## **DEPARTMENT OF PHARMACOLOGY EDI NEWSLETTER**

## THE UW BIOSTEP PROGRAM

TRAINEE SPOTLIGHT

UW BioSTEP Program focuses on engaging undergraduate students from Pacific Northwest Tribal Nations and other systematically marginalized communities in biomedical research at the University of Washington. This initiative launched by the EDI Committee enables students to get hands-on experience and attend seminars to see if science is their passion, which brings us to our very first BioSTEP student.

"My name is Idriana Jan Abinales. I'm from Tacoma, Washington but my parents came to the US from the Philippines. I'm studying Biomedical Sciences at UW Tacoma to hopefully pursue medicine whether it's medical research or as a physician. I found out about this program from our biomedical science advisor. Among many research opportunities presented to us- this one stood out as welcoming and offering a "first-time lab experience". After many rejected applications because I didn't have lab experience, I thought maybe one more application, and now...here I am!"



Idriana Abinales and Dr. Shechner

Idriana decided to join Dr. Shechner's group this summer because O-MAP (Oligonucleotide-mediated proximity-interactome MAPping) was something she never heard about.And there is no better place to learn about this than a lab that developed the method. Under the mentorship of Dr. Shechner and other lab members - especially lab manager Lorenzo Deleon - Idriana dives into the fascinating world of RNAs. Often overlooked but mighty RNA can truly orchestrate subcellular architecture and she is the one to see this with her own eyes.

In the whirlwind world of graduate school, where mind-bending ideas reign supreme, many students manage to shine. But the real challenge lies in making science exciting and digestible for a broad audience. And believe it or not, amona the scariest critics we face are none other than the NIH reviewers, journal editors, and... children! But our graduate student -Nicole Marsh - fearlessly takes on this challenge. In her day-to-day scientific mission Nicole is mentored by **Dr. Yasemin** Sancak and aims to connect the dots between mitochondrial calcium signaling and cellular metabolism in healthy and cancer liver cells. Outside of the lab, Nicole possesses an extraordinary knack for turning perplexing concepts into pure fun. Armed with some chalk and an unwavering dedication to transforming young lives, Nicole has been tutoring children from underprivileged communities for over 5 years.



Nicole Marsh and her mentees

She doesn't just teach science - she dives into a realm where plasticine, gummy bears, and imagination come together to unlock the wonders of the scientific world. She goes beyond being a mere tutor- helping to shape the perspectives of youthful minds and watching them graduate. According to Nicole, this journey ignited her passion for teaching, sharpened her public speaking skills, and taught her the art of improvisation. With the last one being incredibly helpful in every scientific challenge.

**GET INVOLVED IN OURTREACH PROGRAMS** 

In partnership with Seattle Children's Research Institute and the Science Adventure Lab, we facilitated hands-on science experiments at 5 local elementary schools, reaching over 400 4th-6th grade students in underserved communities. Our curriculum focuses on helping the students develop critical thinking skills and exposing them to the STEM career options. We have given guest lectures at Seattle Children's Biomedical Research and Global Health program to show insight into our scientific career path to high school students from underrepresented backgrounds.

Dez Coleman & Nelson Ayala

FEEDBACK (Fostering Educational Excitement Designed for Bold and Academically Curious Kids) encourages achievement in young students from underrepresented backgrounds. Through mentorship and design of innovative educational tools, FEEDBACK cultivates and fosters student engagement in STEM while promoting academic excellence.

Micaela Ruiz

The Husky Science Communication Initiative is a group of volunteers from the University of Washington with a shared passion for scientific equity and community outreach. Our primary directive with in-class activities has engaged our volunteers with over 250 7th-grade students while our Science Night activity booths have helped us engage with hundreds of kids and their families at the large school events. Anthony English If you are interested in polishing your presentation skills and learning to communicate your research to diverse audiences, ENGAGE is a great course to consider. We learned the craftmanship of clear and concise elevator pitch, developed my writing skills via blog posts, and learned presentation tips and tricks. The highlight was getting to share our own work with the Seattle community at the Seattle Town Hall! The chance to meet graduate students from various fields was an extremely valuable aspect of the course. We highly recommend ENGAGE to anyone looking to improve their science communication skills.



## **DIVERSITY DRIVES DISCOVERY**

https://pharmacology.uw.edu/about/edi/