UCAR | UNIVERSITY CORPORATION FOR ATMOSPHERIC RESEARCH

UCAR's Next Generation Fellowship Program

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Next Gen Alumni Reunion, summer 2024

UCAR's Next Generation Fellowship

- Initiated by UCAR's President, Antonio Busalacchi in 2017
- Rooted in UCAR's history supporting NSF SOARS
- Take cohort and community principles of NSF SOARS and expand the areas of focus.
- Remove obstacles to graduation
- Cohorts with diversity of identity AND experience

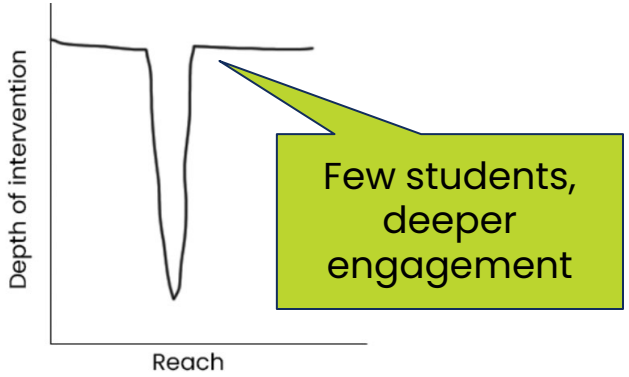
2022 & 2023 Next Gen cohort with UCAR President

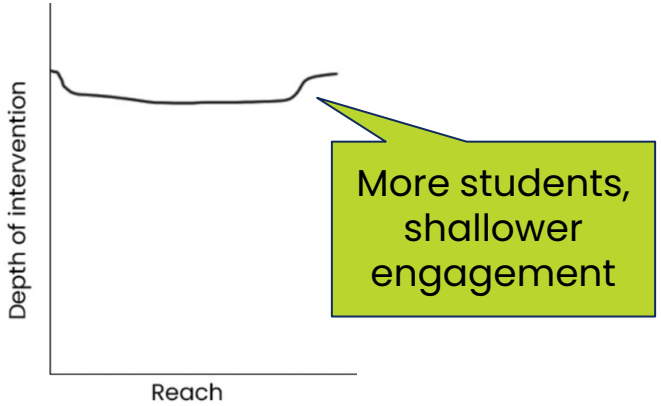
Program Structure

Deep but narrow program

3 Fellows per year (one per track), 2 year tenure, rolling cohort of 6 fellows per year

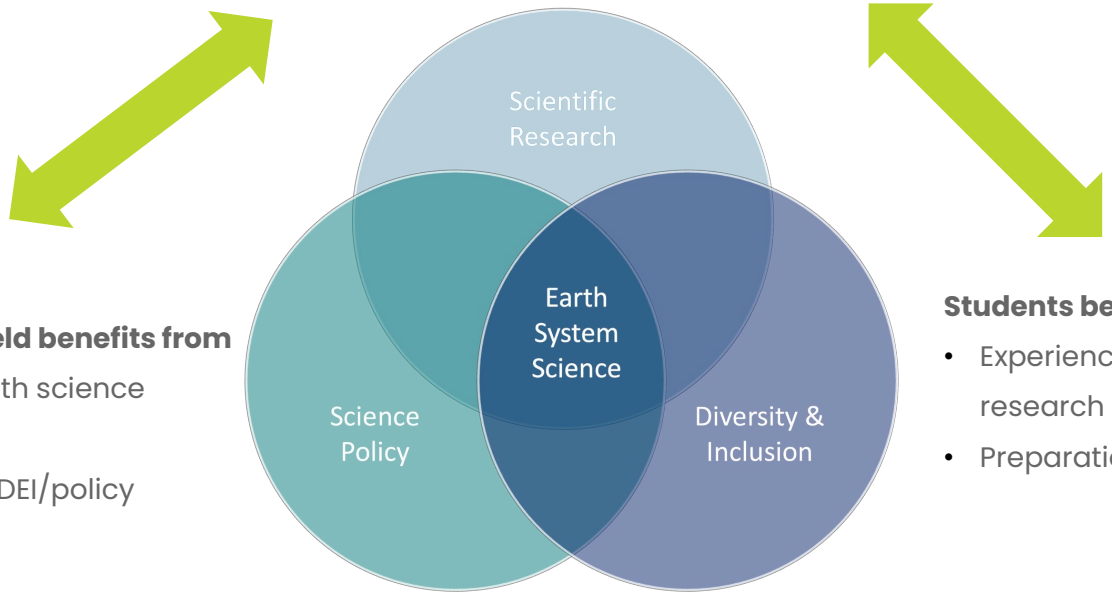
- Science Research
- Science Policy
- DEI





Program Vision

Diversity of Expertise



Earth system science field benefits from

- DEI/policy experts with science background
- Scientists trained in DEI/policy

Students benefit from:

- Experience beyond science research
- Preparation for future leadership

Markers of success

Obstacles to graduation ⇒ 100% graduation rate/still pursuing postgraduate degree

Diversity of identity ⇒ 100% of participants hold at least one minoritized identity

Diversity of expertise ⇒ Wide range of roles and positions held by alumni

24 participants since 2017

Roles and employers of program alumni post-graduation

Why students of color leave STEM

(from Riegle-Crumb et al. 2019)

Financial burden of pursuing a STEM degree is significant.

- Cost of school is higher for STEM
- Loss of earnings while in school
- Moderate income prospects

Students of color face discrimination

- 37% - 40% of Latine and Black students transfer out of STEM due to discrimination and bias.
- "White-centered culture in STEM … establishes the criteria that perpetuate success based on similarity or likeness to the ingroup"

(National Academies of Sciences, Engineering, and Medicine, 2023, p. 2-25)

Familiarity bias

We need to address the "chilly climate" faced by marginalized students in STEM fields

(Hall & Sandler, 1982, Palid et al. 2023 and references therein).

Theory of change

Theory of change

The Next Gen Program aspires to:

"extend cultural notions of **family** to [students'] relationships with peers, staff, and administrators to **(re)create familial relationships** … that serve as conduits for **activating students' familial capital**"

(from Fernandez et al., 2021 in alignment with Yosso, 2005)

Some Participant and Alumni Feedback

"It is great to have people who are so open to helping you learn and grow as you go"

"This fellowship had a **huge positive impact on me**, so thank you to everyone who contributed to that"

"The summer retreats that we were able to participate in allowed me to get to know our cohort much more, and build collaborations and relationships with other fellows. This also **provided me with a feeling of belonging**"

"I learned so much about a field that I wasn't super comfortable initially, but I wanted to know more about, and that **provided me with lessons and relationships that I will cherish**"

"The fellowship exceeded my expectations through the logistics support from the coordinator throughout the year and the **generous conference support** every year"

Most valuable program aspects (according to Fellows)

1. Financial support
2. Fellowship visits
3. Conference funding
4. Relationship with other fellows
5. Fellowship retreat
6. Advising from program coordinators
7. Advising from track mentors
8. Professional development
9. Access to UCAR/NCAR/UCP resources
10. Networking opportunities

Financial
Community
Professional

Diversity Equity & Inclusion	Science Policy	Earth System Science	Diversity Equity & Inclusion	Science Policy	Earth System Science

2024

Dorothy Lsoto
Univ. WI, Madison

Taylor Miller
Catholic University

Fairuz Ishraque
Princeton University

2023

Abdulamid Fakoya
Univ. Oklahoma

Kate DeMarsh
Univ. CA Merced

Esther Oyedele
Virginia Tech

2022

Corinne Salter
Louisiana State

Gabriela Negrete García
Scripps Inst. UCSD

Miguel Hilario
Univ. Arizona

2021

Liz Cunningham
Univ. Toronto

Leslie Nguyen
Univ. Washington

Julieta Juncosa Calahorrano
Colorado State

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www.ucar.edu/opportunities/fellowships/ucar-next-generation-fellowships