

# Ethics in Practice and the Need for Professional Codes of Conduct

Nicole Martinez, PhD, CHP

Assistant Professor  
Clemson, SC, USA

4<sup>th</sup> International Symposium on Ethics of Environmental Health  
September 10, 2018



# Code of Conduct

- AKA Respectful Behavior Policy
- Ensure safety/security of members at events
- Lay groundwork for creating open and inclusive environments
- Encourage active participation by all attendees
- Consider viewpoints of those who might be overshadowed
- Emphasize mindfulness
  - Expressing a critique
  - Surroundings and other participants
  - Other cultures and viewpoints

# Resistance to Adoption of CoC

“A society’s focus should be on the science.”

# Society responsibilities

- What are the roles and responsibilities of a society and its members?

In addition to protecting public interest and promoting progress within the field, professional societies have a responsibility to their members to **provide support for the practice of their profession**, and this idea is typically part of a society's mission statement.

Interestingly, the Health Physics Society's mission has shifted from

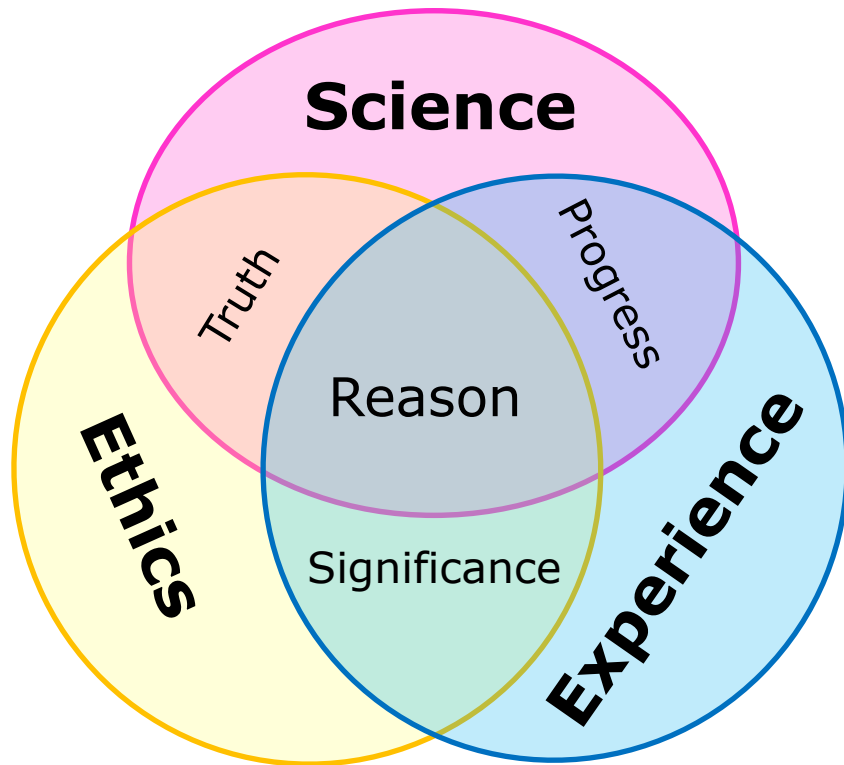
“to support its members in the practice of their profession and to promote excellence in the science and practice of radiation safety”

to the more concise

“excellence in the science and practice of radiation safety”

*Although one can still find a statement on the Society's website that it was formed “to support health physicists in all aspects of the practice of their profession.”*

The various fields related to environmental health invariably include both technical and non-technical aspects concerning the response to or management of environmental contamination.

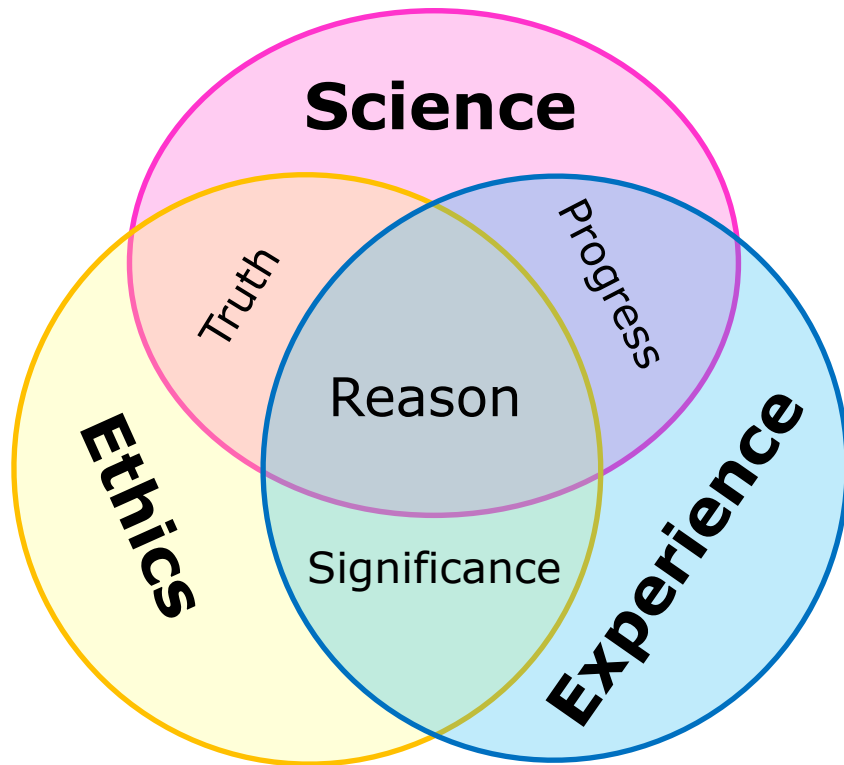


Typically, these fields have developed at the overlap of science, ethics, and experience, and is therefore strongly rooted in reason.

# Society responsibilities

- What are the roles and responsibilities of a society and its members?
- What role should the professional society play in setting and enforcing ethical standards?
- Similarly, how do we maintain and preserve personal and professional integrity?

The various fields related to environmental health invariably include both technical and non-technical aspects concerning the response to or management of environmental contamination



Typically, these fields have developed at the overlap of science, ethics, and experience, and is therefore strongly rooted in reason.

Appropriate and well-informed decisions can be made considering ethical theories, the scientific information available, and our current and past experiences.

**Such an approach can also be used to determine standards of conduct.**



Ethical theories can be treated as tools within a framework for decision-making and used together to analyze situations.

What are potential short and long term consequences?

Are the consequences positive or negative?

**Consequences**

Does the action respect the rights of persons?

Consider the various stakeholders.

**Rights**

What does the action say about the character of a person?

Consider various roles and responsibilities.

**Character**

**Decision/moral judgment**

- Leads to good consequences
- Involves and promotes respect for persons and their rights
- Promotes the development of good character and integrity

# Preserving professional integrity

- Societies have an additional responsibility to their members to offer a safe, inclusive environment where they can comfortably participate in society activities.
  - To that end, societies should clearly establish expectations and outline consequences for not meeting those expectations.
- Members have a responsibility to abide by the Code of Ethics (professional practice) and Code of Conduct (behavior).
- Most professional societies have standards for professional practice, but there is often little guidance provided on enforcement or even what constitutes unprofessional behavior.

## Preamble

Engineering is an important and learned profession. As members of this profession, engineers are expected to exhibit the highest standards of honesty and integrity. Engineering has a direct and vital impact on the quality of life for all people. Accordingly, the services provided by engineers require honesty, impartiality, fairness, and equity, and must be dedicated to the protection of the public health, safety, and welfare. Engineers must perform under a standard of professional behavior that requires adherence to the highest principles of ethical conduct.

## I. Fundamental Canons

Engineers, in the fulfillment of their professional duties, shall:

1. Hold paramount the safety, health, and welfare of the public.
2. Perform services only in areas of their competence.
3. Issue public statements only in an objective and truthful manner.
4. Act for each employer or client as faithful agents or trustees.
5. Avoid deceptive acts.
6. Conduct themselves honorably, responsibly, ethically, and lawfully so as to enhance the honor, reputation, and usefulness of the profession.

### Preamble

Engineering is an important and learned profession. As members of this profession, engineers are expected to exhibit the highest standards of honesty and integrity. Engineering has a direct and vital impact on the quality of life for all people. Accordingly, the services provided by engineers require honesty, impartiality, fairness, and equity, and must be dedicated to the protection of the public health, safety, and welfare. Engineers must perform under a standard of professional behavior that requires adherence to the highest principles of ethical conduct.

### I. Fundamental Canons

Engineers, in the fulfillment of their professional duties, shall:

1. Hold paramount the safety, health, and welfare of the public.
2. Perform services only in areas of their competence.
3. Issue public statements only in an objective and truthful manner.
4. Act for each employer or client as faithful agents or trustees.
5. Avoid deceptive acts.
6. Conduct themselves honorably, responsibly, ethically, and lawfully so as to enhance the honor, reputation, and usefulness of the profession.

### II. Rules of Practice

#### 1. Engineers shall hold paramount the safety, health, and welfare of the public.

- a. If engineers' professional judgment indicates that a situation exists which may result in a violation of this Code, they shall notify their employer and the appropriate authorities as may be required by law.
- b. Engineers shall not accept compensation for services from any party other than their employer or client.
- c. Engineers shall not perform services for multiple clients if the interests of those clients are in conflict.
- d. Engineers shall not perform services for a client without the proper authorization of the client.
- e. Engineers shall not perform services for a client if they are not qualified to do so.
- f. Engineers shall not perform services for a client if they are not properly licensed.

Qualifications or  
or their associates'  
represent or exaggerate  
subject matter of prior  
presentations incident  
shall not misrepresent  
yers, employees,  
t accomplishments.  
licit, or receive, either  
ution to influence the  
honor, or which may be  
ilic as having the effect  
ing of a contract. They  
valuable consideration in  
not pay a commission,  
order to secure work,  
or bona fide established  
es retained by them.

relations by the  
egrity.

errors and shall not

ts or employers when  
successful.  
le employment to  
rk or interest. Before  
g employment, they will

tract an engineer from  
leading pretenses.  
own interest at the  
ty of the profession.

serve the public interest.  
cipate in civic affairs;  
ork for the advancement  
g of their community.  
n, or seal plans and/or  
ormity with applicable  
nt or employer insists  
they shall notify the



The **Society of Environmental Toxicology and Chemistry (SETAC)** provides open, safe forums for the purpose of exchanging ideas and information on the study, analysis and solution of environmental problems, the management and regulation of natural resources, promotion of scientific research and the development of strong environmental education.

## SETAC Code of Conduct

- Avoid inappropriate and discriminatory actions. The diversity of human cultures, races, religions, ethnicities, nationalities, sexual orientations, gender expressions, gender identities, marital statuses, political affiliations, visible and unseen disabilities, employers, levels of employment and educational backgrounds bring unique perspectives to our organization.

## SETAC Code of Ethics

- Objectively and clearly communicate scientific methods, understanding and knowledge in an honest, professional and unbiased manner
- Ensure that presentations during society-sponsored events and other communications are restricted to and based on sound scientific principles and made in a respectful manner
- Respect intellectual property and provide appropriate attribution for all intellectual property arising elsewhere

# Resistance to Adoption of CoC

“A society’s focus should be on the science.”

“We don’t want to negatively impact someone’s career.”

*(For being accused of violating the Code of Conduct)*

# Consequences

- The accessibility of any professional event is determined in part by how safe it is to attend, and conferences are critical to career progression in the sciences.
- Harassment and discrimination undermine professional and educational attainment as well as mental and physical health.
  - Decline in job satisfaction and increase in job stress
  - Decline in productivity or performance
  - Withdrawal from the organization (physically or mentally)
  - Declines in organizational commitment
- The cumulative effect is a significant and costly loss of talent in academic science, engineering, and medicine, which has consequences for advancing the nation's economic and social well-being and its overall public health.

“Harassment endangers **not only the personal and professional well-being of individuals but of our entire community**, and is one of the reasons many young researchers leave academia and science altogether. Our hope is that professional societies can **lead a cultural change** and pressure academic institutions to take this problem seriously, so that everyone who wants to be in science can stay in science.” AGU News 2018



The preface of the RBP states that the HPS mission depends on the **open exchange of ideas, freedom of thought and expression, and productive scientific debate**, which requires an **open, diverse environment, free of bias and intimidation, built on dignity and mutual respect for all participants.**

The underlying tenets of the RBP include:

- **HPS is dedicated to providing a safe, welcoming, and productive experience for everyone participating in Society events.**
- **All participants in HPS events and other Society activities are expected to treat other participants with professionalism and respect**
- **Harassment and other violations of this policy reduce the value of participation for everyone, not just those on the receiving end.**



*Respectful behavior leads to good consequences, involves and promotes respect for persons and their rights, and promotes the development of good character and integrity within the Society*

# Resistance to Adoption of CoC

“A society’s focus should be on the science.”

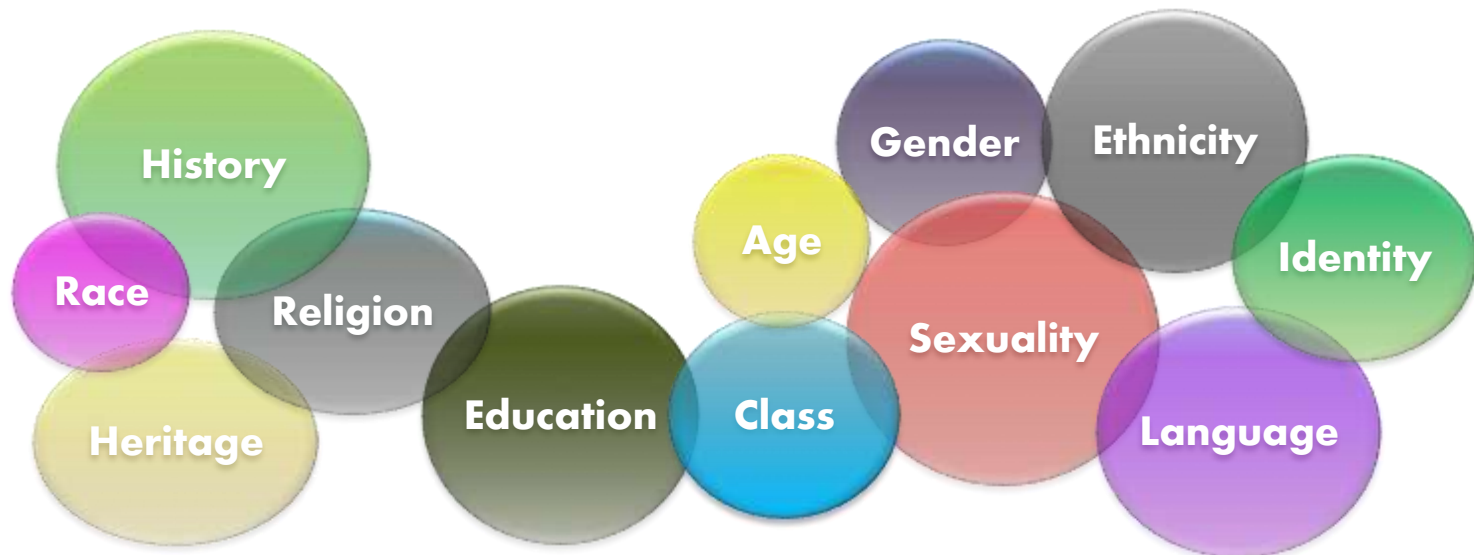
“We don’t want to negatively impact someone’s career.”

“It is unnecessary, no one experiences overt discrimination or harassment in a professional environment anymore.”



# Harassment

- Harassment is behavior that is **hostile or offensive** and in this context includes **bullying** and behavior that is **discriminatory**.
- Harassment **does not require intent to offend**; harassment includes actions above that are intended to be jokes, "kidding," or "teasing."



## Scientific groups revise

Officials worry that under-reporting remains

Helen Shen

16 November 2015



## POLICY &amp; ETHICS

# Confronting Sexual Harassment in Science

It's not just movie moguls and politicians; the problem is rampant in STEM fields as well. But recent moves by major organizations could mark a sea change in addressing this entrenched, degrading behavior.

By Cristine Russell on October 27, 2017

# AGU100

[About](#) | [Membership](#) | [AGU Centennial](#) | [Publications](#) | [Meetings](#) | [Data Services](#) | [Careers](#)

[Home](#) / [Scientific societies speak out against sexual harassment](#)

## SCIENTIFIC SOCIETIES SPEAK OUT AGAINST SEXUAL HARASSMENT

*LEADERS FROM SCIENTIFIC SOCIETIES, GOVERNMENT AGENCIES, AND ACADEMIA COME TOGETHER TO DISCUSS SEXUAL HARASSMENT IN THE SCIENCES*

12 September 2016

[Like](#) 161 [Tweet](#) [G+](#)

[Share](#) 16

Joint Release

WASHINGTON, DC – More than 60 leaders in science from academia, government agencies, and professional societies came together recently to address the challenge of sexual and gender-based harassment on campus, in the field, and at scientific meetings. The American Geophysical Union convened the workshop titled, "Sexual Harassment in the Sciences: A Call to Respond," which was co-sponsored by the American Association for the Advancement of Science, American Chemical Society, American Geosciences Institute, Association for Women Geoscientists, and Earth Science Women's Network.



<https://www.asaecenter.org>



**nature**  
International journal of science

## Sexual Harassment of Women

Climate, Culture, and Consequences in Academic Sciences,  
Engineering, and Medicine  
(2018)

**News & Comment**   Research

News   Opinion   Research Analysis   Careers   Books & Culture

**NEWS** • 12 JUNE 2018

# Sexual harassment is rife in the sciences, finds landmark US study

*Existing policies to address the issue are ineffective, concludes a long-awaited report from the National Academies of Sciences, Engineering, and Medicine.*

---

**Alexandra Witze**

---

# Examples...

In an internet-based survey of the workplace experiences of 474 astronomers and planetary scientists between 2011 and 2015... 40% of women of color reported feeling unsafe in the workplace as a result of their gender or sex, and 28% of women of color reported feeling unsafe as a result of their race... 18% of women of color, and 12% of white women, skipped professional events because they did not feel safe attending, identifying a significant loss of career opportunities due to a hostile climate. [Clancy et al 2017 *J Geo Res*]

Twenty-six interviews highlighted two central themes: (1) variability in *clarity* of appropriate professional behavior and rules at field sites, and (2) *access*, or obstacles therein, to professional resources and opportunity. In some instances, respondent narratives recalled a lack of consequences for violations of rules governing appropriate conduct. These violations included harassment and assault, and ultimately disruptions to career trajectories. [Nelson et al 2017 *Am Anth*]

Greater than 50% of women faculty/staff and 20–50% of women students encounter sexually harassing conduct in academia [NAS 2018]





# Excluded, intimidated and harassed: LGBT physicists face discrimination

Transgender people are the most affected.

Elizabeth Gibney

22 March 2016



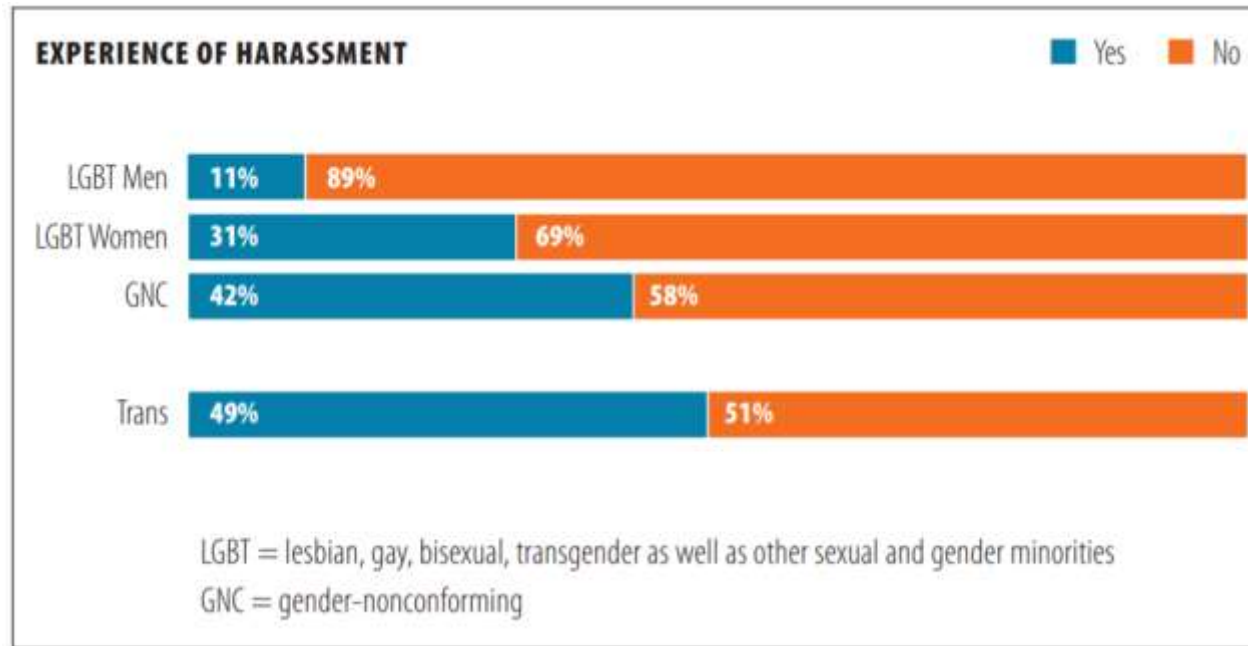
[Rights & Permissions](#)

More than one in five physicists from sexual and gender minorities have been excluded, intimidated or harassed at work in the past year, a survey has found.

According to the American Physical Society (APS) report released on 15 March, transgender physicists and physics students face a hostile work environment, with almost half of the 37 surveyed reporting experiencing harassing treatment in the past year.



An engineering student at the University of California, Santa Barbara, displays an LGBTQ slogan. Credit: Glenn Beltz/flickr/CC BY 2.0



~20% of LGBT physicists experienced harassment or discrimination in the last year, and about half of transgender physicists experienced harassment in the last year (2015).

~40% of LGBT physicists reported observing harassment or discrimination of others based on gender, gender expression, gender identity, sexual orientation, and/or sexual identity.

Over a third (36%) of participants reported considering leaving their institutions in the year prior to taking the climate survey.

Many LGBT individuals working in physics feel pressure to hide their identities from their coworkers, and some even fear losing their job.

Many who are open about being transgender report that colleagues routinely do not respect their gender identity in day-to-day interactions.

Work is *fundamental to the human condition*. It determines what we do for much of our waking lives and it preoccupies much of what we think about. It allows us to engage with other people and it helps us to define our sense of identity. It provides us with access to the material necessities of life, as well as to the advantages and achievements of civilization. Its allocation, organization, management and reward are therefore of no small importance.



- Up to 18% of the global workforce is exposed to *bullying* at work
- Results in elevated stress levels and other negative health effects
- Typically leads to declines in organizational productivity and economic output
- Some studies have found the effects of prolonged psychological aggression and bullying to be equivalent to or even more severe than the effects of sexual harassment

- Workplace *incivility* is defined as low intensity acts, which violate the norms of respectful behaviors established in a specific setting, and whose intent to harm is ambiguous; more difficult to identify

# Resistance to Adoption of CoC

“A society’s focus should be on the science.”

“We don’t want to negatively impact someone’s career.”

“It is unnecessary, no one experiences overt discrimination or harassment in a professional environment anymore.”

“We don’t have the expertise to develop or enforce a behavior policy.”



ANASTASIA



## Harassment should count as scientific misconduct

*Scientific integrity needs to apply to how researchers treat people, not just to how they handle data, says Erika Marín-Spiotta.*

In the past year, allegations of egregious sexual harassment and even assault have emerged across the spectrum of science. *Nature* has already run several stories on the topic just this quarter.

When I talk to senior scientists, many view harassment as an injustice that happens somewhere else, not in their field or at their institution. But data suggest that the problem is ubiquitous. In separate surveys of tens of thousands of university students across Australia, the United Kingdom and the United States, upwards of 40% of respondents say that they have experienced sexual harassment. A survey last year by the US National Postdoctoral Association found that 28% of respondents reported experiencing at least one instance of harassment while they were trainees; offenders were predominantly reported as being faculty or staff members ([go.nature.com/2ju83ox](http://go.nature.com/2ju83ox)). Neither are faculty members safe from mistreatment by colleagues.

Research culture and policies are quick to denounce plagiarism, data fabrication and mismanagement of funds, yet we have too long ignored the mistreatment of people.

Science is a social endeavour; ignoring harassment perpetuates a culture in which people who experience or witness hostile behaviours are afraid to speak up, cannot do their best work, or leave science altogether. Last September, the American Geophysical Union (AGU) defined harassment, bullying and discrimination as scientific misconduct, and outlined consequences. The greater scientific community should do the same.

My colleagues and I are developing a programme to reduce harassment in the geosciences

events because they felt unsafe (K. B. H. Clancy *et al.* *J. Geophys. Res. Planets* 122, 1610–1623; 2017). In a 2016 survey of physicists identifying as lesbian, gay, bisexual, transgender or queer (LGBTQ), one-third of respondents reported that they had considered leaving their institutions; this group was also more likely to have experienced or witnessed hostile behaviours (see [go.nature.com/2wczfih](http://go.nature.com/2wczfih)). Other groups are also likely to be vulnerable, but data are sparse.

Why aren't the laws already in place against harassment sufficient? People cannot count on their enforcement, especially given that imbalances of power in academia favour the perpetrators. Fear of retaliation also keeps people from reporting to employers in the first place.

Defining harassment as misconduct provides more ways of deterring it. For example, the AGU has developed processes for investigating allegations, including for addressing concerns that might not rise to the level of a formal complaint. Sanctions might include being barred from meetings or publishing in society journals, or the denial of an award. To be clear, when talking about harassment, I am not referring to socially awkward interactions but to well-defined and documented behaviours — such as unwanted groping and requests for sexual favours — that create a hostile work environment.

A better sense of how and how often harassment happens in science would help to convince the community of its pervasiveness, and counter mistaken beliefs that it is not common in the workplace. We also need more data on the experiences of people from under-represented

IMPROVED ETHICS  
TRAINING SHOULD  
**LAY BARE**  
POWER DYNAMICS  
AND BEHAVIOURS  
THAT ALLOW  
**HARASSMENT.**



National Science Foundation  
WHERE DISCOVERIES BEGIN



Funding



Email Print Share

Directorate for Social, Behavioral & Economic Sciences

## Cultivating Cultures for Ethical STEM (CCE STEM)

Cultivating Cultures for Ethical STEM (CCE STEM) funds research projects that identify (1) factors that are effective in the **formation of ethical STEM researchers** and (2) approaches to developing those factors in all the fields of science and engineering that NSF supports. CCE STEM solicits proposals for research that explores the following: 'What constitutes responsible conduct for research (RCR), and which cultural and institutional contexts promote ethical STEM research and practice and why?'

# Resistance to Adoption of CoC

“A society’s focus should be on the science.”

“We don’t want to negatively impact someone’s career.”

“It is unnecessary, no one experiences overt discrimination or harassment in a professional environment anymore.”

“We don’t have the expertise to develop or enforce a behavior policy.”

# Implicit Bias

- “The **unconscious** attitudes, stereotypes and unintentional actions (positive or negative) towards members of a group merely because of their membership in that group. ... biases **may be in direct conflict** with a person’s **explicit beliefs and values**.” (<https://www.adl.org>)
- Everyone has some degree of implicit bias

# So-called innocuous comments...

- “If the girls looked like you when I was in school I would have stayed longer.”
- “Women with legs like you shouldn’t be allowed to wear PPE.”
- “So... when are you planning to have kids?”
- “I’d have never guessed you were transgender.”
- “I’ve never met a trans person before.”
- “Which of you is the wife/woman.”
- I’m surprised you’re so articulate.





# Less publicized examples...

## Agesim

- Against older population
  - “Hurry up, grandpa”
  - “An old dog can’t learn new tricks”
- Against younger population
  - “I was doing this job when you were in diapers”
  - “Snowflake”

*61% of workers over age 45 have experienced or seen age discrimination in the workplace (AARP, 2018)*

## Ableism

- Physical, mental/emotional, “invisible” disabilities
- Accessibility considerations
- “ADHD isn’t real, children just need more discipline”
- “You don’t really need accommodations, you just want special treatment”

*Unemployment rate of disabled individuals is 8.0% (vs 3.8%) in the US as of Aug 2018 (US Bureau of Labor Statistics, 2018)*

# Respectfully listening to, responding to, and acknowledging colleagues



*"We'd now like to open the floor to shorter speeches disguised as questions."*

# Resistance to Adoption of CoC

“A society’s focus should be on the science.”

“We don’t want to negatively impact someone’s career.”

“It is unnecessary, no one experiences overt discrimination or harassment in a professional environment anymore.”

“We don’t have the training or expertise to develop or enforce a behavior policy.”

“I’ll no longer be able to have a normal conversation.”



# Solidarity

- Union arising from common interests; mutual support within a group; the ties that bind people together in society
- Recognition and support of unique, individual contributions, enabling the community to more effectively contribute to the benefit of its members as well as the world at large.
  - Includes kindness, as well as an understanding of each other and acceptance that our backgrounds, cultures, experiences, abilities, etc., are all different and necessarily result in a variety of perspectives.
  - Becoming more self-reflective is said to encourage acceptance in a broader community setting.
- Awareness, inclusion, and appreciation of these perspectives result in an overall improved product.

# Resistance to Adoption of CoC

“A society’s focus should be on the science.”

“We don’t want to negatively impact someone’s career.”

“It is unnecessary, no one experiences overt discrimination or harassment in a professional environment anymore.”

“We don’t have the expertise to develop or enforce a behavior policy.”

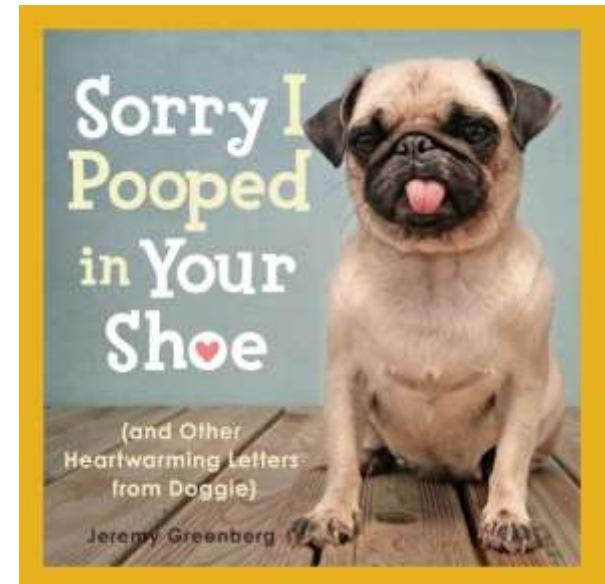
“I’ll no longer be able to have a normal conversation.”

“We don’t want to have a situation with conflicts of interest.”

“How do we arbitrate?”

# Enforcement

- An allegation of harassment/discrimination/bullying is of course not itself proof of harassment.
- Confidentiality is important.
- Many times a discussion and (sincere) apology will resolve the issue; we all make mistakes.
- In the instance of severe violations, the offending party may be asked to leave the meeting or have their membership revoked



## Other ideas for implementation and reporting

- Ombudsman or Arbitration Panel
- Professional development
  - Compassionate communication of expectations
  - Education in others' experiences
  - Bystander intervention



**Explicitly setting standards of conduct makes clear the values and expectations of the organization.**

**Considering and supporting the whole of the membership will help ensure inclusivity for all of an organization's members, which ultimately is an essential part of the mission of any professional society.**

# Case Study: Tim Hunt's Notorious Comment

It's strange that such a chauvinist monster like me has been asked to speak to women scientists. **Let me tell you about my trouble with girls. Three things happen when they are in the lab: you fall in love with them, they fall in love with you, and when you criticise them they cry. Perhaps we should make separate labs for boys and girls?** Now, seriously, **I'm impressed by the economic development of Korea. And women scientists played, without doubt an important role in it. Science needs women, and you should do science, despite all the obstacles,** and despite monsters like me.... So, congratulations, everybody, and I hope – I hope – I hope – I really do hope there is nothing holding you back, especially not monsters like me.

2015 - World Conference of Science Journalists - Luncheon for female journalists and scientists