

The Public Health Research Institute Summer High School Research Internship Program

The Summer High School Research Internship Program serves minority students who attend high schools or live in Newark and their science teachers. Its goal is to nurture, through hands-on laboratory research experiences, the students' interest in science. Mr. Yaakov Saturen, a science teacher with more than ten years' experience in inner city high schools, directs the program. Students begin with a two-week workshop that introduces them to the vocabulary of molecular biology and biochemistry and basic laboratory skills, tools and techniques. They meet PHRI Principal Investigators, who give a series of lectures. After the workshop, each student is assigned to a PI's lab, paired with a scientist/mentor and assigned his or her own research project. Over the course of the summer, they meet weekly to discuss their projects. Each one writes a short research paper on his or her project. They also take field trips to various sites where they can see how research is being applied for the benefit of society. Support for the Summer 2007 program has been provided by the Prudential Foundation, Victoria Foundation, PHRI, UMDNJ and the American Chemical Society - Project SEED.



l - r: Alex, Ms. Constantinescu, Tashyana, Amberly, Lauren, Catia, Marquise, Dillon, Gisel, Mr. Saturen and Ms. Buggs (missing are Kwasi and Petrina)

"Before I came here, I didn't know I really liked science, but once I got here, I liked the challenge. Each day I would get so absorbed that I wanted to keep going with my experiments to see what happened." - Past Student Participant

Summer 2007 Research Internship Participants

Program Director: Yaakov Saturen, Jane Addams HS, Bronx, NY

Teaching Assistant: Petrina Boucher, University of Maryland, College Park, MD

Newark Schools: West Side High School, Science High School

University Academy Charter High School, Saint Vincent Academy, Saint Benedict's Preparatory School

Student	Principal Investigator	Mentor	Research Topic
Kwasi Agyeman	Karl Drlica PHRI ¹	Muhammad Malik, PHRI	Mapping of Suppressor Mutants of the yihE Gene, in <i>E. coli</i> .
Catia Goncalves	Carol Newlon DMMG ²	Carmela Irene DMMG	Analysis of a Yeast Mutant, ofm 6-1, That is Defective in Maintaining a Chromosomal Fragment lacking Conventional Replication Origins.
Marquise Guzman	Karl Drlica PHRI	Karl Drlica PHRI	Studies on the Efficacy of the Antibiotic, Fluoroquinolone in <i>E. coli</i> .
Amberly Hernandez	David Perlin PHRI	Steve Cagas PHRI	Studies on Factors That Contribute to Drug Resistance in <i>C. albicans</i> .
Gisel Nunez	David Dubnau PHRI	Miguel Dias PHRI	Studies on the Genetic Regulation of Virulence-Related Proteins in <i>B. subtilis</i>
Alexandra Sarabia	David Dubnau PHRI	Naomi Kramer PHRI	The Function of the DNA-Binding Protein DprA in <i>B. subtilis</i> .
Lauren Small	Issar Smith PHRI	Michelle Ryndak PHRI	A Mutational Analysis of the PhoP Protein in <i>M. tuberculosis</i>
Tashyana Thompson	Issar Smith PHRI	Marcela Rodriguez PHRI	Studies on the Mechanism of Iron metabolism in <i>M. tuberculosis</i>
Dillon Weiss	David Kaback DMMG	Arnold Barton DMMG	Studies on Meiotic Recombination of Chromosomes in <i>S. cerevisiae</i>
Teacher	Principal Investigator	Mentor	Research Topic
Monique Buggs	Barry Kreiswirth PHRI	Barry Kreiswirth PHRI	Studies of the Distribution of MRSA & MSSA Cases in NJ Using GIS.
Mihaela Constantinescu	Shuishu Wang PHRI	Shuishu Wang PHRI	Toxin-Antitoxin Expression and Purification.

¹ PHRI = Public Health Research Institute Center of the UMDNJ ² DMMG = Department of Microbiology and Molecular Genetics of the UMDNJ
"Students who complete the program leave with much more than research experience. They develop analytical and critical thinking skills that they can use in all areas of learning and throughout their lives." - Yaakov Saturen