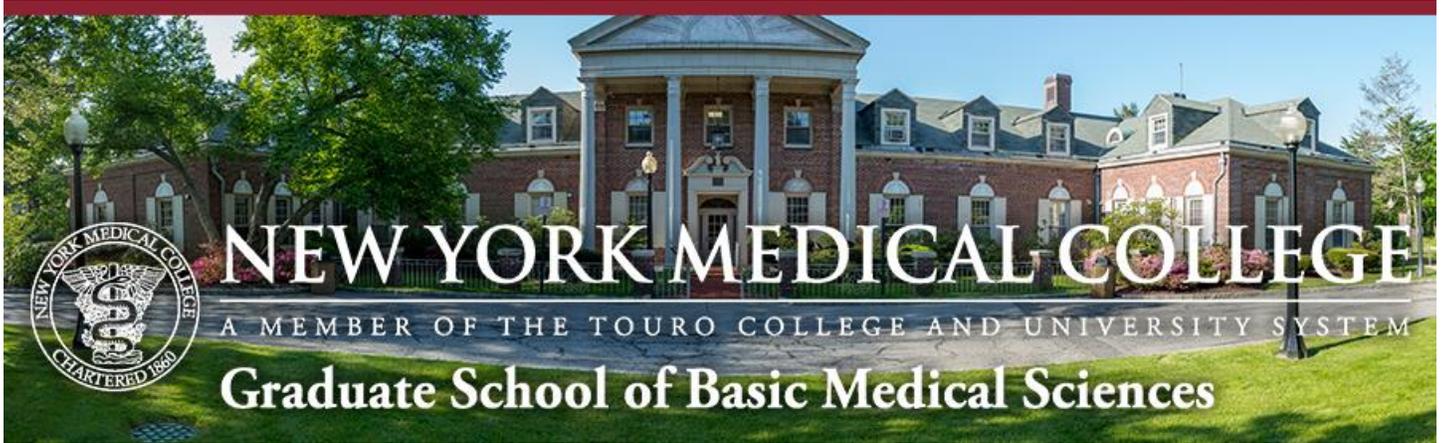
Marina K. Holz

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**Marina Holz, PhD**

Welcome to the Graduate School of Basic Medical Sciences (GSBMS) at New York Medical College. The GSBMS has been offering academic programs in the basic medical sciences since 1963. At present, more than 130 students are pursuing Ph.D., M.D./Ph.D., M.S., or M.D./M.S. degrees in several scientific disciplines – biochemistry and molecular biology, cell biology, microbiology and immunology, pathology, pharmacology, or physiology. Our Ph.D. programs are designed to prepare our graduates for careers as independent researchers and leaders in academia, industry, and government. Our Master's programs help prepare students for a variety of interesting and productive careers as researchers, managers, and teachers. Many of our M.S. graduates continue on to Ph.D. or M.D. programs.

The GSBMS graduate faculty is a community of approximately 90 scientists and educators, most of whom direct active, externally-funded, state-of-the-art research programs. Current projects focus on several areas including cardiovascular disease, neuroscience, cancer, infectious diseases, regulation of gene expression, cell signaling, and metabolic disease. There are ample opportunities for students to actively participate in these research projects. Moreover, GSBMS class sizes are generally small, ensuring personal attention and effective student-faculty interaction. At the Graduate School of Basic Medical Sciences, we think you will find that your breakthrough in science starts here.

**Marina K. Holz, Ph.D.**  
**Dean, Graduate School of Basic Medical Sciences**  
**Professor of Cell Biology and Anatomy**

## **GUARANTEED INTERVIEW AGREEMENTS**

The Graduate School of Basic Medical Sciences currently enjoys guaranteed interview agreements with several colleges and universities:

1. New York Medical College School of Medicine
2. Touro College of Dental Medicine
3. New York College of Podiatric Medicine
4. Touro College of Osteopathic Medicine, New York
5. Touro University California College of Osteopathic Medicine

Students who have completed designated Master's programs and who seek admission will be guaranteed an interview if they meet the institution's required performance benchmarks. These guaranteed interview agreements are open to current Master's students of the GSBMS as well as graduates of GSBMS Master's programs. Final admission to any of these professional programs resides with the admissions office of that institution.

*To learn more about this program, please see our website at:*

<https://www.nymc.edu/graduate-school-of-basic-medical-sciences-gsbms/guaranteed-interview-agreements/>

## 31ST ANNUAL GRADUATE STUDENT RESEARCH FORUM



The Graduate Student Association in the Graduate School of Basic Medical Sciences hosted the 31<sup>st</sup> annual Graduate Student Research Forum (GSRF) on March 19. It was a day of great success as evidenced by the quality and depth of the student presentations and a keynote speech by renowned neuroscientist Marina Picciotto, Ph.D. Dr. Picciotto, the Charles B. G. Murphy Professor of Psychiatry and professor of neuroscience and of pharmacology in the Child Study Center, deputy chair for basic science research in the Department of Psychiatry and deputy director of the Kavli Institute for Neuroscience at the Yale School of Medicine, presented "Cholinergic Control of Circuits Underlying Behaviors Related to Anxiety and Depression."

The day's events were moderated by Robert K. Suriano, Ph.D. '07, assistant professor of biology at the College of Mount Saint Vincent, who returned to campus to serve as master of ceremonies. Dr. Suriano was a GSRF winner when he was a student in the GSBMS.

This year's forum honored Francis L. Belloni, Ph.D., professor of physiology and former dean of the GSBMS, with an Outstanding Service Award and Kenneth M. Lerea, Ph.D., associate professor of cell biology and anatomy and director of the basic medical sciences master's program, with the 2019 Honored Faculty Award.

"The Graduate Student Research Forum is an opportunity to put the classroom aside for a moment and focus on the wide-ranging novel research of our fellow peers, faculty and mentors. I think this year's event really encapsulated that and it was truly an enlightening day, from the presentations to the keynote speaker," said Marianna Jolly, chair of the GSRF.

"The Graduate Student Research Forum was a true community event for the Graduate School. It was a great opportunity for our faculty and students to come together and enjoy the results of many months and years of painstaking research, and to celebrate outstanding student presenters and dedicated faculty mentors," said Marina K. Holz, Ph.D., dean of the GSBMS.

## NYMC ANNOUNCES NEW MASTER OF SCIENCE IN CLINICAL LABORATORY SCIENCES

### NYMC Becomes One of Only Three Schools in New York State to Offer Program to Graduate Students

New York Medical College (NYMC) is launching a newly created [Master of Science in Clinical Laboratory Sciences](#) (CLS) program, offered by the Graduate School of Basic Medical Science (GSBMS), making NYMC one of only three colleges in New York State to offer this unique Master's degree. The two-year, 41.5 credit program, which will be housed in the Department of Pathology, will position students for future employment in highly paid health care fields. Students who complete this graduate program will be qualified for numerous in-demand positions in laboratories across New York State and nationwide. The new program will begin in July 2019.



"We are very pleased to offer this program because it prepares its graduates for an interesting career at the intersection of science and medicine. This program is unique because it provides a defined path towards a professional career," says Marina K. Holz, Ph.D., Dean of the GSBMS.

To learn more about this program, please see our website at: <https://www.nymc.edu/graduate-school-of-basic-medical-sciences-gsbms/gsbms-academics/degrees--programs/clinical-laboratory-sciences-program/>

## GSBMS at the Experimental Biology – EB2019 Meeting

Experimental Biology (EB) is the largest and most prestigious interdisciplinary meeting of its kind. Life sciences and biomedical researchers from all over the world meet to network and share cutting-edge research that leads to discoveries and career advancement. Several students from the department of Pharmacology, and the department of Biochemistry and Molecular Biology presented research posters and received several awards at this meeting.



**Kevin Agostinucci**, a Ph.D. candidate in the laboratory of Michal L. Schwartzman, Ph.D., professor and chair of the Department of Pharmacology, presented a poster and was a finalist for a pre-doctoral excellence scholarship award for the American Physiological Society renal section.

**Ankit Gilani**, a Ph.D. candidate in the laboratory of Michal L. Schwartzman, Ph.D., professor and chair of the Department of Pharmacology, took the first place poster award in the postbaccalaureate /graduate student category in the cardiovascular pharmacology division from the American Society for Pharmacology and Experimental Therapeutics (ASPET).

**Catherine D'Addario**, a Ph.D. candidate in the laboratory of Petra Rocic, Ph.D., associate professor of pharmacology, presented a poster and received an ASPET Graduate Student Travel Award.

**Juan Azcona**, a Ph.D. candidate in the laboratory of Austin Guo, Ph.D., assistant professor of pharmacology, presented a poster and received an Underrepresented Student/Postdoc Travel Award from ASPET.

**Chiso Nwokafor**, a Ph.D. candidate, and **Roxanna Nahvi**, a M.D./Ph.D. candidate in the laboratory of Esther L. Sabban, Ph.D., professor of biochemistry and molecular biology, presented a co-authored poster. Mr. Nwokafor was awarded the \$1800 APS Martin Frank Diversity Travel Award.

## Faculty Spotlight: Jonathan A. N. Fisher, Ph.D., Assistant Professor



Jonathan A. N. Fisher, Ph.D., assistant professor of physiology, earned his Ph.D. in physics from the University of Pennsylvania in 2007. He then performed postdoctoral work at The Rockefeller University with A. J. Hudspeth, M.D., Ph.D., in the Laboratory of Sensory Neuroscience. He is the recipient of several awards and grants, including the Blavatnik Award for Young Scientists, an FDA/Center for Devices and Radiological Health (CDRH) Director's Special Citation Award, the Optical Society of America's New Focus/Bookham Award, and a Bristol-Meyers Squibb Postdoctoral Fellowship in Basic Neurosciences. As an active proponent of STEM outreach, Dr. Fisher is the founder and director of the Neurodome project, which brings real neuroimaging

data into immersive environments such as planaria and VR in order to bring cutting edge concepts in neuroscience and brain health to the public. A pianist by training, Dr. Fisher is particularly interested in the interface between art and technology.

## Alumni Profile: Gregory Joseph, Ph.D. '18, Postdoctoral Scholar



Gregory Joseph, Ph.D. '18, is a postdoctoral scholar at the University of California, San Diego, in the Department of Medicine. His current project aims to gain insight into cellular and molecular mechanisms affecting cardiomyocyte and vascular regeneration after cardiac injury. His goal, after his postdoctoral training, is to obtain an independent, tenure-track position at an academic institution and continue pursuing cardiovascular research.

Dr. Joseph received his Ph.D. in Pharmacology in 2018, in the lab of Petra Rocic, Ph.D. His graduate work focused on the mechanisms by which 20-HETE impaired the coronary collateral growth process in a model of metabolic syndrome. While at NYMC, he was a first author of one paper and co-author of six research papers and received numerous conference awards.

In addition to his research, Greg is an avid comic book fan, especially stories involving Superman.

# NYMC GRADUATE SCHOOL OF BASIC MEDICAL SCIENCES (GSBMS)

Whether a student aims to discover the next life-changing drug or vaccine, investigate the workings of the body's vascular system, educate the future generation of researchers or manage a science-focused non-profit, we offer M.S., Ph.D., M.S./M.D. and M.D./Ph.D. programs to meet their goal. Our Accelerated Master's Program allows students to complete two years of coursework in just one year; and graduates of this program have a distinct advantage when applying to medical school, enjoying an acceptance rate of 85 percent. Our M.S. programs offer options for research training, non-research thesis or project-based internships in industry. The newly launched Professional Science Master's track is designed for students interested in pursuing careers in the pharmaceutical, biotechnology, or other biomedical science industries – or in the government or not-for-profit sectors related to these fields. A new Master of Science in Clinical Laboratory Sciences program trains professionals to work in medical or industrial/pharmaceutical laboratories. Our Integrated Ph.D. program focuses on core scientific knowledge and the interrelatedness of the basic sciences before students declare a specific field of study.



## GSBMS facts and figures

**130** STUDENTS  
(As of Fall 2018)

60% female  
40% male

### 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
- Professional Science Master's (P.S.M.) in six disciplines
- M.S. in Clinical Laboratory Sciences
- Dual degree program — M.D./Ph.D. with the NYMC School of Medicine

**Number of GSBMS Faculty:** 97

**GSBMS Tuition:** \$1,165 per credit

### GSBMS Diversity Numbers:

- 25% of GSBMS students self-reported as belonging to a group currently underrepresented in science.
- GSBMS students self-reported as members of the following groups:

**40% White**

**22% Asian**

**15% Hispanic (of any race)**

**9% Black**

**<1 % American Indian/Native Hawaiian**

**13 % Other/ Not Specified**