



## SEXUAL HARASSMENT PREVENTION

*Barbara C. Bruno*

*Rebecca Haacker*

*Michael Hubenthal*

*Erika Marín-Spiotta*

In recent years, reports of systemic sexual harassment in the STEM workplace have garnered national attention. Scientific societies, federal agencies, and academic institutions have responded by mandating anti-harassment training and establishing or updating codes of conduct accordingly. The [National Science Foundation \(NSF\) has stated that](#) it “will not tolerate sexual harassment, other forms of harassment, or sexual assault, within the agency, at awardee organizations, field sites or anywhere science or education is conducted.”

This chapter provides REU managers with the background and resources necessary to develop a safe and inclusive environment that is free of harassment. REU managers can't simply hope for the best and assume that everything will work out. Sexual harassment must be pro-actively prevented, not simply resolved. REU managers must take a leading role in the process.

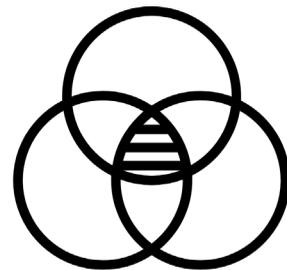
## ➔ Background and Rationale

Both individual testimony and research studies have shown how sexual harassment in academia negatively impacts the recruitment, retention, and advancement of women pursuing scientific, engineering, and technical careers. Sexual harassment is so prevalent that it jeopardizes progress in closing the gender gap” in STEM (NASEM, 2018).

Nationwide, almost half of undergraduates – and over 60% of undergraduate women – report personally experiencing sexual harassment (Cantor et al, 2015). While most of the existing research has focused on women, people of any gender – such as those who identify as trans or non-binary – can be severely impacted by sexual harassment.

Although this chapter focuses on sexual harassment, many of the concerns and recommendations presented also apply to other types of harassment, such as racial harassment.

It’s critically important to acknowledge intersectionality, defined as overlapping dynamics of oppression and discrimination at the intersection of one’s different identities (Crenshaw, 2017). Women of color, for example, may experience the “double jeopardy” of racial and sexual harassment. In a recent study of the planetary science and astronomy community (Clancy et al., 2017), 12% of white women reported skipping professional events due to feeling unsafe. For women of color, the figure was 18%, which is 50% higher.



Protecting REU interns is more than just a moral responsibility or a matter of being accountable to your institution. It is the law. All REU sites, whether at public or private institutions, receive federal funds, and therefore must comply with Title IX of the Education Amendments of 1972, which states that “No person in the United States shall, on the basis of sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any education program or activity receiving Federal financial assistance.”

*Fig. 1 (opposite). The iceberg of sexual harassment. Like an iceberg with most of its mass below the surface, public consciousness of sexual harassment focuses on the tip of the iceberg, here labeled as sexual coercion, which is the most reported yet least common type of sexual harassment. While gender harassment receives less attention, it is the most common and least recognized and reported form of sexual harassment (NASEM, 2018).*

The image features a large iceberg floating in the ocean. The top part of the iceberg is above the water line, representing 'PUBLIC CONSCIOUSNESS'. The much larger part of the iceberg is submerged below the water line, representing 'GENDER HARASSMENT'. The water surface is marked with a wavy line and the text 'PUBLIC CONSCIOUSNESS'. The submerged part is labeled 'GENDER HARASSMENT'. The iceberg is divided into two main sections: 'SEXUAL COERCION' at the top and 'UNWANTED SEXUAL ATTENTION' below it. The submerged part contains various types of harassment, including 'relentless pressure for sex', 'unwanted sexual discussions', 'relentless pressure for dates', 'offensive sexual teasing', 'sexist insults', 'obscene gestures', 'vulgar name calling', 'insults to working mothers', 'nude images posted at work', 'sexually humiliating acts', 'sexual insults', 'offensive remarks about bodies', 'sabotage of women's equipment', and 'gender slurs'. The text is presented in a clean, sans-serif font, with some examples in italics.

**SEXUAL COERCION**

promising professional rewards in return for sexual favors

threatening professional consequences unless sexual demands are met

**UNWANTED SEXUAL ATTENTION**

sexual assault

rape

unwanted groping or stroking

~~~~~ PUBLIC CONSCIOUSNESS ~~~~~

**GENDER HARASSMENT**

relentless pressure for sex

unwanted sexual discussions

relentless pressure for dates

offensive sexual teasing

sexist insults  
*e.g. women don't belong in science*

obscene gestures

vulgar name calling  
*e.g. "slut," "bitch," "c\*\*t"*

insults to working mothers  
*e.g. "you can't do this job with small kids at home"*

nude images posted at work

sexually humiliating acts

sexual insults  
*e.g. "for a good time call...", calling someone a whore*

offensive remarks about bodies

sabotage of women's equipment

gender slurs  
*e.g. "pu\*\*y"*

Sexual Harassment of Women:  
Climate, Culture, and Consequences in  
Academic Sciences, Engineering, and Medicine  
<https://www.nationalacademies.org/sexualharassment>

The National Academies of  
SCIENCES  
ENGINEERING  
MEDICINE



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Following the National Academy of Science, Engineering and Medicine (NASEM, 2018), we define three categories of sexually harassing behavior:

1. Gender harassment (verbal and nonverbal behaviors that convey hostility, objectification, exclusion, or second-class status about members of one gender)
2. Unwanted sexual attention (verbal or physical unwelcome sexual advances, which can include assault)
3. Sexual coercion (when favorable professional or educational treatment is conditioned on sexual activity)

Sexually harassing behavior may directly target an individual and/or operate at a cultural level within an organization. Although unwanted sexual attention and coercion grab the most headlines – and certainly exist in academia – by far the most prevalent form of sexual harassment is gender harassment, which is also the least reported (see Figure 1).

### **Working Off-Site and in the Field**

Sexual harassment is particularly pervasive in “off-site” work situations outside the usual physical boundaries of a person’s home institution or campus. This is particularly relevant to the geosciences, where field camps and fieldwork are critical components of training and research. In a recent study of trainees in field experiences, 64% reported being subjected to sexual harassment, unwanted jokes or gender bias, and only ~4% were aware of the mechanism for reporting (Clancy et al, 2014).

Some factors commonly associated with fieldwork include lack of privacy, lack of control, macho culture, long days filled with physically strenuous work, and alcohol. All of these increase the likelihood of sexual harassment. In contrast, working in teams, setting clear and manageable expectations, working reasonable hours, and excluding alcohol from work activities can mitigate harassment (ADVANCEGeo, 2020; John and Kahn, 2018).

Any REU student who spends the summer at a different institution becomes more vulnerable, even if field work is not involved. Perhaps for the first time, these students are in a new environment without their trusted social safety nets. They may feel socially isolated from their peers and instructors. Furthermore, these students are unlikely to be familiar with the policies, reporting mechanisms for misconduct, or cultural norms at their new institution. It is the responsibility of REU staff to recognize and reduce vulnerability by building social support structures and developing trainings and materials that clearly communicate essential information about sexual harassment, including resources and reporting mechanisms.

## ➔ Designing a Safe and Inclusive REU Program

The work toward creating a harassment-free environment must begin well in advance of the REU program, and it is essential for the PI to take a leading, visible role in the process. Some key steps involve:

Establishing expectations for behavior within the program, and integrating your efforts with those of your institution or department. See the Resource section for examples of Codes of Conducts.



Increasing awareness of sexual harassment, and the impact it has on both individuals and organizations. People who have not personally experienced harassment may dismiss it as unlikely to occur or simply “not a big deal”.

Empowering participants with strategies to respond should they witness or experience harassment. The training should focus on gender harassment, the most common form of sexual harassment. Mentors must be trained in these techniques before the REU program begins and actively participate in the student training.

Educating participants about the reporting and investigation processes at your institution, and the support systems available, should a situation arise.



## ➔ Proactive Strategies and Solutions

The National Academy of Science, Engineering and Medicine has determined five factors that enable sexual harassment to flourish ([NASEM \(2018\)](#), [Johnson \(2019\)](#)):

1. Perceived tolerance for sexual harassment
2. Male-dominated work settings
3. Hierarchical power structure
4. Symbolic compliance with Title IX and Title VII
5. Uninformed leadership

Here, we present strategies that pro-actively tackle each of these factors.

### 1. Communicate No Tolerance for Sexual Harassment

While it's important to state that sexual harassment will not be tolerated, a statement alone is insufficient. You need to demonstrate intolerance. Within your REU program, establish clear lines of communication for reporting and designate a person(s) for students to contact if there is a problem. This person must be on-site and available during the entire REU session, including fieldwork, evening, and weekends. Follow up quickly on any complaint. Consequences for misconduct must be immediate and applied equitably.

Building student trust and encouraging students to report incidents can be promoted by:

- » Clearly defining a policy
- » Establishing procedures for reporting and investigations
- » Providing support for those victimized by harassment
- » Having dialogue with any groups that were affected by an incident



One of the most effective ways to communicate that your program or organization does not tolerate sexual harassment is to regularly publish information about the number and types of sexual harassment claims, how they are investigated, and the outcomes of those investigations (NASEM, 2018). Such reports communicate that sexual harassment allegations are taken seriously and

investigated appropriately, thereby contributing to a safe and welcoming work environment. The vast majority (80%) of the top ten geoscience institutions in the country release such detailed reports ([Douglas and Bruno, 2020](#)), although most institutions do not. If your institution does not publicly release such data, strongly encourage them to do so. At a minimum, you can share the data for your REU program.

## 2. Ensure Racially/Ethnically and Gender Diverse Work Settings

Without proactive recruitment of diverse mentors, it is likely that your research advisors will be predominantly White men, although the ocean sciences have more women than do the Earth, polar, atmospheric, or geospace sciences. Strategies to increase gender diversity could include:

- » Seek mentors from related STEM disciplines, such as engineering, biology, chemistry, or environmental science.
- » Engage graduate students or post-docs as mentors.

## 3. Safeguard Against Power Imbalances in Hierarchical Structures

A hierarchical power structure is one in which students and junior employees are heavily dependent on those at more senior levels. Here are some ways to safeguard against potential abuses of power that can occur in these situations:

- » Have more than one REU program leader.
- » Assign multiple mentors to each student, including peer mentors and near-peer mentors.
- » Encourage research advisors to invite REU students to their research group meetings.



## 4 & 5. Move Beyond Symbolic Compliance to Proactive Leadership

REU managers can't simply "check the box" by attending mandatory *Title IX* training. They must move beyond symbolic compliance and take a leadership role to prevent harassment. A good way to start is by educating yourself about sexual harassment and best practices for harassment prevention. Then, take a leading role in delivering the training to REU mentors and students; don't simply outsource that role to others. Such best practices include ([NASEM, 2018](#)):

- » Focus the training on gender harassment, the most prevalent form of sexual harassment.
- » Work toward changing behavior (not beliefs) using geoscience-specific case studies.
- » Focus on bystander intervention approaches that aim to develop participants' skills so they can intervene and interrupt inappropriate behavior.
- » Address common fears that students face concerning reporting, including not being believed, retaliation, or of being sent home.
- » Evaluate the training to determine whether it is effective, and use the evaluation results to improve training in future years.



**Highlight: Anti-harassment and anti-discrimination workshop  
(submitted by Michael Hubenthal, IRIS)**

Provide training on anti-harassment to staff and students prior to or early in the REU program. Either find a workshop facilitator at your institution in HR or the office of diversity, equity, and inclusion, or use the workshop curriculum developed by members of the GEO REU community, outlined here and found at the [IRIS Internship Program website](#).

**Are students in your research program vulnerable to harassment or discrimination?**

The curriculum is designed to be engaging and educational for undergraduate students who may have little formal training in the terminology and concepts surrounding such topics, are likely to be unaware of policies and procedures regarding harassment, discrimination, and fraternization, are unlikely to know how to respond if they were to witness an incident, and unlikely to know how to report incidents. Through this curriculum we seek to empower students, who might otherwise be vulnerable.

**Audience:**

Undergraduate students participating in science, technology, engineering, or math summer research opportunities, or participating in short-duration field campaigns such as geoscience field camps or workshops.

**Learning Objectives:**

Following instruction, participants will be able to:

- » Describe a work environment that
  - consists of mutual respect,
  - promotes respectful and congenial relationships, and
  - is free from all forms of harassment and discrimination
- » Summarize who is responsible for creating the work environment described above
- » Distinguish between behavior that is harassing or discriminating and non-harassing or non-discriminating
- » Describe how to report harassment or discrimination to the program, the program's investigation procedures, and possible disciplinary outcomes
- » Plan how they would use the bystander interventions to respond to incidents of discrimination or harassment, including sexual harassment
- » Apply the program's anti-harassment, anti-discrimination, and non-fraternization policy to a series of case studies

**Highlight: Anti-harassment and anti-discrimination workshop**  
(submitted by Michael Hubenthal, IRIS)

*Continued*

**Curriculum and Materials**

- » Slides (PPT) from "Train-the-Trainer" webinar for the GEO REU community, May 2020
- » Recording of the "Train-the-Trainer" webinar (59:00 minutes)
- » [Sample slides from a virtual version of the training facilitated on June 10, 2020](#)
- » [Original full curriculum - Last Update: May, 2019](#)
- » [IRIS's Internship Program Handbook \(Version 1.4\) - Last Update: May 2019](#)

**Are you running this curriculum virtually?**

If so, check out the variations on the workshop that have been documented by REU managers for virtual implementation. These may be helpful in considering how to adapt the curriculum to fit your needs or different workshop lengths (range is 60 min to 2 hours).

- » [Modifications for virtual implementation](#) with a selection of options.
- » [Slides from "Train-the-Trainer" webinar](#) for the GEO REU community (May 21, 2020) (PPT)
- » [Recording from the "Train-the-Trainer" webinar](#) (59:00 minutes)

**Use and Feedback Encouraged!** This curriculum is intended to be a community resource. Therefore feedback, input, and the development of new supplemental modules from others are strongly encouraged! Michael Hubenthal at [hubenth@iris.edu](mailto:hubenth@iris.edu)

Also, we would love to get feedback from your students on how the virtual implementation went! To accommodate this you can point your students to this [anonymous survey](#), or [download this pdf version](#) to send to them. Responses can be tallied and returned to Michael Hubenthal ([hubenth@iris.edu](mailto:hubenth@iris.edu)). We will only be using the data for improving the curriculum.



## Resources

### [ADVANCEGeo Partnership](#)

- Harassment, bullying, and discrimination
- Codes of conduct examples
- Field-based resources
- Bystander training

American Geophysical Union. [Safe AGU](#).

Earth Science Women's Network. [Resource Center](#).

National Science Foundation. [Sexual Harassment](#).

Woods Hole Oceanographic Institute. [Harassment Resources for Students, Postdocs, and Staff](#).



## Further Reading

ADVANCE Geo (2020). In the Field. Retrieved on Aug. 1, 2020, from: [https://serc.carleton.edu/advancegeo/resources/field\\_work.html](https://serc.carleton.edu/advancegeo/resources/field_work.html).

Cantor, D., Fisher, B., Chibnall, S.H., Townsend, R., Lee, H., Thomas, G., Bruce, C., and Westat, Inc. (2015). Report on the AAU campus climate survey on sexual assault and sexual misconduct. [https://www.aau.edu/sites/default/files/%40%20Files/Climate%20Survey/AAU\\_Campus\\_Climate\\_Survey\\_12\\_14\\_15.pdf](https://www.aau.edu/sites/default/files/%40%20Files/Climate%20Survey/AAU_Campus_Climate_Survey_12_14_15.pdf).

Clancy, K.B.H., Nelson, R.G., Rutherford, J.N., and Hinde, K. (2014). Survey of Academic Field Experiences (SAFE): Trainees Report Harassment and Assault, PLoS ONE 9(7): e102172. <https://doi.org/10.1371/journal.pone.0102172>.

Clancy, K.B., Lee, K.M., Rodgers, E.M., and Richey, C. (2017). Double jeopardy in astronomy and planetary science: Women of color face greater risks of gendered and racial harassment. *Journal of Geophysical Research: Planets*, 122(7), 1610-1623.



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Douglas, M. and Bruno, B.C. (2020). Silence comes at a cost: Sexual harassment reporting in STEM. *GSA Today* 30(8), 24-25. <https://doi.org/10.1130/GSATG463GW.1>.

John, C.M. and Khan, S.B. (2018). Mental health in the field. *Nature Geoscience* 11: 618–620

Johnson, P.A. (2019). [Sexual Harassment of Women in Academic Sciences, Engineering, and Medicine](#). Statement before the Committee on Science, Space, and Technology, U.S. House of Representatives. July 12, 2019.

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