

Get to Know – NYCPM Faculty
Paramita Basu, PhD
Adjunct Pre-Clinical Instructor



On July 1, 2022, Dr. Basu will become the NYCPM Director of Infectious Diseases, Pre-Clinical Sciences Department, teaching courses in infectious diseases and bacteriology for first- and second-year students.

Until June 30, she is a member of the faculty of the Touro College of Pharmacy, which was founded in 2008 and which she joined in Spring 2009, as well as teaching courses in infectious diseases here at NYCPM. She joined the pharmacy school because it has a division of public health, Dr. Basu's primary interest, especially the health of women and children. She feels public health is highly neglected in India, her birthplace, as well as in the United States. She looks forward to being part of any public health program in NYCPM.

Born in Kolkata, Dr. Basu received her BS in Human Physiology from Presidency College at the University of Calcutta, and an MS in biotechnology from Banasthali University in Jaipur, India. She received an MTech in biotechnology and biochemical engineering from Jadavpur University, Calcutta, India, a course of study that introduced her to the world of pharmacy and pharmaceutical manufacturing, primarily manufacturing antibiotics and technology.

She thought manufacturing (of antibiotics) in India was acceptable, but that the research here in the US was more advanced. Dr. Basu wanted to make a difference, and she wasn't sure if research in India would let her make an impact.

She received her PhD in 2008 from St. John's University in Queens, NY in Biological Sciences, specializing in antimicrobial resistance. While at St. John's, she realized that (the subject of) infectious disease was close to her heart. She had still thought that she would go back to India to make a difference, because TB and malaria are much bigger problems (worldwide) than cancer, but she met her husband at St. John's, had a son and decided to remain here in the US. She worked in the diagnostics industry for a year after receiving her PhD, giving her experience with working with clinical research and data analysis.

Get to Know – NYCPM Faculty
Paramita Basu, PhD
Adjunct Pre-Clinical Instructor

continued

In her work, Dr. Basu participates in a lot of collaborations; one is a collaboration with UNAI (United Nations Academic Impact), which is “an initiative that aligns institutions of higher education with the United Nations in supporting and contributing to the realization of United Nations goals and mandates, including the promotion and protection of human rights, access to education, sustainability and conflict resolution.” She leveraged relationships with other universities in India and Trinidad for Touro’s Global Health Committee. She wants to keep working with UNAI here at NYCPM.

One collaboration she’s involved in has implications for the world’s current battle with infectious disease and future pandemics. She was able to collaborate with India to design an assay, and using what she designed here, she was able to work with the city of Bangalore to test a sewage monitoring system (thanks to a grant from the Skoll Foundation) for Covid. The system detects Covid through monitoring sewage; virus gets shed in sewage, and if the sewage is continuously monitored, then a sudden increase of its viral load would predict a surge in symptoms several days later. (Interestingly, this method has been used for testing for narcotics in New York City, according to Dr. Basu.) The data from this study was made available to the public via an article in *Access Microbiology* – it was published in January as open access and available in PubMed. That was her way of contributing towards the fight against infectious disease, she says.

Dr. Basu’s “big project” at NYCPM will be to introduce audiovisual-based teaching about infectious disease. She wants to bring in outside sources; video companies and educational technology companies have new products that help students learn. She wants to bring in short videos. Dr. Basu loves to spend time with students!