Texas A&M College of Geosciences

Introduction and Scope

The purpose of this document is not to detail procedures which will guarantee scientific accuracy in lab and field work. Those recommendations are out of scope for the recommendations found here. This document signifies the recommendations of the Department of Atmospheric Science URGE pod which we think will foster an inclusive and fruitful working environment for all scientists in day-to-day field and lab work from interpersonal interactions to policies governing group expectations and recommendations.

Recommendations

Group Policies

Upon admission into a lab group or the start of field work, resources for reporting instances of discimination should be made clear.

The PI should create an inclusivity statement which should be communicated to each member when the lab is joined or the field campaign starts.

Self-Education

Members of the lab or field group should actively pursue self-education to understand their own unconscious biases and cultural lenses. In doing self-work, members are better equipped to engage with each other in respectful ways.

Group Reflection

Periodically, the PI should schedule discussions which the PI structures around a reflection of the social culture over the past month. At these meetings, the PI should read the inclusivity statement and share a recent article that has been read which she thinks the group should be aware of. The PI should encourage members to share any experiences where they feel the lab failed to be inclusive if they feel comfortable. The PI should share how group members can report instances in a more private setting.

The group focused on discussing field experiences and did not dedicate much time to local laboratory situations and mentoring experiences.

Background

Enjoyable, high-impact learning and research experiences require that all participants feel safe, included, and have their needs met in a supportive environment. Remote field and laboratory locations and shipboard experiences (combined as "field experience" herein) are high-risk environments that often promote feelings of isolation and alienation and create unsafe environments for minoritized individuals. Issues arise in part due to lack of personal space, distance from family, friends, and allies, limited access to facilities and items to fulfil personal needs, and an inability to control interactions with non-science members of the community and crew. While faculty, staff, and employed graduate students receive online training through the TAMU system and may attend short in-person training that address professional conduct, students and non-university affiliated staff often do not have similar mandatory training.

Pre-trip preparation

Before work in remote or new settings, we discussed the importance of community-building and skills acquisition prior to the field experience. These could take the form of workshops or required courses for the cohort immediately prior to the trip, but should also be integrated with student's full academic program beginning in their first-year experience courses. Requiring these types of activities as part of field preparation in the department curriculum could prevent some of the negative aspects of field experiences. Some of potential actions we discussed were:

- Identifying and hiring senior students and graduate teaching assistants to serve as liaisons between students and faculty and providing them with allyship training.
- Have whole class discussing of living situations and the expected conditions in the locations openly well ahead of field experience and providing avenues for students to voice their concerns through peer or near-peer mentors.
- Training students in particular skills needed to live in those conditions and engaging in practice with potentially unfamiliar equipment.
- Leading anti-racist conversations with the group, similar to what is recommend in in Chaudhary et al., 2020 for research laboratory groups.
- Clearly addressing racism in the field safety guide and code of conduct policies, again following Chaudhary et al., 2020, and holding dedicated discussions.
    - Requiring all participants sign and discuss a code of conduct.
- Creating group projects and activities that the traveling cohort can engage in together prior to the trip such that students become familiar with each other in a near-home setting and start building relationships prior to being in a riskier setting.

Designing the field experience

Field experiences can also be designed to be lower risk. Some actions we discussed as possible avenues include:

- Choosing locations that permit day trips rather than overnight stays.
- Choosing locations that are near to a town, have paved road accesses, and do not require long hikes.
- Creating a tiered field experience where students start with a short, required experience, and then are invited to participate in optional longer field experiences.

- Integrating virtual experiences to cover content and lessen the need for long duration field experiences.
- Being conscious of the culture of the areas the field experiences are held in and having open discussions of the issues that may arise.
    o Looking for alternative locations where those issues are less likely.
- Investigating the reputation of any companies providing personnel support and discussing conduct expectations.
    o Giving clear feedback to hired companies so that they may improve their practices.

Building in zero-tolerance polices in codes of conduct for field experiences

Codes of conduct need to have clear consequences for violations that are known to all participants and enforceable. Conduct statements specific to promoting inclusion of minoritized groups include:

Modified a few from IODP:
- Harassment, intimidation and discrimination are not tolerated.
- Abusive language, derogatory images, and derogatory gestures will not be tolerated.
- Show consideration and respect for all participants at all times.
- Collaborate openly and without exclusion.
- All members are responsible for the wellbeing of all other members. Speak up if something doesn't seem right. If you aren't sure something is okay, it probably isn't.
- If asked to stop an unacceptable behavior, members are expected to comply immediately or the [activity leader] will follow reporting protocol?

Alcohol consumption is engrained in geoscience culture, but is a key contributor to poor behavior. Drinking behaviors also create in-group and out-group dynamics between drinking and non-drinking participants, amplifying minority-majority issues and creating exclusive spaces of interaction.
- The code of conduct should contain a zero-tolerance approach to alcohol consumption with clear, enforceable, consequences.