Re-populating Faculty and Graduate Students: Framework for Restarting Research v3

This draft was adapted from a planning document created by UC Berkeley in partnership with VCRs/VPRs from the APLU and borrowing liberally from other institutions, including UCLA, UCSD, UCI, Univ Washington, and many other universities. Some links to the plans for other universities are shown at the end of this document. The phases for restarting research and creative activities are coordinated with plans developed at UCSD.

This document includes research conducted in all SDSU and SDSU Research Foundation (SDSURF) spaces at both on-campus and off-campus sites. Off-campus spaces include Mt. Laguna Observatory, Coastal & Marine Institute Laboratory, Field Stations, SDSURF Facilities, and any other SDSU or SDSURF sites. Wherever this document references “university space” it shall be understood to include all sites referenced above.

“Research Leader” is used throughout this document to include all faculty who lead groups involved in academic scholarship activities in disciplines from across campus, whether supported by the university or by external grants. Project personnel refers to students, staff, and post-doctoral scholars engaged in academic scholarship.

Participation in on-site research during Phases 1-3 is voluntary.

All research that can be done remotely should be done remotely during this time.

Goals: Restart research in a phased approach to optimize:

- Health of university personnel and the community
- Continuity of essential research
- Re-initiation of other research as quickly as feasible based upon public health and safety considerations

Public Health Context:

a. Public Health authority directives became more restrictive with time in response to COVID-19, including identification of essential businesses and closures, identification of allowable and non-allowed activities, more restrictive social distancing such as closing of parks and beaches, recommendations/requirements for face coverings, etc. Likewise, the easing of these restrictions will occur sequentially based upon public health data.

b. When the shelter-in-place/stay-at-home order was initiated, SDSU shifted to an emergency phase and only allowed essential research on campus with permission of the Vice President for Research and the President. [Essential = cannot pause, animal care, COVID-19 research, limited number of other activities]

c. California State and San Diego County guidelines have been updated recently to allow re-initiation of research that cannot be done remotely. Approval of the Chancellor’s Office and implementation of appropriate health and safety precautions allowed a shift from the Phase 1 emergency restrictions to Phase 2 with low density repopulation of faculty and graduate student researchers who cannot telecommute because they rely on university infrastructure to accomplish their work.
Guiding principles for restarting research:

1. **Follow CSU, local, state, and national Public Health authority directives, including COVID-19 symptom screening.**
   
a. Upon coming to campus each day, all personnel must have their temperature monitored or, if a thermometer is not available, report on their health status before starting work. A COVID-19 Symptom Screening form is available at [https://research.sdsu.edu/coronavirus](https://research.sdsu.edu/coronavirus). If an approved researcher is the only occupant of a research space, the individual must provide the results of their symptom screening to the Research Leader or a designee via phone, text, or email upon arriving at the research space. If the approved researcher does not show any symptoms of COVID-19, then the individual should sign-in on the research group’s scheduling calendar, indicating that the individual has been approved to work on that day. SDSU shall provide each Research Leader with a no-touch thermometer.

   b. Personnel who feel sick, are coughing, running a fever, or have other COVID-19 symptoms should follow the recommendations in the SDSU COVID-19 Case Alert Protocol for self-isolation, report their absence to their supervisor, and must not come to campus.

   c. Personnel who have had a positive diagnostic test for COVID-19, or have had close, prolonged contact with an individual who tested positive should follow the recommendations on the SDSU COVID-19 Case Alert Protocol to self-quarantine, monitor symptoms closely, and seek medical attention if feeling ill.

   d. Any personnel who are suspected to have COVID-19 or confirmed to have COVID-19 by a positive diagnostic test should notify the university via the COVID-19 Reporting Form.

   e. Contact tracing will be provided by the San Diego County Public Health Services.

2. **Protect the physical and emotional health and safety of university personnel and community members by physical distancing, Personal Protective Equipment (PPE), disinfection, handwashing, and other recommended practices.**

   a. Safety of spaces and facilities used for research and academic scholarship activities must be rigorously maintained, with adequate access to PPE and other safety related supplies as appropriate for the position. SDSU will provide Research Leaders with recommended COVID-19-related PPE, COVID-19 safety-related supplies, and disinfectant sufficient for recommended use by public health officials and standard practices of other research universities.

   b. Prior to returning, all personnel must complete COVID-19 safety training. The training is available online and is self-guided.

   c. While distancing requirements are in place per the most current Public Health Order, personnel must not exceed the maximum density specified for each room, and must maintain a distance of at least 6 feet between individuals in all shared indoor and public spaces.

   d. University facilities will not be authorized for faculty and graduate student access unless a Research Continuity Plan that describes appropriate safety measures is submitted by the Research Leader and approved by the College Dean, Provost, and Vice President for Research (VPR). Review may also be required by EH&S, and university compliance committees, including IACUC, IRB, and IBC.

   e. Shared spaces require an adequate plan to avoid exceeding the density limits. The plan submitted by the primary Research Leader responsible for the space must be agreed to by all Research Leaders using the space and approved by the corresponding Dean. Review may also be required by EH&S, and university compliance committees, including IACUC, IRB, and IBC.
f. For each phase of re-initiating research, Research Leaders must identify which of their personnel will be granted access (including replacements or backups for other personnel) and any planned temporal staging of personnel to maximize distancing (including scheduling access in shifts or on alternate days). A scheduling template is available on the SDSU Graduate & Research Affairs Coronavirus site.

g. Guidance on safely conducting Human Subjects Research during Phase 2 is available on the SDSU Research Affairs site.

h. Research and scholarly activities that have successfully transitioned to being fully remote and require infrequent or no access to university spaces should continue to work remotely until all public health recommendations have been lifted and the university resumes normal operation.

i. Both the CDC and San Diego County Health & Human Services strongly recommend that vulnerable populations, including individuals who are 65 or older, have a chronic underlying condition, or are immunocompromised do not to return to work on-site until SDSU resumes normal operation. Employees who are concerned about returning to work may consult with Human Resources. Concerned graduate students may consult with the Dean of Graduate Affairs.

j. Graduate students with concerns about their emotional or psychological well-being may consult with SDSU Counseling and Psychological Services. Faculty and Staff should consult with their medical provider or Employee Assistance Program.

3. **Research and scholarly activities will be restarted in phases as public health restrictions are eased, with the highest priority research and scholarly activities initiated first.**

   a. Criteria for the highest priority to restart projects may include:

   ● Work that CANNOT be done remotely due to safety, access to instrumentation, laboratory facilities, high end computing facilities, access to studio equipment and facilities, etc.

   ● Work that is providing essential services to the public, projects close to completion, deadline driven, or seasonal data collection where continued deferral would lead to catastrophic delay or loss of results.

   ● Activities for completion of grants with end dates within 6 months (where the funding agency has not granted extensions).

   ● Work that is essential for career advancement of early stage faculty.

   ● Work by graduate students and postdoctoral scholars close to completing their degree or term of appointment.

   b. Until the university resumes normal operation, all research involving face to face meetings that can be done remotely should continue to be done remotely (including seminars, group meetings, etc).

   c. Upon approval of a Research Leader’s use of university space for research activities, the university shall allow access to this space as long as adequate facilities support and resources are available, there is no change in county or state public health guidelines, and the approved research repopulation plan is followed.

4. **Research by individuals who are not faculty, graduate students, or employees.**

   a. Research volunteers.
Participation of research volunteers in university spaces must be approved by the College Dean, Provost, and VPR. The CSU Volunteer Policy provides information on the roles and expectations of volunteers.

To ensure that all SDSU volunteers are covered by Workers’ Compensation and state liability coverage, only individuals have submitted the SDSU Volunteer Form and been approved by the university may work at university sites. A form required for volunteers working in SDSURF facilities is currently under development.

No volunteer under the age of 18 shall be allowed to participate as a researcher or in a support role for any research activities before the university has returned to normal operations.

b. Undergraduate researchers.

Undergraduate students are permitted to conduct on-site research subject to compliance with health, safety, and density requirements, and upon approval by the Dean, VPR, and Provost.

Any undergraduate student who is not enrolled for research credit or working as paid research personnel, must complete an SDSU Volunteer Form and be approved by the university to ensure that the student has worker’s compensation and liability coverage.

No student under the age of 18 shall be allowed to participate as a researcher or in a support role for any research activities.

5. Develop Research Continuity Plans that address public health and university safety requirements before reinitiating on-site research, creative activities, or community service projects.

a. The Research Continuity Plan has two components.

A personnel and space usage plan must be approved by the College Dean with oversight by the Provost and VPR. This plan must indicate how the research group will ensure that the maximum density in assigned research spaces will not be exceeded. The plan should prioritize personnel and projects to ensure adequate physical distancing in all spaces used for research. This may include planning multiple shifts with sufficient time between shifts to avoid overlap.

A health and safety plan must be developed that will provide standard operating procedures for the research group. This document is for internal use by the research group, and does not require the Dean, Provost, and VPR approval. The health and safety plan should describe how work surfaces will be disinfected before and after use, availability and use of appropriate PPE, and proper training of personnel. PPE and other supplies recommended by and informed by public health officials and the practice at other research universities will be provided by SDSU or SDSURF. Any specialized PPE and supplies must be provided by the Research Leader.

b. Research Leaders must develop a calendar to schedule and monitor activities within their labs or other facilities, including staggered work shifts or workdays as needed to maintain required social and physical distancing. Research Leaders are expected to monitor the calendar regularly to ensure efficiency and compliance.

c. Research and scholarly activities that use shared space or shared equipment must coordinate plans to ensure appropriate social and physical distancing of users.

d. EH&S must be made aware of all research within university spaces.
e. All animal research must be coordinated with vivarium staff prior to initiating work.

f. Research Leaders who fail to comply with their approved Project Continuity Plans will lose campus access until the issues are adequately rectified based upon reevaluation by the Dean, Provost, and VPR.

6. Physical infrastructure and human resources must be in place before opening research spaces. This process includes:
   a. Staged opening of buildings.
   b. Social distancing plan for each building, with appropriate signage and mapping of human traffic in hallways, restrooms, elevators, etc.
   c. Sufficient EH&S and Facilities Services support for operation of laboratories, other facilities, and building functions prior to approving plans to reopen these spaces to researchers.

Phase-in Research as Public Health Risk Decreases:

Based upon the goals and guiding principles listed above, a 4-stage process for phasing-in research and creative activities by faculty and graduate students is shown in the following tables. The first table is a brief summary of the phasing plan, and the second table details important considerations for implementation of each phase. This plan coincides with phases for restarting research planned at UCSD.

During Shelter-in-place/Stay-at-home orders, only research deemed essential by the Dean, Provost, VPR, and President can continue operations on campus. Additional research will be added in Phases 2 and 3 as public health conditions improve. Phase 4 is the reopening of all university research, creative and community project activities. Until the campus returns to normal operation, all activities that can be done remotely must continue to be done remotely.

Moving between the phases will be based upon the ability to effectively comply with county, state, and federal public health recommendations, including social and physical distancing between personnel, availability of proper PPE, and implementation of disinfection and hand hygiene practices.

Similarly, adequate custodial support is required to provide necessary hygiene and maintain oversight of physical spaces.

Planning for use of our university library facilities (e.g. occupation density, flow and delivery of materials, traffic flow and management) will be overseen by the Dean of Library Sciences.

If public health conditions demand, there may be a need to rapidly return to an emergency pause or more restrictive phase at any time.
# OVERVIEW: Repopulation of Faculty and Graduate Students

<table>
<thead>
<tr>
<th>Density restrictions on-site</th>
<th>Restricted</th>
<th>Low Density</th>
<th>Moderate Density</th>
<th>Return to Normal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Essential projects only; Participation in approved on-site research is voluntary</td>
<td>Distancing + other public health measures; Participation in approved on-site research is voluntary</td>
<td>Reduced distancing + continued public health measures; Participation in approved on-site research is voluntary</td>
<td>State/County shift to Phase 2; Chancellor approval; adequate facility services</td>
<td>Further easing of public health directives; State/County shift to Phase 3</td>
</tr>
</tbody>
</table>

| Trigger | State and county Stay-at-Home order | State/County shift to Phase 2; Chancellor approval; adequate facility services | Further easing of public health directives; State/County shift to Phase 3 | Public health advisories lifted |

<table>
<thead>
<tr>
<th>Social distancing, PPE, disinfection</th>
<th>Required</th>
<th>Required</th>
<th>Required</th>
<th>Per EH&amp;S recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Continue projects remotely that can be done remotely</td>
<td>Required</td>
<td>Required</td>
<td>Required</td>
<td>N/A</td>
</tr>
<tr>
<td>Vulnerable groups work remotely</td>
<td>Required</td>
<td>Strongly recommended</td>
<td>Recommended</td>
<td>N/A</td>
</tr>
<tr>
<td>Research Leader actions required</td>
<td>Essential research and personnel plans; Protocols for limiting occupancy, distancing, use of PPE, hand hygiene, disinfection, etc.</td>
<td>Density control plan/priorities submitted Personnel calendar and schedules; Responsibility checklist submitted; Require approval</td>
<td>Density control plan/priorities submitted; Personnel calendar and schedules; Responsibility checklist submitted; Require approval</td>
<td>N/A</td>
</tr>
<tr>
<td>Project personnel actions required</td>
<td>Documented safety training</td>
<td>Responsibility checklist submitted for approval</td>
<td>Responsibility checklist submitted for approval</td>
<td>N/A</td>
</tr>
<tr>
<td>Dean/Provost/VPR approval</td>
<td>Required</td>
<td>Required; Response within ~2 weeks</td>
<td>Required; Response within ~2 weeks</td>
<td>N/A</td>
</tr>
</tbody>
</table>
### IMPLEMENTATION PLAN: Repopulation of Faculty and Graduate Students

<table>
<thead>
<tr>
<th>PHASE</th>
<th>PUBLIC HEALTH CONSTRAINTS</th>
<th>SUMMARY</th>
<th>IMPLEMENTATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phase 1</td>
<td><strong>COVID-19 situation unknown and changing</strong></td>
<td>Only essential functions allowed</td>
<td>Research paused. Only research personnel required to protect lives or maintain critical infrastructure and resources (cell lines, animal colonies, instrumentation, etc) allowed on-site:</td>
</tr>
<tr>
<td></td>
<td>Stay-at-home order in place</td>
<td>Faculty, graduate students, and staff must be designated as “essential” to be on-site</td>
<td>• Minimum staffing</td>
</tr>
<tr>
<td></td>
<td>Public health recommendations for physical distancing, PPE, disinfection, hand hygiene, etc</td>
<td>Participation in approved on-site research is voluntary</td>
<td>• Authorization for one-time access to faculty offices to pick up books and materials, shut down instrumentation, check security of hazardous biologicals, chemicals, and wastes</td>
</tr>
<tr>
<td></td>
<td>PPE shortages and testing limited</td>
<td></td>
<td>• Access approval delegated to Deans with oversight by the Provost, VPR, and President</td>
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<tr>
<td></td>
<td>[Emergency Pause]</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Prepare for Phase 2</td>
<td>• Each Research Leader must submit a plan for health and safety of personnel who will begin working on-site</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Each Research Leader must create scheduling calendar indicating when each of their personnel will be on-site, to ensure limited density in all spaces, including physical distancing in public and shared spaces. Research Leader must monitor the calendar to ensure compliance by all personnel in the group</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Responsibility agreements for Research Leader and group personnel must be submitted and approved prior to work during Phase 2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Plans and Responsibility agreements must be approved by the College Dean, Provost, and VPR</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• For spaces not assigned to a single Research Leader, a shared personnel plan and calendar will be prepared by the person responsible for maintaining the space. The plan must be approved by the college Dean, Provost, VPR, and</td>
</tr>
</tbody>
</table>

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<table>
<thead>
<tr>
<th>Phase 2</th>
<th>State and County shift to Phase 2</th>
<th>On-site access allowed to restart high-priority research</th>
<th>Access limited to approved research personnel</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reduced Density On-site</td>
<td>County authorizes limited research activities; Approval of Chancellor’s Office; Adequate access to facility services and EH&amp;S; Access to safety supplies</td>
<td>All on-site research projects must be approved by the Dean, Provost, and VPR; Response provided within ~2 weeks of submission Maximal density in rooms during this phase is: =1 person/aisle in labs ≤1 person/250 sf in rooms ≤1 person in rooms &lt;250 sf Appropriate face coverings must be worn at all times while on campus except when in rooms restricted to a single person Participation in approved on-site research is voluntary All research projects that can be done remotely should continue to be done remotely (including all seminars, group meetings, etc) Strongly recommended that vulnerable populations continue to work remotely</td>
<td>Resume approved high priority research Continue ongoing projects, but no “new” projects initiated without permission of the College Dean, Provost, and VPR Resume off-site projects that can be done with appropriate distancing, PPE, and disinfection; Research at off-campus sites must be approved by college Dean, Provost, and VPR All personnel must abide by ongoing CSU travel restrictions Undergraduate research must be approved by the College Dean, Provost, and VPR COVID-19 Safety training required prior to accessing university facilities All projects should be prepared to rapidly ramp-down if necessary</td>
</tr>
<tr>
<td>Prepare for Phase 3</td>
<td></td>
<td>Research Leaders planning to reinitiate projects for Phase 3 must submit a plan</td>
<td></td>
</tr>
<tr>
<td>Phase 3</td>
<td>Local and state authorities further ease public health recommendations</td>
<td>Restart additional research and scholarly activities that can be done within public health and safety requirements</td>
<td>Access to all approved research and scholarly activities with required density, distancing, PPE, and hygiene in place, as well as necessary EH&amp;S and Facilities Services support:</td>
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<tr>
<td>Less Reduced Density On-site</td>
<td>State/County shift to Phase 3</td>
<td>Initiation of additional research and scholarly activities, but limited to personnel capacity that does not exceed density specified below</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Maximum density in rooms during this phase:</td>
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<tr>
<td></td>
<td></td>
<td>(\leq 2 \text{ person/aisle in labs} \leq 1 \text{ person/150 sf in rooms} \leq 1 \text{ person/room &lt;150 sf} )</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Participation in approved on-site research is voluntary; All research that can be done remotely should continue to be done remotely (including all seminars, group meetings, etc)</td>
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</tr>
<tr>
<td></td>
<td></td>
<td>Recommended that vulnerable populations continue to work remotely</td>
<td></td>
</tr>
<tr>
<td>Prepare for Phase 4</td>
<td></td>
<td>Core campus functions staffed and operational to handle increased capacity (including OLAC, EH&amp;S, Facilities Services)</td>
<td></td>
</tr>
<tr>
<td>Return to Normal Campus Operation</td>
<td>Public health situation controlled</td>
<td>All research activities allowed</td>
<td>Campus and SDSURF open for all research activities</td>
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</tr>
<tr>
<td>State/County shift to Phase 4; No or minimal state or local public health restrictions in effect</td>
<td>Research activities with appropriate compliance approvals may return to full engagement of personnel</td>
<td>All research may resume, including initiation of new projects, field research, IRB-approved human subject research, art exhibits, public performances, etc</td>
<td>● All research may resume, including initiation of new projects, field research, IRB-approved human subject research, art exhibits, public performances, etc&lt;br&gt;● In-person group meetings, discussions, seminars, performances, and other activities may resume&lt;br&gt;● Visitors may resume on-site collaborations</td>
</tr>
</tbody>
</table>

**Additional Materials and Considerations:**

- Documents provided to facilitate the process for repopulating faculty and graduate students:
  - Application for Restarting Research and Research Leader Responsibilities (requires e-signature and date)
  - Responsibilities of Project Personnel (requires e-signature and date)
  - Research Leader Planning Checklist
  - Startup Assessment
  - Scheduling template (download spreadsheet from https://research.sdsu.edu/coronavirus)
  - Template for Room Entry Signage (See #5)
  - Required Cal/OSHA COVID-19 Return to Work Training and Agreement Form

- Employees and students with current disability accommodations or who will require new accommodations should consult their College Dean.

**Communication:**

- University communications about the Repopulation of Faculty and Graduate Students and responses to frequently asked questions from faculty and graduate students are posted as FAQs on the GRA website. This document will be updated regularly as new questions arise.

- Please send any questions to <GRA-CoV2@sdsu.edu>

**Useful Public Health Resources:**

- Current Public Health guidance for self-isolation is available at:
  - County of San Diego Health & Human Services:
    <https://www.sandiegocounty.gov/content/sdc/hhsa/programs/phs/community_epidemiology/dc/2019-nCoV/FAQs.html#quarantine-and-isolation>
- CDC List of people at higher risk for severe illness: <https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/people-at-higher-risk.html>
- California Department of Public Health COVID-19 Updates: <https://www.cdph.ca.gov/Programs/CID/DCDC/Pages/Guidance.aspx>
- San Diego County Public Health Order and updates: <https://www.sandiegocounty.gov/content/sdc/hhsa/programs/phs/community_epidemiology/dc/2019-nCoV/health-order.html>

**Information on Research Restart Plans at some other Universities:**

- Nature 4/3/20: Safely conducting essential research in the face of COVID-19 <https://go.nature.com/34IHmUd>
- U Washington: <https://www.washington.edu/research/or/guidance-for-returning-to-in-person-research/>
- UCI: <https://news.research.uci.edu/vcr/uci-research-shutdown/>
- UCD: <https://research.ucdavis.edu/guidelines-for-uc-davis-research-ramp-up-ramp-down-april-23-2020/>
- UCSD: <https://blink.ucsd.edu/research/covid-19/index.html#Vice-Chancellor-and-UCOP-Resear>