RII Research Re-entry Checklist

Research, Innovation and Impact (RII) has developed a webpage for COVID-19 related guidance and resources for faculty, staff, visiting scholars, student workers and other personnel working in University facilities. The current situation is rapidly evolving and RII and Research Lab & Safety Services (RLSS) will update the guidance as new information becomes available. Please check the webpages regularly for updates. The purpose of this checklist, which should be reviewed prior to completing this survey, is to: 1) Ensure all researchers evaluate and plan for the health and safety of researchers, participants, and potentially impacted communities prior to resuming research or commencing new research; 2) Assist researchers to review their critical operations, plans, approvals, and equipment before resuming or commencing new operations following the UArizona temporary closure.

Principal investigators are ultimately responsible for:
1. Ensuring all research operations are accounted for, and that any hazardous **materials/equipment** are appropriately introduced/reintroduced safely into operations.
2. Planning and modifying any **research methods and procedures** to enhance human safety and reduce risk.
3. **Identifying and training personnel** able to safely perform any required opening procedures, modified research procedures, any critical operations, and effective closing procedures (should they be necessary).
4. Meeting specific requirements for **physical distancing** and other protective measures in place during the COVID-19 pandemic and ensuring that all research is conducted efficiently to **minimize in-person contact** between researchers, researchers and human subjects, the general public, and/or support personnel.
5. **Empowering** any research-related faculty, staff, or students to issue **"stop work" orders** should an unsafe condition emerge.
6. Providing all research personnel with appropriate **contact information** for all key research contacts and safety-related services.

In order to meet these responsibilities, Principal Investigators or their designee must complete this checklist. All research personnel should be properly trained in research and procedures and safe equipment use. Researchers should remain flexible to changing circumstances and remain postured and prepared to safely/securely ramp down operations in the future, as necessary. Please consult with your department head/director and contact Research Laboratory & Safety Services (RLSS) for assistance with developing your plan and for any questions/concerns.

Instructions: The following checklist questions will help determine if your research is adequately prepared to meet COVID-19 related health, safety, and compliance needs.
"Y" certifies that you are confirming a research requirement and/or have performed a specific action;
"N" certifies that you are denying a research requirement and/or have not performed a specific action;
"N/A" certifies the particular item is not present in your research.
Once all boxes are checked, submit the survey. You may enter and exit this survey as needed, and your answers will remain saved. Do not begin research before receiving confirmation that your completed checklist has been received, approved, and confirmed by you College Associate Dean for Research. You will receive email confirmation once it has been approved or returned for further review.

Basic Information

Principal Investigator (PI) or Project Leader: _____

PI/Project Leader Phone Number: _____

PI/Project Leader Email: _____

Is the PI a student? **Yes/No**, If Yes:

Who is your Research Advisor? _____

Research Advisor Phone Number: _____

Research Advisor Email: _____

Has your Research Advisor approved your research plans and safety protocols? **Yes/No**

Select Primary College/Unit:

- ○ College of Agriculture and Life Sciences
- ○ College of Applied Science and Technology
- ○ College of Architecture, Planning and Landscape Architecture
- ○ College of Arts, Letters, and Science
- ○ College of Engineering
- ○ College of Education
- ○ College of Fine Arts
- ○ College of Humanities
- ○ College of Medicine - Phoenix
- ○ College of Medicine - Tucson
- ○ College of Nursing
- ○ College of Optical Sciences
- ○ College of Science
- ○ College of Social and Behavioral Sciences
- ○ College of Pharmacy
- ○ College of Veterinary Medicine
- ○ Eller College of Management
- ○ Graduate College
- ○ James E. Rogers College of Law
- ○ Mel & Enid Zuckerman College of Public Health
- ○ Research, Impact and Innovation (RII)
- ○ University of Arizona Health Sciences
- ○ UAHS - BioBank
- ○ UAHS - AzDRC

- ○ UAHS - Cancer Center
- ○ UAHS - CATS
- ○ UAHS - CIBS
- ○ UAHS - D&I
- ○ UAHS- I2B2
- ○ University of Arizona Libraries
- ○ Other

Primary Center, Department, School, or equivalent: _____

Department Head and/or Director Email: _____

Abstract/Brief Description of Research Activities (recommend 500 character max; provide project titles, if desired):

My research is laboratory-based/involves a laboratory-based component.
(Laboratory-based research includes the use of centers, core facilities, etc.. Research may be both laboratory-based and field-based.)

- ○ Yes
- ○ No

My research is field-based/involves a field-based component.
(Field-based research is defined as all research taking place off campus, in settings that involve human co-location or interaction, or that require travel (including locally) to reach. This could include but is not limited to environmental and agricultural research at field stations, social science research in community settings, humanities research in off-campus archives. Research may be both laboratory-based and field-based.)

- ○ Yes
- ○ No

Research Location(s): _____

Research Screening Questions

Does the research you are seeking to resume or commence entail (select all that apply):

	Yes	No	N/A
Use of an on-campus or off-campus research facility (e.g. lab, office, library, archive).	○	○	○
In-person, face-to-face interaction (including among members of a research team, study participants, or non-participants in community settings).	○	○	○
For in-person, face-to-face interaction: Are all involved consistently able to (or anticipated to be able to) follow and maintain physical distancing, according to CDC guidelines throughout any in-person interactions?	○	○	○
Use and care of Animal Subjects regulated by the Institutional Animal Care and Use Committee Program (IACUC).	○	○	○
Travel (including local) to and/or residential stay at a research site other than a UArizona campus facility.	○	○	○
For travel: Will travel to the research site require modes of transit that make physical distancing challenging (e.g. sharing a vehicle with others, travel by bus or commercial airplane, etc.)?	○	○	○
For travel: Will travel require any researchers or participants to stay overnight away from the primary residence (at a hotel, another private residence, a field station, or other facility)?	○	○	○
For travel: Will researchers be traveling out of the state of Arizona and/or outside of the United States? If yes, please list location(s).	○	○	○
For travel: Will researchers be traveling to any Native/Tribal nations? If "yes," please list location(s).	○	○	○

Does your research include Human Subjects?

- ○ Yes
- ○ No

Does your project fall within the IRB requirements “None/Low/Medium/High” outlined in the IRB’s “Resuming human studies table" AND can the PI ensure the proper conditions/mitigation efforts can be achieved and maintained?

- ○ Yes
- ○ No

Does your project fall within the IRB requirements “Highest” category, as outlined in the IRB’s “Resuming human studies table”?

- ○ Yes
- ○ No

Pre-Research Preparations

These checklist questions will help ensure your research is prepared to commence in a safe and compliant manner.

I and/or my researchers have established physical distancing protocols for all spaces (offices, labs, break areas, vehicles, off-campus field locations, etc.).

	Yes	No	N/A
Created staggered schedules for researchers and participants to be present and maximize physical distancing: AM/PM shifts, staggered benches, on/off days or weeks, or other strategies as needed.	○	○	○
Taken into account any special considerations for physical distancing including but not limited to: community-based, on site field research; travel to and from research locations in vehicles; remote locations; acquisition of research supplies; and more.	○	○	○
Worked with all research staff to utilize the hierarchy of controls to ensure physical distancing is maintained or mitigated by additional control measures.	○	○	○
Created a plan for ensuring adequate supervision of workers and controls for those who may be working alone (such as Zoom calls during high risk operations, text or app check ins, and more).	○	○	○
Created and posted a schedule on shared rooms and any multiuser spaces to ensure physical distancing is maintained.	○	○	○
Created procedures/training that set expectations and reinforce physical distancing plans and controls.	○	○	○

I and/or my researchers have established guidelines for the use of shields or face coverings (Contact RLSS for assistance in determining guidelines and materials appropriate for your research).

	Yes	No	N/A
Created guidelines for use in research with the help of RLSS; when and where to use, how to maintain and clean, etc.	○	○	○
Created guidelines for cases where other researchers and/or participants decline or refuse to utilize face coverings in areas where physical distancing is not possible.	○	○	○
Ensured research team members are trained on proper hygiene measures, donning & doffing, storage, and cleaning.	○	○	○

I and/or my researchers have established cleaning and disinfection routines for all unique research spaces and environments.

	Yes	No	N/A
Created, posted and trained researchers on a daily cleaning checklist for workspace disinfection (e.g. cleaning agents, towels, etc.).	○	○	○
Worked with the building manager to ensure hand sanitizer, cleaning spray and/or wipes are placed near equipment, common areas, inside/outside doorways, and any locations of high traffic.	○	○	○
Created or acquired labels from Facilities Management and RLSS for common areas and equipment reminding users to disinfect before and after use.	○	○	○

I and/or my researchers have held or will be holding a research team meeting (remotely, or while maintaining proper physical distancing) to discuss safely commencing work.

	Yes	No	N/A
Reviewed and trained all researchers on the established physical distancing, engineering controls, hygiene measures and practices, and personal protective equipment required for research activities.	○	○	○
Informed laboratory and field researchers that they should not make up for lost time using by scaling up reactions without an assessment and PI signoff.	○	○	○
Informed laboratory and field researchers that they should not make up for lost time using by working alone on nights and/or weekends, without proper check-in protocols in place (e.g. Zoom call during operations, text or call check-ins).	○	○	○
Informed laboratory and field researchers that they should not make up for lost time using by significantly increasing hours and/or rushing protocols without the proper preparation and/or materials.	○	○	○
Informed laboratory and field researchers that they should not make up for lost time using by forgoing approval processes and/or traveling to research site(s) without appropriate permission(s) and documentation.	○	○	○
Reviewed equipment, protocols, and all relevant safety plans (e.g. Human Subjects, Biosafety SOPs, Lab Chemical Hygiene Plan, etc.) and retrained workers as necessary.	○	○	○

I and/or my researchers have confirmed with building managers, lab managers, and/or Facilities Management that laboratories, office spaces, and any other locations where research is being conducted

(and is under the control of the researchers and/or UArizona) have recently been cleaned/disinfected and remained closed afterwards.

- ○ Yes
- ○ No
- ○ N/A

I and/or my researchers have verified that written plans (including steps for restarting critical equipment or processes) are up to date, readily available, and workers are trained appropriately.

- ○ Yes
- ○ No
- ○ N/A

I and/or my researchers have reviewed any and all required protocols and updated them as needed (e.g. Institutional Biosafety Committee approval, etc.).

- ○ Yes
- ○ No
- ○ N/A

I and/or my researchers have reviewed research supplies and facilities, including access, to plan research start/restart appropriately.

	Yes	No	N/A
Noted supply chain disruptions/limited supplies and prepared for limited availability and slow request fulfillments for reagents, consumables, etc.	○	○	○
Planned for limited, and potential shortages of required personal protective equipment (PPE) including gloves, face coverings, respirators, etc., some of which can be supplied by Facilities Management (your building manager must be contacted to coordinate this request).	○	○	○
Confirmed adequate waste-collection supplies are available for near-term research needs (includes bleach and ethanol supplies for inactivating biological waste prior to disposal; red bags for biological specimens; contaminated gloves and respirator disposal, etc.).	○	○	○
Assessed which support services and deliveries—including compressed gases, reagents, dry ice, etc.—are necessary and determined whether or not those services are operational and available for the foreseeable future.	○	○	○
Determined how other facilities such as cores, sample/specimen providers, and collaborators will be managing their services and maintaining physical distancing requirements to prepare for delays.	○	○	○

I and/or my researchers have reviewed steps to monitor safe fieldwork.

	Yes	No	N/A
Assessed any local conditions (whether in the state of Arizona or outside of it) related to infection, hospitalization, and community spread, and adapted protocols accordingly.	○	○	○
Collaborated with appropriate partners or contacts to align research protocols with partner needs, potential hazards, risks, and/or required restrictions prior to entering the facility or research setting.	○	○	○
Confirmed location and contact information of emergency services for all off-campus sites.	○	○	○
Conducted, when feasible and safe to do so, onsite assessment of hazard and risks associated with meeting locations, including their preparedness for COVID-19.	○	○	○
Acknowledged and complied with up-to-date guidance from any and all relevant and site-specific state, local, and/or tribal authorities regarding access, travel restrictions, use of public spaces, and/or the use of PPE/face coverings.	○	○	○

Commencing Laboratory Research

These checklist questions will help ensure your laboratory-based research begins or commences in a safe and compliant manner.

I and/or my senior lab member have walked through the lab or other research location(s) only with critical personnel and identified any potential damage that may have occurred during the temporary closure.

	Yes	No	N/A
Water: checked for leaking plumbing, DI sources, MilliQ water sources, etc.	○	○	○
Spills: inspected all hazardous material storage areas for leaks, spills, etc. and mediated as needed.	○	○	○
Electric: inspected cables, plugs, and other electrical equipment prior to use.	○	○	○
Mold or odors: Checked for evidence of mold growth (particularly within walk-in cold rooms) or indoor air quality issues and notified the building manager and Risk Management Services.	○	○	○

I and/or my researchers have carefully returned equipment, supplies, electrical wires, and chemicals from storage locations to regular use locations and contacted Facilities Management for the movement of large items.

- ○ Yes
- ○ No
- ○ N/A

I and/or my researchers have prepared for delays and shortages of both common PPE and lab supplies (consumables, reagents, etc.).

- ○ Yes
- ○ No
- ○ N/A

I and/or my researchers have checked all instrument filters, inlets, etc. for potential dust clogging.

- ○ Yes
- ○ No
- ○ N/A

I and/or my researchers have confirmed critical equipment such as freezers, temperature sensitive areas, etc. are intact and fully functional and disposed of any materials that may have been compromised by improper or malfunctioning storage.

- ○ Yes
- ○ No
- ○ N/A

I and/or my researchers have reconnected compressed gas cylinders (only those that will be in frequent use).

- ○ Yes
- ○ No
- ○ N/A

I and/or my researchers have ensured cryogenic liquids have been refreshed by Cryogenics and confirmed they are properly vented.

- ○ Yes
- ○ No
- ○ N/A

I and/or my researchers have checked all emergency supplies:

	Yes	No	N/A
Contacted Facilities Management (520-621-3000) to flush safety showers and eyewash stations.	○	○	○
Checked pressure on fire extinguishers and contacted Risk Management Services (520-621-1790) for recharges or replacements, as needed.	○	○	○
Confirmed that emergency equipment (eyewash, safety shower, fire extinguishers) are not blocked by any equipment.	○	○	○
Checked first aid and spill kit contents and restocked supplies as needed.	○	○	○

I and/or my researchers have checked the functionality of all equipment and facilities prior to use:

	Yes	No	N/A
Equipment and/or instruments using water (circulating water baths, aspirators, distillations, etc.).	○	○	○
Chemical fume hoods, glove boxes, biological safety cabinets, and/or other ventilated equipment.	○	○	○
Gas regulators and equipment.	○	○	○
Any other equipment that was shut down temporarily.	○	○	○

I and/or my researchers have managed any expired, outdated, peroxide-forming, self-reactive, or limited-lifespan reagents appropriately; Risk Management Services (520-621-1790) was contacted for hazardous waste disposal as needed.

- ○ Yes
- ○ No
- ○ N/A

I and/or my researchers have surveyed all radioactive material (including waste) storage locations.

- ○ Yes
- ○ No
- ○ N/A

I and/or my researchers have performed a response check on all radioactive material survey meters (batteries and check source).

- ○ Yes
- ○ No
- ○ N/A

I and/or my researchers have performed laser alignment verification(s).

- ○ Yes
- ○ No
- ○ N/A

I and/or my researchers have verified inventories of all hazardous materials, particularly security sensitive and/or highly hazardous

- ○ Yes
- ○ No
- ○ N/A

I and/or my researchers have prepared any hazardous biological, chemical and/or radiological waste for disposal and arrange for a waste pick-up.

- ○ Yes
- ○ No
- ○ N/A

I and/or my researchers have confirmed any and all other laboratory specific items have been checked for potential health and safety issues, and worked to mitigate them if any were found.

- ○ Yes
- ○ No
- ○ N/A

I and/or my researchers have ensured "Temporary Laboratory Closure Posting" form(s) have been removed from the lab door(s).

- ○ Yes
- ○ No
- ○ N/A

Do you and/or your researchers have any questions/concerns about safely resuming your research operations?

_____