FEBRUARY 2020 | ISSUE 2

GEOFORCE MONTHLY

Changing lives since 2005

John Hash (left) directing the first GEAR UP cohort to look at Multnomah Falls during their 11th grade academy trip to Oregon in 2016.

BROADER IMPACTS IN K-12: GEAR UP PARTNERSHIP

In 2013, GeoFORCE established a partnership with Texas GEAR UP to broaden our impact throughout underserved Texas districts. This partnership was a complete success and, as a result, GeoFORCE and GEAR UP are now entering into a new collaboration that will introduce twice as many diverse students to the geosciences.

Gaining Early Awareness and Readiness for Undergraduate Programs (GEAR UP) is a federal grant program created to increase the number of low-income students entering into and succeeding in post-secondary education. GeoFORCE coordinator John Hash worked with Dr. Matt Orem, an executive director at The University of Texas at Austin's Institute for Public School Initiatives and GEAR UP principal investigator, to use GEAR UP funds to bring the GeoFORCE program to an entirely new population of diverse, low-income Texan students. The first GeoFORCE GEAR UP cohort completed the entire summer experience from 2014 to 2017. When they entered college in 2018, they were encouraged to choose geoscience and engineering majors—and an astonishing 19% did. They have been provided the full support of our GeoFORCE college program and encouraged to apply to internships and jobs with our partner corporations.

In 2019, GeoFORCE and GEAR UP decided to expand on this partnership to affect positive change on even more students. Beginning in summer 2020 through summer 2024, GeoFORCE will take two full GEAR UP cohorts through our program. These students are being recruited from underserved schools in San Antonio, San Marcos, Lockhart, Navasota, and Livingston.

"Our first partnership with the Texas GEAR UP state project was an exceptional experience," Hash said. "The students were appreciative of what GeoFORCE provided and invested in learning as much as they could. I am eager to begin our new collaboration and introduce more diverse students to the GeoFORCE experience."

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: GeoFORCE

Stephanie Suarez loading processed Martian meteorites into the autosampler at the MC-ICP-MS lab at the University of Houston.

UPCOMING EVENTS & OPPORTUNITIES

2/21
- GeoFORCE 9th - 11th Grade Training Webinar

2/22
- Introduce a Girl to Engineering and Girl Day STEM Festival at UT Austin

2/27
- Breakthrough Central TX Teaching Fellowship for college students, Application Deadline

2/28 - 3/1
- GeoFORCE 12th Grade Training Weekend

2/29
- Volunteer with UT Outreach for an SAT Prep Workshop

3/3
- Gilman International Scholarship Application Deadline

3/6 - 3/8
- The Sweatt Center's 2020 Collegiate Black Male Retreat

3/15
- G-camp Field Camp for 5th - 12th Grade Science Teachers, Application Deadline

ALUMNI SPOTLIGHT: STEPHANIE SUAREZ

In 2009, when Stephanie Suarez first joined the GeoFORCE program, she had no idea that in 10 years she'd be one of the few geologists in the world studying Martian rocks.

Suarez finished the GeoFORCE summer program in 2012 and received a full-ride GeoFORCE Texas Graduate scholarship to The University of Texas at Austin. There she started her research career by determining ages of volcanic ashes surrounding early land biotas to evaluate the rate and character of land colonization under the supervision of Dr. Elizabeth Catlos.

Suarez graduated with a Bachelor of Science in general geosciences in 2017 and proceeded directly on to graduate school at the University of Houston. In 2019, she received her Master of Science in geology. She is currently working on her Ph.D. and studies the chronology and petrology of extraterrestrial and terrestrial materials under Dr. Tom Lapen. Her research is funded by both the highly competitive National Science Foundation Graduate Research Fellowship and by NASA grants. With Dr. Lapen's research group, Suarez is investigating the nature and timing of Martian magmatism through isotopic analyses of Martian meteorites.

Suarez in her Master's robes at the MC-ICP-MS lab.

"GeoFORCE not only assisted me financially but was an incredible support network as a first generation student," Suarez told us. "I initially struggled to adjust during my first few years of undergraduate but with GeoFORCE's assistance, I was able to better succeed and navigate university."

Suarez is passionate about inspiring other diverse students to pursue STEM fields, especially the geosciences. She was a GeoFORCE Educational Coach-in-Training, a graduate mentor for SACNAS' University of Houston chapter, and a panel member for various transition to college workshops and at the Houston Hispanic Forum's Career and Education day.

Suarez is the first in her family to graduate college—and will be the first to receive a doctorate. After earning her Ph.D., Suarez hopes to work in a facility like NASA's Johnson Space Center where she can continue researching extraterrestrial rocks.

GeoFORCE TEXAS
JACKSON SCHOOL OF GEOSCIENCES

@GeoFORCETexas
@geoforce_texas

Questions or comments? Email us at geoforce@jsg.utexas.edu

Photos: University of Houston