

MSNS Students Participate in Harvard Medical School's Quantitative Methods Boot Camp



Through shared collaboration of dedicated faculty across universities, Master of Science in Neuroscience (MSNS) students were given the opportunity to participate in the two-week Quantitative Methods Boot Camp (QMBC) course offered to incoming graduate students in the Department of Neurobiology at Harvard Medical School. This short, intensive course has been designed to address the growing need for life scientists to receive appropriate quantitative and computational training, as well as acquire practical skills early in their graduate career, to meet the demands of the modern biology discipline. The QMBC training initiative aims to help students develop their quantitative problem-solving skills, increase their programming ability, and demonstrate the relevance of these skills to their work in life science laboratories.



Shelley Cobb, Jasmin Eatman, Asia Payne and Parris Washington, all 2017 graduates of Spelman College and students in the BS/MS Program in Neuroscience at MSM since August 2015, attended the QMBC course at Harvard Medical School this summer. In addition to hands-on exercises and individualized support, our four students had the opportunity to interact with graduate student peers as well as Harvard faculty in both academic and social settings.

"The Harvard boot camp was an awesome experience to be able to learn new quantitative tools to use in my research," said Payne. "The instructors, TAs, and graduate students were all so welcoming, and this is an experience that I will definitely remember."

“The most enjoyable part of the Harvard trip was being able to learn about all of the *avant-garde* research techniques and projects that were being pioneered by all of the labs in the institution. Being able to talk to the investigators and hearing their stories was inspiring,” stated Cobb.

“The Quantitative Bootcamp was fantastic. I enjoyed being challenged; learning new techniques and languages to apply to my own coding. However, the best part of my trip to Harvard was the people I encountered; from Ivan Santiago and Dr. Taralyn Tan, who were heavily involved in the organization of our trip, to Dr. Rosalind Segal, Dr. Joan Reede, and the other phenomenal doctors who took the time out of their busy schedules to teach, guide, and speak with us,” remarked Washington. “From them, I saw the importance of thinking outside of the box, thinking beyond your immediate limitations, and then taking those risks. That’s where innovation lies. Whether they know it or not, they challenged me to become a better scientist.”

This collaboration has been spearheaded by [Peter MacLeish, PhD](#), professor and chair of Neurobiology at MSM, and [Rosalind Segal, MD, PhD](#), professor of Neurobiology at Harvard Medical School, with the help of [Taralyn Tan, PhD](#), Curriculum Fellow at Harvard Medical School Department of Neurobiology, and [Morris Benveniste, PhD](#), professor of Neurobiology at MSM.

“Several aspects of this two-week program made it a particularly compelling experience for the faculty and organizers here and (I hope) for the MSM students involved,” said Dr. Segal. “Having the students stay with faculty for one week provided personal interactions with two of our best mentors, and gave the faculty involved greater insight into student concerns. The meeting with Joan Reede, dean of Diversity and Community, and with Professor Ed Furshpan provided a historical perspective for the links between the Neuroscience communities at Harvard and Morehouse, and also showed how this new program can further develop these links and further develop the careers of talented young scientists and physicians,” said Dr. Segal.



“We are very excited to continue (and expand upon) the collaboration in the future,” said Dr. Tan. “I was very impressed by all of the students’ enthusiasm for learning new things, meeting new people, and pursuing their professional goals. The passion that they have for science and medicine, social justice, and leading by example as role models for their communities was palpable and incredibly inspiring. Their visit was motivating me to work harder and to reflect on what more I can be doing to mentor up-and-coming scientists and to create new opportunities for scholarly collaboration and friendship among different communities in the spirit of the ties we’ve reestablished between HMS and MSM.”

Funding for this interaction has been provided by the Specialized Neuroscience Research Program grant from NINDS and Harvard Medical School. The Neuroscience Institute plans to continue this program. Designing a unique experience for our students that will improve skills in computational and mathematical technique will position them to great success in practice of modern biomedical science.

