**INTRODUCTION TO FIELD SAFETY: A RTK GUIDE**

Safety is the number one priority when conducting fieldwork. However, peoples’ personal limits and risks for encountering dangerous situations in the field can vary drastically based on individual identity and experience level (John and Khan 2018, Rinkus et al. 2018, Demery and Pipkin 2021). Open communication that sets the culture and expectations from the beginning has been identified to reduce risk and promote discussion between field members (Nelson et al. 2017, Demery and Pipkin 2021). More importantly, equipping individuals with knowledge of the risks allows them to assess their own comfort with risk (Demery and Pipkin 2021). When reflecting on your personal thresholds for risk, ask yourself, “would I take this risk in your personal life?” People should not risk their personal safety to collect data, but many people, especially people from minority groups or those with less institutional power (students, untenured faculty etc.; Rinkus et al.) have reported feeling obligated to do so.

Other conceptual models highlight the importance of clear communication prior to the start of field season. Students are more likely to feel supported when open, clear communication is established (John and Khan 2018, Demery and Pipkin 2021), and without it, students are more likely to have lower self-esteem, face delays in their careers, or leave the field entirely (Nelson et al. 2017, Copenheaver et al. 2021, Demery and Pipkin 2021).

**The goal of this guide**

Taken from the legal concept, participants have a right to know the risks they encounter when participating in field work. This document is our interpretation of safety or material data sheets for field work settings, and it was written to support field teams, which consist of two groups– supervisors and technicians. We define supervisors as anyone that serves in a leadership role while collecting data. Supervisors guide technicians as they collect data and learn new skills. We recognize that these roles may not reflect institutional roles. While most PIs will serve as a supervisor, but staff, teaching faculty, and graduate students can act as crew leads (supervisors) or be technicians themselves. Therefore, we distinguish between these two groups based on leadership and power dynamics within field settings. A strong lab safety plan requires reciprocal relationship between supervisor(s) and their technicians.

The RTK document is intended to guide supervisors as they work to better support their technicians. It prompts supervisors by encouraging them to discuss issues beyond physical safety with their technicians while also considering the impact of race, gender, and background on experiences. The specific goals of this document are two-fold. The first is to inform technicians of expectations regarding field work risks and codes of conduct so that technicians can provide informed consent prior to starting work. The second goal of this document is to provide guidance as supervisors and technicians use this tool to maintain communication between all field members.

To achieve these goals, the RTK contains several sections each with their own specific objectives. In-depth discussions of each sections can be found in the RTK, but we outline a brief summary of each section here. The first section is a space for general and site-specific risks associated with field work. The Risks and Mitigation Strategies section pairs perceived and actual risks with mitigation strategies so that everyone is informed and has opportunities to improve protocols to better accommodate individual needs. The second section, packing lists, lays out expectations for technicians so that they come to the field prepared and know how to locate team equipment. This section also opens lines of communication regarding access to gear as well as potentially harmful culture surrounding outdoor gear. The third section, building safer spaces, provides guidance for field teams as they navigate issues related to group dynamics and conflicts with people within and outside of field teams. The fourth section, containing project descriptions, ties together expectations for technicians with logistical details and provides greater context to project objectives and research questions. Lastly, the Professional Development section underscores the importance of field experience for technicians. This section outlines supervisors’ learning objectives and provides guidance to technicians to leverage their field experience when speaking to potential employers. The RTK also contains several appendices, including a template (appendix A) for constructing project-specific Right to Know documents.

Although we outline several tools to build your communication toolkit, this template cannot be all-encompassing and requires ongoing self-reflection. New issues will arise, and as science becomes more diverse, supervisors will need to incorporate the needs and concerns of technicians with different backgrounds. Supervisors need to also be cognizant of site or project specific risks to create a useful RTK. The quality of the RTK is strengthened by the inclusion of site- or condition-specific issues. Therefore, this document can only be as strong as supervisors’ willingness to think critically about their projects and listen to their technicians. Similarly, this document depends on technician’s willingness to have open, honest conversations with their supervisors. It is therefore crucial that this resource be a living, working document and that everyone works towards building and maintaining open and safe lines for communication.

Disclaimer: While intended as a communications tool to foster improved field safety and field culture, this document does not supplant information or expectations contained within a Job Responsibilities Worksheet (JRW), nor goals set by employees under guidance of their supervisors. Care should be used for this document in use with JRW defined employees to ensure expectations and conditions are not contradictory.