

**RUTGERS**

Ernest Mario School  
of Pharmacy

**2016 EMSOP Summer  
Undergraduate Research  
Fellowship Program**

## **2016 EMSOP Summer Undergraduate Research Fellowship Program**

Twenty three students were selected for the Summer Research Fellowship Program at the Ernest Mario School of Pharmacy. Students were very active in a number of events:

- Participated in a tour of the pharmaceutical company Bristol-Myers Squibb and met in small groups with scientists from various teams within Drug Safety Evaluation.
- Dynamic research discussions with Dr. Cheryl Dreyfus (School of Medicine) and Dr. Stephan Schwander (School of Public Health).
- Team-based water activity to investigate concentrations of lead in local drinking sources with Brittany Karas, Dr. Brian Buckley, Dr. George Rhoads, and Dr. Rob Laumbach from the EOHSI Institute.
- Career-focused events including discussion of careers with pharmaceutical and personal product industry scientists, Ms. Mindy O'Mealia (Career Services, Rutgers) and Dr. Gary Grover (School of Pharmacy).
- Participated in Final Thesis Completion for Honors Students
- Active participation in Responsible Conduct of Research Case-Based Session
- Students met with high school students during lunchtime sessions to discuss picking majors.
- Fantastic final presentations of research projects on July 21 and 28, 2016



## 2016 SURF Program





## 2016 SURF Fellows







# Bristol-Myers Squibb Field Trip







## Bristol-Myers Squibb Field Trip





# Bristol-Myers Squibb Field Trip





# Bristol-Myers Squibb Field Trip





# 2016 Summer Research Presentations

Researcher	Mentor	Project Description
Holly Yang	Dr. Guo	Fgf15 Gene and Its Effects on Bile Acid Homeostasis
Jessica Xiao	Dr. Chen	Role of Metabotropic Glutamate Receptor-1 (Grm1) in Melanoma Metastasis
Nihal Narsipur	Dr. Yang	Effect of Long-Term Intake of Phytosterols on NAFLD in High Fat Diet Fed Mice
Eric Zhang	Dr. Hu	Synthesis of Small Molecule Inhibitors of Keap1-Nrf2 Protein-Protein Interaction
Justin Park	Dr. Hu	Adaptation of a Cystine Specific Assay for the Characterization of Cystine Crystallization Inhibitors LH707 and LH708
JiYoung Park	Dr. Zhou	Strain Differences in Sensitivity to Cuprizone-Induced Demyelination
Sarah On	Dr. Kagan	Comparison of Paclitaxel Toxicity to Cancer Cell Line A549 in Two Different Formulations
Sonam Chodon	Dr. Suh	Prevention of Breast Cancer by Natural Compounds: Effects of Vitamin E on Estrogen-Receptor Positive Breast Cancer
Kavleen Kaur	Dr. Kimler	Tacrolimus Dosing in Pediatric Patients
Shivani Gupta	Dr. Gow	Understanding Effects of iNOS on Cellular Recruitment within LAM
Ziping Liu	Dr. Gow	Derivation of Semi-Ordinal Mann Whitney U for the Body Mass Comparison of Sequential Capra aegagrus in Bridge Crossings
Catherine Johnson	Dr. Reuhl	The Role of Extracellular Matrix in Neurotoxicity and Neural Repair



# 2016 Summer Research Presentations

Researcher	Mentor	Project Description
Jennifer Li	Dr. Cartegni	Characterizing Splicing Effects of p53 Exonic Point Mutations
Taylor Tillery	Dr. Fang	Circadian Rhythm Disruption and its Effects on Mammary Tumor Lung Metastasis
Daniel Peled	Dr. Uzumcu	Effects of Endocrine-Disrupting Chemicals on Rat Uteri
Caitlyn Tobita	Dr. Driscoll	Characterizing the Recovery and Adaptation after Exercise in <i>C. elegans</i>
Helen Wang	Dr. Sinko	Effect of Bac7 on Nanoparticle Transport Across the Colorectal Epithelium
Maxine Abustan	Dr. Aleksunes	Establishing an In Vitro Blood-Placental Barrier Using BeWo b30 cells
Phil Gallo	Dr. Gordon	Restasis Reduces Matrix Metalloproteinase Activity in Nitrogen Mustard-Exposed Corneas
Megha Shah	Dr. Maroney	Examining the Clinical Outcomes of Patients Treated with Paliperidone Palmitate: A Retrospective, Mirror-Image Study
Arsany Makkar	Dr. Guo	Investigating the Role of the Farnesoid X Receptor (FXR) on Nonalcoholic Steatohepatitis (NASH)
Iris Escobar	Dr. Gardner and Dr. Laskin	Identification of Unique Markers to Distinguish Macrophage Populations in Mouse Models Resembling Fatty Liver Disease
Mary Stofan	Dr. Buckley and Dr. Guo	Analysis of the Bile Acid Synthetic Pathway in the Absence of Enzymes, CYP7A1 and CYP27A1
Vivian Hu	Dr. Wu	Microglia Phagocytosis Through Development







# Funding and Support

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Ernest Mario School  
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<http://pharmacy.rutgers.edu/>

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Graduate School of  
Biomedical Sciences

<http://gsbs.rutgers.edu/>



<https://eohsi.rutgers.edu/niehs/>



<http://eohsi.rutgers.edu/>



**Bristol-Myers Squibb**



<http://www.aspet.org/>



<http://rise.rutgers.edu/>



**National Institute of  
Environmental Health Sciences**

<http://www.niehs.nih.gov/>



Through Dr. Gary Grover