

Geophysical Fluid Dynamics Laboratory (GFDL)



Akira Di Sandro

Akira will be a senior at Oberlin College, OH, studying Math and Neuroscience. In her free time, she likes to cook, read, go to the beach, listen to music, practice taiko (Japanese traditional drumming), and help organize events, all in the company of friends and family.

Akira said, “It may seem weird at first glance that a math and neuroscience major is interested in climate modeling and oceanography. I actually did not even know that climate modeling existed until a year ago when my math professor who does a lot of research in climate modeling brought a guest speaker to campus to talk about how she uses math to understand and predict the Earth system. As someone who has training in modeling through various math, statistics, and neuroscience classes, and whose interests lie in real world applications of science, this talk inspired me to look further into this field as a possible future career. In my search for research opportunities, GFDL’s oceanographic and atmospheric research with emphasis on computational models seemed a perfect fit for me.”

Akira said she is fortunate to have experienced this internship this year. Her project, titled Validating Tropical Pacific Circulation in GFDL Ocean Models, consisted of choosing a model to work with, making transport calculations based on the model output data, and comparing it to the observational data of the Solomon Sea transport. She said she learned plenty of skills ranging from coding, communication, to time management.

Overall, Akira said her experience was challenging, and at times frustrating because of coding blocks, but very fulfilling and enriching. “I am so grateful to have had the opportunity to work with Dr. Marion Alberty and Dr. Sonya Legg, two wonderful mentors, as well as the rest of the GFDL/NOAA team who have dedicated so much time to make this remote internship not only possible, but excellent!”

Quiana Berry

Quiana is a Spanish Harlem native, student leader/activist at Bronx Community College, New York City, NY, and Biology, Anthropology and Chemistry interdisciplinary major transferring to Lehman College in the Fall. She is of Peruvian and African American heritage and plans to pursue a future career in the intersection of science, activism, and policy.

Quiana learned about the internship for the first time when Sonya Legg from Princeton/NOAA-GFDL came to give a talk at Bronx Community College. She is most excited that she has the opportunity to learn from and ask experts questions on topics ranging from ocean geophysics, zooplankton, ocean mixing, machine learning to the latest research on the Arctic. The project she is working on with Liz Drenkard and Jessica Luo of GFDL/Princeton is Assessing drivers of primary productivity in the Humboldt Current in a changing climate. Quiana feels fortunate to be able to connect her travels, stories of Incan folklore, and grandparent’s accounts about growing up near the Peruvian current, alongside GFDL data.

Interning during these historic times has been challenging but rewarding for Quiana, balancing research and activism in one summer. She is inspired by contributing to discussions about diversifying STEM and academia alongside building research skills.

This virtual internship experience has taught her a valuable lesson in managing competing passions and priorities, taking any negative in the world and filtering it into something positive. Quiana truly believes science can be a creative outlet of expression and mechanism for positive change within society if applied properly.

Quiana would highly recommend this NOAA internship to other students looking to grow professionally and personally. She recommends to interns, “Be curious, ambitious, ready to think critically, fully participate in discussions and scientific inquiry, come with an open growth mindset ready to contribute anywhere you can add value.”

