Biochemistry

1st Place – Julia Hicks-Berthet



Julia is a student in Dr. Xaralabos (Bob) Varelas's lab. From her research to her citizenship, Julia is a "winner". Julia's dissertation work involves the characterization of pathways involved in lung epithelial cell fate. Integrating in vitro (primary cell models), in vivo (knockout mouse models) and computational (ChIP Seq analysis) approaches, the work has resulted in the identification of a novel role for the Hippo pathway transcriptional effectors Yap and Taz in the regulation of goblet epithelial cells, with implications in asthma, cystic fibrosis and bronchitis. In the future, Julia looks forward to developing therapeutic tools in regenerative medicine. A great citizen, Julia's participation ranges from mentoring others in the lab to participating as a discussion leader in the Foundations in

Biomedical Sciences curriculum, tutoring dental students and serving on the department's seminar committee. Julia's passion for science is infectious!

2nd Place – Nathan Kingston



Nathan (Nate) is a student in Dr. Xaralabos (Bob) Varelas's lab. Nate is studying the role of Taz and Yap, Hippo pathway transcriptional effectors, in idiopathic pulmonary fibrosis. Cell populations that contribute to pulmonary fibrosis are poorly understood. Nate's studies have identified roles for Taz and Yap in a population of PDGFRbeta-expressing mesenchymal cells that promotes matrix deposition in a model of bleomycin-induced lung injury. His studies have shown that loss of Taz or Yap in these cells protects against fibrosis-induced alveolar damage. Nate looks forward to becoming an independent researcher, either in an academic or industry setting. A great collaborator and citizen, Nate was in

leadership positions in the Biomedical PhD Student Organization (BPSO), served as a peer mentor to incoming PhD students, mentored many in the lab and tutored DMD students. Nate's collaborative nature enables science innovation!

<u>3rd Place – Deborah Chang</u>



Deborah is a student in Dr. Joseph Zaia's lab. Developing an effective influenza A virus vaccine remains a challenge. With the goal of enabling a path to the development of more effective vaccines, Debbie integrates biochemical, mass spectrometry and bioinformatic approaches to design a method to quantify glycoforms in various strains of the virus to understand how it escapes adaptive immunity. Debbie looks forward to working in a mass spectrometry core facility in an academic setting, collaborating on a variety of research projects. A great citizen, Debbie was in a leadership position in the Biomedical PhD Student Organization (BPSO), she volunteers during PhD recruitment and orientation events, serves as a peer mentor for first year PhD students

and for a rotation student in the lab, and she served on the department retreat planning committee. Debbie is intellectually curious and embraces all opportunities to add tools to her armamentarium!