Leveraging Field-Campaign Networks to Identify Sexual Harassment in Atmospheric Science and Pilot Promising Interventions

PI Team: Emily Fischer, Brittany Bloodhart and Kristen Rasmussen

Fischer, E. V., B. Bloodhart, K. Rasmussen, **I. B. Pollack**, M. G. Hastings, E. Marin-Spiotta, A. R. Desai, J. P. Schwarz, S. Nesbitt and D. Hence (2021), Leveraging Field-Campaign Networks to Identify Sexual Harassment in Atmospheric Science and Pilot Promising Interventions, <u>Bulletin of the American Meteorological Society</u>, https://doi.org/10.1175/BAMS-D-19-0341.1.

Thanks to our participating field campaigns:











Field settings are different than other settings.

- Short time windows to accomplish goals
- Extended working hours
- Reduced privacy and ability to retreat from social/work interactions
- Can feel less formal than our offices
- Can be remote, and have additional safety concerns
- Interactions with others can create unsafe environments

Scientific American 2017: "Potential sexual harassment danger zones include: field research; remote science sites such as observatories; isolated or smaller laboratories; professional travel and meetings; ...predominantly male fields."

Why do we need to engage field campaign teams on the issue of harassment?

Field settings are understudied in terms of sexual harassment.

These experiences dramatically expand the networks, and career potential for trainees, including interaction at major conferences and science-team meetings.

Research shows that harassment policies are not routinely communicated, and harassment is common [Clancy et al., 2014; Nelson et al., 2017].

Large and collaborative multi-institutional teams often carry out field campaigns. Connected networks can facilitate change [Mohrman et al., 2003].

To motivate atmospheric science field campaigns teams to engage on the issue of sexual harassment, our project:

- 1. Trained major field campaign networks to recognize, report, and confront present and future situations of sexual harassment;
- 2. Investigated the perceptions, attitudes, behaviors, and experiences of atmospheric science field researchers regarding sexual harassment;
- 3. Continued talking about the issue with our teams in many settings.



Our project involved different major field campaigns.









July – Sept 2018 June 2018 – April 2019 July – Sept 2019 June – Oct 2019

Boise, ID

Cordoba, Argentina Boise, ID; Salina, KS Broomfield, CO

Park Falls, WI

5+ universities / NCAR

U Illinois / NCAR/ CSU

NASA/NOAA

UW / NEON/ KIT

Here is the engagement process with our 4 teams:

Survey four field campaign teams about past incidences and measure Social Psychological Scales (92 women, 166 men, 7 other or did not identify)



Train teams to identify, prevent and intervene in relevant situations.

*Used slightly modified ADVANCEGeo Materials**



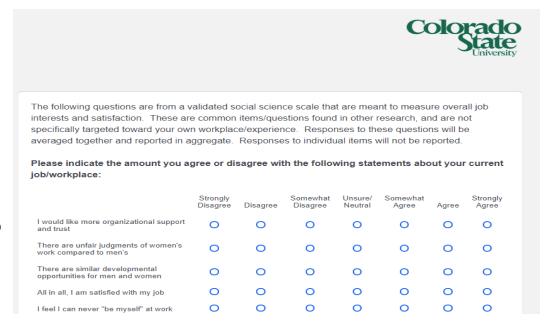
Re-survey both field campaign teams after the campaigns (89 women, 140 men, 17 other or did not identify)



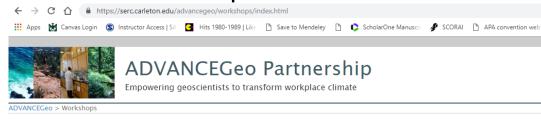
Present results to teams, discuss findings and path forward Poster at AMS in science session, lunch meeting at AMS and at science team meeting.

We conducted pre- and post- campaign surveys to measure harassment behaviors and attitudes.

- Online survey sent before and after each campaign
- All campaign members (students, staff, researchers) were invited to participate
- Pre-Survey: 265 participants (92 women, 166 men, 7 other or did not identify)
- Post-Survey: 246 participants (89 women, 140 men, 17 other or did not identify)



We used harassment training materials adapted from ADVANCEGeo.





ADVANCEGeo Workshops

Our work is based on a community model for harassment intervention training for academic leaders and faculty that harassment as scientific misconduct and equips individuals and departments with skills to 1) recognize harassment settings and how it is experienced by individuals with different gender, racial and ethnic identities, 2) implement dir harassment (bystander intervention), 3) produce, implement, and enforce ethical codes of conduct, and 4) educate t the harm caused by harassment. A main goal of ADVANCEGeo is to produce material that can be adapted to differer person and online, for departments, and for broader audiences at scientific conferences. We are currently developing materials that will be made publicly available via this site.

Workshop Description: Strategies for Improving Workplace Cl

This short, interactive session (2 hours) describes academic practices and institutional structures that allow for serbehaviors to persist, discusses initiatives to address harassment as research misconduct, and provides training in protect and support targets of harassment. As a result of this session, participants will be able to identify: (1) different participants will be able to identify: (1) di











Other intervention measures included codes of

conduct and handouts.

Harassment Reporting and Complaint Procedure

UCAR strives to maintain a work environment that encourages mutual respect and professionalism and is free from all forms of harassment, intimidation and violence.

This procedure outlines the reporting process for any harassment complaint. It includes a flow chart describing the process and Frequently Asked Questions detailing what to expect if you file a complaint or have a complaint filed against you.

If you have questions or concerns about UCAR's process at any time you should contact:

- -Human Resources Director
 - Chief Diversity, Equity & Inclusion Officer -Ethics Officer

UCAR's Commitment

Any person (employees or third parties) who uses this reporting and complaint procedure will be treated with dignity, respect and professionalism by UCAR. UCAR will handle all complaints swiftly and confidentially

Filing a complaint in goo have a negative impact of any harassment, you are as possible. This procedu and activities at all work workshops.

How to File a Report ar UCAR encourages any ir retaliated against to initia

- -To the employee UCAR/NCAR/U -Human Resource -Chief Diversity,
- -Ethics Officer -Anonymously, th -Anonymously, tl

It is not the intent, but rather the perception and impact which determines if an action is harassment.

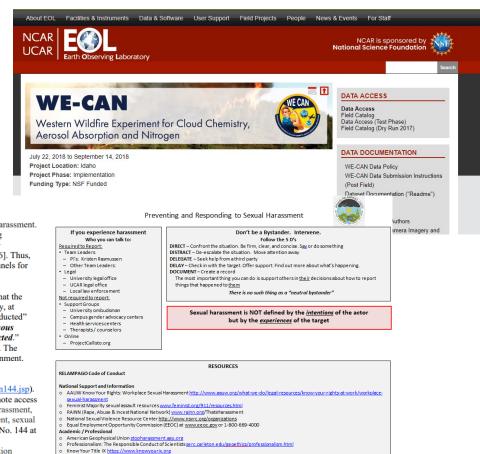
WE-CAN PIs acknowledge that when employees know about the procedures for reporting harassment, have resources to assist targets of harassment, and are certain of sanctions for harassment behavior, the occurrence of harassment can be reduced [McDonald et al., 2016]. Thus, WE-CAN will have a formal sexual harassment training for all participants, multiple channels for reporting harassment, and pre-determined sanctions for engaging in harassment.

WE-CAN Harassment Procedures

A recent proposed policy change at NSF (Important Notice No. 144: Harassment) states that the "NSF does not tolerate sexual harassment, or any kind of harassment, within the agency, at grantee organizations, field sites, or anywhere NSF-funded science and education are conducted" and they "expect all awardee organizations to establish and maintain clear and unambiguous standards of behavior to ensure harassment-free workplaces wherever science is conducted." These requirements are consistent with the independent expectations of the WE-CAN PIs. The WE-CAN PIs are united in their commitment to a diverse, inclusive and respectful environment.

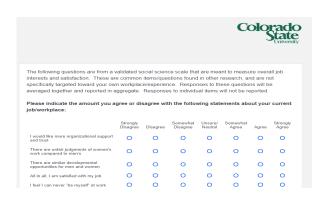
All WE-CAN participants are expected to:

- 1) Be familiar with NSF Important Notice No. 144; https://www.nsf.gov/pubs/issuances/in144.jsp).
- 2) Participate in a training on July 10, 2018. This training will be located at RAF, and remote access will be available. The training will include information on how to identify and prevent harassment, how to provide support for targets of harassment, and how to report instances of harassment, sexual or other. Everyone will be asked to confirm that they are aware of NSF Important Notice No. 144 at this time.
- 3) Report all instances of harassment in accordance with each project participant's institution policy, or to the WE-CAN Leads identified below.



Let's talk about what the survey results:

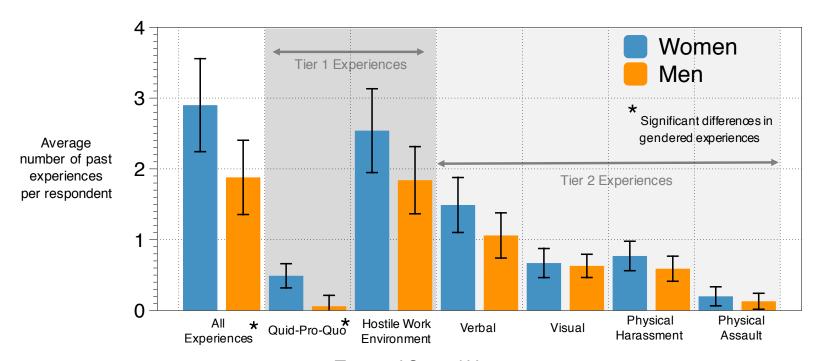
- 1. Train major field campaign networks to recognize, report, and confront present and future situations of sexual harassment;
- 2. Investigate the perceptions, attitudes, behaviors, and experiences of atmospheric science field researchers regarding sexual harassment;
- 3. Build multi-institutional networks of proactive scientists and campaign leaders, including men, that are invested in combating gender inequality.



What are your hypotheses?

What percentage of women on the field teams had experienced sexual harassment prior to the campaigns?

Pre-campaign surveys indicate ~52% of women had experienced sexual harassment prior to the campaigns.

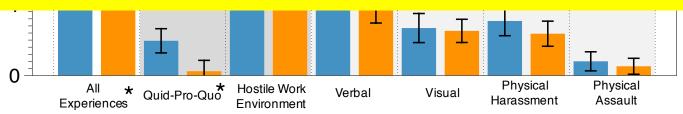


Types of Sexual Harassment

Pre-campaign surveys indicate ~52% of women had experienced sexual harassment prior to the campaigns.



- > 80% of past harassment disclosed in the survey went unreported
- ➤ Of those disclosing harassment, ~59% of the time they coped with past experiences by avoiding their harasser or downplaying incidents.
- > Only 35% of women and 17% of men who disclosed harassment indicated that at least one instance was confronted.

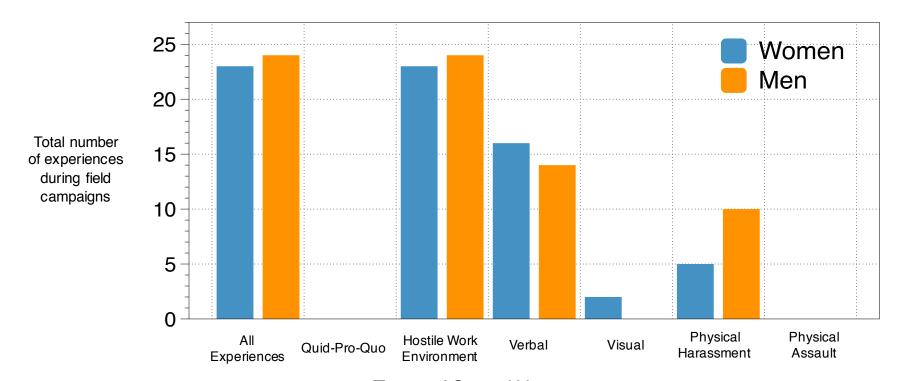


Types of Sexual Harassment

What are your hypotheses?

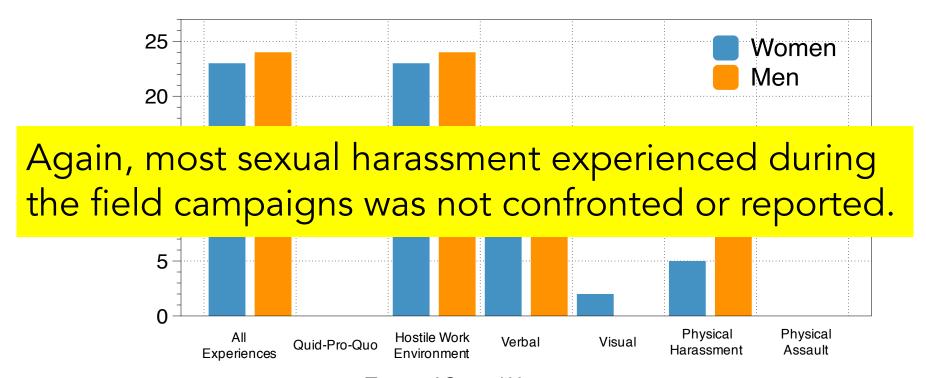
How many incidences of harassment behavior were reported in the post-campaign surveys across the 4 teams?

There were 47 incidences of harassment behavior reported in the post-campaign surveys reported by 30 participants.



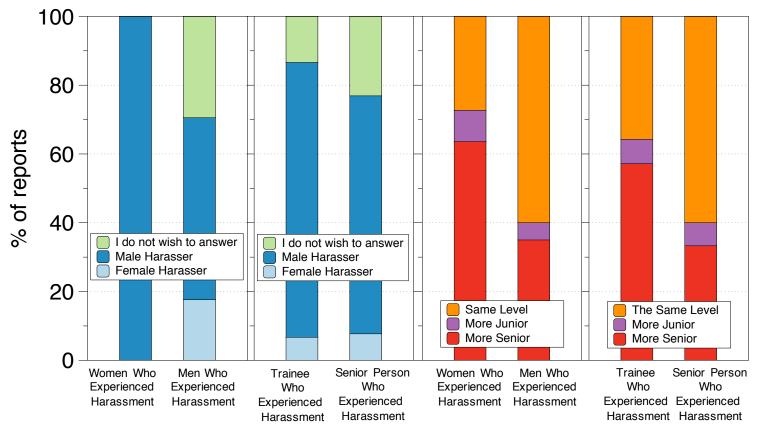
Types of Sexual Harassment

There were 47 incidences of harassment behavior reported in the post-campaign surveys reported by 30 participants.



Types of Sexual Harassment

Men and women had different experiences with harassment.



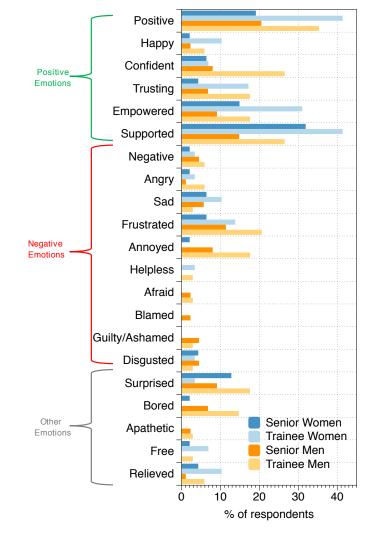
This data suggests that sexual harassment continues to be a problem for early-career colleagues.

In the pre-campaign survey, 63% of junior level participants communicated that they have already experienced some form of harassment.

During the field campaigns, 24% of junior-level participants disclosed experiencing some form of harassment (9% of senior-level reported).

Both women and men were more likely to report positive emotions than negative emotions.

However, women are more likely to feel supported, men more likely to report feeling bored or annoyed.



There are very promising examples of behavioral change in the written comments.

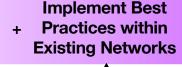
One male participant reported that he felt enabled to "call out" the use of sexist jokes being shared among team members in an online platform due to the training.

A female participant reported that two of her male colleagues helped her leave a situation in which she was being harassed by a person unaffiliated with the field team, named it as harassment, and checked whether she was okay.

We think this is a path forward!

Collaborative Change to End Harassment in Atmospheric Science

Understand Prevalence of Harassment in Each Community



Integrate Dialog on
Harassment within =
Community Settings

Safe Science

Leadership Activities

- 1. Anonymously survey your community about past issues.
- 2. Review relevant research.
- 3. Identify connected networks where cultural change is possible.

Rationale / Guiding Research

- A. Recognition that "it happens here" is a key motivation for engagement on this issue.
- B. Engaging connected communities to build safe and inclusive teams is how we inspire cultural change.

Leadership Activities

- 1. Conduct ADVANCEGeo Training *with* other teambuilding and safety-related activities.
- 2. Develop a clear code of conduct, including response procedures and multiple avenues for reporting.
- 3. Re-survey community after major activities to provide an anonymous alternative for reporting harassment.

Rationale / Guiding Research

- A. Participants in the training are more likely to intervene.
- B. Harassment largely goes unreported.

Leadership Activities

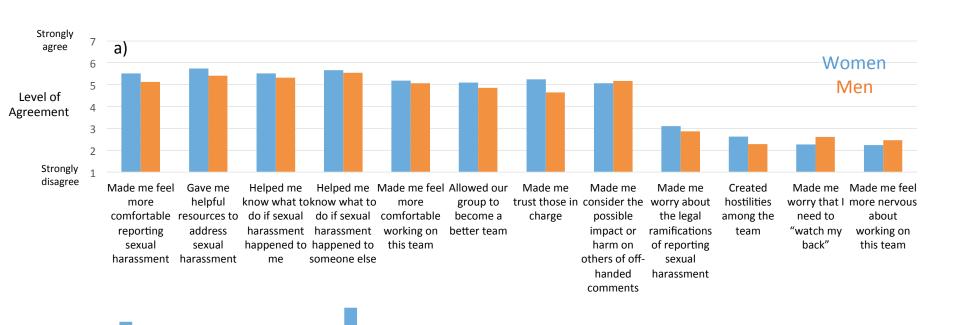
- 1. Host discussions about the incidence of harassment in specific communities.
- 2. Integrate follow-up within related science sessions.
- 3. Include the multicultural development of community standards by campaign leadership and participants

Rationale / Guiding Research

- A. Data will be more visible, allowing a larger community to engage on this issue.
- B. Atmospheric science benefits from more diverse and inclusive teams.

Extra materials

Those who attended the ADVANCEGeo training agreed on average that it provided helpful resources.



Based on informal observations and feedback, we offer these practical lessons:

- When team members hear that members of their community experience harassment, they express a stronger commitment to best practices.
- Harassment training should be integrated into a broader respectful culture.
- Training would be optimized by well-trained, mixedgender leaders.
- Learn how to lead sexual harassment training.
- Continued conversations are important.

Based on the survey findings, teams should:

- Acknowledge that sexual harassment is a problem, commit actions to prevent occurrence, support targets and address negative behaviors.
 - Recognize that junior colleagues are more likely to be harassed.
 - Anticipate that targets are more likely to avoid or deny incidents than to report them or seek help.
- Implement a bystander intervention training.
- Engage in community-wide efforts to prevent harassment.

Most sexual harassment experienced during the field campaigns was not confronted or reported.

