

APPENDIX B

Guidelines for conducting field work in Geosciences

Note: this document assumes that safety protocols for fieldwork that are developed in all departments meet normal safety standards. What follows are guidelines peculiar to the current Covid-19 problem. A significant challenge of all fieldwork will be to minimize contact with potential corona virus infections. Above all, use common sense and urge all fieldworkers and students to be even more vigilant than usual about all aspects of safety.

Before you go:

- Self-quarantine to the extent possible for two weeks prior and post to any travel in case you experience any symptoms of discomfort-malaise.
- Anyone with symptoms of illness (fever, cough, sneezing, aches and pains, etc.) will not be allowed to participate in fieldwork.
- Self-educate about the Covid-19 situation on your route and at your destination.
- If traveling internationally check with State Department for alerts and warnings re. Covid-19; be sure to check for PPE requirements at all airports that will be visited en route, both ways.
- Learn about locations of clinics/hospitals in the area/region you will be working in.
- Have in place a system of communication (cell phones, sat phones) among all participants and local collaborators.
- All participants should assemble an emergency kit to include in carry-on baggage if traveling by air or train (hand sanitizer, extra PPE, water bottle, power bars and snacks, extra clothing).
- Anyone with allergies or other issues with medications should carry a written description in a safe but accessible place; this will be useful in hospitalization situations.

1. Research

Ground Travel:

- Keep field teams to a minimum number of people.
- Make sure that all vehicles used have been properly cleaned before any participants enter them.
- Wear masks always and be equipped with enough PPE to deal with any needs.
- More than usual, pay attention to clothing with emphasis on reducing exposure.
- In vehicles maintain maximum of two persons per row in vans and trucks.
- Keep the vehicle well aerated whenever passengers are on board.
- When switching drivers, be sure to sanitize steering wheel, gear shift, and other relevant surfaces.
- Minimize movement in the vehicle and require passengers to not switch places.
- Minimize contact with gas station staff, equipment, and facilities; sanitize hands immediately afterward.
- Be prepared to spread out in taxis and other public transportation.
- Sanitize hands frequently.

Air Travel, Domestic and International:

- Avoid air travel in general, but if necessary, follow all airport and airline protocols, including PPE, social distancing, and avoiding physical contact with surfaces and equipment. Sanitize hands frequently.
- Avoid crowds as much as possible. The latter will be difficult in customs and immigration lines. Be prepared to instruct strangers to step back if needed.

- Be sure to have health insurance card(s) and other insurance proofs in carry-on baggage, along with any relevant allergy/medical information.

Lodging/eating:

- Reduce as much as possible lodging in hotels and other facilities; in most international travel situations this is impossible, so be prepared to sanitize your local environment en route to and from destination.
- Carry a lightweight sleeping slip and pillowcase for use in situations where hotel beds cannot be avoided. Use a sleeping bag if necessary.
- Avoid restaurants, bars and other potentially crowded situations; bring as much food with you as reasonably possible in order to avoid restaurants and shops en route.

Camping and Fieldwork:

- In general, camping is probably safer than using hotels and other public lodgings; practice all the usual safeguards in camping situations.
- Do not share tents or other personal equipment.
- Place tents as far apart as possible; avoid tent cities and crowded campgrounds.
- Sanitize all cooking equipment between users if sharing; avoid cross-contamination.
- In the field, maintain safe physical distance while still keeping visual contact according to standard buddy system protocols.
- Try to avoid using exactly the same routes when walking or climbing. Spread out.
- Do not share field equipment unless absolutely necessary.
- Use gloves and sanitize whenever sharing gear/equipment.
- Try to maintain consistent 'roles' in doing fieldwork in order to reduce gear/equipment switching.
- Practice more than usual all of the normal 'developing world' routines in maintaining personal and group hygiene.

*If a student feels uncomfortable attending fieldwork because of COVID, alternative activities (e.g. independent projects) will be provided to the student.

2. Teaching

- Practice *all* of the safeguards listed under Research above, both before and during the trip.
- Emphasize PPE, spacing, emergency kits, and foreknowledge about clinics/hospitals.
- Teaching presents additional challenges owing to larger numbers of students usually involved in fieldtrips. Strategize to reduce student numbers on a per-trip basis. Many ways exist to spread people out, in space or time. This may require duplication of effort. Use a bullhorn if necessary.
- Meet with students and TA's/Preceptors before the trip to discuss safety protocols; emphasize a zero-tolerance policy and be prepared to deal with students who are not behaving safely. Try to anticipate problems.
- Prepare a short efficient list of do's and don'ts to be distributed to all students.
- Be prepared before the camping component of the trip in terms of group size and tent spacing. Do not overcrowd the camping space.
- In camping situations, pay close attention to tent spacing and equipment sharing.
- Be sure to have adequate TA's/Preceptors to assist in enforcing best practices among the students.

