Please find the updated Plan for Restarting Research Lab, Field, and Studio Activities here

Plan for Restarting Research Lab, Field, and Studio Activities

May 18, 2020

This document describes a structured plan for restarting research activities at all Stony Brook University facilities. In response to the Directive from the VPR on March 20th, all lab-based research activities were curtailed as of March 22nd, with only critical maintenance being permitted by essential personnel designated specifically for that purpose. Research directly involving COVID-19 was also allowed with the provision that appropriate safeguards were observed. The purpose of the current plan is to establish a framework for an orderly and phased resumption of research that is consistent with guidance from relevant authorities and aligned with Stony Brook's broader plan for returning to campus facilities and operations. This plan is guided by six principles intended to safeguard the research workforce while enabling research to resume as quickly and efficiently as conditions and guidance allow. While this phased return to operations focuses on research activities, the phased approach to opening research labs is applicable to all scholarly and creative activities that need facilities on or off campus to proceed.

Principal investigators (PIs) or faculty supervisors are responsible for adapting the provisions of this plan for their own research lab and/or activities. This requires implementation of safe work practices, including appropriate engineering measures, administrative measures, and use of face coverings/PPE to comply with key elements of the plan. Principal investigators must submit their operational plan for approval by their respective Chair or Director, who will coordinate with their Dean and Facilities representative to enable compliant implementation. Additional oversight will be provided by the COVID Key Area Research Recovery Committee and the Senior Executive Group, as needed.

Outline of the Plan

4. Principal Investigator Laboratory Operations Plan
5. Checklist for Returning a Lab from Standby to Operations

1. Principles Informing the Plan

Principle 1: Follow the cognizant directives and guidance from NY State, SUNY, and SBU leadership, and ensure the plan to restart research is aligned with Stony Brook's broader plans for returning to work.

Principle 2: Protect the emotional and physical health and safety of the research workforce, with particular consideration for vulnerable and immunocompromised members of our community. No researcher should feel they are being pressured to work on campus or in the field during periods when NY Pause is in effect. Safety within laboratories and related spaces must be rigorously maintained, with adequate access to face coverings/PPE and other safety-related supplies. The health and safety of our clinical patients and human research subjects must also be protected.

Principle 3: Protect early career researchers. Junior faculty are at a critical time in their careers when research productivity is especially important. Postdoctoral researchers are particularly vulnerable with the implementation of hiring freezes at many academic, government, and industry organizations. As such, early career researchers who wish to return to their labs should do so as soon as they safely can.

Principle 4: Graduate students are students in addition to being researchers. Critical skills are gained in the classroom as well as in the lab. New graduate students arriving in the Fall of 2020 must be afforded a proper balance of classwork and practical laboratory experience following appropriate safety protocols. Senior graduate students with limited funding or who require additional laboratory or field research to complete their dissertation work should be given preference as labs open.

Principle 5: Undergraduates are students first, researchers second. Engagement of undergraduates in research should only occur subsequent to the incorporation of postdoctoral researchers and graduate students back into lab spaces.

Principle 6: A transparent process for a phased return to research activities, accounting for equity and fairness, should be implemented as rapidly as public health conditions and guidance/approval from relevant authorities allow. Principal investigators are best able to adapt the plan to their lab operations and/or research activities. Oversight must be provided by Department Chairs, unit directors, and higher leadership to assure compliance.

2. Framework of Controls and Practices for Safeguarding the Research Workforce

Guidance from the CDC states that the virus is thought to spread mainly from person-to-person:

- Between people who are in close contact with one another (within about 6 feet).
- Through respiratory droplets produced when an infected person coughs, sneezes or talks.
- These droplets can land in the mouths or noses of people who are nearby or possibly be inhaled into the lungs.
- COVID-19 may be spread by people who are not showing symptoms.

The plan requires safe work practices to be introduced to minimize the risk of transmission of the coronavirus in the research workplace in accordance with guidance from the CDC, State health authorities, and Stony Brook leadership. These safe work practices are categorized as engineering controls, administrative controls, and face coverings/personal protective equipment (PPE). The lists below identify possible measures that may be adopted as safeguards for resumption of research activities.

Whereas most of these apply to the lab setting, equivalent controls may be appropriate for core facilities, studios, rehearsal rooms, computer labs, field-based research, shipboard, or other research areas.

2.1 Engineering Controls

- Separation of personal workspaces to achieve minimum 6' distance, or other barriers between personnel when otherwise needed. Examples include:
    - Staggered use of "bench-top" space.
    - Use of tape on benchtops and/or floors to delineate space and maintain separation of personnel.
    - Construction of "sneeze barriers" (e.g., plexiglass; may require request through Building Manager).
    - Separation of or limited access to common equipment and instrumentation to avoid close contact and cross-contamination (hygiene, see below).
    - Separate storage of individuals' face coverings/PPE.
- Post appropriate signage at lab entrance and at essential locations within labs to remind personnel of safeguard procedures.
- Ensure adequate air flow in labs and fume hoods
- Ensure hand washing stations with soap and signage are available within labs. Hand sanitizer should be made available as an alternative, especially for field work.

2.2 Administrative Controls

- All normal safe lab and field practices appropriate for the intended research should be observed.
- Regular health screening as required by SBU. Current SBU guidance requires:
    - All non-health care employees will be required to conduct a brief health care screening before coming to campus. This daily screening will involve temperature check and a review for COVID related symptoms. These currently include shortness of breath, cough, body aches/muscle pain, sore throat, new loss of taste and/or sense of smell, fatigue, and headache. For an employee who returns or remains on campus after 12 hours this screening must be repeated.
    - If the temperature recorded is less than 100 F without use of fever reducing medication, and no other symptoms are observed, the employee may attest to their supervisor/PI that they screened negative, and may come to campus. An employee who screens positive for a temperature over 100 F or one or more symptoms must notify their supervisor and not come to campus. If during the day an employee begins to feel unwell, they should notify their supervisor/PI and leave the campus immediately.
    - Employees who identify themselves as symptomatic are provided information about diagnostic testing, including the testing available to employees at P lot. They should contact the health information line (HIL) at 631-632-5000 and will also be advised to seek guidance from their health care provider. The employee may not return to campus without a clearance from their healthcare provider or the HIL, which must be shared with HR Time and Attendance at hrs_timeatt@stonybrook.edu. HRS Time and Attendance will notify the Supervisor/PI and the employee that the employee has been cleared to return to work.
- Diagnostic testing for COVID-19 virus and/or antibodies if required by SBU. As of 5/18/2020, SBU guidance does not require testing. However, PIs should check for updated guidance.
- Control lab access to limit personnel density. A 6' minimum separation is the goal, however other mitigation strategies may need to be employed on a case-by-case basis.

    - Implement staggered work hours and/or shifts as needed.
    - See separation of personal workspace in Engineering Controls
- Continue use of teleconferencing for meetings.
- Comply with SBU's guidance regarding non-essential travel.
- Implement regular cleaning of common areas and contact surfaces (including control surfaces of instrumentation).

2.3 Face Coverings/Personal Protective Equipment (PPE)

- Comply with SBU guidance regarding use of face coverings or masks. Currently, SBU requires the use of a face covering or mask in situations where social distancing (minimum 6' separation) cannot be achieved. Care must be taken to wear face protection when transiting public spaces (e.g., hallways, elevators, bathrooms) to avoid unexpected infringement of social distancing.
- If the standard operating procedure for a research activity requires use of more protective PPE or face coverings, the standard practice takes precedence.

3. Schedule for Phased Return to Research

Research activities will resume following a multi-phase approach. The goal of this approach is to ensure a gradual and safe return to operations. The plan comprises five phases, with Phase 1 being the current state of research stand-by, and Phase 5 being the return to normal research operations. The phases reflect increasing levels of activity achieved by gradually relaxing limitations on the number of research units open and projects per unit allowed. Estimated percentages of the total research workforce are suggested for different phases. The criteria for prioritizing research efforts depend on: operational readiness, access to shared facilities (i.e., core facilities), impact of delay, time-sensitivity of research, funding commitments, and fairness. Activities that can be done remotely (e.g., data analysis, computation and theory, writing, seminars, group meetings, mentoring) should not be conducted on site until Phase 5, unless consistent with SBU's broader plan for returning to work.

Progression through the phases will be dictated by guidance from the Key Area Research Recovery Committee, as informed by the Senior Executive Group, NY State, SUNY, and local policies based on external conditions, and by a lab's readiness to operate safely with increasing workforce. For this, PIs and core facilities' directors/coordinators will need to demonstrate lab operational readiness through the submission of a "Laboratory Operations Plan" (see template below). Factors that contribute to readiness include compliance with all necessary controls for social distancing, availability and use of face coverings/PPE, access to all related instruments, facilities, or cores needed to conduct research, available supply chain for all necessary materials, reagents, cleaning procedures, necessary custodial and related services, etc. PIs must coordinate with their respective Chair and Building Manager to ensure readiness of common areas (e.g., building entrances, hallways, bathrooms, elevators, offices) with appropriate safeguards, including regular cleaning/disinfecting of common touch surfaces. If research activities require access to another lab or facility (e.g., a core facility), it is necessary to ensure that such access is available at times that permit research activities. PIs that share a lab space must coordinate among themselves to ensure equitable implementation. Plans for a return to earlier phases should remain in place if warranted by a deterioration of external conditions.

The Laboratory Operations Plan must be submitted to the Department Chair, Unit Director, or corresponding reporting authority for review and approval, with the Dean (or the Dean's Coordination

Team) and the Key Area Research Recovery Committee providing oversight and acting to resolve questions. Once approval is in place, Department Chairs or unit Directors will then identify the timing for the progression of core facilities and individual research projects/labs to the next Phase. For progression to a higher Phase, the PI updates their existing Laboratory Operations Plan, and resubmits for approval as described.

PHASE I - Standby			
Safeguards: health screening, social distancing, use of masks or face coverings, cleaning measures as described by SBU's policy for returning to work			
Phase description	**Anticipated Activities**	**Preparation for next phase**	**External Condition and Expected Period**
Standby • Operations limited to critical maintenance only • Exemption: COVID-19 related research • Essential employees only Estimated 0-10% operations.	*Research facilities, studios and field stations are closed, except where personnel are required to protect life safety and critical infrastructure & capability (maintaining cell lines, animal health, instrumentation, computer systems, etc.).* • Minimum staffing present when absolutely necessary. • Limited occasional access elsewhere for maintenance. • COVID-19 related research allowed with appropriate safeguards.	Keep record of expenses related to damaged equipment and supplies. Compile a list of supplies necessary for restarting on-site activities. Initiate plan for health screening. PI creates a Laboratory Operations Plan and submits to Chair or Director for restarting operations through phases 2-5. To transition into phase 2, prioritize existing projects and develop a schedule for staggered work. Begin purchasing necessary supplies making arrangements for deliveries in phase 2.	Rising or plateaued number of new infections per day. "NY State on Pause" order remains in effect for LI region at least until May 31st.

PHASE II - Ramp Up - Minimal Operation			
Safeguards: health screening, social distancing, use of masks or face coverings, cleaning measures as described by SBU's policy for returning to work			
Phase description	**Anticipated Activities**	**Preparation for next phase**	**External Condition and Expected Period**
Ramp Up - Minimal Operation • Funded research resumes limited operations in approved high-priority areas • Essential employees only, increased number of approved individuals Estimated 10-30% of total research workforce on campus	*Minimal operation of critical and time sensitive research, which otherwise could lead to substantial loss or catastrophic delay of research results and/or funding.* • All research and activities that can be done remotely should continue remotely • Labs with funding commitments begin re-staffing to operate at low capacity maintaining low density (e.g., staggered shifts) • Core campus functions can begin to re-staff and operate for increased load • Core facilities resume minimal operations • Labs are able to purchase necessary supplies and make arrangements for deliveries • Field Research: prioritize seasonal data collection or experiments close to completion.	Update Laboratory Operations Plan for transitioning into phase 3 including a schedule for staggered work assuming increased research staffing levels. Maintain plans for sudden return to phase 1 if required	More than one-half of the seven Regional COVID-19 Metrics achieved for LI. "NY State on Pause" is relaxed other regions of NY, and some businesses reopen. Work at home stays in place for most residents.

PHASE III - Moderate Operation			
Safeguards: health screening, social distancing, use of masks or face coverings, cleaning measures as described by SBU's policy for returning to work			
Phase description	**Anticipated Activities**	**Preparation for next phase**	**External Condition and Expected Period**
Moderate Operation • Onsite operations resume at reduced effort based on time-sensitive activities. • Essential employees mainly, but significantly increased number of approved individuals • Strict social distancing, staggered shifts, cleaning protocols etc. Estimated 30-60 % of total research workforce on campus	*Moderate operations of research labs, studios, and field stations, with prioritization on critical and time-sensitive work (research that is deadline driven, e.g., grant submission, manuscript revisions, graduate student dissertations, researchers approaching termination of their appointments, junior faculty starting their laboratories, etc.).* • Health screening, social distancing, face mask, cleaning measures remain in place • Research that can be done remotely continues remotely • Core campus functions and core facilities continue to increase capacity • Studios ramp up activities • Field research: expand approvals depending on what current restrictions are in the locations where field research is to be conducted. • Some monitored access to offices for limited time (e.g., 3 times weeks) with strict social distancing.	Update Laboratory Operations Plan for transitioning into phase 3, with a schedule for further increasing research workforce. Maintain plans for sudden return to phase 1 or 2 if required	All seven Regional COVID-19 Metrics achieved. "NY State on Pause" relaxed for LI. More businesses reopen with strict social distancing. Work from home recommended for most residents.

PHASE IV - Sustained Operation			
Safeguards: health screening, social distancing, use of masks or face coverings, cleaning measures as described by SBU's policy for returning to work			
Phase description	**Anticipated Activities**	**Preparation for next phase**	**External Condition and Expected Period**
Sustained Operation • Operation with social distancing or masks/gloves/PPE where social distancing is not guaranteed at all times. Estimated 60-80% of total research workforce on campus	*All research operations resume providing that social distancing, personal protection and cleaning can be ensured.* • Staggered work scheduling should be maintained	Maintain plans for return to phases 1-3 if required.	All seven Regional COVID-19 Metrics achieved. Significant testing and tracing capabilities become widely available. NY State reopens most businesses with social distancing requirements. Work from home recommended where possible.

PHASE V - Normal Operation			
Phase description	**Anticipated Activities**	**Preparation for next phase**	**External Condition and Expected Period**
Return to normal operations • Operation at full capacity without the need of social distancing. 100% of research workforce on campus			NY State lifts all restrictions

3.1 Special Research Activities

Human Subject Research: PIs should consult updated guidance for changes to research involving human subjects. Research activities must follow IRB policies for changes in operation of research facilities. The IRB should be notified of any changes to procedures that were not part of the initial approved protocol. Screening of subjects for clinical research should incorporate the following new inquiries: i) Ask if subjects have been tested for coronavirus and/or antibodies, and the results of these tests, ii) Ask for any current symptoms of fever, cough, fatigue, shortness of breath, sore throat, headache or body aches, and iii) Ask for any contact with known COVID-19 cases or with individuals with the symptoms above. Exclude subjects from participation/screening/visit to research facilities, if answer is yes to ii and iii. For i, include only if evidence supports immune status (subject to further guidelines from either the CDC or local health authorities).

For non-clinical research, subjects must be interviewed by phone or sent an on-line questionnaire/survey in order to avoid direct interactions. Consent can be mailed to the individual or can be part of the on-line questionnaire/survey. If subjects need to be screened, phone or email (written) screening can be performed without having actual interaction with the individual. In studies where there is direct interaction with the individual, videotaping or observation through a two-way window is preferable. Direct interaction where no indirect alternatives with subjects are available, must follow the precautions listed above.

Animal Research: PIs should consult updated guidance for changes to research involving animals (provide link). PIs should outline procedures for coordinating and complying with DLAR procedures for return to research. Briefly, i) the use of DLAR procedural space will be limited to ensure proper social distancing, ii) for procedures requiring two people that do not allow social distancing to be observed, proper PPE will be worn at all times, iii) orientation will be provided on-line instead of in-person and group training sessions will be replaced with one-on-one sessions with proper PPE worn, and iv) use of all equipment and special procedure areas will be prioritized according to the campus phasing plan.

Field and Off-Campus Research: PIs conducting field or off-site research should follow the same process outlined for lab spaces, accounting for the particular aspects of the off-site activities. Additional guidelines for hazardous activities (e.g., SCUBA diving) will also apply as appropriate to ensure personal safety. During all aspects of operations, social distancing must be maintained unless appropriate PPE are employed. It must be recognized that the 6' distance is generally specified for indoor, land-based conditions. In a windy and moisture-laden environment such as on a boat, downwind positions require greater distancing. Social distancing applies to all activities, including transportation to and from the site, as well as sample work-up and storage. Food and liquids must be separately maintained and handled for and by each member of the field team. Operational planning, briefing, and communications should be conducted prior to departing for the field site. A responsible party not associated with the research trip must be made aware of the full details of the plan, including departure and return ETAs. For individuals conducting approved fieldwork alone, a responsible party must be made aware of the full details, including times of departure, return and receive periodic check-in calls at agreed upon times. All shared vehicles, vessels and equipment, must be properly disinfected according to CDC procedures before and after use by the person using it. Field work involving travel outside of New York State must comply with all local safety recommendations pertaining to mode of travel, registration with local authorities, and quarantines as appropriate, and ensure adequate supplies of all necessary safety equipment, including PPE prior to departure. Out-of-state travel must be pre-approved by the Department Chair, Dean, and/or relevant supervisor. Research to be conducted at remote facilities must operate in accordance with the safety

protocols in place for that institution in addition to protocols stipulated in this plan, whichever is more protective.

4. Principal Investigator Laboratory Operation Plan (Click here to download Word template)

Guidance to PIs: Use this template to create a plan for your research activities that accounts for the requirements set out in the *Plan for Restarting Research Lab, Field, and Studio Activities* document. This template is also required for core facilities, studios, rehearsal rooms, computer labs, field (off-site), shipboard, or other research activities. PIs in shared/open lab spaces will need to coordinate with each other and describe the coordination in the template. Once completed, submit this plan to your Department Chair, unit Director, or corresponding reporting authority for review and approval.

Name: _____ **Mobile Number:** _____

Title: _____ **Name/No. of Alternate Contact** _____

Department: _____ **College/School:** _____

This plan covers operation for Return Phase: _____ **(e.g., 2, 3, 4)** **[update this plan for next phase]**

Lab or Studio Space (adapt as needed for work off-site)

Building and Room Number	Square Footage	Is your lab within a shared or open lab space? If yes, provide total square footage and names of other PIs.	Max # of simultaneous personnel permitted. If shared space, also include max # permitted in total space.	Other Considerations
Ex. Chemistry 452	*Ex. 400*	*Ex. 2000 sq.ft. Share with Johnson, Rodriguez*	*Ex. 2 (8 in total space)*	*Ex. Max 2 researchers per bench, 1 per hood*

Exposure Controls

Controls	Description
Describe engineering measures and administrative measures for ensuring social distancing and health screening among lab members:	
Describe plan to minimize risk of transmission during routine procedures that require close proximity (if applicable):	
Describe controls (including any prohibitions, buddy-system of communication) to minimize risk to lab personnel working alone and/or on high-risk procedures (reactive or acutely toxic materials, etc.):	
Describe plans for lab readiness and expected or actual critical materials or reagents, including face coverings and needed PPE:	
Describe plan for receipt of deliveries:	
List shared facilities or instrumentation your lab members need to access and describe plan for shared usage:	
Describe plan for disinfecting common surfaces and shared equipment within lab and/or allowing down-time between users:	
Describe any coordination with other offices/labs and core facilities:	

If applicable, describe coordination among lab groups in shared/open lab spaces:	
Describe building access considerations, and coordination with Chair and Building Manager:	

Lab Personnel

Name	Title	Contact Info (email; tel number)	Active during this phase
Ex. Jane Smith	***Graduate Student***		***Y/N***

Lab Schedule (minor adjustments to this schedule do not need pre-approval provided safety measures are upheld)

Personnel	Days on Campus	Start/End Time	Room Number
Ex. Researcher 1	***MW***	***8am-6pm***	***Chem 454***
Communication plan for lab members:			

Communication plan between lab members in open/shared lab spaces:	

PPE and Critical Supplies

Describe availability of PPE necessary for your research and for safeguards to minimize risk of transmission:	
Describe availability of supplies, materials, samples, etc. necessary for conducting your research:	

Human Subjects and Animal Research

If the research involves human subjects or animals, describe how safeguards will be accounted for, and for animals, how you will coordinate with DLAR:	

Travel, Off-campus Research Facilities & Field Work

Describe plans to mitigate risks during travel and while at off-campus research sites (e.g., field work, national laboratories):	
Describe measures to minimize risk after returning to campus from off-campus research sites:	

Compliance

Describe how you will explain to personnel the safeguards and practices for safe operations within each phase of operations:	
Describe how the PI will ensure compliance and resolve any conflicts and concerns among group members:	
Lab personnel who do not feel comfortable returning to work should not be pressured to do so. Lab personnel who have concerns about returning to work may discuss them with their PI, another departmental contact, or with Human Resources or the Graduate School.	

As the Principal Investigator or Faculty Supervisor responsible for research, scholarly, and creative activities in the designated laboratory, studio, or off-site location(s), I affirm that, to the best of my knowledge, the measures and practices I have outlined in this Laboratory Operations Plan are consistent with the principles and safe practice guidance in the Plan for Restarting Research Lab, Field, and Studio Activities. *I also understand that resumption of activities is contingent on maintaining safe practices, including any revisions necessitated by changes in public health conditions, and on approval(s) by the Department Chair and/or the Research Recovery Committee. I further acknowledge that it is my responsibility to ensure compliance, to the best of my ability, with these plans by personnel under my supervision.*

Print Name: _____

Signature: _____ *Date* _____

Attestation by lab personnel: I have reviewed this document with my supervisor, understand the expectations, and agree to abide by all the safety measures described in this plan.

Print Name: _____

Signature: _____ *Date* _____

Print Name: _____

Signature: _____ *Date* _____

Reviewed by:

Print Name/Title: _____

Signature: _____ *Date* _____

5. Checklist for Returning a Lab from Standby to Operations (use link below for downloadable checklist)

Laboratory Contingency Plan – Returning to the Laboratory