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

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, including both on-campus and off-campus sites. On-campus sites include laboratories, the library, performance and art studios, and other facilities. Off-campus spaces include Mt. Laguna Observatory, Coastal & Marine Institute Laboratory, Field Stations, SDSURF Facilities, and any other SDSU or SDSURF sites used for research, creative activities, or community service. Field research performed at sites not affiliated with SDSU are also included. 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 grants. Project personnel refers to students, staff, and post-doctoral scholars engaged in academic scholarship.

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

Guiding principles:

1. *Follow CSU, local, state, and national Public Health authority shelter-in-place/Stay-at-home, social distancing, face-covering, and hygiene directives.*

    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 like exercise, more restrictive social distancing such as closing of parks and beaches, recommendation/requirements for face coverings, etc. Likewise, the easing of these restrictions is beginning to occur sequentially.

    b. While the shelter-in-place/stay-at-home order was in place, SDSU was in 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 reinitiation of research that cannot be done remotely. Approval of the Chancellor's Office and implementation of appropriate health and safety precautions will allow a shift from the Phase 1 emergency restrictions to Phase 2 with low density repopulation of faculty and graduate students who cannot telecommute because they rely on university infrastructure to accomplish their work.

    d. Personnel diagnosed with COVID-19 or exposed to individuals infected with COVID-19 must follow the current guidance for 14-day self-quarantine prior to reporting to work.

[https://www.sandiegocounty.gov/content/dam/sdc/hhsa/programs/phs/Epidemiology/covid19/Health OfficerOrder-Isolation.pdf]

e. Personnel who feel sick, are coughing, running a fever, or have other COVID-19 symptoms should self-isolate, report their absence to their supervisor, and must not come to campus. [https://www.cdc.gov/coronavirus/2019-ncov/symptoms-testing/symptoms.html]

f. Personnel returning from travel to a country or an area within the U.S. that has an elevated travel warning of 3 or 4 must self-isolate and monitor their health. [https://www.cdc.gov/coronavirus/2019-ncov/travelers/after-travel-precautions.html]

g. 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. [See COVID-19 Symptom Screening]

h. As it becomes available, COVID-19 testing may be required for all personnel returning to campus. 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. [Physical distancing, face coverings, disinfection, handwashing, travel restrictions, etc]*

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.

b. EH&S must be made aware of all research within university spaces.

c. Prior to returning, all personnel involved in research and academic scholarship must complete COVID-19 safety training.

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

e. 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.

f. Shared spaces require an adequate safety plan submitted by the primary Research Leader responsible for the space, 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.

g. For each phase of re-starting 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 social distancing (including scheduling access in shifts or on alternate days).

h. No volunteers or visitors who are not university employees or students will be allowed in spaces dedicated to laboratory research or creative activities until the university resumes normal operation.

i. Volunteers in Human Subjects research projects that require face-to-face interactions, including Clinical Research and Community Service, may participate as long as appropriate social and physical distancing and hygiene protocols are enforced, a Project Continuity Plan has been approved, and the project has been reviewed and approved by the IRB.

j. 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.

k. Vulnerable populations, including those 65 or older, have a chronic underlying condition, or compromised immune system per the Public Health Order are strongly recommended not to return to work on-site until the university 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.

l. 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.

m. Lifting of travel restrictions must occur before research, creative activities, or community service projects requiring travel can begin. This includes human subject research that is conducted off-campus. [Current CSU travel restrictions extend through July 31, 2020.]

3. *Only work considered essential (required to protect lives or maintain critical infrastructure and resources such as cell lines, animal colonies, instrumentation, etc) is allowed while stay-at-home orders are in place (SDSU Phase 1).*

4. *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).

5. *Recognize that undergraduates are students first, researchers second.*

   Undergraduate students will not be allowed to conduct on-site research, creative activities, or community service until density restrictions are lifted. Exceptions may be approved by the Dean if the undergraduate student plays an essential role that must be performed in-person and on-site, or if the undergraduate student depends upon participation in those activities for financial aid and remote work is not available.

6. *Develop Research Continuity Plans that address public health and university safety requirements <u>before</u> reinitiating on-site research, creative activities, or community service projects.*

   a. These plans must address personnel and space usage as follows:

- Prioritize personnel and projects to ensure adequate social and physical distancing in spaces used for research, creative activity, and community service. This may include planning multiple shifts that include sufficient time between shifts to avoid overlap.

- Describe how work surfaces will be disinfected before and after use, availability and use of appropriate PPE, and proper training of personnel. Currently, the university does not plan to provide face coverings, but any appropriate covering that is disposable or washable is acceptable. Other PPE and supplies must be provided by the Research Leader.

- The research plan must first be approved by the college Dean with oversight by the Provost and VPR.

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. All animal research must be coordinated with vivarium staff prior to initiating work.

e. 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.

7. *Physical infrastructure and campus operations plans must be in place before opening facilities, including:*

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. Deans must ensure availability of EHS and Facilities Services support needed for operation of laboratories, other facilities, and building functions <u>before</u> 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 plans, and the second table details important considerations at each step. 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, creative activities and community service projects will be added in two phases 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 local, state, and federal public health recommendations, including social and physical distancing between personnel, availability of proper PPE, and implementation of disinfection and handwashing practices.

Similarly, we need to ensure adequate custodial support to provide necessary hygiene and maintain oversight of physical spaces. To date, custodial support has been severely curtailed by the COVID-19 pandemic.

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. Information on reopening access to library resources is described in the document "Reopening Plan for the SDSU Library and IV Campus Library".

> *If public health conditions demand, there may be a need to rapidly return to an emergency pause or more restrictive phase at any time.*

SUMMARY: Repopulation of Faculty and Graduate Students

	Restricted	Low Density	Moderate Density	Return to Normal
	Essential projects only	Distancing + other public health measures	Reduced distancing + continued public health measures	
Trigger	State and county Stay-at-Home order	Stay-at-home order lifted; State/County shift to Phase 2; Chancellor approval	Easing of public health directives; State/County shift to Phase 3	Public health advisories lifted
Density restrictions on-site	Only essential research, creative activities and community services allowed	≤1 person/aisle in labs ≤1 person/250 sf in larger rooms ≤1 person/room less than 250 sf	≤2 people/aisle in labs ≤1 person/150 sf in larger rooms ≤1 person/room less than 150 sf	N/A
Social distancing, PPE, disinfection	Required	Required	Required	Per EH&S recommendations
Continue projects remotely that can be done remotely	Required	Required	Required	N/A
Vulnerable groups work remotely	Required	Strongly recommended	Recommended	N/A
Research Leader actions required	Essential research and personnel plans	Density control plan/priorities submitted (occupancy, distancing, PPE, disinfection, handwashing, etc); Personnel calendar; Responsibility checklist submitted; Require approval	Density control plan/priorities submitted (occupancy, distancing, PPE, disinfection, handwashing, etc); Personnel calendar; Responsibility checklist submitted; Require approval	N/A
Project personnel actions required	Documented safety training	Responsibility checklist submitted for approval	Responsibility checklist submitted for approval	N/A
Dean/Provost/VPR approval	Required	Required; Response within 2 weeks	Required; Response within 2 weeks	N/A

IMPLEMENTATION PLAN: Repopulation of Faculty and Graduate Students

PHASE	PUBLIC HEALTH CONSTRAINTS	SUMMARY	IMPLEMENTATION
Phase 1 **[Emergency Pause]**	*COVID-19 situation unknown and changing* Stay-at-home order in place Public health recommendations for physical distancing, PPE, disinfection, hygiene PPE shortages and testing limited	*Only essential functions allowed* Faculty, graduate students, and staff must be designated as "essential" to be on-site	*Research paused. Only research personnel required to protect lives or maintain critical infrastructure and resources (cell lines, animal colonies, instrumentation, etc) allowed on-site:* ● Minimum staffing ● 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. ● Access approval delegated to Deans with oversight by the Provost, VPR, and President.
		Prepare for Phase 2	● Each Research Leader must submit a plan for health and safety of personnel who will begin working on-site. ● 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 this calendar to ensure compliance by all personnel in the group. ● Responsibility agreements for Research Leader and group personnel must be submitted and approved prior to work during Phase 2. ● Plans and Responsibility agreements must be approved by the college Dean, Provost, and VPR. ● 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

			President.
			● Social distancing, face coverings, disinfection, and other recommended measures must be understood and followed by all personnel.
			● Appropriate PPE and cleaning supplies must be available and provided by the Research Leader or personnel.
			● EH&S and Facilities Services must be prepared for additional Research .
Phase 2 **Reduced Density On-site**	*Local and state authorities lift Stay-at-Home order* State and County shift to Phase 2; County authorizes limited research activities; Approval of Chancellor's Office	*On-site access allowed to restart high-priority research* All on-site research, creative activities and community service 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 <250 sf Appropriate face coverings must be worn at all times while on campus except when in rooms restricted to a single person. All research projects that can be done remotely should continue to be done remotely (including all seminars, group meetings, etc). Strongly recommend that vulnerable populations continue to work remotely.	*Access limited to personnel involved in high-priority research, creative activities, or community service projects;* *Density restrictions, distancing, PPE, and hygiene in place.* ● Resume high priority research approved by the college Dean. ● Continue ongoing projects, but no "new" projects initiated. ● 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 is discouraged; Any undergraduate participation in these activities must have approval from the college Dean, Provost, and VPR. ● COVID-19 Safety training required prior to access to university facilities ● Coordinate with EH&S and Facilities Services for access to buildings, including public spaces ● All projects should be prepared to rapidly ramp-down if necessary.
		Prepare for Phase 3	● Research Leaders planning to reinitiate projects for Phase 3 must submit a plan

			- for approval, and develop a scheduling calendar for density limitations. - Density restrictions, distancing, PPE, disinfection protocols, and other recommended measures understood and followed by all personnel. - Appropriate PPE and cleaning supplies must be available or provided by the Research Leader/project personnel. - EH&S and Facilities Services must be prepared for additional research
Phase 3 **Less Reduced Density On-site**	*Local and state authorities further ease public health recommendations* State/County shift to Phase 3	*Restart additional research that can be done within public health and safety requirements* Initiation of additional research and scholarly activities, but limited to personnel capacity that does not exceed density specified below. Maximum density in rooms during this phase: - 2 people/aisle in labs - ≤1 person/150 sf in rooms - 1 person/room <150 sf All research and scholarly activities that can be done remotely should continue to be done remotely (including all seminars, group meetings, etc) Recommend that vulnerable populations continue to work remotely	*Access to all approved research with required density, distancing, PPE, and hygiene in place, as well as necessary EH&S and Facilities Services support:* - Expand off-site projects depending on local conditions/restrictions at field sites, travel restrictions, ability to travel safely, and feasibility of physical distancing at sites; Research at SDSU Field Stations must be approved by the responsible college Dean. - Allow IRB-approved human research studies that require in-person interactions but can be done with appropriate physical distancing; projects must also be approved by college Dean, Provost, and VPR - Library use as described in"Reopening Plan for the SDSU Library and IV Campus Library" - All projects should be prepared to rapidly ramp-down to Phase 1 or Phase 2 if necessary
		Prepare for Phase 4	- Core campus functions staffed and operational to handle increased capacity (including OLAC, EH&S, Facilities Services)
Return to Normal Campus	*Public health situation controlled* State/County shift to	*All research and scholarly activities allowed* Research and scholarly	*Campus and SDSURF open for all research and scholarly activities:* - All research and scholarly activities

Operations	Phase 4; No or minimal state or local public health restrictions in effect	activities with appropriate compliance approvals may return to full engagement of personnel	may resume, including initiation of new projects, field research, IRB-approved human subject research, art exhibits, public performances, etc ● In-person group meetings, discussions, seminars, performances, and other activities may resume ● Volunteers and visitors may resume on-site collaborations

Additional Materials and Considerations:

● Documents provided to facilitate the process for repopulating faculty and graduate students:
  - *Research Continuity Plan (online form)*
  - *Responsibilities of Research Leaders (requires e-signature and date)*
  - *Responsibilities of Project Personnel (requires e-signature and date)*
  - *Research Leader Planning Checklist*
  - *Startup Assessment*
  - *Template for Scheduling Calendar*
  - *Template for signage on doors*

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

Communication:

● Responses to questions asked by faculty and graduate students will be posted on the GRA website as FAQs.
● Please send any questions to <GRA-CoV2@sdsu.edu>

Useful Resources:

- CDC COVID-19 Guidance for Institutes of Higher Education (updated 5/19/20):
  https://www.cdc.gov/coronavirus/2019-ncov/community/colleges-universities/considerations.html

- CDC Guidelines on disinfection for community spaces:
  https://www.cdc.gov/coronavirus/2019-ncov/community/organizations/cleaning-disinfection.html

- CDC Guidelines for collecting, handling, and testing clinical COVID-19 specimens :
  https://www.cdc.gov/coronavirus/2019-nCoV/lab/guidelines-clinical-specimens.html

- 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

- California roadmap - Four stages for returning to work:
  https://www.gov.ca.gov/wp-content/uploads/2020/04/Update-on-California-Pandemic-Roadmap.pdf

- Definition of Essential Employees:
  https://covid19.ca.gov/img/EssentialCriticalInfrastructureWorkers.pdf

- 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

- 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/

  https://www.ehs.washington.edu/system/files/resources/UWLabContinuityPlan.pdf

- 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/

- UCLA: https://ucla.app.box.com/v/UCLA-Guidelines-Res-Ramp-Up

- UCSD: https://blink.ucsd.edu/research/covid-19/index.html#Vice-Chancellor-and-UCOP-Resear