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GEOFORCE MONTHLY

Changing lives since 2005



Laura Gloria with the first sample from her Lead & Copper Sampling Program.

ALUMNI SPOTLIGHT: LAURA GLORIA

As a Water Quality Specialist for Canyon Lake Water Service Company in New Braunfels, Texas, Laura Gloria's job involves many of the same data-driven skills she learned during her four summers as a GeoFORCE student. From 2009 to 2012, "GeoFORCE really solidified how much I love the outdoors," Gloria said. "I highly recommend, as a student, that you take all the opportunities you can. Everything serves as a learning opportunity for you to figure out what you do and do not like."

In 2017, Laura Gloria graduated from Texas A&M University with a B.S. in Environmental Geosciences. During her undergraduate studies, she learned about geographic information system mapping, site remediation, urbanization, environmental law and ethics, and public health—but she discovered her favorite subject by taking advantage of research opportunities. She was thrilled to explore a variety environments, studying clouds and snow in Colorado, dunes and the water table of South Padre Island, and hydrology in Costa Rica. Taking her passion for the study of water, Gloria went on to earn a Master's in Water Management and Hydrological Sciences in 2019.

Now, Gloria's work at Canyon Lake Water Service Company continues focusing on water. Her main function is to ensure that the company stays in compliance with Federal and State regulatory water standards by reviewing data, creating monitoring programs, and implementing operating policies. She oversees three surface water plants, three wastewater plants, and approximately forty wells. Her favorite task thus far involved a water quality study that included evaluating disinfection by-products and creating a treatment recommendation.

"I really want students to know how broad the geosciences are," Gloria said. "There are so many diverse jobs and work environments you can be a part of! You can be a water quality specialist, a field scientist, or a lab technician. You can restore ecosystems, make maps, or be an advocate for environmental justice. You can work for private or public, profit or non-profit, in an office, lab, or in the field. That's why I love the geosciences so much-because it truly is interdisciplinary."

GeoFORCE Texas is an outreach program through The University of Texas at Austin's Jackson School of Geosciences that introduces high school students from underserved communities to STEM and geoscience careers through summer field experiences, corporate mentoring, and college guidance. In 2015, our program was honored with the Presidential Award for Excellence in Science, Mathematics, and Engineering Mentoring—the highest such honor from the United States government. More information can be found on our website at https://www.jsg.utexas.edu/geoforce/.

Photo: Laura Gloria



UT AUSTIN'S FALL 2020 COVID-19 PLANS

This fall, The University of Texas at Austin plans to operate a hybrid online & in-person semester. The GeoFORCE staff will continue working from home, alongside most staff of the Jackson School of Geosciences, for Fall 2020.

Read more here.

INTERNSHIP & SCHOLARSHIP RESOURCES

- Geoscience Research Programs & Internship Opportunities for Undergrads & Recent Grads
- Scholarships for Undergraduate & Graduate Students
- Scholarships for High School Students



PROGRAM SPOTLIGHT:

GEOFORCE VIRTUAL FIELD ACADEMIES

This summer, all nine GeoFORCE academy programs took place over Zoom conferences. These Virtual Field Academies used a combination of lectures, challenge projects, and Virtual Field Experiences (VFEs) in lieu of traveling to educate, inspire, and engage our students. The opportunity of a virtual environment allowed the course designers to push beyond what could normally be taught during an in-person academy.

Each virtual academy was a success, as seen in the quotes our students gave us in the anonymous post-survey. The 9th grade's exploration of the Gulf of Mexico, allowed the students to see footage of hydrocarbon seeps and explore coral reefs off the coast of the Dominican Republic. One student from GeoFORCE Southwest 9 said, "The thing I liked most about this academy was the VFEs! We were able to see a whole different perspective that we wouldn't have been able to see in person!"

For 10th grade, the virtual experience transitioned from the red rocks of the Grand Canyon to the canyons of Mars where student groups chose the site of the next Mars rover landing. "I liked being able to interact with the teachers and peers and discuss with them. I liked being able to learn so much more about different geological aspects even without being able to do any fieldwork!" a 10th grader remarked.

The 11th graders explored volcanoes not only in the Pacific Northwest, but also in Hawai'i, Scotland, and the Mid-Atlantic Ridge. A student from Houston 11 told us, "I loved the fact that we still got to work on group projects and virtually visit places around the world."

As for the 12th graders, an entirely new Legacy Cycle project was developed so they could have fun investigating planetary geology and terraforming for human habitation. "This academy made me realize that possibilities are endless in regard to careers and that I should open my options," one student from Houston 12 said.

Though the GeoFORCE team hopes to resume our normal field academies next summer, we are grateful to Dr. Kathy Ellins and Dr. Dana Thomas for the time that went into the creation of these virtual academies. Their initial design ideas combined with the hard work of our summer instructors and educational teams made spectacular experiences for our students. We also want to thank all of the students who took this change in stride and who participated in our virtual academies with enthusiasm and a willingness to learn—our success is because of you.

Photo: John Hash