Title: Safe Fieldwork Strategies for At-Risk Individuals

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Abstract

As a result of identity prejudice, certain individuals are at higher risk for conflict and violence when they are in the field. At-risk individuals include minority identities of the following: race/ethnicity, sexual orientation, disability, gender identity, and/or religion. Everyone deserves to conduct fieldwork as safely as possible; therefore, it is paramount for anyone conducting fieldwork to be informed of the increased risk certain populations face when conducting field research and to define informed strategies. Research groups should adhere to best practices to minimize risk for all individuals who go into the field. Here we provide strategies that 1) acknowledge that some individuals encounter dangerous situations in the field due to their identity(ies), and 2) minimize the chance of conflict between and among researchers and other communities present at field sites. The inclusion of this document as a key resource in a research lab, a university department, or any active research or work environment sends a positive signal to at-risk individuals that their professional community acknowledges their risk and is willing to implement actions to ensure their safety. We suggest that this document be made freely available

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to anyone who is directly or indirectly involved in fieldwork. Supervisors who support the information in this document should publicly commit to promote a diverse and inclusive environment in order to maintain the safety of their researchers.

I. Purpose of this Document

This document is intended to facilitate and implement anti-discriminatory practices in an unbiased manner to promote a safer and more inclusive community in the field. We describe the increased risk to researchers (or anyone conducting fieldwork) of at-risk identities, and provide strategies so that researchers, supervisors, and institutions can mitigate such risk. By sharing this document, supervisors and institutions show that they promote diverse and inclusive discussion and engagement in a safe space for all, irrespective of professional status. This document can be made available as a permanent resource in lab guidelines, a departmental or institutional website, or sent to and reviewed with anyone going into the field. Moreover, it can serve as a starting point to design more inclusive lab and field practices as well as stimulate discussion about diversity, equity, and inclusion in the workplace (e.g., See Section V). The material in this document is applicable to anyone who conducts research, teaching, extension, or outreach activities while in the field.

II. Rationale - What are the risks that researchers can encounter and why?

II.a. Prejudice and resulting impacts

Individuals of all backgrounds routinely enter unfamiliar communities, placing some in an uncomfortable and potentially unsafe “othered” position. Conducting fieldwork places researchers in such communities, where prejudice can unfairly manifest against specific

identities [1]. Both immediately and over the long term, prejudice-driven conflict can threaten a researcher's physical health and safety, up to and including their life. Moreover, such situations impact mental health, productivity, and professional development. While many field-based disciplines are aware of the lack of diversity represented by their scholars, at-risk researchers' career advancement can be stunted or permanently diverted after a negative experience during fieldwork [e.g., 1-2].

Below we define risk, use examples to illustrate how at-risk identities have and continue to encounter conflict during fieldwork, and describe the need and responsibility of researchers and their supervisors to identify and mitigate risks inherent to fieldwork.

II.b. Risk

Given the value of a diverse scientific community [e.g., 3-8], the increased risk to certain populations in the field - and the actions needed to protect such individuals - must be broadly addressed by the scientific community if we are to build and retain diversity in disciplines that require fieldwork. Fieldwork in certain geographic areas and/or working alone has led many researchers to feel uncomfortable, frightened and/or threatened by local community members and/or their scientific colleagues [e.g., 8-9,12-13]. Local community members use individuals' identities as a biased marker of danger to the community, putting them at risk from law enforcement and vigilante behaviors. Researchers' feelings of discomfort in the field have been reaffirmed by the murders of Black, Indigenous, and People of Color, however fieldwork also presents increased risk for individuals in other demographics. For example, researchers who bear visible signs of a minority religion (e.g., a Muslim woman wearing a hijab or Sikh man wearing

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a turban), gender identity, visible disability, and/or sexual orientation can be at increased risk when conducting fieldwork. Several studies have documented the high incidence of harassment or misconduct that occurs in the field [e.g., 9]. Based on lived experience, many at-risk individuals already consider how they will handle harassment or misconduct before they ever get into the field. At-risk researchers deserve to be supported by their lab, departments, and institutions on the risks involved when they go into the field. Labs, departments and institutions must address such risks by informing the individuals conducting field work of potential risks, and making available resources and protocols for filing complaints and accessing training well before the risk presents itself [e.g, 10-11].

II.c. Example situations experienced by at-risk individuals

The following are examples of situations that at-risk researchers (pers. comm. Anonymous) have experienced in the field: the police are called on them, a gun is pulled on them (by law enforcement and/or local vigilantes), hate symbols are displayed at or near the field site, the field site is an area with a history of hate crimes against their identity (i.e., "sundown towns"), available housing has bigoted connotations (e.g., staying on a plantation), refused service (e.g., food or housing), slurs have been used while on location, an unknown and potentially aggressive person or people approach the researcher and/or follow them, sexual harassment and/or assault occurs, verbal abuse occurs due to misunderstandings about a researcher's disability. Such situations are a routine expectation in the lives of at-risk researchers. The chance of these situations occurring is exacerbated in field settings where researchers are alone, in an unfamiliar area with little-to-no institutional or peer support, or are with research team members who are uninformed, unaware, or who the researcher does not trust. In these situations, many at-risk

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researchers actively modify their behavior in an attempt to avoid the kinds of situations described above. However, doing so is mentally draining, with clear downstream effects on their ability to conduct research [e.g., 8,12,14].

Conversations to discuss potential risks rarely occur between researchers and their supervisors, especially in situations where supervisors may not be aware of the risk posed or understand the significant impact of these threats on the researcher, their productivity, and their professional development [e.g., 15]. Quoted from Barker et al. (2011):

> "*...faculty members of majority groups (such as White faculty in predominantly White institutions (PWI)) may not have an understanding of the 'educational and non-academic experiences' of ethnic minority graduate students or lack 'experience in working in diverse contexts'*."

This extends to any supervisor who does not share identity(ies) with those whom they supervise, and would have had to receive specific training on this subject matter in order to be aware of these potential risks.

II.d. Shared responsibility to limit risk

Supervisors bear a responsibility to educate themselves on the differential risks posed to researchers in the field. When learning of safety risks and the realized potential for negative experiences in the field, the supervisor should work with at-risk researchers to develop strategies and practices to address risks in ongoing and future research environments. Designing best practices for safety in the field for at-risk researchers will inform all team members and

supervisors of ways to promote safe research, maximize productivity, and engender a more inclusive culture in their community.

III. Who is at heightened risk?

At-risk individuals belong to many demographics that have been subject to discrimination and prejudice. This includes but is not limited to visible signs of race/ethnicity, disability, sexual orientation, gender identity/expression (e.g., femme-identifying, transgender, non-binary), and/or religion (e.g., Muslim, Jewish, Sikh). However, at-risk is fluid with respect to fieldwork and extends to any identity that is viewed as different from the local community in which the research is being conducted. In some cases, fieldwork presents a situation where a majority identity at their home institution can be the minority identity at the field site, whether nearby or international.

IV. Where and when does risk occur?

An individual could be at-risk whenever someone perceives them as different in the location where they conduct research. This risk could manifest if individuals are visibly different from members of the local community, or if the local populations are prejudiced against newcomers (see Section II.c with examples). Given the variety of places that at-risk situations can occur, researchers and supervisors must work under the expectation that prejudice can arise in any situation.

V. Strategies for Researchers, Supervisors, and Institutions to minimize risk

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Below is a list of actions to minimize risk and danger while in the field compiled from researchers, supervisors, and institutional authorities from numerous affiliations (Table 1). These strategies are used to augment basic safety best practices. Furthermore, the actions can be used in concert with each other and are flexible with regards to the field site and the risk level to the researcher. These strategies are not comprehensive; rather, they can be tailored to a researcher's situation.

We acknowledge that it is an unfair burden that at-risk populations must take additional precautions to protect themselves. We therefore encourage institutions, departments, and supervisors to collectively work to minimize these harms by: 1) meeting with all trainees to discuss these guidelines, and maintaining the accessibility of these guidelines and additional resources; 2) fostering a department-wide discussion on safety during fieldwork for all researchers; 3) urge supervisors to create and integrate contextualized safety guidelines for researchers in lab, departmental, and institutional resources.

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Table 1. Strategies for Researchers, Supervisors, and Institutions to minimize risk

V. a.	What can researchers do to minimize risk to themselves on a field site?*
1.	Talk with colleagues and supervisors about the risks, preparations to minimize risk, and reporting mechanisms. Be aware that the conversation will likely be difficult and will require mental and emotional readiness by both parties. If a supervisor is dismissive of this conversation, individuals should be informed that they can and should reach out to additional mentors, institutional or industry advocates (e.g., ombudsman, Equal Employment Opportunity officer, Diversity and Inclusion administrators, Student Disability Services, or other trusted professionals to have this conversation.
2.	The scale of risk can be higher at international field sites (e.g., identities may be criminalized). At minimum, be aware of and abide by any international laws and customs in addition to local foreign laws, current political situations, actual degree of law enforcement, and mandate a conversation between researcher and supervisor to establish an emergency contingency plan.
3.	Contact others (especially those who share an at-risk identity) that have previously used a field site at a location where there is a history of risk. It is recommended that researchers document all known cases of risk at that location.
4.	Take advantage of training opportunities to increase field safety and promote awareness (e.g., self-defense courses, first aid, safety aids, cultural history course about the location of the field site).
5.	Know who manages the field site(s) and inform the field managers when/where you will be at those locations.
6.	Introduce yourself to the neighbors surrounding the field property, or leave a short note informing neighbors about research being conducted at nearby locations and who will be conducting the research. It is advisable to also include contact information, preferably information that clearly demonstrates affiliation with the research institution to provide additional credibility.
7.	Engage in fieldwork with another person, when possible. When this is not possible, have a point of contact (preferably the supervisor) who is aware of your whereabouts and expected schedule on a given day. A written communication plan that gives notice of field plans is another way to maintain communication with a point of contact.
8.	Always carry credentials in case someone challenges why you are at the field site. These include photo ID (driver's license, passports, institution ID), and relevant permits. Any additional form of identification that clearly demonstrates affiliation with the research institution can also be helpful (i.e., University apparel, institution bumper stickers/car magnets, etc.).

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9.	If at any time you feel unsafe, you should contact your supervisor to discuss ways to modify the project. While supervisors work closely with researchers, they often do so outside of the field site, and therefore may not know of the risks and dangers therein encountered. It is paramount that at-risk individuals advocate for themselves.
*	*If you are establishing your own field site and/or are supervising others, review sections V.b. and V.c. for additional strategies.*
V.b.	In the event that an at-risk individual's supervisor is unwilling to help minimize risk, the individual should leverage available resources at their institution
1.	Have a support group for 1) reporting and documenting risk and 2) gathering witnesses to help showcase the level of threat. The support group might range from peers, a counselor, to established institutional services.
2.	Report the risk and the supervisor, following the institution's established reporting policy or office (see section V.a. for examples). This report can include documentation of the risk (for example, recordings of a verbal altercation, written correspondence of an inactive supervisor, photo documentation of a slur, etc.).
3.	Reach out to the departmental officer in charge of reporting situations to higher echelons of administration who would provide administrative and legal support for the researcher. There are laws in place to maintain the safety of researchers.
V. c.	What can <u>supervisors</u> do to support at-risk individuals?
1.	Self-educate on the experience of your team member's identity, and the corresponding risk that they may encounter in the field. *This does **not** involve asking researchers to relive trauma surrounding their identity as a source of education*. Rather, use available resources to self-educate. First-person accounts and resource compilations are available [See section VIII Additional Resources]. Furthermore, self-educate on the politics, demographics, and culture of the areas surrounding established field site(s), in order to be fully aware of potential risks.
2.	Prior to fieldwork, contact relevant institutional offices for risk management on how to best manage risk in the field and identify resources for researchers to identify the social landscape in which the field site(s) is(are) situated and identify potential risks.
3.	Create a field risk management plan that discusses risk at established field sites. This document should detail potential risks and identify mitigation(s) for that risk. This document should also act as a living document for recording safety incidents. Copies of these should be carried with fieldworkers on their person as well as left in the workplace/lab.

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4. Provide materials to clearly identify researchers and their purpose (e.g., signs for vehicles and field sites, safety vests, etc.). These items should be provided for the researcher so that their use is easily implemented.

5. Have a conversation with all research team members on the risks and preparations to minimize risk. This can include a statement that certain demographics may be at higher risk, and that the supervisor is available to discuss with any researcher about concerns and proactive measures. Educational resources, such as this document should be made available to all researchers, who can then self-select to engage in a conversation about safety issues surrounding their specific identity(ies).

6. Create a time and space to talk to research team members specifically about fieldwork safety concerns in advance of the field season, and touch base with them throughout the season to address new concerns. As a reminder, this is an uncomfortable reality and merits the need to establish a space and time for both parties (researcher and supervisor) to be ready and willing to engage in this important discussion.

7. Even after education, supervisors that do not share the same identity as their researchers will be unaware of all potential risk to researchers. If researchers bring up potential or experienced risk, validate their experiences and assist in modifying the project so that they can safely continue conducting research.

8. The scale of risk can increase dramatically in an international field site. At minimum, be aware of and abide by any international laws and customs in addition to local foreign laws, current political situations, actual degree of law enforcement, and mandate a conversation with the researcher. Furthermore, this conversation should include allies in the field - collaborators/supervisors at the international field site - to discuss any safety concerns that the researcher may not be aware of.

9. At established field sites, introduce researchers (via email or in-person) to the manager of those locations, if they exist. If there are multiple managers, researchers should be introduced to each manager to minimize any miscommunication that could lead to increased risk.

10. When possible, show new researchers established field locations, teach them about the specific concerns of that field location, and inform them of the resources in accordance with established safety plans. The resources should have contact information about field site personnel relevant to research and safety (e.g., contact information of the local police department).

11. Assist researchers in establishing safe housing accommodations before arriving at the field location. A safe and secure housing location includes the following: researchers are able to secure food, safe travel to and from field sites, and supportive points of contact in the local community.

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12.	Review and agree upon fieldwork and safety plans with the researcher before any fieldwork begins.
13.	Actively engage with researchers on how to reorganize fieldwork practices if and when there are restrictions on movement; for example, local ordinances limiting activity (i.e., curfew, stay-at-home orders, etc.).
V. d.	What can departments and institutions do to support at-risk individuals?
1.	Make a general field safety, harassment training and first aid course available and mandatory for all researchers to attend in the institution/department.
2.	Make a list of resources available about diversity in the sciences, barriers to entry in the sciences and safety concerns (See section VII References).
3.	Regularly reevaluate all current department and institutional practices to remove barriers to inclusion in safety practices. Develop a proactive plan to alter detrimental (anti-inclusion and equity) practices and document the process to increase transparency of decision-making.
4.	Inform and advise supervisors and research groups about the benefits of acting responsibly and with care, as well as legal and social ramifications if they fail to invest in researcher safety during university-sanctioned fieldwork.
5.	Provide training to supervisors on how to be an effective mentor to diverse individuals. This training should provide clear lines of communication for anyone conducting fieldwork, regardless of the researcher's institutional affiliation (e.g., a visiting researcher working with faculty and field sites managed by the institution).
6.	Ensure field course locations and housing are appropriate, safe, and equitable for all identities. Solicit regular, anonymized feedback from field researchers to determine the climate and safety of field sites and accommodations, and engage supervisors in responding to this feedback.
7.	Ensure that all department- or institution-managed field sites are clearly labeled as a part of the institution. On this signage, include acceptable activities allowed at such locations (e.g., birdwatching, dog walking, no public access).
8.	Collate information on all active or newly established field sites throughout the year and provide this information to relevant police departments. Due to the sheer volume of field projects occurring at a single time, this cannot feasibly be accomplished by supervisors and researchers. Supervisors or individual researchers should only have to contact specific law enforcement if the field site(s) was(were) not a part of this initial package.

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9.	Supply an official letter of support for researchers doing fieldwork with contact information. This provides additional credibility to the researcher, if and when they are approached and challenged.

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VI. A hold harmless recommendation for at-risk individuals, supervisors, and their institutions

Topics related to identity are inherently difficult to broach, including for reasons that can have serious legal components. For example, many supervisors have been trained to avoid references to a researcher's identity and to ensure that all researchers they supervise are treated equally regardless of their identities. Many institutions codify this practice in ways that conflict with the goals outlined above, as engaging in dialogue with at-risk individuals is viewed as a form of targeting or negative bias. In a perfect world, all individuals would be aware of these risks and take appropriate actions to mitigate them and support individuals at heightened risk. In reality, these topics will likely often arise just as an at-risk individual is preparing to engage in fieldwork. We therefore strongly encourage all relevant individuals and institutions to 'hold harmless' any good-faith effort to use this document as a framework for engaging in a dialogue about these core issues of safety and inclusion. Specifically, it should never be considered a form of bias or discrimination for a supervisor to offer a discussion on these topics to any individual that they supervise. The researcher or supervisee receiving that offer should have the full discretion and agency to pursue it further, or not. Simply sharing this document is one potential way to make such an offer in a supportive and non-coercive way.

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VIII. Additional Resources for Education

Fieldwork: diversity, equity, and risks

https://serc.carleton.edu/advancegeo/resources/field_work.html?fbclid=IwAR3l7tyc4Gcfe1HJfKsKVkOg4KuqmrU5DRX5xnSrBQAfs2_QrKqrDE7M2D8

https://www.geolsoc.org.uk/Events/Past-Meeting-Resources/Confronting-Barriers-to-inclusion-opening-the-gate-to-accessible-fieldwork

https://www.sciencemag.org/careers/2020/03/scientists-push-against-barriers-diversity-field-sciences

https://onlinelibrary.wiley.com/doi/full/10.1002/ece3.6300?af=R#.XrYdcFt3kBA.twitter

https://wildlife.onlinelibrary.wiley.com/doi/abs/10.1002/wsb.603

Mentorship of a diverse student body

https://www.sfn.org/sitecore/content/Home/OMP/Articles/Professional-Development/2015/Heres-How-to-Effectively-Mentor-Diverse-Students#:~:text=Ask%20them%20about%20their%20research,with%20a%20sense%20of%20community.

https://www.chronicle.com/article/Advice-on-Advising-How-to/245870

https://www.unl.edu/mentoring/mentoring-needs-diverse-community

https://onlinelibrary.wiley.com/doi/abs/10.1002/he.20139

Discussing and promoting diversity, equity, and inclusion in the STEM workplace

https://www.nature.com/articles/d41586-018-05646-4

http://diversityinacademia.mystrikingly.com/

https://medium.com/@chanda/how-to-make-a-real-commitment-to-diversity-30ddb2cc4cc3#.on4xissss

https://coco-net.org/wp-content/uploads/2019/11/Coco-WhiteSupCulture-ENG4.pdf

https://www.geolsoc.org.uk/HEN-Higher-Education-Network-Annual-Meeting-2019#Resources

Perspectives on the visibility and discrimination of diversity in STEM

https://www.microaggressions.com/

http://www.adfg.alaska.gov/static/home/library/pdfs/wildlife/research_pdfs/travis_booms_wildlife_professional.pdf