



The Caltech GPS URGE Pod has created a summary of best practices and recommended actions for safe and inclusive field and labwork in research groups based out of our department. To facilitate implementation, we have prepared checklists of critical resources to consider when developing plans for each research group. We also will organize meetings with the Faculty Fieldwork committee to identify division-level implementation plans, and discuss implementation strategies with the Caltech Center for Inclusion and Diversity.

Fieldwork Best practices check-list

PI/Trip	Leader:		Travel Dates:				
•	Sampling Locations:						
•	Locations passed through on the						
•	On-trip ombudsperson:						
•	Ombudsperson outside of the						
•	Access to restrooms: Yes/No/S						
•	Cell/data access: Yes/No/Some						
•	Satellite phone/SPOT access &						
•	Transport: vehicle/plane/train,						
somev to kno	and respectful environment sho where rural/back country/to sea? w? What is the local culture like	? If you had never been ?	~				
Prior to	o trip, identify and discuss with a	all participants:					
	Risk assessment of travel and s	sampling locations					
	o i.e. sundown towns, bo	order checkpoints, rura	l locations				
	□ Recommended gear						
	 i.e. clothing, shoes, ha 						
	,						
	Rest/meal times and dietary preferences						
	Cultural/Religious norms and restrictions (i.e. Ramadan)						
	Local history and land acknowledgements						
	Plan for inclement weather						
	Exit strategy for worst-case-sce						
	Procedure for documenting an	d handling code of con	duct violations in th	e field			
	Harassment reporting resource	es					
is secu	cal information (allergies, medion re and private but accessible in a be returned to each participant	an emergency. If a phys	sical record is obtain	•			
articipant	Contact number	Home Institution/ Employer	Primary Advisor	Emergency Contact	Medical Information		

Field Safety Plan:

Pre-departure Forms/Discussions:

Reference for safety considerations before departure: https://eos.org/opinions/ten-steps-to-protect-bipoc-scholars-in-the-field

Risk assessment of travel and sampling locations Consider the local history of the areas: Were these localities historic sundown towns? Is there a strong border patrol presence or will you be going across border checkpoints? Are trip participants prepared for encounters with common violent or discriminatory messages and symbols (e.g. confederate flags, racist billboards, swastikas)? Is this area, or country, known to have a history of violence against racial		
minority groups or the LGBTQ+ community (e.g. area where lynching was common, plantation land, documented violence against the LGBTQ+ community)?		
 Be proactive about ensuring the safety and wellbeing of the BIPOC and LGBTQ+ students on the trip by addressing these concerns before they arise and making sure you offer support if you arrive in areas that are not comfortable for those students. 		
Recommended gear and the resources made available to participants by the trip leader or division		
 Make a clear list of items for the trip and provide alternatives to borrow this equipment from the division or provide items as the trip leader (i.e. clothing, shoes, hats, sunscreen, bug repellent). 		
Share maps to address any accessibility concerns getting to the field area		
 Provide topographic profiles of any hiking paths to address any physical concerns or 		
areas that may be inaccessible to all participants		
 Provide alternative areas/options. 		
 Address that the group will stay together to get to the field area, but there will be opportunities for independent exploration of the field area afterwards. Additionally, all participants likely have different comfort levels and experience with fieldwork, use these opportunities as instructional moments to teach others on the trip (in a respectful and constructive manner). 		
Rest/meal times and dietary preferences		
Cultural/Religious norms and restrictions (i.e. Ramadan)		
 Consider accommodations for times of worship or practices 		
 Examples of cultural concerns trip leaders must address and inform participants of 		
norms:		
 Safety for women at night or in certain cities (e.g., Shell has a major HQ in Brazil where many women feel unsafe) 		

- Expected attire (cover legs in Catholic countries, shawls or head covering in many countries, closed-toe-shoes)
- Expected behavior (e.g., Oman, not to shake women's hands)
- What days of the week will key resources be unavailable?
- What drugs/alcohol are illegal?
- Is it safe or legal for LGBTQ+ people to be open about their sexuality?
- ☐ Local history and land acknowledgements
 - Identify the history of native displacement in the area and if it is designated tribal land be sure to acquire the proper permits to get permission for land access.
 - Have any atrocities enabled or limited land access or permissions today? Have public lands been used for police, military, or extractive industries, eminent domain, prisons or internment camps?
 - Who has stake on the land you are visiting, and do they have a permitting procedure?
 What other groups/organizations should be notified of your visit?
 - Do not disturb cultural artifacts such as dwellings, petroglyphs/pictographs, shards and tools, food middens, burial/religious sites
- ☐ Plan for inclement weather
- ☐ Exit strategy for worst-case-scenario situations
 - If a trip member is harassed or physically endangered by participants, local law enforcement, or local inhabitants, how is this quickly detected and where will participants safely regroup?
 - o How can trip participants contact the trip leader at all times?
 - o How can the trip leader find and contact all participants?
 - Is there a culture of immediately addressing interpersonal and environmental safety concerns?
 - O What common, dangerous situations may be encountered?
 - Roads, railroads, industrial activities, abandoned quarries/mines, hidden rusty debris/barbed wire fences, abandoned weapons/bombs/mines
 - Wildlife: bears, bees, snakes, mosquitos/flies
 - Contaminated water and infectious diseases
 - Terrain steep cliffs, unstable surfaces, swift water, deep mud, changing tides, high altitude, disorienting landscapes (e.g., dense forest, labyrinthine canyons)
 - Wildfires, flash floods, or dam/canal discharge changes
 - Extreme temperatures, weather, and sun
 - Aggressive landowners, passerby's, law enforcement, or security?
 - Irresponsible gun, fireworks, ATV, or off-road vehicle use; local hunting seasons
 - Common illegal behaviors in the area: illicit drug operations, opportunistic theft, illegal mining/salvage/land clearing/grazing/farming, burning, poaching

⊔ 1	rocedure for	documenting and	nandling code of	t conduct violations in the field
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 Create a code of conduct before departure and address how violations of the code of conduct will be handled in the field. (e.g. harassment of others, racial slurs or racially motivated aggression towards others, homophobic or xenophobic slurs, sexual harassment)

☐ Harassment reporting resources

- Designate several ombudspeople on the trip to report concerns to and have a plan in place to handle violations (hold nominations and elections to select several student ombudspeople?).
- ☐ Fieldwork involving participants from multiple institutions (PIs across institutions)
 - People should be introduced in advance
 - Create a buddy system within or between institutions

During the trip:

Refer to code of conduct, which should address all of the checklist points laid out in the pre-departure checklist. Include language about keeping conversations professional and address key risk factors for discriminatory or abusive behavior, including alcohol consumption on the trip. Include a statement referring to the trip as a Caltech event therefore the same behavioral expectations and adherence to honor code as on-campus behavior at all times on trip, including "around the campfire."

Refer back to the code of conduct if there are violations during the trip and have conversations with the group to address these and find a solution for moving forward with the trip or ending it early due to violations and safety concerns. Facilitate communication between trip participants and outside support and services.

Overall, be *proactive* about offering help in isolated situations; don't wait for participants to ask for help or express fear; look for exit strategies and alternate plans for critical resources; long term resource is to prepare a "Green Book" for geologists, especially in common fieldwork places

After the trip:

Have a post-trip anonymous debrief between participants and a third party in the division (Division support staff, including Julie Lee or Jen Shechet, and anonymous feedback such as a Google Form or Drpo Box). Provide a list of contacts and resources if safety violations have occurred and need to be reported (e.g. sexual assault or harassment/violence of any kind). Check in on the wellbeing of any victims that have reported incidences, to be sure they are getting the help they need.

Post trip surveys and code of conduct violations should be addressed by the Faculty Field Committee within the division. This committee should review complaints, address code of conduct violations and the disciplinary action from that (e.g. suspension from future trips, mandatory training), look for patterns in and between trips, and intervene in issues early. It is important that reported incidents get treated seriously and there is a response to them. Lack of meaningful response by the division to reported incidences will likely result in decreased reporting and participants loss of trust in the division and institution. The URGE pod will meet with the Faculty Field Committee to discuss implementing these suggestions.

Lab Safety Plan:

Currently, codes of conduct and safety plans beyond ordinary chemical and hazard training are not required for laboratories in Caltech GPS. Several laboratories have created their own. A good code of conduct includes well-detailed outlines of the expectations lab members can have for the director of the lab and what expectations the director of the lab has for lab members.

In GPS, lab group interactions extend beyond experimental or instrument laboratories. Safe, supportive lab cultures proactively consider what lab group members need to be successful scientists. Accessibility resources should be made clear, including but not limited to: resources for racially minoritized scholars, resources for (temporarily or permanently) disabled scholars, and resources for LGBTQ+ scholars.

In order to encourage more faculty members to pursue the creation of a laboratory code of conduct that addresses accessibility, workplace expectations, and outlines harassment reporting mechanisms, we have created a checklist about what resources and information should be included in a comprehensive code of conduct. Codes of conduct should be created in collaboration with the entire lab group and PIs should be aware that many graduate students and postdocs are involved in multiple lab groups.

Items that should be included:

- When there is a problem or concern, who do you tell?
- What are key areas in which group leaders and members proactively look to help each other?
- What onboarding processes ensure new group members know about key resources and personnel? Are these available to all group members equally, and what is required to maintain their availability?
- What hours and days are you expected to be on campus and/or in your office and/or available over email? What is the preferred communication mechanism for the group?
- Is everyone expected to attend group meetings? How often are they and where do they take place? How often is someone expected to present?
- What are the expectations for communal group resources? What is the cleaning schedule for the lab?
- How does someone schedule a meeting with the PI? Other lab members? Collaborators?
- What is the amount of holiday time available to lab members?
- How do you request time off to handle a family emergency? A physical health emergency? A mental health emergency?
- How does authorship work in the group? What work is necessary to include someone as an author versus in an acknowledgement?
- What is the source of funding for the group? How can one find out what grant or organization is funding their research?
- How often do group members travel for conferences? How are these funded?
- How does a successful member of the group interact with the PI and with other members of the group? What is the ideal experience and quality of relationships for a member of your team?
- What does a good research outcome look like in the group?
- What values do you want your lab to show/exemplify?
- If your lab cultivated a sense of belonging, how might lab members practically experience this?
- If you have a disability, who can you ask for accommodations?

• If you experience harassment, what are your resources for reporting? Are they private, confidential, or neither?

What resources can a lab group leverage to make their codes of conduct sustainable and effective?

- Lab Safety Officers: Safety officers undergo training once a year and are meant to disseminate information to their lab groups.
- GPS Diversity, Equity, and Inclusion Committee: Provides a private reporting mechanism for harassment or unwelcoming behavior in the GPS division. https://www.gps.caltech.edu/resources/dei-gps
- Caltech Accessibility Services for Students: provides accommodations for temporary and permanent disabilities. https://cass.caltech.edu/
- Caltech Center for Inclusion and Diversity: Offers mentorship training and workshops relating to equity and inclusion (LGBTQ+ Safe Zone, Decoding Diversity, etc.). Also offers confidential reporting resources. http://diversity.caltech.edu/
- Caltech Title IX and Equity Office: Offers lab-tailored trainings on workplace communication and bystander training. Also offers private reporting resources. https://titleix.caltech.edu/
- Caltech Center for Teaching, Learning, and Outreach: Provides workshops and discussion sessions about best teaching practices for TAs and instructors. https://ctlo.caltech.edu/

Potential new resources to put into place:

- Lab or Option DEI Officers: New lab officers that facilitate interfacing with CCID and Title
 IX/Equity offices, organize trainings relating to DEI and bystander intervention, and maintain
 group resources related to DEI. This position should be compensated, potentially by providing
 funding for attending relevant conferences. Ideally, an institute-level coordination of labgroup
 DEI officers would be analogous to lab safety officers, under the purview of the Caltech CCID.
- GPS DEI Committee: The committee anonymously reports the number of reports of harassment they have received in a given period of time.

Example Codes of Conduct:

- https://serc.carleton.edu/advancegeo/resources/codes_conduct.html
- https://johnstonlab.fas.harvard.edu/files/johnstonlab/files/expectations.pdf
- https://docs.google.com/document/d/10y7TP48ik1rcQBPA5Do8mZM7DJ5EbF0hyWPcsgb1QE/edit
- http://www.geo.brown.edu/research/Fox-Kemper/people/graduateadvice.pdf