



ADVANCEGeo Partnership: Empowering geoscientists to transform workplace climate through behavioral and institutional change



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Earth Science
WOMEN'S NETWORK



Association for Women Geoscientists



Land acknowledgement

"Every community owes its existence and vitality to generations from around the world who contributed their hopes, dreams, and energy to making the history that led to this moment. Some were brought here against their will, some were drawn to leave their distant homes in hope of a better life, and some have lived on this land for more generations than can be counted. Truth and acknowledgment are critical to building mutual respect and connection across all barriers of heritage and difference. We begin this effort to acknowledge what has been buried by honoring the truth. We are standing on the ancestral lands of the Duwamish and Puget Sound Salish. We pay respects to their elders past and present. Please take a moment to consider the many legacies of violence, displacement, migration, and settlement that bring us together here today."

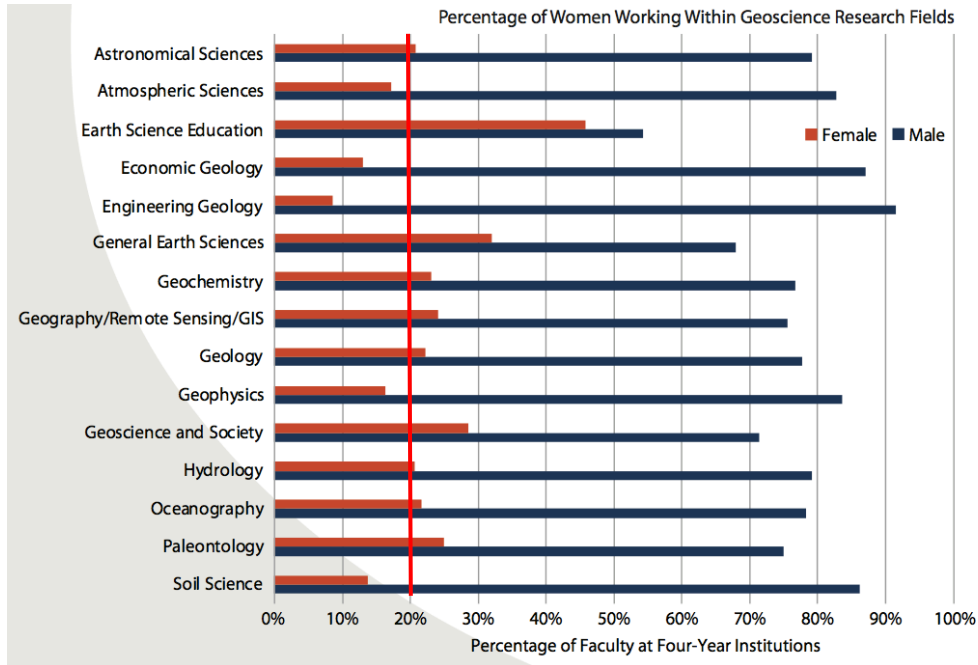
[#HonorNativeLand](#)

U.S. Department of Arts and Culture

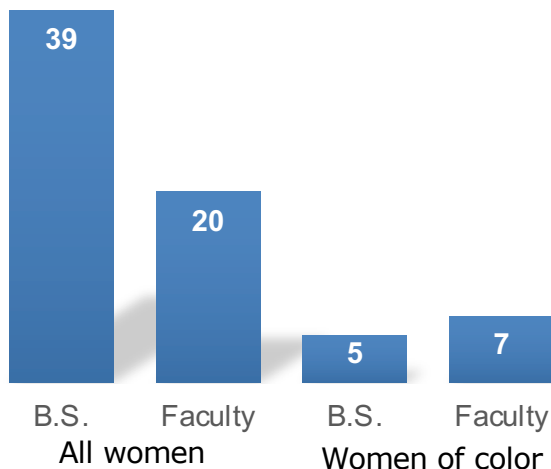


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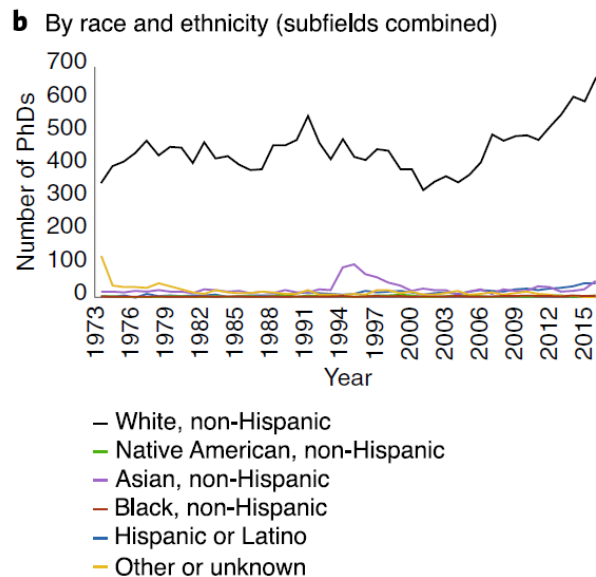
Women make up 23% of geoscience workforce, 20% of faculty



Most geoscience departments have no faculty or students of color



Proportion of Bachelors degrees and Faculty in Earth, Atmospheric and Ocean Sciences (%)



The playing field is not level

- Mentoring ([Canetto et al. 2012](#))
- Job applications (Moss-Racusin et al. 2012)
- Reference letters ([Dutt et al. 2016](#))
- Salaries and startup (Acton et al. 2019)
- Access to research facilities ([Patat et al. 2016](#))
- Referee invitations ([Lerback and Hanson 2017](#))
- Speaking invitations ([Ford et al. 2018](#))
- Awards ([Holmes et al. 2011](#), Lincoln et al. 2012)
- Named professorships (Treviño et al. 2015)
- Invisible labor (Misra et al. 2011, June 2015)
- Prestigious publications ([Conlay and Stadmark 2012](#))

* [Blue citations](#) are specific to geosciences

Hostile behaviors create hostile climates

62% of U.S. higher-ed employees reported witnessing/experiencing bullying

62% of undergraduate women and 50% of female faculty are sexually harassed

51% of geoscience women experienced sexual harassment

71% of women doing fieldwork experienced inappropriate comments and 26% assault

Disproportionate impact

40% of women of color (27% of white women) felt unsafe due to gender; 28% of WOC felt unsafe due to race

18% of women of color (12% of white women) reported skipping professional events

Gender-non conforming and LGBT+ scientists who identify as women are 3-2x more likely to experience exclusionary behaviors than male LGBT+

Require multiple strategies



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Empowering geoscientists to transform workplace climate



- Erika Marín-Spiotta, Univ of Wisconsin
- Rebecca Barnes, Colorado College
- Asmeret Asefaw Berhe, UC Merced
- Meredith Hastings, Brown
- Allison Mattheis, Cal State LA
- Blair Schneider, Univ of Kansas & AWG
- Billy Williams, AGU

NSF Award #1725879
(2017-2021)

Website:

serc.carleton.edu/advancegeo

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ADVANCEGeo 

1. Develop and deliver bystander intervention and workplace climate training with discipline-specific scenarios and that incorporate intersectionality.
2. Collect data.
3. Develop teaching modules that identify harassment as research misconduct.
4. Develop a sustainable model that can be transferred to other disciplines in partnership with professional societies.



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Empowering geoscientists to transform workplace climate



- Reviewed >14 existing programs
- Led > 60 workshops/presentations
- Built relationships with campus admin and programs
- Generated online resources on relevant research and tested strategies
- Developed climate survey
- Expanded to: ecology, animal behavior, evolutionary biology, neuroscience, chemistry, sociology, psychology, political science

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Example of real-world scenario: Field days

Inclement weather has limited the number of days available for sampling at remote field sites, causing a last minute change of plans. The team leader pushes for longer days in the field. When the most junior member of the crew asks about stopping to replenish water and eat, several others loudly complain about them slowing down the team and start making comments about their physical ability and appearance.



- What power dynamics are at play?
- How would you respond to this? What can you do in the moment? Which of the 5 Ds could you implement?
- What do you need to have in place to support all those affected?
- What can you do ahead of time to prevent this scenario or reduce its impact?

Scenario: Poster session

A student is presenting a poster on their summer research at a national scientific meeting. A senior scientist appears to listen intently to the poster discussion, and after some chatting, comments, “You realize people are interested in you, not your science.”

Scenario: Conference reception

The reception at the large annual conference is known for its open bar. As a recent newcomer and one of few people of color in your department, you observe your Chair, who appears to be under the influence of alcohol, leaning very close over a student in the corner of the room. From the student’s body language, you can tell they feel very uncomfortable.

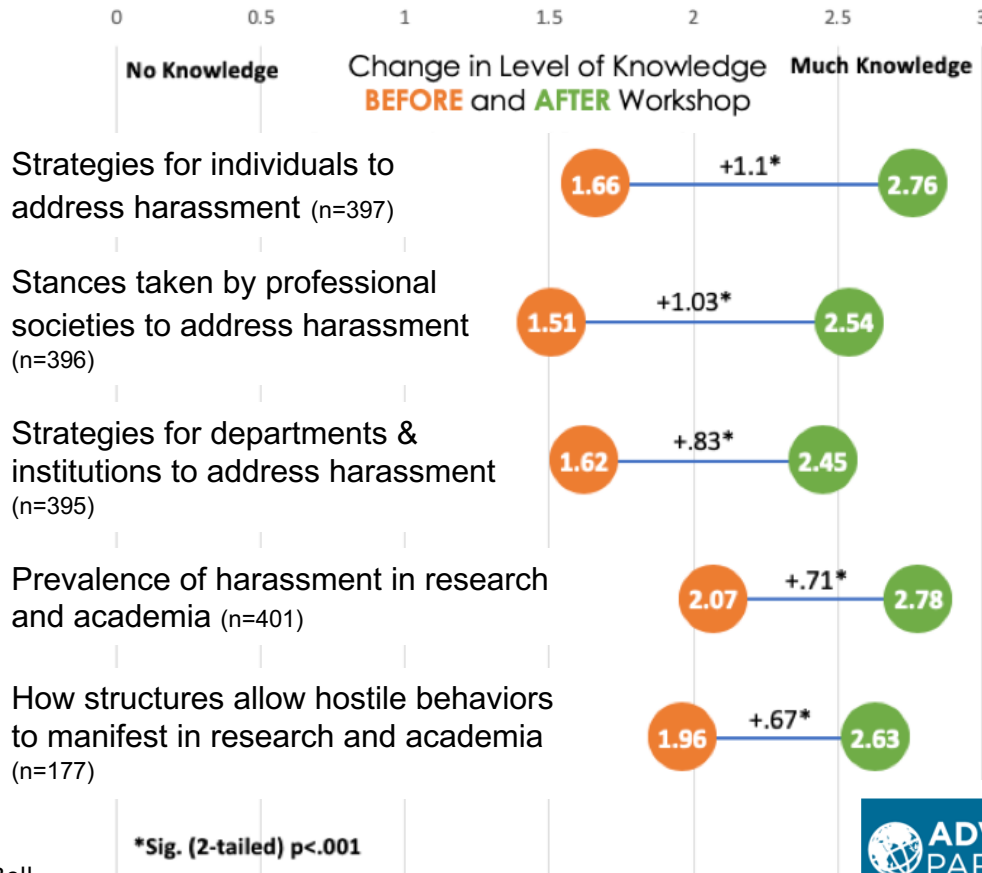
Scenario: Remote Field

A Native student is conducting research in a remote field site with a guide who has the only phone that is capable of reaching the ranger station. The guide asks blunt questions about her sex life (“So how often do you and your so-called boyfriend get it on? I wanna know what I’m up against if you know what I mean”). He also refers to Anna as a “sexy Indian princess”. He invites her to sleep in his tent with him if she gets cold.



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Empowering through education



ADVANCEGeo
Resources
Harassment, Bullying, and Discrimination
Codes of Conduct
In the Field
Training
Responding to Hostile Behaviors
Creating Inclusive Climates
A Primer on Diversity
Legal Context
Recognizing Bias
Reporting
Data
Workshops
About
Project Team
News
For Team Members

Community Resources

[Harassment, Bullying and Discrimination](#) |
 [Codes of Conduct](#) |
 [In the Field](#) |
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 [Data](#)

Harassment, Bullying and Discrimination



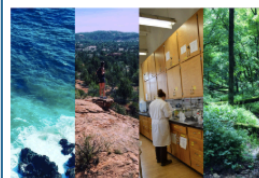
Every individual has the right to learning and working environments free of discrimination, harassment and bullying. This resource provides definitions of these types of

Codes of Conduct



Codes of conduct are guidelines adopted by an organization to address expected and appropriate behaviors, and are one of the important steps an organization

In the Field



Field training and research experiences can be defining moments in people's careers, especially in the earth and environmental sciences. This

Training



In addition to [the ADVANCEGeo bystander intervention workshops](#), this resource provides a list of common workshops and training to address harassment, sexual violence, and

Website: serc.carleton.edu/advancegeo





Reimagine the scientific enterprise

- Interrogate the history of our disciplines, institutions, and cultural practices and beliefs
- Redesign science education
- Reinvent mentoring
- Prioritize safety and people over data and disincentivize unethical behavior
- Recognize and compensate labor
- Redefine scientific success

