

# GAGE

National Science Foundation's  
Geodetic Facility for the  
Advancement of Geoscience

## Geo-Launchpad, RESESS, & USIP Go Remote in 2020: Facilitating successful online internships for geoscience students from underrepresented groups

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### Mission of Internships

**UNAVCO internships** (each 11 weeks long) provide unique opportunities for students from **underrepresented populations** to develop their technical and communication skills while **aiming to broaden participation** in the **Earth sciences**.

Program	Target Audience	Activity	Support Structures
Geo-Launchpad	2YC students from Colorado	Research-ready Skills	Travel, housing, summer salary, professional development, near-peer mentoring
RESESS	Underrepresented upper level undergraduates	Research Experience	Travel, housing, summer salary, professional development, near-peer mentoring
USIP	Upper level undergraduate students	Work Experience	Summer salary, work experiences, bus pass, near-peer mentoring, professional development

The general **goals** of the programs are to:

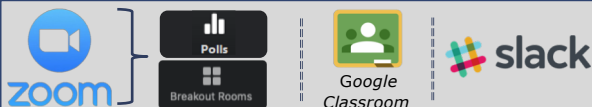
- 1) **Engage** students in an extended technical project.
- 2) **Develop** students' professional networks & skills.
- 3) **Provide** career and project mentoring/support.
- 4) **Enhance** students' capacity to pursue geoscience.

### Motivation for Going Remote

In light of the COVID-19 pandemic & 'safer-at-home' directives, we **redesigned** our programs to **successfully launch RESESS, Geo-Launchpad (GLP), and the UNAVCO Student Internship Program (USIP) to remote platforms**, ensuring continued access to **education, career advancement, monetary stipends, & community connection** for our interns.

Most costs associated w/ going remote were **covered through cost savings** related cancelation of on-site intern lodging and intern travel to Boulder, CO.

### Online Communication Tools



### Strategies for Facilitating Fully Online Programs

#### Pre-Internship Support & Resources

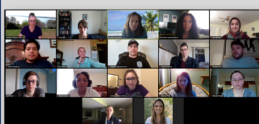
**Shipped** each intern a **laptop** with accessories for program use.



Laptops issued to interns via FedEx.

Issued one-time **Support Stipend** of \$2500 to each RESESS & GLP intern to **offset costs** associated w/ high speed internet, office needs (desk, chair, etc.), & living costs due to COVID-19 restrictions and living off-site.

#### Virtual Team Building



2020 UNAVCO interns and program staff participating in online team-building.

- **External Facilitator** led team building exercises
- **Hosted** 6 one-hour sessions, 3 days a week over 2 weeks.
- Sessions heavily influenced **cohort connectiveness**.

#### Training & Support of Project Mentors

Offered **Compensation Stipend (\$2500)** to **faculty mentors** for accommodating significant **shift in scope** of project design & mentoring. Typically mentors serve fully as **volunteers**.



Provided online **mentor training and resources**, highlighting best practices for **communication** and full-student **mentoring** with clear program **goals & expectations**.

#### Synchronous Professional Development

##### Weekly Professional Development:

- **Mondays** (10-12): Writing Workshop (**RESESS only**)
- **Wednesdays** (10-12): Communication Seminar
- **Fridays** (11-12): Geoscience Career Circles

##### Core working hours (~8 hr/day):

- 10 AM to 3 PM Mountain Time
- Other work hours were negotiated within project teams.

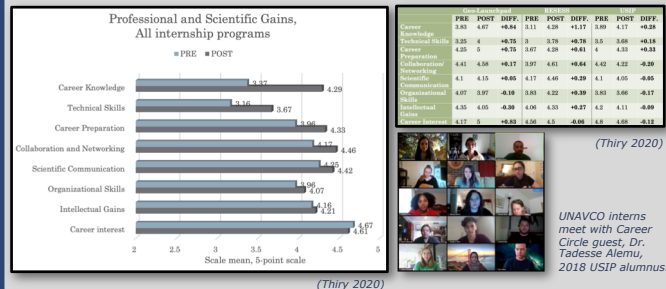
##### Weekly Program Manager-Intern Check-Ins

##### Semi-Weekly Online Survey Check-Ins for Interns

### Remote Platform Outcomes

#### Professional & Scientific Gains

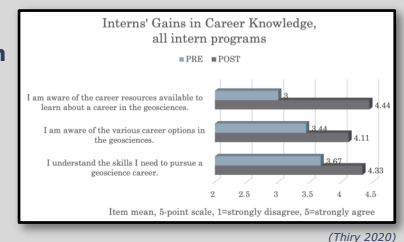
Interns in 2020 in all programs reported the strongest gains in **'knowledge about careers'** & **'technical skills'**.



#### Career Knowledge Gains

- Interns' awareness of career resources in geoscience **rose from 50% to 100%.**

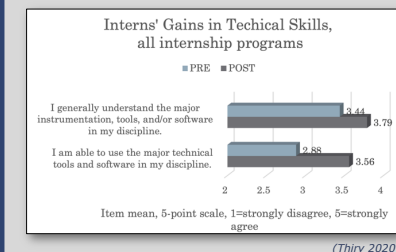
- **Career Circles** were most effective in **building interns' knowledge about geoscience career options.**



#### Technical Skills Gains

In previous **in-person** internships, **'technical skills'** & **'ability to use major instrumentation'** in the geosciences were the **most prominent gains**.

However, in the **online** internship, **'technical skills'** was the **2nd most significant gain**.



Geo-Launchpad

RESEARCH EXPERIENCES IN SOLID EARTH SCIENCE FOR STUDENTS

RESESS



#### ACKNOWLEDGEMENTS:

The success of the 2020 UNAVCO internship programs was largely a product of each of our intern's **dedication, perseverance, and passion** for supporting their own education in the geosciences. Without each student showing up fully with a great attitude to every meeting during our 11-week program despite various hardships, UNAVCO's 2020 internships would have been impossible. Additionally, we had the support of 75+ volunteers to make this summer successful from **Project Mentors to Career Circle guests to informational interview volunteers to resume reviewers to poster evaluators**. **THANK YOU: YOU** made the difference and helped propel these students' careers and their engagement this summer.

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