Memorandum

To: UMN Staged Resumption of Selected Research Operations Working Group
From: Christopher J. Cramer, Vice President for Research
Subject: Response to Report on Staged Resumption of Selected Research Operations
Date: April 28, 2020

Thank you for your hard work and effort in preparing your report. I am especially grateful for the depth of your analysis, the fashion in which you chose to address the broadest scope of our operations, and the tremendous detail you provided with respect to specific undertakings expected of researchers and various unit and University administrators, as well as with respect to an aspirational timeline.

As the University finalizes its own plans and implements procedures to put them into operation, the recommendations that you have assembled should prove invaluable.

While the evolving situation makes it unlikely that all of the work group’s proposals will be implemented exactly as envisioned, particularly with respect to the timing of anticipated steps, the contents of this report are nevertheless sure to be useful to campus, collegiate, and departmental leaders, and I will share it with them to assist in local planning.

Along those lines, it is probably appropriate that such leaders, like yourselves, begin the process of holding local “town halls” to discuss matters likely to be especially relevant to your own units.

I do ask that in those meetings, however, it be made clear that the specific practices that will be expected of individuals and dates of implementation will be communicated in system- or campus-wide messages to ensure broad administrative clarity and consistency.

I again express my appreciation for your creation of so comprehensive a report, and look forward to continuing to work together to sunrise our research operations moving forward.
report of the

Staged Resumption of Selected Research Operations Working Group

Initial Version: April 27, 2020
Revised Version: April 30, 2020

Membership

Abimbola Asojo, Associate Dean for Research, Creative Scholarship & Engagement, College of Design
David Bereiter, Interim Associate Dean for Research, School of Dentistry
Erik Brown, Associate Vice Chancellor for Graduate Education and Research, UMD
Gregory Cuomo, Associate Dean for Research and Graduate Programs, CFANS
Carolyn Fairbanks, Associate Dean for Research, College of Pharmacy
David Greenstein, Associate Dean for Research, College of Biological Sciences
Janice Jaguszewski, Associate University Librarian, University Libraries
Amy Kircher, Sr. Advisor of the Food Protection and Defense Institute, College of Veterinary Medicine
Joseph A. Konstan, Associate Dean for Research, College of Science and Engineering (chair)
Frances Lawrenz, Associate Vice President for Research, Office of the Vice President for Research
Tucker LeBien, Senior Advisor for Research Operations, Office of Academic Clinical Affairs
Thomas Lindsay, Director of Advancing Research in LATIS, College of Liberal Arts
Eric Singsaas, Director for Materials and Bioeconomy, Natural Resources Research Institute, UMD
Carissa Schively Slotterback, Associate Dean, Humphrey School of Public Affairs
Frank Symons, Associate Dean for Research and Policy, College of Education and Human Development
Diane Treat-Jacobson, Associate Dean for Research, School of Nursing
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¹ Note: These sections are omitted in publicly posted versions of this report because they include non-public material or material identifying individual commenters.
1. Introduction

This working group was charged on April 16 by VP Research Chris Cramer with developing principles and a plan for restarting research operations in the wake of the COVID-19 pandemic-related reduction to essential operations at the University of Minnesota (see appendix A). The committee followed the following process in developing its report:

- Substantial (and ongoing) distribution of relevant materials from within the U of M and from other peer institutions.
- Substantial community input from a public request for input.
- Further input through targeted consultation with representatives of faculty, students, postdocs, and providers of research-support services.
- Three full-committee online meetings:
  - 4/20 to review initial input; discuss phased resumption approach; identify key areas needing further work and organizing subgroups
  - 4/24 to review assembled work of subgroups as integrated into main report and discuss areas of conflict or controversy
  - 4/27 to finalize report, address final issues of conflict or controversy, and deliver the report
- Eleven subgroups (typically 3 members per subgroup) worked through a range of issues and perspectives, including online subgroup meetings on 4/22, consultations with relevant groups and individuals, and development of material for the main plan and supplemental reports.
- The entire group communicated regularly and used online collaboration tools to jointly author (and extensively edit) the report provided here. All working group members had access to all materials used by the working group.
- At the request of VP Research Cramer, a revision was completed 4/30 replacing specific recommended dates with references to phases of resumption.

The result presented here includes a set of principles articulating key priorities and values in resuming research, a staged resumption framework, and a detailed set of action items for investigators, colleges and campuses, core/shared research facilities, and central university units. The working group feels that the greatest value it could provide in producing this report is to bring together the diverse perspectives from across the University in identifying an extensive set of issues, challenges, and things that simply need to get done.

To the extent that this report has a conclusion, it is that we believe much research can be resumed after an appropriate preparation period, and that research activity can continue to grow after that if the COVID-19 crisis continues to ease.
2. Working Group Recommendations: UMN Research Restart Plan

University of Minnesota Research: Phased Research Restart within COVID-19 pandemic
Drafted by Staged Resumption of Selected Research Operations Working Group on 4/27/2020
Submitted as a Recommendation to VP Research Chris Cramer on 4/27/2020
Revised version submitted 4/30/2020

Purpose

This document provides guidance and direction for restarting on-site research (i.e., research on campus, at University-owned facilities, and at non-University field locations) at the University of Minnesota after most operations were suspended as part of an effort to minimize the impacts of the COVID-19 pandemic. The research restart will be staged and deliberate, with a focus on restoring high-priority operations while minimizing the risk of transmission of the SARS-CoV-2 virus to the University’s students, staff, faculty, and the larger University community through the adoption of government recommendations and best practices.

This restart plan has four sections:

- Principles -- an articulation of values, objectives, and high-level policy recommendations
- Assumptions -- an enumeration of key assumptions that underlie the plan; changes that invalidate these assumptions should cause re-evaluation of related plan elements
- Restart Stages -- a table of resumption stages that articulates external and internal preconditions to moving forward into a stage and the characteristics of that stage
- Action List -- a set of specific actions identified (for OVPR, for other central units, and for colleges, campuses, and similar entities) that are recommended as necessary to implement the plan.

Principles

The principles we present are grounded in the University’s values and policies, the best practices of peer institutions, governmental guidance, and the Board of Regents’ own articulation of principles related to the COVID-19 pandemic and the resumption of operations.

Board of Regents Principles

Academic & Research Work Group
- Ensure the safety, health, and wellness of our students, faculty, and staff
● Ensure the continuity of the student academic experience and support research-related initiatives, including MNtersections
● Leverage the world class excellence of our teaching, discovery, and engagement with an emphasis on research and discovery that directly addresses the challenges of the COVID-19 pandemic and serves the local, state and world communities
● Examine the delivery of instruction and consider evolving learning models for the short- and long-term
● Make decisions with respect, transparency, and timeliness, and with the best interests of our students, faculty and staff in mind

**Finance & Operations Work group**

● Support the University’s academic, research and outreach mission with emphasis on research that directly addresses the challenges of the COVID-19 pandemic
● Prioritize the retention of our current workforce to the greatest extent possible
● Balance strategic financial decisions with maintenance of the institutional mission
● Scrutinize all existing budgets to identify efficiencies
● Position the University for both short-term and long-term financial viability
● Make decisions with respect, transparency, and timeliness, and with the best interests of our students, faculty and staff in mind

**Goals and Priorities**

● Protecting the health and welfare of our employees, students, and community is essential. While we recognize that no course of action (including shutting down all operations) will keep people perfectly safe, we will take all available steps to minimize the transmission of SARS-CoV-2 at our research facilities, to minimize in particular the risks to those with heightened vulnerability to COVID-19, to rapidly respond to and contain any infection, and to protect the overall health and welfare of all conducting, participating in, or supporting our research operations.

● University of Minnesota research benefits the state, nation, and world. We have undertaken obligations to conduct research for external clients (government, industry, and not-for-profit), to work on problems of societal significance, and to train the next generation of researchers to benefit our state, nation, and world. Only a subset of research requires physical access to specialized facilities, laboratories, field sites, library collections, and similar resources. Our goal is to continue to carry out remote research whenever possible while resuming the operations of on-site research as quickly as can be done safely given the evolving COVID-19 situation and the availability of supplies and procedures for protecting researchers and research support staff.
• All planning for resumption of research operations must take into account the possibility that future health conditions may require rolling back to more restricted operations. The potential harm caused by interrupting research must therefore be considered as a factor when determining whether a project should be resumed.

• Personal responsibility is key to the University’s approach to flattening the curve and avoiding virus transmission. Accordingly, all faculty, staff, and students engaged in research activities must be provided with training on both the motivation for and the details of university guidelines and procedures. Failures of personal responsibility should be addressed through normal personnel processes and may include revocation of access.

• All restrictions in these principles are intended to apply to research during a period of limited operations, corresponding to phases 2, 3, and 4 in the phased reopening table below.

Approvals, Oversight, and Record-Keeping

• Conduct of research on-campus or at field locations off-campus during the period of limited operations should be approved, tracked, and overseen. A centralized database and approval system (e.g., wfgen) should be used to submit and track requests (which shall include specific spaces and facilities used and individuals requested to use those spaces and facilities). Requests should be made by the PI, Lab Director, or coordinator of a space for endorsement by a department chair/head; center director; or similar official. Requests are routed for approval to a designated collegiate or campus official (usually Associate Dean or Vice-Chancellor for Research) or to the VP Research for centrally-managed units.

• All research activities that have been previously approved to be conducted during reduced operations are still approved, though only for the personnel, spaces and activities originally requested. Expansion of or changes to approved activities must go through the approval process.

• Colleges and campuses are responsible for monitoring compliance with policies and procedures; OVPR has oversight responsibility for research systemwide.

Prioritizing Research Facilities and Projects

• Research already approved within the existing categories of essential research (including COVID-19 research) may continue, and essential research will have priority access to
needed PPE or other scarce research resources.

- Many shared research facilities are likely to experience usage demand that exceeds capacity. Such facilities will develop priority systems for facility access.

- When requests to conduct on-site research exceed capacity at a particular stage, projects should be prioritized within a college or campus based on the ability to carry out the work with appropriate safety precautions and at least the following criteria (weights vary by circumstance):
  - being necessary for timely graduate student or postdoc completion
  - hard deadlines from project sponsors for research or pilot data to support new work proposals
  - inherent urgency of the work (seasonality, repeated measures, etc.)
  - urgency of benefit to society (e.g., clinical work with immediate health impacts; work that supports immediate service delivery or policy decisions)
  - number of university students or employees kept employed through the work
  - the degree to which the research, once started, can be suspended without negative consequences to human subjects, animals, or research materials (e.g., cell lines, equipment, collections) if developing health circumstances so warrant
  - availability of needed resources without competition with other research

Safety Equipment, Supplies, and Procedures

- On-site research activities will follow university-wide safety protocols, plus additional required safety steps as provided case-by-case. Exceptions to university-wide protocols can be made only when such exceptions provide greater safety than the protocols. Such protocols will be finalized in consultation with University Health and Safety, but shall include:
  - Spacing of at least 6 feet between the perimeters of work areas for people occupying the same room to comply with social distancing guidelines from the CDC except in situations where safe operation requires closer interactions. Such spacing will likely result in reduced capacity for many facilities which may wish to schedule labs in “split shifts” to reduce the number of people present at any one time.
  - Wiping down surfaces in labs or offices with bleach, alcohol, or other approved disinfectants both before and after each user’s session.
○ A requirement for a “buddy system” to provide frequent check-in or continuous
communication for anyone alone in a lab with another individual (who may be
remote) who can summon or provide help in an emergency.
○ Additional protective gear measures to be specified for close interactions between
people (e.g., gloves and appropriate masks).

In addition, during at least the initial restart phase:
○ All work that can be completed remotely must be carried out remotely.
  Individuals should only be on-site for the minimum time needed to carry out those
  research activities requiring site access.
○ All meetings (including lab meetings) will remain online and remote.
○ Lab access will be limited to those already trained to carry out the specified
  activities in the labs. On-site training may resume in the expanded restart phase.

● Proper use of cloth face masks shall be required in all shared spaces on campus except
  when individuals are wearing more highly protective face coverings. All participants in
  on-campus research shall be required to acknowledge and accept the requirement to wear
  masks. Training on safe use of cloth masks shall be provided through an online video.
  ○ Employees may provide their own face masks; alternatively, they may use
    University-provided face masks. Employees are responsible for carrying out
    recommended washing procedures on cloth face masks.

● On-site research activities will only be conducted when appropriate personal protective
  equipment can be provided without shortages for health/medical personnel uses. UMN
  research personnel requiring clinical-grade PPE will only be allowed to return to campus
  if sufficient supplies are available on a continuous basis and if there are no current
  shortages in the Minnesota healthcare workforce. Equipment will be identified and
  supplied in accordance with University Health and Safety Guidance for PPE.

Protecting Students and Postdocs; Protecting All Employees

● Undergraduate student participation in on-site research during the period of limited
  operations is generally only permitted for good cause (assessing both the risks and the
  educational and the career development benefits to the student) and with the approval of
  the Vice-Provost and Dean for Undergraduate Education. This provision does not apply
  to individuals who are employees in non-student positions but also enrolled as students.

● Graduate and Professional Student and Postdoc/Resident participation in on-site research
  during the period of limited operations is optional; they may opt-out without providing
reasons or justification. Advisors and unit leaders must be educated about the expectations for treating graduate students/postdocs who opt out appropriately (including working to identify alternative duties or sources of support). Colleges and campuses may choose to review any dismissals and non-renewals of graduate and professional students and postdocs/residents.

- Other employees may be expected to work on campus in accordance with the responsibilities of their position. Existing HR Policies (such as the University State of Emergency: Human Resources Implications policy and related documents) provide for leave for those who are exposed/infected and those who are unable to work on-site for other specified reasons. This plan is not intended to amend those policies.

- Points of contact will be established and promoted for (a) anyone on-site who feels unsafe due to the inappropriate presence or actions of others; (b) conflict resolution services for students and employees who feel they are being inappropriately pressured or otherwise being placed at risk; (c) mental health services for those who need assistance; and (d) public health services to report an actual or likely COVID-19 infection.

- Each room opened for resumed research operations will have two safety posters displayed prominently: (a) a COVID-19 safety procedures poster (either a generic one or one customized to the specific laboratory’s approved safety protocol), and (b) a poster with contact information for lab-specific emergency contacts and the three points of contact identified above for unsafe conditions, conflict resolution, mental health, and public health services. OVPR will provide templates.

**Virus and Antibody Testing; Contact Tracing**

Nobody should come to an on-campus or field site if they have symptoms of COVID-19 or believe they have been exposed to it. Employees should monitor their temperatures on days they are planning to work on-site and stay home if they have a fever of 38°C or 100.4°F or higher or are taking medicine to control a fever (based on CDC guidance). Individuals must be informed (and the message regularly reiterated) that the university has a collective obligation to prevent transmission of the virus. They should be referred to [https://mn.gov/covid19/for-minnesotans/if-sick/](https://mn.gov/covid19/for-minnesotans/if-sick/) for state guidance on what to do if they suspect they may have COVID-19. Supervisors need to be informed that “essential personnel” must have back-ups identified to ensure that nobody feels coerced to come to campus while potentially infected.
● Any individual who exhibits symptoms or who is diagnosed with COVID-19 must follow MDH and CDC guidelines to determine when they are eligible to return to work (including self-quarantine, temperature monitoring, etc.).

● Any enclosed space in which a confirmed case of COVID-19 is identified will be closed until disinfection can be completed; those who were identified as being in the space at the same time as the infected individual shall stay home until they can be tested or demonstrate non-infection through self-quarantine and self-monitoring in accordance with MDH and CDC guidelines.

● Contact tracing and follow-up testing is essential to preventing individual infections from spreading to large numbers of people. Data to be used should be identified in advance (database of allowed users, keycard access logs, building sign-in sheets). The School of Public Health has expertise in such methods and will be asked to develop and implement a contact tracing protocol.

● The Office of Human Resources has noted that supervisors must “continue to handle employee health and personnel data in a manner that complies with state and federal laws and University policies. This includes information that an employee has sought a COVID-19 or any other medical test or is absent from work for a medical condition. As always, information may be shared with appropriate supervisors and administrators on a need-to-know basis. However, unless you have received authorization from the employee, information about an employee's health should not be shared beyond the need-to-know group. This generally means it may not be shared with co-workers.”

Research with Human Participants

● Resuming human subjects research must position the health and safety of our faculty, staff, students, and human research participants as central; must attend to and acknowledge the particular circumstances and challenges across the different university units as well as our community partners; and must be guided by strategic priorities of the State of Minnesota’s only combined research and land-grant institution, the value we place on discovery and disciplined inquiry, and a commitment to research excellence.

● Face to face human subjects research during limited operations must balance benefits of research against the specific and unique vulnerabilities of at-risk populations, both within the categories legally defined as vulnerable, and in other populations made vulnerable by COVID-19. Researchers should assess and document in their resumption application
Animal Research

- Reopening research involving the use of animal subjects is essential to implement the research mission of the University of Minnesota and must be designed to reduce potential harm to investigators and animal husbandry and veterinary staff. Reopening research implementation must involve collaboration, communication, and coordination between investigators and the animal husbandry group. Investigators should be cognizant of the likelihood of future hibernations when planning long-term experiments.

Access to University Libraries

- The University Libraries is a critical resource for the research needs of University of Minnesota faculty, staff, and students. Until the campus is open for normal operations, library services will continue to offer robust digital access to critical content. In addition, access will be expanded as follows:
  - Wherever feasible, print-only materials will be provided through scanning/digital delivery (e.g., articles, book chapters, selections of archival material and special collections, selections from instructor copies for online reserves).
  - When a digital surrogate is not available or does not meet research needs, curbside pickup of physical materials, including interlibrary loan, will be provided on an as-needed basis.
  - Subject to approval by each curator, Archives and Special Collections will provide extremely limited, controlled, on-site use of materials, particularly for time-sensitive needs.
- While the Libraries will adopt policies and procedures to fulfill as many research uses as possible (including automatically extending circulation due dates and providing remote services), it may not be possible to accommodate some researcher needs.

Beyond the Lab: Common Spaces, Transportation

- On-site research at campus or field locations depends upon a variety of complementary services including transportation and parking, common space cleaning services, building and campus security, etc. Providing workplace safety in this situation requires close coordination of University Services functions with University Health and Safety and the managers and users of facilities.

Research at Off-Campus Locations
• Research at field and community locations is guided by the same principles as on-campus research, but shall be evaluated in view of the local conditions and governmental restrictions associated with the research site, transportation to/from the research site, and the University’s travel guidelines at the time of research.

Assumptions
1. The University will follow guidance from the Minnesota Governor, the Minnesota Department of Health, and from their counterparts in other states where off-campus research may be conducted.

2. Each unit will follow University policy, designating “essential employees” according to the work to be done during the Initial Restart Phase.

3. Each unit will articulate, and consistently apply, protocols and procedures for employee return.

4. University of Minnesota research is conducted in a diverse set of facilities at both on-campus and off-campus (field) locations. The opportunities and strategies for minimizing viral transmission are very different in a research forest vs. a special collections archive vs. a large open-plan studio vs. a class 100 cleanroom.

5. Research Associate Deans and Vice Chancellors are best positioned to provide individual attention to each resumption request while prioritizing such requests across the available facilities.

6. All normal research approval processes (human subjects, animal subjects, biosafety, etc.) are still in effect in addition to collegiate/campus approval. Community-engaged research must involve the community in decisions of when it is appropriate to resume research.

7. There is substantial effort involved in restarting operations at all levels. A period of time is needed to permit development/approval of protocols, testing and reopening of laboratories, and implementation of University-wide practices needed to support safe resumption of research.

8. Core research facilities and services (e.g., Research Animal Resources, Genomics Center) are likely to be unable to accommodate the entire demand, at least during the initial weeks of resumption. Research uses will need to be prioritized with staged starts.
9. University researchers fall into different COVID-19 risk categories, both as individuals and when considering those they live with. The University strongly encourages those at elevated risk to follow medical and public health guidance. The University’s role is not to determine the risk level of individuals; rather the University should ensure that individuals can make their own informed choices.

10. Researchers also have different levels of vulnerability and power. Students and Postdocs are particularly vulnerable because of the unique power advisors have over their future careers. Communication, training, and conflict resolution processes need to be in place to prevent harm due to power differentials.

11. Social distancing, wearing of masks or other appropriate PPE, hand-washing, and disinfection of surfaces are key factors to reducing the transmission of the COVID-19 virus.

12. The best way to reduce transmission is for researchers to do at home as much of their research as can be done from home. Time on-site should be limited to what is necessary for the research being conducted.

13. Large gatherings are unlikely to be safe over the next several months. Research meetings, seminars, conferences, and similar activities should be carried out online.

14. Personal responsibility is key to safe operations and the avoidance of disease transmission. Educational materials will be developed for researchers and research support staff, and researchers found out of compliance may be denied future access to research sites.

15. Social distancing and use of PPE are a significant behavior change that will require reinforcement. University communicators will be engaged to ensure regular messaging encouraging and supporting this behavior change.

16. The University is well-informed about the availability of PPE in the state and will restrict non-essential research requiring medical-grade PPE if PPE supply does not meet the needs of healthcare workers and first responders.

17. Adequate protection in many cases can be provided by PPE that is different from typical medical-grade PPE and that may be manufactured on site at the University specifically to support research use. The nature of PPE needs and availability of such PPE will be part of the determination of whether research can be conducted.
18. There are many potential disruptions that could cause research efforts to be interrupted. Researchers are responsible for planning to prevent interruptions that are foreseeable (e.g., having a sufficient supply of PPE and research materials prior to commencing research). Researchers are also responsible for planning for non-foreseeable interruptions (e.g., a resurgence of COVID-19), including potentially delaying the start of research projects.

19. The University’s priority for re-opening research facilities, at least in the short term, is the resumption of research, not on training or other activities taking place in labs.

20. Undergraduate students will generally not be used as part of research resumption activities. Use of undergraduate students is subject to an additional level of approval.

21. Research facilities will conduct a robust start up plan that includes equipment checks, facilities and supply chain assessments prior to being approved to return to work.

22. The University of Minnesota already has expertise, policies, and procedures to address many of the issues involved in resuming research. Our goal is not to reinvent the wheel but rather to enlist and align all of these resources to facilitate a speedy and safe resumption.

23. The situation will evolve and UMN will remain adaptable and nimble to the dynamic environment. The baseline level of risk for researchers will change as restaurants and retail businesses reopen, schools reopen, etc., requiring a reassessment of what level of resumption and precautions are appropriate.

**PHASED APPROACH**

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<th>Phase</th>
<th>Conditions and Criteria</th>
<th>Allowed Activities</th>
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<tr>
<td>External (MN+* )</td>
<td>COVID in Minnesota</td>
<td>Internal (U of M)</td>
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<tr>
<td>Cases presenting in MN</td>
<td>COVID-19 research that has the potential to mitigate the pandemic’s spread;</td>
<td>Only research deemed critical is allowed on-campus</td>
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<tr>
<td>limited community spread</td>
<td>Certain biomedical/clinical research that, if paused, would harm its research participants;</td>
<td>RAR Pandemic Plan implemented</td>
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<td>testing limited</td>
<td>Procedures to maintain critical research infrastructure. For example: animal care, irreplaceable cell lines, laboratory equipment that requires gas or cryogenic monitoring, etc.;</td>
<td>10-15% of normal research estimated on-campus (including ramp-down of research being closed)</td>
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- Only research deemed critical is allowed on-campus
- RAR Pandemic Plan implemented

Central Activities (implemented)
- University travel domestic and international travel ban (10 March)
- Laboratory hibernation guidance released to include hibernation/shutdown templates released (March 16)
- Research with Animals Guidance released (March 17)
- Research with Human Beings Guidance released (March 18)
- RAR implemented pandemic plan and guidance associated with yellow phase to include identification of 20% priority save cages (March 21)
- Studies completed early that required on-campus effort however are not included in critical list
- Recommendations to MN Governor’s office regarding Essential Workers based on research considerations
<table>
<thead>
<tr>
<th>#1 State Reaction</th>
<th>• Gov Walz Exec Order (3/25)</th>
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<tr>
<td>Challenges</td>
<td>• Community spread</td>
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<td>• Hospitalizations increase</td>
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<td>• testing limited</td>
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<td>• PPE shortages</td>
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<td>• Research as designated in Phase 0</td>
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<td>• UMN or MN Government “Essential”</td>
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<td>• Human subjects remote recruitment/data collection</td>
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<td>10-15% of normal research estimated on-campus (including extensive new COVID-19 research)</td>
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| Internal (U of M) | • On-campus access allowed to maintain research capability or prevent catastrophic disruption |
|                  | • COVID-19 related research encouraged |
|                  | • Researchers must be designated as Essential to be on site (per Governor order) |
|                  | • Provost announces a one year extension to probationary periods for faculty and librarians (4/1) |

<p>| Central Activities (implemented) | • Lab posting requirements released for labs performing essential tasks (March 29) |
|                                 | • Onsite Research Exception Process implemented (April 8) |</p>
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<th>#2</th>
<th>Pre-Restart</th>
<th>State Context</th>
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<td>● Governor Walz issues EO 20-40 allowing re-opening of non customer-facing workplaces</td>
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<td>● UMN/Mayo announce substantial increase in testing capacity (virus and antibody)</td>
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<td>● Increased COVID-19 cases and deaths, but hospital and ICU numbers holding below capacity</td>
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<td>Internal (U of M)</td>
<td>● Some activities start with OVPR approval (consistent with current reduced operations)</td>
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<td>● OVPR approval of process for re-start (this report or modified version)</td>
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<td>Central Activities (to be implemented)</td>
<td>Core/shared facility/ISO/Research Svcs</td>
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<td>● Inspect/ready facilities</td>
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<td>● Develop and review scheduling/prioritization plans (review with appropriate ADR/VCR/VPR)</td>
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<td>● Final activities: bring into operation (and address priority backlog)</td>
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<td>Individual labs/PIs</td>
<td>● Single visits to develop safe operation proposals (measurements, etc.)</td>
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<td>● Submit plans for review by department, then college/campus</td>
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<td>● PI must post safety procedures and emergency contact signs in each room to be opened.</td>
</tr>
</tbody>
</table>

15-20% of normal research estimated on-campus

Central preparation
- OVPR disseminates resumption plan
- Obtain/manufacture sufficient non-competing PPE and disinfectant
- FM review of cleaning procedures for common spaces; notification of operating levels per building
- Coordination with PTS over access to campus for approved researchers
- Establish needed hotlines, ombuds, etc. to protect researchers in labs
- Develop training programs for safety (masks, hand washing, etc.) and broad messaging about personal responsibility and optional participation
- OVPR needs to "build" the approval system
- OVPR to produce printable “posters:” (a) safety procedures, and (b) contact info
- Develop contact tracing tools (access database, cardkey access, building logs)
- SPH to develop/implement contact tracing protocol
- University Libraries develops plans for limited scanning, curbside delivery, and physical access to items not available through online access

College/Campus preparation
- Hold “research resumption” town halls with faculty, staff, grad students, postdocs
- Make connections as needed to centralized core facilities, services
| #3 | Initial Restart | 
|---|---|---|
| **External (MN+)** | **Restart Initiation**  
- Relaxation of social distancing measures  
- Local COVID-19 hospitalizations flatten, then drop  
- COVID-19 testing capacity increases |  
- All research from Phase 2 (no new approvals needed except to expand scope, space, personnel)  
- On-site research may continue as it is approved by college/campus approvers based on priority scheme:  
  - Due to limited capacity, some facilities may wish to go to multiple shifts (e.g., 7-1, 3-9), specifics to be determined for each facility.  
  - Capacity of core/shared facilities is likely to be limited and will be a constraint.  
- Field/community-based research resumes (based on individual approvals) in locations where local conditions and safety procedures permit.  
- Only work that requires on-site access may be performed on-site; all other work remains remote:  
  - Meetings remain online.  
- No undergraduates on-site except by special authorization.  
- Only trained individuals at on-site locations; no training on site.  
- Libraries extend access to print collections through scanning/delivery, curbside pickup, limited physical access to archival and special collections. Most access remains online.  
- 30-50% of normal research estimated on-site |  
| **Internal (U of M)** |  
- OVPR declaration of initial restart  
- Safety procedures finalized and disseminated with training materials for face mask use, hand washing, cleaning measures, social distancing, etc.  
- Contact tracing plans in place; sufficient testing available for students/employees who are exposed to COVID-19  
- Approval process implemented and functional.  
- Hotline in place for workplace safety issues, conflict resolution, mental health, public health.  
- PPE and disinfection supplies at adequate levels; facilities are able to order supplies from U Market (or designated sources)  
- FM plans for common area disinfection.  
- Appropriate plans approved for parking/transportation.  
- Campus is staffed to accommodate increased number of individuals.  
- Seek interpretation from Provost’s office on whether travel by auto to off-campus research sites (i.e., field work) is permitted under the travel ban. |  

- Prepare and implement review process for reopenings
<table>
<thead>
<tr>
<th>Central Activities (proposed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>● Ongoing evaluation of COVID-19 disease progression; monitoring of any cases of infection/transmission on campus</td>
</tr>
<tr>
<td>● Monitor hotline reports and overall level of issues of concern</td>
</tr>
<tr>
<td>● Review level of approved research being conducted; assess capacity to increase</td>
</tr>
<tr>
<td>● Monitor usage levels of shared/core research facilities</td>
</tr>
<tr>
<td>● Colleges/Campuses review and report on successes/challenges/failures so far</td>
</tr>
<tr>
<td>● Continued evaluation of the extent to which travel may be resumed for research purposes</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>#4 Expanded Restart</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>State Situation Improves</strong></td>
</tr>
<tr>
<td>● MN (continued) relaxation of social distancing measures</td>
</tr>
<tr>
<td>● New cases of COVID-19. ICU usage, deaths decreasing;</td>
</tr>
<tr>
<td>● COVID-19 testing capacity near maximum of needed capacity</td>
</tr>
<tr>
<td>● PPE widely available</td>
</tr>
<tr>
<td>● All research from Phase 3 may continue.</td>
</tr>
<tr>
<td>● New on-site (campus and field) research may be proposed and approved with the limitation that it must be able to be conducted in accordance with University safety procedures.</td>
</tr>
<tr>
<td>○ At start, only work that requires being on-site will be permitted on-site</td>
</tr>
<tr>
<td>○ If situation permits, will expand to permit limited on-site access to allow greater productivity / psychological and home relief (e.g., 1-3 days/week on campus depending on office situation) consistent with social distancing guidelines.</td>
</tr>
<tr>
<td>● Human Subjects Research resumes with restrictions related to participant and public safety</td>
</tr>
<tr>
<td>● Group meetings, seminars, and other group activities not permitted on site.</td>
</tr>
<tr>
<td>● Travel permitted to the extent deemed appropriate in University guidance.</td>
</tr>
<tr>
<td>50 - 75% of normal research estimated on-campus</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Internal (U of M)</th>
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</thead>
<tbody>
<tr>
<td>● Review of Initial Restart complete and critical issues addressed</td>
</tr>
<tr>
<td>● Facilities and core services staff have adequately prepared for expanded return to campus</td>
</tr>
<tr>
<td>● Ability to gradually expand # of people on campus while maintaining social distancing</td>
</tr>
<tr>
<td>Central Activities (proposed)</td>
</tr>
<tr>
<td>-------------------------------</td>
</tr>
<tr>
<td>● Evaluate conditions for resuming on-site (lab, field, etc.) training operations</td>
</tr>
<tr>
<td>● Evaluate conditions for returning to normal operations</td>
</tr>
<tr>
<td>● Ongoing evaluation of COVID-19 disease progression; monitoring of any cases of infection/transmission on campus</td>
</tr>
<tr>
<td>● Monitor hotline reports and overall level of issues of concern</td>
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<td>● Review level of approved research being conducted; assess capacity to increase</td>
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<tr>
<td>● Monitor usage levels of shared/core research facilities</td>
</tr>
<tr>
<td>● Colleges/Campuses review and report on successes/challenges/failures so far</td>
</tr>
<tr>
<td>● Continued evaluation of the extent to which travel may be resumed for research purposes</td>
</tr>
<tr>
<td>#5 Approaching Normal</td>
</tr>
<tr>
<td>External (MN+)</td>
</tr>
<tr>
<td>● No or minimal state restrictions</td>
</tr>
<tr>
<td>○ Retail and restaurant operations resume (possibly with spacing guidelines)</td>
</tr>
<tr>
<td>● Travel restrictions relaxed or eliminated</td>
</tr>
<tr>
<td>● Widespread testing and identification of new COVID-19 cases, with quarantining</td>
</tr>
<tr>
<td>● Adequate supplies of PPE</td>
</tr>
<tr>
<td>● Business as usual except for certain restrictions on research with vulnerable populations</td>
</tr>
<tr>
<td>● Resumption of full library access; full access to campus workspaces.</td>
</tr>
<tr>
<td>● Some “new normal” procedures may be in place for large groups, mask use while ill, etc.</td>
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</tbody>
</table>

*On site research activity approaches 100%*

<table>
<thead>
<tr>
<th>Internal (U of M)</th>
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</thead>
<tbody>
<tr>
<td>● University determination that normal operations may return (with possible exceptions for large-group gathering)</td>
</tr>
<tr>
<td>○ Students permitted to return for on-campus activities; or</td>
</tr>
<tr>
<td>○ Students remain largely remote, but other on-campus activities resumed.</td>
</tr>
<tr>
<td>● University issues guidance on any “new normal” guidelines (e.g., mask use when ill; group size guidelines; campus dining facilities; etc.)</td>
</tr>
<tr>
<td>● Conditions are such that it is appropriate for RAR to alleviate Yellow condition per their pandemic plan.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Central Activities (proposed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>● Ongoing evaluation of COVID-19 disease progression; evaluation of appropriate protective measures as part of a “new normal.”</td>
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<tr>
<td>#6</td>
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<tr>
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</tbody>
</table>
| ![Image](image1.png) | **COVID-19 Not a Health Risk**  
- CDC and MDH determination that COVID-19 no longer requires special precautions, likely due to one or more of:  
  - Vaccine widely available  
  - National herd immunity  
  - Effective antiviral treatment  
  - Few if any new cases  
  - No special restrictions on research; back to full normal operations.  
*On site research activity at 100%* |

| ![Image](image2.png) | **University formally declares end to COVID-19 emergency** |

| ![Image](image3.png) | **Central Activities (proposed)**  
- Retrospective analysis to learn from our handling of this pandemic to be better prepared for future similar emergencies; include a full analysis of the costs incurred (and where) to inform financial recovery priorities. |

---

**Action List**

The following actions are needed (at appropriate times) to implement the Research Restart Plan.

**OVPR**

- Determination and announcement of when University is ready to progress to next stages in restart plan (and, if necessary, to revert to prior stages). [Ongoing]
- Disseminate resumption plan [start of Phase 2: Pre-Restart]
- Create approval system in wfgem (and appropriate access to database of approved requests; authorized personnel) [during Phase 2: Pre-Restart]
- Oversee building sufficient supply of PPE and disinfectants that does not compromise supply available for healthcare. Provide a point of reference where interested individuals can consult to determine whether medical-grade PPE is currently available for non-essential research. [during Phase 2: Pre-Restart]
• Seek interpretation from Provost’s office on whether travel by auto to off-campus research sites (i.e., field work) is permitted under the travel ban. Disseminate interpretation. [during Phase 2: Pre-Restart]

• Establishment and promotion of points of contact for (a) anyone on-site who feels unsafe due to the inappropriate presence or actions of others; (b) conflict resolution services for students and employees who feel they are being inappropriately pressured or otherwise being placed at risk; (offer from Student Conflict Resolution Center to coordinate, likely with Office for Conflict Resolution and links to other campus); (c) mental health services for those who need assistance (already exist); (d) public health services to report an actual or likely COVID-19 infection (coordinated with SPH for contact tracing). [during Phase 2: Pre-Restart]

• In coordination with UHS, finalize university-wide base safety procedures. [during Phase 2: Pre-Restart]

• Produce documents for local printing/posting with (a) the base safety procedures, and (b) contact information for safety concerns, conflict resolution, mental health, and public health services. [during Phase 2: Pre-Restart]

• In coordination with UHS, develop and disseminate training programs for safety (masks, hand washing, etc.) and broad messaging about personal responsibility and optional participation. [during Phase 2: Pre-Restart]

• Oversee (in conjunction with University Services, SPH) identification of resources to be used for contact tracing in the event of infection (e.g., authorized user database, building keycard usage logs, building sign-in sheets). [during Phase 2: Pre-Restart]

• In conjunction with others, ongoing evaluation of COVID-19 disease progression; monitoring of any cases of infection/transmission on campus [ongoing]

• Monitor hotline reports and overall level of issues of concern [ongoing]

• Review level of approved research being conducted; assess capacity to increase [ongoing]

• Evaluation of suitability of resumption of on-site research training [ongoing]

• (with President/Provost/…) continued evaluation of the extent to which travel may be resumed for research purposes [ongoing]

• Lead retrospective analysis to learn from our handling of this pandemic to be better prepared for future similar emergencies; include a full analysis of the costs incurred (and where) to inform financial recovery priorities. [after Return to Normal Operations]

University Services: University Health and Safety

• Develop with FM plans for installation of hand sanitizer stations at appropriate locations [during Phase 2: Pre-Restart]
● In coordination with OVPR, finalize university-wide base safety procedures. [during Phase 2: Pre-Restart]

● In coordination with OVPR, develop and disseminate training programs for safety (masks, hand washing, etc.) and broad messaging about personal responsibility and optional participation. [during Phase 2: Pre-Restart]

● Review FM cleaning procedures for common spaces. [during Phase 2: Pre-Restart]

● Collaborate with FM on procedures for disinfection of spaces with known exposure to COVID-19 positive individuals. [during Phase 2: Pre-Restart]

University Services: Facilities Management

● Develop with UHS and implement plans for installation of hand sanitizer stations at appropriate locations. [develop during Phase 2: Pre-Restart; implement by start of Phase 3: Initial Restart]

● Review of cleaning procedures for common spaces; review with UHS. [during Phase 2: Pre-Restart]

● Develop plans to staff custodial services at levels needed based on facility usage (coordinate with building occupants or college/campus representatives). [during Phase 2: Pre-Restart]

● Develop, with UHS, plans for safe disinfection of enclosed spaces where infected individuals have been found to have been. [during Phase 2: Pre-Restart]

University Services: Public Safety

● Review access to authorized user database and points of contact for hotline in case of complaints of unauthorized users in buildings or facilities. [during Phase 2: Pre-Restart]

University Services: Parking and Transportation Services

● Develop/promulgate plans for close-to-building access for authorized researchers traveling by car to the University. [during Phase 2: Pre-Restart]

● Develop with UHS options and best practices for travel to the University by authorized researchers without access to cars. [during Phase 2: Pre-Restart]

University Services: U Market

● Develop/disseminate plans for availability, ordering, and distribution of disinfectants, hand sanitizer supplies, gloves, and masks for authorized research uses. [during Phase 2: Pre-Restart]

Office for Undergraduate Education
• Implement review process for requests for exceptions to permit undergraduates in on-site activities across the system. [during Phase 2: Pre-Restart]

University Libraries

• Develop and promulgate plans for limited scanning, curbside delivery, and physical access to items not available through online access. [during Phase 2: Pre-Restart]

School of Public Health

• Develop and implement contact-tracing protocol. [during Phase 2: Pre-Restart]

Colleges, Campuses, and Central Offices Managing Research Operations

• Hold “research resumption” town halls with faculty, staff, grad students, postdocs. Town halls should not only explain processes, but also focus on the underlying values, including personal and collective responsibility for health and safety and appropriate treatment of students, trainees, and staff in research resumption. [during Phase 2: Pre-Restart]
• Prepare and implement review process for reopenings. [during Phase 2: Pre-Restart]
• Make connections as needed to centralized core facilities, services. [during Phase 2: Pre-Restart]

• Monitor usage levels of shared/core research facilities. [ongoing]
• Review and report on successes/challenges/failures so far. [ongoing]
• Review atypical non-renewals of graduate/professional students and postdocs/residents to identify potential cases for remediation (recommended). [ongoing]

Core/Shared Research Facilities/ISOs/Research Services

• Inspect/ready facilities for resumption of operations. [during Phase 2: Pre-Restart]
• Develop and review scheduling/prioritization plans (communicate to appropriate ADR/VCR/VPR). [during Phase 2: Pre-Restart]
• Bring facilities into operation (and address priority backlog). [at start of Phase 3: Initial Restart]

• Review and respond to requests for access (and capacity queries). [ongoing]

Lab Directors and Principal Investigators
• If resumed operation is appropriate, develop and submit plans for safe and compliant operation of research. May include single visits during Pre-restart to measure spaces and otherwise develop safe operation proposals. [ongoing; first proposal reviews during Phase 2: Pre-Restart]

• Post signs with safety protocols (either University base protocol or custom approved protocol) and contact information for emergencies, safety concerns, conflict resolution, and mental health services in each room in which resumed operations will take place. [by first day of operation for that facility]
MEMORANDUM

TO: Joe Konstan, Associate Dean for Research & Planning, CSE, Chair
    Abimbola Asojo, Associate Dean for Research & Outreach, College of Design
    Erik Brown, Assoc. Vice Chancellor for Graduate Education and Research, Duluth
    Greg Cuomo, Associate Dean for Research & Graduate Programs, CFANS
    Carolyn Fairbanks, Associate Dean for Research, College of Pharmacy
    David Greenstein, Associate Dean for Research, CBS
    Janice Jaguszewski, Director and Associate University Librarian, Health Sciences
    Amy Kircher, Director, SPARC, COVID-19 PM
    Frances Lawrenz, Associate Vice President for Research
    Tucker LeBien, Director, CTSI
    Eric Singsaas, Initiative Director, NRRI
    Carissa Slotterback, Associate Dean, HHH Institute of Public Affairs
    Frank Symons, Associate Dean for Research & Policy, CEHD
    Diane Treat-Jacobsen, Associate Dean for Research, School of Nursing

FROM: Christopher J. Cramer, Vice President for Research

SUBJECT: Staged Resumption of Selected Research Operations Working Group Charge

DATE: April 16, 2020

Background

The University remains in extended reduced operations with onsite research idled except for essential operations. Since March 18, we have limited our onsite/on-campus research activities to:

- COVID-19 research that has the potential to mitigate the pandemic’s spread;
- Certain biomedical/clinical research that, if paused, would harm its research participants;
- Procedures to maintain critical research infrastructure. For example: animal care, irreplaceable cell lines, laboratory equipment that requires gas or cryogenic monitoring, etc.;
- Activities that, if discontinued, would result in significant degradation of safety.

Research activities able to be done remotely have been able to continue. President Gabel has indicated in no uncertain terms that until the Governor and the Minnesota Department of Health change the parameters of the current stay-at-home order in some meaningful way, we will not change our own posture with respect to working remotely.
This remains the case until at least May 4, the current end date for the state’s stay-at-home order. In order to prepare for an eventual easing of restrictions, it will be important to have plans in place that permit our overall research operations to resume in a staged fashion, consistent with the best available public health guidance and our commitment to the health and wellbeing of all of our students, faculty, and staff.

Charge

OVPR has already done some preparation for returning to more robust research operations, including creating an exemption process with an associated workflow and request form (see attachment). As it is unlikely that we will transition directly from "extended reduced operations" to "open without restrictions", I ask that this work group generate more specific recommendations about how the University should proceed under a number of possible scenarios. I ask that the working group’s recommendations center on the following ideas:

- Suggested criteria to be implemented if prioritization of different activities is required. That criteria might include grant/contract timelines, planned student graduations, time-sensitive operations, fieldwork vs work on-campus distinctions, etc.
- Development of a set of broadly applicable principles for safety that would guide limited openings of labs and other facilities, such as:
  - Setting limits on the number of people in a given room based on sufficient spacing/distancing between people/work stations.
  - Require that appropriate protective gear, such as gloves and N95 masks, be available and employed for situations where laboratory operations require close interactions between people, or where PPE is required for the research work itself. Coordinate with the University Health Emergency Response Office (HERO) to assess ability to order/use PPE in non-clinical settings.
  - Create disinfection protocols for labs and offices (wipe down of surfaces before/after each user with appropriate bleach, alcohol, or other approved disinfectants).
  - Outline a "buddy system" to ensure that anyone alone in a lab is in regular contact with another individual who can provide/call help in an emergency.
  - All meetings, lab meetings, etc., would be expected to remain online, at least for the short term
  - Limit training new individuals in lab operations with recommendations about training should the stay-at-home or a similar measure continue through the fall.
  - Implied in the above is that many labs would move to careful pre-scheduling and possibly "platooning" or "split shifts" to reduce the number of people present.
- Address how to accommodate junior researchers who may feel that returning to campus/site would pose undue risk to themselves, or to those with whom they are in contact, but feel unable to negotiate power dynamics in individual research groups that are likely to be unbalanced.
- Coordinate with Facilities Management around best practices for common spaces, including restrooms and mechanisms for identifying labs where operations have resumed.
- Assess the degree to which the availability of robust testing protocols for COVID-19 may influence planning.
To accomplish your work, I expect that you will engage those with appropriate expertise and use their knowledge as necessary to complete this work. I have asked Amy Kircher and Frances Lawrenz to represent OVPR and provide committee support where necessary. I also attach a document from the University of Washington that illustrates how a peer institution has begun to approach this task, in the event it may be useful.

**Requested Deliverables and Timeline**
Please generate a list of recommendations by 04/27/2020

**Attachments**

From: Chris Cramer  
Date: April 7, 2020  
Subject: Standardizing the onsite research exception process during COVID-19

Chancellors, Deans, and Associate Deans for Research,

In our current status of extended reduced operations, we have limited our **onsite/on-campus** research activities to:

- COVID-19 research that has the potential to mitigate the pandemic’s spread;
- Certain biomedical/clinical research that, if paused, would harm its research participants;
- Procedures to maintain critical research infrastructure. For example: animal care, irreplaceable cell lines, laboratory equipment that requires gas or cryogenic monitoring, etc.;
- Activities that, if discontinued, would result in significant degradation of safety.

Many of you continue to identify research that falls into those categories, and requests to permit that work to continue have to date been made in various ways. In **an effort to standardize the process, and to ensure the minimization of risk to personnel, we ask that all future requests make use of the form at**

[http://z.umn.edu/essentialro](http://z.umn.edu/essentialro)

This form captures relevant data and also informs the PI/researcher making the request of best public health practices that must be employed to protect the well being of the researchers.

The form routes from them, through college leadership (Associate Dean for Research or Dean), to the Office of the Vice President for Research, which will make the final decision in consultation with the Provost’s office and/or the Office for Academic Clinical Affairs as necessary. (Note that this form applies only to research activities; all clinical and clinical lab activities should follow the [process already developed by OACA for this purpose](http://z.umn.edu/essentialro).)
While planning for an ultimate return to normal operations merits effort, our current focus remains on restricting our research operations to address only the critical areas outlined above. We will re-evaluate this focus when the public health situation improves, consistent with advice from both the Minnesota Department of Health and the Office of Governor Walz.

Thank you for your partnership,

Chris Cramer

Vice President for Research
Appendix B

Table of Consultation

The working group consulted with the following individuals and groups in the development of this report.

<table>
<thead>
<tr>
<th>Individual or Group</th>
<th>Nature of Consultation</th>
</tr>
</thead>
<tbody>
<tr>
<td>VPR solicitation to faculty, students, staff</td>
<td>Request for input which has received 118 responses (included in Appendix C) from the UMM community. These responses were shared with the working group; those in on time were also digested into issues for sub-groups to address.</td>
</tr>
<tr>
<td>Faculty Consultative Committee and Senate Research Committee representatives</td>
<td>Hour-long video conference call with six governance representatives (with chair and one other working group member); provided draft report for further feedback.</td>
</tr>
<tr>
<td>Leaders of the Council of Graduate Students; UMN Postdoc Association, UMD Graduate Student Association, and various graduate students and postdocs (18 total; details in appendix D)</td>
<td>Consultation with members of the subgroup on protecting graduate students and postdocs (various sessions)</td>
</tr>
<tr>
<td>CBS Dean, Associate Deans, department heads and faculty (13 total; details in appendix D)</td>
<td>Consultation with members of the subgroup on protecting graduate students and postdocs (various session)</td>
</tr>
<tr>
<td>UMN-Duluth academic leadership, deans, faculty leaders (6 total)</td>
<td>Consultation with members of the subgroup on protecting graduate students and postdocs (various session)</td>
</tr>
<tr>
<td>Scott Lanyon (Vice Provost and Dean of Graduate Education);</td>
<td>Joined meeting with subgroup on protecting graduate students and postdocs.</td>
</tr>
<tr>
<td>Jan Morse (Director and Ombudsman, Student Conflict Resolution Center); Rachel Roach (HR Consultant, CBS); Christina Kramer (Facilities Manager, CBS)</td>
<td>Consultation with members of the subgroup on protecting graduate students and postdocs (various session)</td>
</tr>
<tr>
<td>Considered requests from departments and faculty across colleges, with a significant</td>
<td>Requests, consultations, and ongoing feedback to the subgroup on expanding</td>
</tr>
</tbody>
</table>
Consulted staff from across the University Libraries:
Dean/University Librarian (Lisa German); Associate University Librarians (John Butler, Kate McCready, Jennie Burroughs); Director of Minitex (Maggie Snow); Director of Finance and Facilities (Shaan Hamilton); Director of Human Resources (Sheri Stone); over 10 members of the Libraries Leadership Council and key staff members of their units

<table>
<thead>
<tr>
<th>Brad Benson, MD, Professor of Medicine</th>
<th>Consultation on virus and antibody testing</th>
</tr>
</thead>
<tbody>
<tr>
<td>David Bernlohr, PhD, Professor and Head of Biochemistry, Molecular Biology and Biophysics</td>
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<tr>
<td>David Boulware, MD, Professor of Medicine</td>
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</tr>
<tr>
<td>Ashley Haase, MD, Professor and Head of Microbiology and Immunology</td>
<td></td>
</tr>
<tr>
<td>Marc Jenkins, PhD, Regents Professor of Microbiology and Immunology</td>
<td></td>
</tr>
<tr>
<td>Joseph Metzger, PhD, Professor and Head of Integrative Biology and Physiology</td>
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<tr>
<td>Mark Schleiss, MD, Professor of Pediatrics</td>
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<tr>
<td>Beth Virnig, PhD, Professor, School of Public Health</td>
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<tr>
<td>Rebecca Wurtz, MD, MPH, Associate Professor, School of Public Health</td>
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<thead>
<tr>
<th>Rachel Roach, College of Biological Sciences HR director; Sheri Stone, University Libraries HR director; Dee Reineking, Nursing HR director</th>
<th>Consultation on issues relating to Human Resources and University policies</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Dr. Lynn Impelluso, Attending Veterinarian and Director of Research Animal Resources. Prof. Richard Bianco, Chair of IACUC and Director of Experimental Surgical Services. Dr. Benjamin Clark, Associate Director of IACUC. Dr. Jodi Oglivie, Chemical Hygiene Safety</th>
<th>Consultation on issues related to animal research and animal husbandry.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Officer and DEHS representative to IACUC</td>
<td>Consultation on issues related to offsite research and travel to field locations</td>
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<tr>
<td>------------------------------------------------------</td>
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<tr>
<td>Mr. Ian Aldrich, UMD Animal Services</td>
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<thead>
<tr>
<th>NRRI Leadership and Safety committee</th>
<th>Consultation on issues related to prioritization and safety</th>
</tr>
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<tbody>
<tr>
<td>Valery Forbes, Dean of the College of Biological Sciences</td>
<td></td>
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<tr>
<td>Jonathan Schilling, Professor, Department of Plant and Microbial Biology UMN and Director, Itasca Biological Station,</td>
<td></td>
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<tr>
<td>Forest Isbell, Associate Professor, Department of Evolution, Ecology, and Behavior, UMN and Associate Director for Cedar Creek</td>
<td></td>
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</tbody>
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<table>
<thead>
<tr>
<th>Consulted with research compliance personnel in DEHS, College of Pharmacy and OVPR</th>
<th>Consultation on issues related to prioritization and safety</th>
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<tbody>
<tr>
<td>Consulted with personnel from UMD</td>
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<td>Consulted with personnel at NRRI</td>
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<tr>
<td>Consulted with ad hoc faculty and gathered input from documents from other institutions</td>
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<thead>
<tr>
<th>Dr. Amy Hewitt, Director, Institute for Community Integration; Professor, Organization, Leadership, Policy, &amp; Development</th>
<th>Consultation on human subjects issues.</th>
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<tr>
<td>Dr. Kim Gibbons, Director, Center for Applied Research and Educational Improvement</td>
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<td>Dr. Megan Gunnar, Director, Institute for Child Development; Regents Professor</td>
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<td>Dr. Trai LaLiberte, Director, Center for Advanced Studies in Child Welfare</td>
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<td>Dr. Michael Rodriguez, Associate Dean, Undergraduate, International, and Diversity, College of Education + Human Development; Professor, Quantitative Methods in Education, Department of Educational Psychology</td>
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<tr>
<td>Ryan Warren, Director, Education Technology Innovations; Chief Strategic Officer, College of Education + Human Development</td>
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<td>Debra Dykhuis, Executive Director, Institutional Review Board</td>
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<td>Dr. Jeffry Simpson, Chair, Department of Psychology</td>
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Appendix D
“Students” Working Group

**Charge:** In consultation with stakeholders, draft principles and recommendations to ensure that graduate students, postdoctoral fellows, undergraduates, and other junior research staff members (henceforth referred collectively to as “trainees”) receive the highest quality mentorship, research training, and career guidance free from coercion and can safely and efficiently pursue their education and scholarly research.

**Committee Members:**
David Greenstein, PhD, Associate Dean for Research, College of Biological Sciences, University of Minnesota–Twin Cities and Professor, Department of Genetics, Cell Biology, and Development; Erik T. Brown, PhD, Associate Vice Chancellor for Graduate Education and Research, University of Minnesota–Duluth, Professor, Department of Earth and Environmental Sciences and Large Lake Observatory Fellow, Institute on the Environment; Joseph A. Konstan, PhD, Associate Dean for Research, College of Science and Engineering, University of Minnesota–Twin Cities, Distinguished McKnight Professor and Distinguished University Teaching Professor, Department of Computer Science and Engineering.

**Issues Addressed:**
1. Safety considerations for a phased restart to research activities
2. Procedures for mitigating risk and creating the safest possible working environment
3. The roles of Facilities Management, the Department of Environmental Health and Safety, and all researchers to ensure a safe working environment
4. Availability and limitations on PPE usage
5. Importance of protecting careers of trainees
6. Factors that might make trainees unable, unwilling, or afraid to resume research before a return to normal operations
7. Potential sources of conflict with faculty mentors and supervisors specific to the resumption of research activities during a pandemic, as well as general areas of potential conflict.
8. Availability and access to mental health resources
9. Availability and access to disability resources
10. Availability and access to childcare
11. Status of research cores and the status and capacity of all research resources (RAR, chemical stock rooms, instrument shops, Fleet Services, etc.)
12. Access to transportation and parking
13. Social distancing in laboratories, maker spaces, and other research facilities and enforcement of policies
14. Optimal space utilization
15. Mechanisms for reporting abuse, as well as mechanisms for reporting safety concerns
16. The benefits of requiring new Individual Development Plans (IDPs) for trainees tailored to the new economic and employment realities in academia resulting from the pandemic
17. Concerns of trainees about potential non-renewal of appointments and potential extensions to time-limited appointments
18. The participation of undergraduate students in research activities before a return to normal operations and during the phased restart of research operations
19. Administrative oversight mechanisms to maximize the quality of training and allay trainee concerns
20. Concerns of international trainees related to visa status
21. Equitable access to research spaces and resources
22. The role of SARS-CoV-2 testing
23. The need for investigators (e.g., faculty) to formulate “Restart Initiation Proposals” and the use
of a tiered system of review by departments and collegiate units
24. The need for clear communications of policies and procedures
25. The expectation that any work that can be done remotely will continue to be done so
26. Availability and access to resources to enable remote work (e.g., computer hardware, software, internet)
27. Procedures and mechanisms to handle individual trainee and PI requests on an individual basis
28. Contingency planning if the public health situation worsens

**Individuals Consulted:**

**Trainees**
Kriti Agarwal, PhD, Electrical and Electronics Engineering–Nanotechnology, University of
Minnesota–Twin Cities, President, Council of Graduate Students;
Deepak Haarthin, Doctoral Candidate, Department of Plant Pathology, University of Minnesota–Twin
Cities, Vice President, Council of Graduate Students;
Samuel Nemanich, PhD, Department of Rehabilitation Medicine, School of Medicine, University of
Minnesota–Twin Cities, President, UMN Postdoctoral Association;
Katherine Block, PhD, Center for Immunology, School of Medicine, University of Minnesota–Twin
Cities, Secretary, UMN Postdoctoral Association;
Adrian Moore, PhD, Department of Evolution, Ecology, and Behavior, University of Minnesota–Twin
Cities, Postdoctoral Representative, CBS Leadership Council;
Evan Ellison, Department of Plant and Microbial Biology, University of Minnesota–Twin Cities;
Graduate Student Representative, CBS Leadership Council;
Gabriela Huelgas-Morales, PhD, Department of Genetics, Cell Biology, and Development, University
of Minnesota–Twin Cities
Robyn Rebeck, PhD, Department of Biochemistry, Molecular Biology, and Biophysics, University of
Minnesota–Twin Cities, BMBB Postdoc Representative, CBS Postdoc Committee Organizer;
Francois Gaascht, PhD, Department of Biochemistry, Molecular Biology, and Biophysics, University
of Minnesota–Twin Cities, BMBB Postdoc Representative;
Ryan Bruce Runquist, PhD, Department of Plant and Microbial Biology, University of
Minnesota–Twin Cities, Genetics Society of America Early Career Scientist Leadership Steering
Committee Co-Chair;
Jeff McVay, Chem MS, University of Minnesota–Duluth, President, UMD Graduate Student
Association;
Clara Smolenski, Integrated Biosciences Graduate Program, School of Medicine, School of
Medicine, University of Minnesota–Duluth;
Michael Williams, Integrated Biosciences Graduate Program, School of Medicine, School of
Medicine, University of Minnesota–Duluth;
Dustin Ray, PhD, Biology Department, University of Minnesota–Duluth;
Rosalyn Putland, PhD, Biology Department, University of Minnesota–Duluth;
Brenna Doheny, PhD, School of Medicine, University of Minnesota–Duluth;
Tiana Luczak, PharmD, Pharmacy Practices and Pharmaceutical Sciences, University of
Minnesota–Duluth.

**Faculty and Staff**
Scott Lanyon, PhD, Vice Provost and Dean of Graduate Education, University of Minnesota–Twin Cities;
Valery E. Forbes, PhD, Dean College of Biological Sciences, University of Minnesota–Twin Cities;
David Bernlohr, PhD, Distinguished McKnight Professor and Head, Department of Biochemistry, Molecular Biology, and Biophysics, University of Minnesota–Twin Cities;
David Kirkpatrick, PhD, Associate Professor and Head, Department of Biology Teaching and Learning, University of Minnesota–Twin Cities;
Peter Tiffín, PhD, Professor and Head, Department of Plant and Microbial Biology, University of Minnesota–Twin Cities;
Michael Travisano, PhD, Distinguished McKnight University Professor, Interim Head, Department of Evolution, Ecology, and Behavior, University of Minnesota–Twin Cities;
Emilie Snell-Rood, PhD, Associate Professor and Associate Head, Department of Evolution, Ecology, and Behavior, University of Minnesota–Twin Cities;
Thomas Hays, PhD, Professor and Head, Department of Genetics, Cell Biology, and Development, University of Minnesota–Twin Cities;
Carrie Wilmot, PhD, Professor and Associate Dean for Graduate Education, Department of Biochemistry, Molecular Biology, and Biophysics, University of Minnesota–Twin Cities;
John Ward, PhD, Professor and Associate Dean for Undergraduate Education, Department of Plant and Microbial Biology, University of Minnesota–Twin Cities;
Marlene Zuk, PhD, Professor and Associate Dean for Faculty, Department of Evolution, Ecology, and Behavior, University of Minnesota–Twin Cities;
Nikki Letawsky Shultz, Assistant Dean for Student Affairs and International Programs, Student Support and Advising, College of Biological Sciences, University of Minnesota–Twin Cities;
Allison Shaw, PhD, Assistant Professor, Department of Evolution, Ecology, and Behavior, University of Minnesota–Twin Cities;
Sivaraj Sivaramakrishnan, PhD, Professor and Director of Graduate Studies, Department of Genetics, Cell Biology, and Development, University of Minnesota–Twin Cities;
Jan Morse, Director and Ombudsman, Student Conflict Resolution Center, University of Minnesota–Twin Cities;
Rachel Roach, Human Resource Consultant, College of Biological Sciences, University of Minnesota–Twin Cities;
Christina Kramer, Facilities Manager, College of Biological Sciences, University of Minnesota–Twin Cities;
Robert Sterner, PhD, Professor of Biology and Director of the Large Lakes Observatory, University of Minnesota--Duluth;
Fernando Delgado, PhD Executive Vice Chancellor for Academic Affairs, University of Minnesota--Duluth;
Paula Termuhlen, MD, Regional Campus Dean of the Medical School, Duluth Campus;
Wendy Reed, PhD, Dean of the Swenson College of Science and Engineering, University of Minnesota--Duluth;
Members of the Research, Scholarship, and Creative Activities Committee of the University of Minnesota-Duluth Faculty Senate;
Members of the Graduate Programs Committee (aka Graduate Council) of the University of Minnesota-Duluth

**Recommendations included in the Research Restart Plan:**
1. All planning for resumption of research operations must take into account the possibility that future health conditions may require rolling back to more restricted operations. The potential
harm caused by interrupting research must therefore be considered as a factor when
determining whether a project should be resumed.
2. Personal responsibility is key to the University’s approach to flattening the curve and avoiding
virus transmission. Accordingly, all faculty, staff, and students engaged in research activities
must be provided with training on both the motivation for and the details of university
guidelines and procedures. Failures of personal responsibility should be addressed through
normal personnel processes and may include revocation of access.
3. Conduct of research on-campus or at field locations off-campus during the period of limited
operations should be approved, tracked, and overseen. A centralized database and approval
system (e.g., wfgen) should be used to submit and track requests (which shall include specific
spaces and facilities used and individuals requested to use those spaces and facilities).
Requests should be made by the PI, Lab Director, or coordinator of a space for endorsement by
a department chair/head; center director; or similar official. Requests are routed for approval to
a designated collegiate or campus official (usually Associate Dean or vice-Chancellor for
Research) or to the VP Research for centrally-managed units.
4. Colleges and campuses are responsible for monitoring compliance with policies and
procedures; OVPR has oversight responsibility for research systemwide.
5. Priority should be given to research that is necessary for timely graduate student or postdoc
completion.
6. Priority should be given to research work that promotes the scholarship, career development,
and employment of a large number of trainees and employees.
7. The plan must consider the degree to which the research, once started, can be suspended
without negative consequences to human subjects, animals, or research materials.
8. Research will employ approved, validated, and mandated safety protocols, including social
distancing, wearing of cloth masks.
9. Research plans should incorporate organized shift work to minimize occupancy of research
spaces.
10. Disinfection and cleaning of spaces is a shared responsibility; the specific tasks to be
undertaken by researchers versus facilities management should be clearly defined.
11. All work that can be carried out remotely must be carried out remotely.
12. All meetings will be carried out remotely.
13. Undergraduate student participation in on-site research during the period of limited operations
is generally prohibited. This prohibition does not apply to individuals who are employees in
non-student positions but also enrolled as students. Exceptions to this prohibition can be
granted only for good cause (assessing both the risks and the educational and the career
development benefits to the student) and with the approval of the vice-Provost and Dean for
Undergraduate Education.
14. Advisors and unit leaders must be educated about the expectations for treating graduate
students/postdocs who opt out appropriately (including working to identify alternative duties or
sources of support). Colleges and campuses may choose to review any dismissals and non-
renewals of graduate and professional students and postdocs/residents.
15. Mechanisms must be in place for trainees to report abuse through the Student Conflict
Resolution Center. Immediate mechanisms (e.g., “hotlines”) should be established for trainees
and staff to address immediate safety or security concerns.
16. Mental health services should be available and accessible to trainees.
17. We must consider the availability and accessibility of childcare for our trainees.
18. Researchers also have different levels of vulnerability and power. Graduate students and
Postdocs are particularly vulnerable because of the unique power advisors have over their
future careers. Communication, training, and conflict resolution processes need to be in place to prevent harm to lower-power researchers.

19. Collegiate units should hold research resumption town hall meetings to help allay the fears of trainees, reinforce community values, promote strong mentorship, maximize the adoption and adherence to safety protocols, and manage expectations

Decisions on Items not Recommended in the Research Restart Plan:

1. We decided not to recommend that research mentors must work with trainees to produce new IDPs relevant to the new situation.
2. We decided not to make it mandatory that collegiate units review all dismissals and non-renewals of graduate and professional students and postdocs/residents. The rationale is that trainees are appointed through different processes and procedures in the various collegiate units. In some cases, “non-renewal” is part of the typical progression from one position to another. Nonetheless, there must be a means for trainees or interested faculty to contest dismissal and non-renewal decisions.

Resources:

3. Mathematical modeling studies relevant to considering trainee safety during the restart of research (see two modeling documents produced by the EEB department with essential contributions of Professors Allison Shaw and Michael Travisano).
Appendix E

Subgroup- Ensuring Adequate Stores of PPE

Subgroup members- Amy Kircher, OVPR; Carolyn Fairbanks, Pharmacy; David Bereiter, Dentistry

Summary report

1. Introduction

Across the country PPE is currently in short supply, especially N-95 and surgical masks for clinical care. Existing stock is being prioritized for healthcare and hospital workers who have a high risk of exposure to COVID19. At this time (4/24) VP Jakub Tolar directs the prioritization of PPE for the University of Minnesota based on health care needs. The PPE needs for researchers will vary based on research activities which will require a stratification of researchers for return to work.

2. Issues addressed

The primary issues addressed were the requirements for clinical grade PPE and criteria under which UMN researchers could return to research given PPE constraints.

3. Individuals consulted

Chris Cramer, PhD, OVPR
Jodi Oglivie, PhD, DEHS
Rebecca Cuellar, PhD Pharmacy
Emergency Management Policy Committee (via questions from VPR Cramer)

4. Recommendations made

For each “return to research” plan, researchers must include the type of all the PPE required (e.g. gloves, masks, lab coats).

Plans may include alternate PPE (such as fabric-based masks) that may contain/limit droplet exposure between people. Surgical masks should be reserved for health care and animal research activities.

Inclusion of non-disposable PPE (e.g. fabric-based masks, lab coats, safety goggles, or face shields) in the plans should be accompanied by an SOP for frequency of washing (fabric-based masks and lab coats) and disinfection (safety goggles and face shields).
Maintaining animal research is contingent not only on investigators having sufficient access to PPE but also whether Research Animal Resources is also sufficiently supplied with PPE necessary for animal care and husbandry.

For clinical grade PPE required the following criteria must be met to return to research:

- Dr. Tolar, VP OACA, has declared sufficient PPE supplies and is no longer requesting PPE be directed to the healthcare system.
- There are no known PPE shortages in MN as confirmed with the MDH
- Researchers have 4 weeks of PPE on hand with verified future availability of supplies from vendors.
Appendix F
Field and Offsite Research

Field-based research frequently involves one or more of the following pandemic risk areas; vehicle travel to sites, stopping for rest and food, working in groups, interaction with the public, and co-working spaces. Many of these offer unique safety concerns because they occur outside of the spaces controlled by the university and so special safety precautions may be needed. Safety is always the first criterion for approval of any travel and field activity.

Name and affiliations of the individuals who were part of the sub-group
Eric Singsaas, Research Director, Natural Resources Research Institute
Erik Brown, Associate Vice Chancellor for Graduate Education and Research, UMD
Greg Cuomo, Associate Dean for Research and Graduate Programs, CFANS
David Greenstein, Associate Dean for Research, CBS

Issues addressed
Scope of travel and off site locations
Risks unique to work off campus, field stations, vessels, and rural settings
Risk mitigation unique to travel in university or personal vehicles
Overnight lodging, including camping, hotels, and field stations
Risk mitigation when using shared field equipment and instrumentation

Individuals consulted or coordinated with
NRRI safety committee and leadership and field staff
Valery Forbes, Dean of the College of Biological Sciences
Dr. Jonathan Schilling, Professor, Department of Plant and Microbial Biology UMN and Director, Itasca Biological Station
Dr. Forest Isbell, Associate Professor, Department of Evolution, Ecology, and Behavior, UMN and Associate Director for Cedar Creek.
Fernando Delgado, EVCAA, UMD
Wendy Reed, Dean of SCSE, UMD
Robert Sterner, Director of LLO
Al Mensinger, Dept Head, Biology, UMD
Jeffrey McVay, MS student, Chair of UMD Grad Student Association

Recommendations
Definition of travel for field work should include, in approximate order of increasing risks: campus locations such as forests; plots and on-campus farm areas; local travel to an off-campus site; statewide day trips; travel to field stations; time on research vessels; statewide travel requiring overnight lodging; travel out of state; and international travel. Travel should be severely restricted during safer-at-home restrictions and the travel horizon should be relaxed as research activities gradually open, subject to state and federal guidelines. All field work and travel shall follow general guidelines by minimizing the need for interactions (food
pre-purchased, etc.), pre-planning for “what if” scenarios such as knowing locations of clinics/healthcare facilities, making preparations for returning home if someone becomes ill during field work, and considerations for remote medical capabilities and choices for overnight accommodations

Personal responsibility: All personnel should be trained and requested to agree to follow infection control practices, adherence to university guidelines (health monitoring, PPE, distancing, etc), perform a pre-work self assessment for health and potential exposure, and always default to stay home if any health-related concerns arise. It is the responsibility of supervisors and workers alike to affirm that all personnel are travelling on their own free will. There should be no penalties for those who express genuine safety concerns unique to the individual.

To mitigate risk to field personnel, ensure there is a contact point in case of emergency or unsafe conditions. There should be a means of record keeping for interpersonal contact for follow if a participant later becomes ill with COVID-19

Some field work may require overnight lodging if travel distances do not allow workers to safely travel, work, and return in one day. Decisions about the length of travel requiring overnight stays will be made by the individual unit and should weigh the risk of exposure to Covid-19 with other risks, such as driving while fatigued. If overnight lodging is required we suggest that the following precautions be considered; For lodging in hotels, approvers should review hotel’s Covid-19 policy and verify consistency with U of M policy; for lodging at field stations and research vessels, U of M facilities management should set building sanitation and disinfection policies per U of M or specialized (e.g. NSF-UNOLS) guidelines and consider limiting the number of guests per floor, building, room; for camping, consider separate tent sites for each participant and develop sanitation and disinfection protocols for common areas

When travel in motor vehicles, whether University-owned personal or rental, is required to access sites we suggest that personnel follow precautions; employees should limit the number of people per vehicle per university guidelines. When possible limit to one person per vehicle during safer-at-home and early phases of re-opening. During later re-opening phases units can consider allowing more personnel per vehicle if safe carpool procedures are put in place to limit virus spread. We recommend that units develop vehicle decontamination procedures and communicate to personnel to make sure the vehicle is clean when you start and is left clean when you finish. We recommend that all vehicles have travel kits containing gloves, disinfectant wipes or liquid plus towels, and N95 masks.

When making fuel stops during travel, purchase fuel from automated pumps by credit card if possible. Disinfect all fuel pump handles and touchpads before and after use with in-vehicle wipes. If others are present at fuel stations, wear masks and maintain a minimum 6ft distance from others at all times at fuel stations.
During field work and data collection, employees should have a protocol in case someone becomes ill during field work, identify and ensure availability of healthcare facilities nearby, and plan for conditions where personnel may have to work closely together. Upon return to University facilities, ensure some mechanism to reduce the risk of virus transfer on materials surfaces.

When field work requires the use of equipment, units should have plans in place to minimize risks associated with viral spread. For equipment operated by trained site staff, the university researchers should coordinate all equipment needs ahead of arrival at the site so that social distancing requirements if others are present are required. Areas of equipment that have been contacted by the operator will be wiped/sanitized after its use. This may include, but not limited to handles, control knobs and levers, arm rests, the steering wheel, and gear selection levers. For equipment that is operated by trained project staff, project leader or project staff should identify the needed equipment and arrange for its usage with site staff prior to arrival. Equipment should be located in a common area accessible to the project to be used without any obstructions hindering their ability to begin operations. Equipment should be operated in a manner that follows all manufacturer’s recommendations, safety protocols, and social-distancing guidelines. Equipment will be returned to an agreed upon location. Once returned, areas of equipment that have been contacted by the operator, will be wiped/sanitized after its use. This may include, but not limited to handles, control knobs and levers, arm rests, the steering wheel and gear selection levers.

Use of other common areas of field and research stations, including vessels, should follow University facilities use guidelines.

**Decisions on items not recommended**
We decided to recommend that the University provide more uniform guidance on what level of travel is allowed at each stage.

**Unresolved Issues**
Preparedness of field stations/site facilities for overnight lodging

Enforcement: university will not reimburse unapproved travel and university assets (equipment, vehicles, etc) must not be used in support of unapproved travel

**Timeline recommendations**

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<tr>
<th>Stage - Conditions</th>
<th>Allowed activities</th>
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<tr>
<td><strong>Zero</strong> - Situation unknown and changing</td>
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<tr>
<td><strong>One</strong> - Initial Stay Home/Stay Healthy directive in place</td>
<td>Travel for essential employees only Day trips within state</td>
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<td>Overnight stays extremely limited--essential cases only.</td>
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<tr>
<td><strong>Two</strong> - Public health authorities &amp; Governor relax restrictions on 'essential workers'</td>
<td>Ongoing projects may restart Primarily in-state day trips Participants must affirm interest/desire to participate</td>
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<tr>
<td><strong>Three</strong> - Further relaxation of restrictions - standards for return to normal</td>
<td>Overnight stays possible, within guidelines Work at field stations and research vessels may be proposed</td>
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<tr>
<td><strong>Four</strong> - Expanded restart</td>
<td>New projects may be proposed Out of state travel may be proposed</td>
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<tr>
<td><strong>Five</strong> - Approaching normal</td>
<td>Internationation travel may be proposed (subject to State Department and other guidelines)</td>
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**Addendum**

Pre-access screening (temps, HIPAA, etc)
Face covering (not N95 PPE)
Trace back requirements: Manual systems introduce risk, automated (smart phone) systems introduce privacy concerns
Considerations to approach if asymptomatic infections confirmed
Virus and Antibody Testing for COVID-19

Subgroup members- Tucker LeBien, Medical School; Joseph Konstan, CSE; Amy Kircher, OVPR

Summary report

1. Introduction

The ability to make an informed decision on whether to require COVID testing as a requirement for individuals to re-enter the research workplace at UMN is made difficult by the lack of comprehensive data on the COVID health status of the general Minnesota population. The announcement by Governor Walz of a $36M commitment to support a collaborative effort between UMN, Mayo and the MDH to expand testing in Minnesota will eventually provide answers to many questions, but information will not be available for weeks to months.

2. Issues addressed

The primary issues addressed were whether to recommend some type of COVID-19 diagnostic testing as a pre-requisite for returning to the research workplace, and what steps employees should take prior to returning to work or if they become ill upon returning to work.

3. Individuals consulted

Brad Benson, MD, Professor of Medicine
David Bernlohr, PhD, Professor and Head of Biochemistry, Molecular Biology and Bipphysics
David Boulware, MD, Professor of Medicine
Ashley Haase, MD, Professor and Head of Microbiology and Immunology
Marc Jenkins, PhD, Regents Professor of Microbiology and Immunology
Joseph Metzger, PhD, Professor and Head of Integrative Biology and Physiology
Mark Schleiss, MD, Professor of Pediatrics
Beth Virnig, PhD, MPH, Professor, School of Public Health
Rebecca Wurtz, MD, MPH, Associate Professor, School of Public Health

4. Recommendations made

No one should return to an on-campus laboratory or field site if they have had any symptoms of the COVID-19 virus or believe they have been exposed to it during the past 14 days. This is a zero tolerance policy. Furthermore, employees should monitor their temperatures on days they are planning to work on-site and stay home if they have a fever of 38°C or 100.4°F or higher, or are taking medications to control a fever (based on CDC guidance). Individuals must be informed (and the message regularly reiterated) that the university has a collective obligation to prevent transmission of the virus. Supervisors need to be informed that “essential personnel” must have back-ups identified to ensure that no one feels coerced to come to campus while potentially infected.
Any individual who begins to exhibit symptoms at work must leave IMMEDIATELY, and notify their supervisor of their health concern. Individuals who find themselves in this circumstance are urged to utilize the Minnesota Department of Health (MDH) COVID-19 Response website. A very recent addition to that site provides guidance on what to do if you become sick ([https://mn.gov/covid19/for-minnesotans/if-sick/](https://mn.gov/covid19/for-minnesotans/if-sick/)). This includes a review of COVID symptoms, whether or not you should be tested, and the location of state-wide testing locations. Anyone diagnosed with COVID-19 must follow MDH and/or CDC guidelines to determine when they are eligible to return to work, including: self-quarantine, temperature monitoring etc.

Any enclosed space in which a confirmed case of COVID-19 is identified will be closed until disinfection can be completed. If the space is occupied by faculty from a single college/school, the Dean of that college/school will make the decision to close the space. If the space is occupied by faculty from two or more schools/colleges, the Deans of the schools/colleges will make the decision to close the space. Those who were identified as being in the space at the same time as the infected individual shall remain at home until they can be tested, or demonstrate non-infection through self-quarantine and self-monitoring in accordance with MDH and/or CDC guidelines.

5. Decisions on items not recommended

Testing of researchers for evidence of exposure to the COVID-19 virus (the PCR test) or development of an immune response to the COVID-19 virus (the antibody test) would, in principle, have value in assessing the COVID-19 health status of the returning workforce. However, this would have enormous logistical and interpretive challenges, even if the new state commitment could support it. It is therefore not recommended as a requirement for researchers to return to work on UMN campuses. Furthermore, at present one can only be tested with consent from a physician or health care system and there is therefore no mechanism for broad testing of a given population (i.e., in this case the returning research workforce) at the present time.
Appendix H
Human Subjects Working Group
CRAD: Research Re-Opening Task Force

Charge:
In consultations with stakeholders, draft principles and address human subjects research issues specific to safely and ethically resuming research operations in a staged framework.

Committee Members:
Thomas Lindsay, College of Liberal Arts
Diane Treat-Jacobson, School of Nursing
Carissa Schively Slotterback, Humphrey School of Public Affairs
Frank Symons, College of Education + Human Development

Consultation:
Debra Dykhuis, Executive Director, Institutional Review Board
Jeffrey Simpson, Chair, Department of Psychology
Dr. Amy Hewitt, Director, Institute for Community Integration; Professor, Organization, Leadership, Policy, & Development
Dr. Kim Gibbons, Director, Center for Applied Research and Educational Improvement
Dr. Megan Gunnar, Director, Institute for Child Development; Regents Professor
Dr. Trai LaLiberte, Director, Center for Advanced Studies in Child Welfare
Dr. Michael Rodriguez, Associate Dean, Undergraduate, International, and Diversity, College of Education + Human Development; Professor, Quantitative Methods in Education, Department of Educational Psychology
Ryan Warren, Director, Education Technology Innovations; Chief Strategic Officer, College of Education + Human Development

Issues Addressed:
1. Safety of participants and safety of researchers (faculty, staff, students)
2. Respecting and accommodating community partner assurances/needs
3. **Equity and diversity**: possible differential risks for socially disadvantaged/underprivileged individuals/populations

4. **Research Incentives**: Is there increased risk of coercion due to economic hardship? The IRB has a worksheet (HRP-316) that guides review of participant compensation. It may need to be reconsidered during start up. This worksheet does not address amounts. A search of the Investigator Manual (HRP-103) didn't yield any information about the IRB setting amounts, either. Guidelines should be issued by OVPR in conjunction with IRB to empower researchers to assess potential increased risks.

5. **Single IRB considerations**: are there different standards at different institutions.

6. **Potential power disparity and priorities**: student research completion (thesis, dissertation)

7. **Potential power disparity and priorities**: post doctoral researchers, junior faculty

8. **Research with vulnerable populations**: Does research with vulnerable populations need to be re-reviewed before resuming? Do risk/benefit considerations change post COVID? If so, how? E.g., what may have been zero to low risk may now be moderate risk, NOT because of protocol change but because the sample is from a population considered to be higher risk for COVID or experiencing other impacts (e.g. housing, financial). Currently, IRB is not planning on re-reviewing at this time

9. **Location of human subject research activities**: Establish College-level procedure to identify and track all locations where human subjects research is taking place. This is particularly important for research taking place with healthy subjects that is considered minimal risk. Research visits could be taking place in small meeting rooms, offices, etc. There is often less regulation with minimal or no risk human subjects research than with lab or animal research. There are fewer institutional requirements for inspection of spaces. This has implications for maintaining a safe environment and minimizing risk of contamination/spread. This should fall to ADRs/administrators in individual units rather than on the IRB to manage this information. Ensure best practices when bringing in participants from outside regardless of location of study visits.

**Goal**: Initiate resumption of research related to human subjects following guidelines established by the University of Minnesota Institutional Review Board

**Principles**

- Resuming human subjects research must position the health and safety of our faculty, staff, students, and human research participants as central; must attend to and acknowledge the particular circumstances and challenges across the different university units as well as our community partners; and must be guided by strategic priorities of the State of Minnesota’s only combined research and land-grant institution, the value we place on discovery and disciplined inquiry, and a commitment to research excellence.
• Face to face human subjects research during limited operations must balance benefits of research against the specific and unique vulnerabilities of at-risk populations, both within the categories legally defined as vulnerable, and in other populations made vulnerable by COVID-19. Researchers should assess and document in their resumption application plans any COVID-19 specific issues.

**Key Assumptions**

The research being conducted is health/safety compliant (DHHS/MDH)

The research being conducted is U of M human subjects IRB compliant and approved with the 5-Tier framework

The research being conducted is community site compliant

**Recommendations**

Checklist(s) for resuming campus-based human subjects research should be developed and started now for resumption/safety plans based on the six phases. Plans should be flexible enough to enable the swift ramp down of research to an earlier phase in response to changing circumstances. Plans must comply with physical distancing requirements and should provide for the lowest density of people reasonable to carry out research; gatherings, including group meetings and even one-to-one discussions, should continue to occur virtually. Document the plan and responsibilities for cleaning/sanitizing labs/clinic research rooms and research work spaces prior to resuming work. Research teams utilizing shared space must coordinate their plans. Such plans need to be coordinated with FM, most likely at the building level.

DO NOT resume human-subjects research that requires PPE without first ensuring/acquiring an adequate supply of PPE. Start ordering non-clinical PPE now, if necessary, to have on hand for resumption if current stock on hand is insufficient. Wearing cloth masks is likely to be mandated as part of physical distancing when conducting research where higher-level PPE is required/expected.

Conducting research should be limited to UofM employees and registered students – volunteers should not be allowed to conduct research until Phase 5 is reached (with possible exceptions based on request and review for Phase 4). All resumption planning must consider the needs of employees/students with current disability accommodations or those who will require new accommodations. All resumption planning for human subjects research off campus must comply with local sites’ administrative policy and guidelines specific to safe working conditions and any special circumstances or provisions specific to their ability to support on-site human subjects research. Researchers should be trained accordingly and IRB protocols updated to reflect changes in expectations of research sites.
Off campus human subjects research that is greater than minimal risk must provide documentation and plan for approval to safely conduct face to face research in situ that comply with local site regulations. Plans should also include ‘roll back’ provisions if, after resumption, prevailing COVID conditions change and require scaling back to prior level. It may be challenging to ramp-up projects involving human subjects that are distributed over multiple sites or depend on international collaborations. Lifting travel restrictions, such as international travel and essential travel only, are necessary before some activities specific to off campus human subjects research can recommence. This includes human subject related field research that must be conducted in person. Decisions will be dependent on prevailing University-wide travel restrictions; exceptions made only on request and review.

Appendix A

Name of subgroup and focus

Staged Resumption of Selected Research Operations Working Group

Human Subjects Subgroup: Address human subjects research issues specific to safely and ethically resuming research operations in a staged framework.

Subgroup roster

Diane Treat-Jacobson, School of Nursing
Carissa Schively Slotterback, Humphrey School of Public Affairs
Thomas Lindsay, College of Liberal Arts
Frank Symons, College of Education + Human Development

Summary Report

The issues addressed by the Human Subjects subgroup of the OVPR-convened Staged Resumption of Selected Research Operations Working Group included review and consideration of principles and assumptions supporting staged resumption of human subjects research at the University of Minnesota. The issues centered on (1) prioritizing personal safety for participants and researchers, (2) balancing risk/benefit as per the existing UMN IRB 5-Tier framework, (3) research training mission goals (graduate student thesis/dissertation research) as well as early career vulnerabilities (post-doctoral, assistant professors developing programs of research), (4)
community-site regulation compliance and variability across local, state, regional, national, or international human-subjects research sites, and (5) recognition that risk status among existing participant pools may have shifted because of COVID-19. Multiple individuals were consulted (see Appendix B) representing the IRB (Debra Dykhuis), human-subjects intensive behavioral and psychological research departments (Jeffry Simpson, Megan Gunnar), institutes and centers focusing on vulnerable populations (Amy Hewitt, Kim Gibbons, Traci LaLiberte), and colleges (Ryan Warren, Michael Rodriguez).

General considerations and recommendations included the following. Checklist(s) for resuming campus-based human subjects research should be developed and started now for resumption/safety plans based on the six phases. Plans should be flexible enough to enable the swift ramp down of research to an earlier phase in response to changing circumstances. Plans must comply with physical distancing requirements and should provide for the lowest density of people reasonable to carry out research, and gatherings, including group meetings, and even one-to-one discussions should continue to occur virtually. Document the plan and responsibilities for cleaning/sanitizing labs/clinic research rooms and research work spaces prior to resuming work. Research teams utilizing shared space must coordinate their plans. Such plans need to be coordinated with FM, most likely at the building level.

Any personnel returning from out of state must follow current guidance on 14-day self-quarantine prior to reporting to campus – these individuals should work from their place of quarantine to the greatest extent possible if they are asymptomatic. International graduate students who cannot return to UofM, but are able to engage in federal sponsored research activities are, by definition, foreign components. Consult with SPA when planning for the resumption of research that necessarily involves graduate students in this situation.

DO NOT resume human-subjects research that requires PPE without first ensuring/acquiring an adequate supply of PPE. Start ordering PPE now, if necessary, to have on hand for resumption if current stock on hand is insufficient. Wearing cloth masks is likely to be mandated as part of physical distancing when conducting research where higher-level PPE is required/expected.

Carrying out research should be limited to UofM employees and registered students – volunteers should not be allowed to conduct research until Phase until Phase 5 is reached (with possible exceptions based on request and review for Phase 4). All resumption planning must consider the needs of employees/students with current disability accommodations or those who will require new accommodations. All resumption planning for human subjects research off campus must comply with local sites administrative policy and guidelines specific to safe working conditions and any special circumstances or provisions specific to their ability to support on-site human subjects research. Researchers should be trained accordingly and IRB protocols updated to reflect changes in expectations of research sites.
Off campus human subjects research that is greater than minimal risk must provide documentation and plan for approval to safely conduct face to face research in situ that comply with local site regulations. It may be challenging to ramp-up projects involving human subjects that are distributed over multiple sites or depend on international collaborations. Lifting travel restrictions, such as international travel and essential travel only, are necessary before some activities specific to off campus human subjects research can recommence. This includes human subject related field research that must be conducted in person.

The primary resource for guidance on human subjects research is the Institutional Review Board (IRB; https://research.umn.edu/units/irb) and the COVID-19 Guidance for the Research Community that is regularly revised and updated (https://research.umn.edu/covid-19-guidance-research/overview). Similarly, for sponsored projects, the primary resource for guidance is the Sponsored Projects Administration office (https://research.umn.edu/units/SPA).

There were several issues discussed but not resolved mostly centering on the likelihood of changing risk status and vulnerability and also the broader societal context of conducting human subjects research during the COVID-19 era. For example, the University has a long history of research on psychological and social factors related to human development, family function, preK-12 performance, and optimizing social outcomes. There needs to be consideration given to the morbidities associated with and induced by the social isolation resulting from societal shutdown and stay-in-place orders. The effects are not likely to be in one direction nor linear. In some instances, studies considered ‘minimal benefit’ may provide benefit for individuals who are experiencing isolation; on the other hand, other studies previously considered ‘low risk’ may introduce higher-level of stress that could be harmful given the current social circumstances of different individuals. Further, individuals may be experiencing other impacts, such as financial and housing constraints, that should be considered in terms of their impacts on vulnerability.

Appendix B

Consultation from:

Dr. Amy Hewitt, Director, Institute for Community Integration; Professor, Organization, Leadership, Policy, & Development

Dr. Kim Gibbons, Director, Center for Applied Research and Educational Improvement

Dr. Megan Gunnar, Director, Institute for Child Development; Regents Professor
Dr. Trai LaLiberte, Director, Center for Advanced Studies in Child Welfare

Dr. Michael Rodriguez, Associate Dean, Undergraduate, International, and Diversity, College of Education + Human Development; Professor, Quantitative Methods in Education, Department of Educational Psychology

Ryan Warren, Director, Education Technology Innovations; Chief Strategic Officer, College of Education + Human Development

Debra Dykhuis, Executive Director, Institutional Review Board

Dr. Jeffry Simpson, Chair, Department of Psychology
Appendix I

Animal Research

Subcommittee members
Prof. Carolyn Fairbanks, ADR of College of Pharmacy
Prof. David Bereiter, ADR of Dentistry
Prof. Greg Cuomo, ADR of CFANS.

PRINCIPLES

Reopening research involving the use of animal subjects is essential to implement the research mission of the University of Minnesota and must be designed to reduce potential harm to investigators and animal husbandry and veterinary staff.

Reopening research implementation must involve strong collaboration, communication, and coordination between the animal husbandry group.

Researchers using animals must apply basic public health guidance of social distancing when possible and use PPE (gloves, mask) when research must be conducted as a team.

ASSUMPTIONS

It is assumed that research involving animals will resume provided the principles governing animal usage and recommendations to prevent harm to investigators and staff are followed.

Resuming animal research activities will require a staging. Research Animal Resources cannot physically accommodate all investigator groups’ orders (receipt and housing of subjects) within the first week of resumption of activities. There will have to a phase-in period and prioritization.

Resuming animal research activities will require adequate supplies of PPE for a 2 month duration. This will include gloves and masks at the minimum for most researchers and gloves, masks, bonnets, booties, eye protection for surgeries for USDA animals, and sufficient powered air purifier respirators (PAPRS) for animal husbandry staff.

Inspections of animal areas will be on hold as approved by OLAW. When inspections resume inspectors will social distance by having only one inspector in an area at at time and/or will use electronic technology to review areas.

RECOMMENDATIONS

RESEARCHERS

Social Distancing
Personnel work alone whenever possible and safe to do so.
Research teams should work in shifts when possible.

Each person carries a cellphone for contact with supervisors and coworkers in routine communication and emergency situations.

**INVESTIGATOR INTERACTIONS with RESEARCH ANIMAL RESOURCES STAFF**

**Retrieving and Returning Animals from the Vivarium**
When possible send one lab member to retrieve animals. Wear PPE. Maintain social distancing and do not ride elevators if other people are in the elevator. Wait for an empty elevator.

When more than person is required to retrieve or return animals, take shifts and/or maintain social distancing. Wear PPE. Do not ride elevators together.

Investigators and lab staff should wear masks (not N95s), and other PPE while walking in the hallways to and from animal rooms and procedure rooms.

**Procedures requiring more than one person**
Under these conditions team members should socially distance when possible and wear masks, gloves, eye protection, lab coats.

**Staged Ordering of Animals**
Research Animal Resources will need lead time to prepare. Animal shipment arrival times may take longer than under normal conditions; orders may need to be staggered while ramping up capacity.

**PPE.** Until the PPE supply chain resumes normal distribution and operations, Investigators must supply their own PPE in when working in animal rooms until PPE supply chain resumes.

**Reducing People in Animal Holding Rooms during heavy use times of cage changing and checking**
Limit non RAR personnel in animal rooms prior to 9 am. Investigators who need to start procedures early can request exception by communicating with area veterinarian and area supervisor.

RAR will post online expected days and times of use in area rooms weekly.

RAR will create a Google document/calendar available for people to sign up to be in certain rooms at specific times which will include holding rooms and procedure rooms. The link to Google document/calendar will be sent through RAR announcements to the RAR-Talk listserv.
All investigators need to ensure that they are receiving RAR announcements and on the RAR-Talk listserv. If not, send an email to Chris Hanson (hans0123@umn.edu)

**IACUC ACTIVITIES**

**Inspections**
Inspectors wear masks, gloves, lab coats. Socially distance while visiting sites. Enter rooms individually and one at a time.

**IACUC review meetings.**
All IACUC meetings will be held remotely for the foreseeable future

**Agricultural and Field Research**
Research personnel must wash hands (or use hand sanitizer) before and after interacting with livestock.

When recording data, assign one person to a station and keep that same person at that station until the work is done. If it is necessary to rotate stations, wipe clean equipment or tools that are being used with disinfectant before the new worker takes over the station.

**Teaching**
All students and employees involved in the class have been COVID-19 symptom free for at least 30-d  
All biosecurity precautions appropriate for the species visited, with a minimum of no water, no food, washing hands when coming on site and leaving.

**Animals housed outdoors in extensive or confined conditions**
These housing conditions include pastures and outdoor feedlots where there is ample opportunity for dilution of potential pathogens by ambient air and air currents. The following practices must be observed to ensure the safety of stockpeople and researchers:

In addition to the minimum requirements for working with any animals those working with animals housed outdoors in extensive or confined conditions will:

Research personnel let their supervisor know where they will be working (applies mostly to pasture situations)

Masks must be brought to the research location by the visiting staff (Cannot depend on the research site to supply these masks)

Anyone who has a temperature or experiencing other corona virus symptoms should stay home and is not permitted to participate in any research activities.
Animals housed indoors in environmentally-controlled barns
These housing conditions include: breed-to-wean, nursery, and growing-finishing barns for pigs; turkey breeder and grower barns, calf nursery barns and milking parlors. Air exchanges in these facilities are achieved by mechanical means so there is lower opportunity for dilution of pathogens compared to outdoor housing. The following practices must be observed to ensure the safety of stockpeople and researchers:

In addition to the minimum requirements for working with any animals those working with animals housed indoors in environmentally-controlled barns will:

Wear newly-laundered clothes (personal clothes are fine) or coveralls provided by the research site and boots (or other footwear) provided by the research site when working with livestock

If more than one person needs to work on the project, attempt to have individuals work in separate airspaces within the barn to achieve separation

N95 or approved masks must be brought to the research location by the visiting staff

Anyone who has a temperature or experiencing other corona virus symptoms should stay home and is not permitted to participate in any research activities.

Coordinate with a supervisor at the research location to determine if additional labor can be supplied at the research site to help with data collection.

Timeline recommendations

<table>
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<th>Prevailing Shut Down</th>
<th>Husbandry Care of Animals</th>
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<tr>
<td></td>
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<td>Animal Breeding for non-commercially available animals</td>
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<tr>
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<td>COVID-19 related animal research</td>
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<td></td>
<td>Limited ongoing research that is approved for essential status</td>
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<td>1</td>
<td>Stay in place orders lifted/University shut down softened to preparing for resumption of activities</td>
<td>Staged Phase-in phased-in animal ordering and</td>
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<td>Staged Phase-in of animal research</td>
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<tr>
<td>2</td>
<td>Return to Work</td>
<td>Researchers should operate with the social distancing guidelines articulated and with contingency plans ready to accommodate any future periods of lab hibernation.</td>
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Animal Research should be cognizant of the possibility that, with return to work, RAR staffing may diminish if illness increases in the staff. Under that condition, the RAR pandemic plan may need to be reinstituted ([https://research.umn.edu/covid-19-guidance-research/overview](https://research.umn.edu/covid-19-guidance-research/overview)).

<table>
<thead>
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<th>Consultants</th>
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<tbody>
<tr>
<td>Dr. Lynn Impelluoso, Attending Veterinarian and Director of Research Animal Resources.</td>
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<tr>
<td>Prof. Richard Bianco, Chair of IACUC and Director of Experimental Surgical Services.</td>
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<tr>
<td>Dr. Benjamin Clark, Associate Director of IACUC.</td>
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<tr>
<td>Dr. Jodi Oglivie, Chemical Hygiene Safety Officer and DEHS representative to IACUC</td>
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<tr>
<td>Mr. Ian Aldrich, UMD Animal Services</td>
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Appendix J
Priority and Safety Work Group

Worked on how to determine which research should be allowed to return and what safety procedures should be required.

Carolyn Fairbanks
Associate Dean for Research,
College of Pharmacy
Professor, Depts of Pharmaceutics, Pharmacology, Neuroscience

Consulted with research compliance personnel in DEHS, College of Pharmacy and OVPR

Eric Singsaas
Initiative Director - Wood Products and Bioeconomy
Natural Resources Research Institute NRRI
Formerly Professor of biology and forestry at U WI Stevens Point

Consulted with personnel at NRRI

Erik Brown
Associate Vice Chancellor for Graduate Education and Research
University of Minnesota Duluth

Consulted with personnel from UMD

Frances Lawrenz
Associate Vice President for Research; Office of the Vice President for Research
Professor Educational Psychology; College of Education and Human Development

Consulted with ad hoc faculty and gathered input from documents from other institutions (as did the other group members)

The Priority and Safety groups were combined because we felt the issues fit well together. The results provided below assume inclusion of suggestions from other work groups and material from other institutions. We have a draft form for requesting return to research at the end.

Decisions about which research to start would be based on safety and urgency; not on the type of research. Urgency includes external contractual requirements, continuing data base needs, post doc or grad student needs to finish/move on, grant reporting deadlines, etc. Recommendation remains stay at home whenever possible. Decisions to resume activities are to be made mostly at Dean level with option to delegate to Associate Deans of Research or Department Heads, based on structure of the unit. Safety standard operation procedures should be developed by each
research group and reviewed by the Associate Dean/Associate Vice Chancellor for Research who may delegate to Research Safety Officer or Safety committee or other authorities within the unit. A monitoring system should be established by each collegiate unit to verify plans are followed submitted. Monitoring would be at the college level with quarterly reporting to central. It is required that investigators post what is going on in the labs on the doors. Additionally, building management or other designated leadership of buildings that house laboratories of investigators from multiple Colleges or Units, should also review lab safety plans for alignment with building safety.

Research would be phased in based on safety and urgency with coordination at central. Need to coordinate with core services. As safety and facility capability is increased, decisions move closer to PI. Working from home requirements could be loosened.

Draft Reopening Research Form

PI name
Other PIs involved
Numbers of staff/researchers involved
Location of research

Safety: Plan to ensure researcher safety—social distancing, buddyng, PPE, emergency plans, entry exit to facilities, external context issues

Urgency: Justification for immediate re-entry needs (e.g. contract deadlines, reporting deadlines, grants, preliminary data collection, postdoctoral associates leaving for jobs and needing to finish experiments, disruption of ongoing time series observations, graduate students needing to finish, etc.)

Consideration for staggered re-entry. Can your team or part of your team wait till week 2 or week 3 to re-enter?

Synopsis of research goals
Funding source
Protocols IRB IACUC IBC OTHERS (e.g., radiation)

Approvals PI, dept, college central
Appendix K
Sub Group on Context: Facilities, Transportation, and Outside the Lab

Sub-group members:
Abimbola Asojo, College of Design
Thomas Lindsay, College of Liberal Arts
Carissa Schively Slotterback, Humphrey School of Public Affairs

Groups Consulted With:
Bill Paulus, Associate Vice President, Facilities Management
Ross Allanson, Director, Parking and Transportation Services
Benton Schnabel, Assistant Director of Operations, Parking and Transportation Services
Matthew Clark, Chief, Police Department

Principles
● Need to be attentive to health and safety of researchers and research subjects, and those working to support them, within facilities and on campus
● Need clear and frequent communication about necessary safety requirements and sanitation expectations
● Access to campus, parking, and within buildings should be managed to ensure safety of all users and those who support them
● Management and sanitation of labs and other research spaces must be coordinated with broader guidelines, staffing, and training offered by UMN Facilities Management

Recommendations
● OVPR should consult with Facilities Management (FM) and Parking and Transportation Services (PTS) before moving to a new phase.
  ○ FM can work to identify access corridors and make appropriate decisions about sanitation of those areas.
  ○ PTS will adjust parking and transit service as campus activity resumes. Flexibility with parking and services such as paratransit will be reevaluated according to demand.
● Substantial changes in the level of activity in a building should be coordinated with the various auxiliary services offices.
  ○ University of Minnesota Police Department (UMPD) concentrates its efforts according to volumes of activity
  ○ FM and PTS should be engaged in any decisions that would require an adjustment in capacity
● Collaboration with FM and PTS should focus on clarifying expectations and establishing baseline conditions for each of the auxiliary services

Appendix
Parking and Transportation Services

- UMN buses get decontaminated daily.
- Parking remains open for any contract at any ramp while University campus is at reduced operations; will change when demand warrants, probably when first ramp hits 60-70%
- Major trigger for changes in operations of parking and buses will be President's lifting of mandatory working from home for all employees
- Paratransit is currently shut down; during early phase(s) of research re-opening, will need to contact PTS ([parking@umn.edu](mailto:parking@umn.edu)) to work out options
- Need to contact PTS before each change in phase of research re-opening
- During early phases, exceptions to parking norms may be appropriate for visitors (participants), but PTS does not want to make any exceptions for longer-running efforts that may still be going when normal operations resume

UMN Police Department

- FAQ [https://publicsafety.umn.edu/resources](https://publicsafety.umn.edu/resources)
- Security whistles available for people who are on campus for security.
- UMPD provides welfare checks if employees don’t come in and aren’t reachable.
- Travel in groups is recommended
- The UMN Safe Walk (escort program) is currently available and will continue during expanded operations - [https://publicsafety.umn.edu/content/624-walk-walking-escort-service](https://publicsafety.umn.edu/content/624-walk-walking-escort-service)
- Mobile cameras are identified as a deterrent; currently focused on Health Sciences area, can be relocated
- Phone helpline 624-cops or 911 for UMNPD
- OVPR should let UMNPD know which buildings become more active
- UMPD is adjusting its practices to limit exposure to COVID-19, including adjusting shifts, not taking medical calls, and initially sending a single vehicle to a scene

Facilities Management

- Information: [https://facilities.umn.edu/](https://facilities.umn.edu/)
- FM needs to be connected as decisions are made about reopening. Mike Berthelsen, Vice President of University Services, is working with Chris Cramer on U services and support services across the campus.
- FM working with the UMN Department of Environmental Health and Safety (DEHS) on what needs to be cleaned how often and by whom.
- FM does not have enough staff to clean every space after people leave every time. Cleaning will need to be coordinated between FM and the researchers, starting from the pre-COVID baseline. FM definitions of public vs private spaces may not align with researchers’ understanding; clarification will be needed.
● Spaces don’t need to be sanitized if they are left unused long enough; in some cases, this approach may be appropriate to reduce risks. Lab activity and hibernation signs can be developed to reduce burden on FM employees to determine which spaces are active.
● There is an opportunity to identify efficiencies in phased restarting of research in order to minimize FM costs - e.g. focusing initially on a few buildings.
● Defined access corridors through buildings to active research spaces can focus activities to a smaller number of public spaces.

Additional Resources

OACA Guidance for Essential Employees -
https://clinicalaffairs.umn.edu/resources/guidance-essential-employees

Guidance for Schools and Child Care Programs from CDC

Guidance on business reopening Minnesota Department of Employment and Economic Development
https://mn.gov/deed/newscenter/covid/safework/non-critical/

Leveraging Our Community-Engaged Research: Policy Change and Community Development Resource List -
https://docs.google.com/document/d/1cQX9xDnYrjnKqIcMUgY-FzFmECw-qGhewTMAXaAdlEI/edit

Planning for a Post-COVID Return to Campus
https://www.gensler.com/research-insight/blog/planning-for-a-post-covid-return-to-campus?

A Day in the Life: Going Back to Work in China
https://www.gensler.com/research-insight/blog/a-day-in-the-life-going-back-to-work-in-china?utm_source=dialogue-now-email_2020_april24&utm_me...

Redefining Wellness in the Face of Pandemic
Appendix L
Sub-Group Report: Library Access for Research

Working group members:
    Janice Jaguszewski, University Libraries
    Abimbola Asojo, College of Design

Considered requests from:
    Departments and faculty across the College of Liberal Arts

Consulted staff from across the University Libraries:
    Dean/University Librarian and Associate University Librarians (3)
    Director of Minitex
    Director of Finance and Facilities
    Director of Human Resources
    Libraries Leadership Council and key staff members of their units

Phase 3, Initial Restart: Highly selective access to physical collections for UofM students, staff, and faculty in support of teaching, learning, and research. Builds on an existing robust suite of digital content and services. Libraries remain closed.

Goal: To follow safety guidelines and best practices, while increasing access to library content not available online. The purpose is to fulfill critical research, teaching, and learning needs for UofM students, staff and faculty.

Conditions that must be met:

1. Governor Walz relaxes the Emergency Executive Stay at Home Order
2. Relaxation of social distancing measures
3. Local COVID-19 hospitalizations flatten, then drop
4. COVID-19 testing capacity increases
5. Robust safety equipment and procedures in place to ensure social distancing and minimize risk;
6. COVID-19 Preparedness Plan finalized and approved; see template from MN Emergency Executive Order 20-40

Principles:
1. Purpose is to fulfill critical research, teaching, and learning needs for UofM students, staff and faculty.
2. All libraries will remain closed except for highly selective and approved access to archival and special collections.
3. Libraries will follow University Safety Requirements: [Guidance for Protective Equipment During Reduced Operations related to COVID-19 Pandemic](#) and [Libraries Guidance for Personal Protective Equipment](#)
4. Staff schedules will be staggered and rotating; workspaces will not be shared.
5. University policies will be followed, and local procedures developed, to determine which staff will return to work on site to provide these services.
6. A process for ensuring safe handling of physical materials will be developed.
7. Staff assignments and schedules will be adjusted to accommodate an increased need for scanning and book retrieval.
8. Due dates will continue to be automatically renewed and book return discouraged.
9. It may not be possible to accommodate some researcher needs.

**Services:**

1. Wherever feasible (recognizing legal, financial, and technological considerations), print-only materials will be provided through scanning/digital delivery (e.g., articles, book chapters, selections of archival material and special collections, selections from instructor copies for online reserves).
2. When a digital surrogate is not available or does not meet research needs, curbside pickup of physical materials, including interlibrary loan, will be provided on an as-needed basis.
3. Subject to approval by each curator, Archives and Special Collections will provide extremely limited, controlled, on-site use of materials, particularly for time-sensitive needs such as tenure and promotion cases, book contracts, etc.

Phase 4, Restart Expansion: A broader range of library operations resume, including Minitex delivery services throughout Minnesota and beyond. Libraries remain closed to the public.
**Goal:** To follow safety guidelines and best practices, while gradually expanding library operations to include financial operations, acquisitions and cataloging of new material, preservation of materials, Minitex interlibrary lending services.

**Conditions that must be met:**

1. MN (continued) relaxation of social distancing measures
2. New cases of COVID-19 and ICU usage continue to decrease
3. COVID-19 testing capacity near maximum of needed capacity
4. PPE widely available

**Principles:**

1. All libraries will remain closed except for highly selective and approved access to archival and special collections.
2. Libraries will follow University Safety Requirements: Guidance for Protective Equipment During Reduced Operations related to COVID-19 Pandemic and Libraries Guidance for Personal Protective Equipment
3. Staff schedules will be staggered and rotating as possible.
4. University policies will be followed, and local procedures developed, to determine which staff will return to work on site to provide expanded services.
5. Due dates will continue to be automatically renewed and book return discouraged.
6. It may not be possible to accommodate some researcher needs.

**Services:**

1. All services in Phase 3
2. Minitex interlibrary lending throughout Minnesota and beyond
3. Acquisition and processing of new materials
4. Preservation and management of materials

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**Phase 5, Approaching Normal Operations:** Libraries gradually re-open, with restrictions that support the safety of staff and library users.
Goal: To follow safety guidelines and best practices, while gradually expanding on site library operations to include all library staff and units.

Conditions that must be met:

1. No or minimal state restrictions
2. University determination that normal operations may return (with possible exceptions for large-group gathering)
   a. Students permitted to return for on-campus activities; or
   b. Students remain largely remote, but other on-campus activities resumed.
3. University issues guidance on any “new normal” guidelines (e.g., mask use when ill; group size guidelines; campus dining facilities; etc.)
4. Travel restrictions relaxed or eliminated
5. Adequate supplies of PPE
6. Widespread testing and identification of new COVID-19 cases, with quarantining

Phase 6, Return to Normal Operations: Libraries open with few if any restrictions.

Goal: To follow safety guidelines and best practices, while supporting research, teaching, learning, and outreach for UofM students, staff, faculty, and the broader community

Conditions that must be met:

1. COVID-19 Not a Health Risk
2. CDC and MDH determination that COVID-19 no longer requires special precautions, likely due to one or more of:
   ● Vaccine widely available
   ● National herd immunity
   ● Effective antiviral treatment
   ● Few if any new cases
Appendix M
Sub-Group on Human Resources Issues

Sub-group members:
   Diane Treat-Jacobson
   Janice Jaguszewski

Met with HR Consultants:
   ● Sheri Stone, University Libraries
   ● Dee Reinking, School of Nursing
   ● Rachel Roach, College of Biological Sciences

Principles (from HR Consultants):
1. All decisions and processes must follow labor-represented contracts and employee rules, policies, and tenure code
2. Note that labor-represented contracts take precedence over University policy
3. A very small percentage of people will return at this time
4. All public health and safety guidelines will be followed; must have the ability to keep spaces clean and sanitized
5. Each unit will follow University policy, designating “essential employees” and the work to be done during the Phase 3 Restart; note that students may be designated essential employees
6. Each unit will articulate, and consistently apply, protocols and procedures for employee return

Questions:
1. Are there liability issues in asking staff to work on-site before normal operating conditions return?
   a. Question in current draft: Can we ask staff to read and sign a document regarding risk to self and risk to others?
      From HR Consultants: Designate “essential employees” and articulate the work that needs to be done. Would definitely vet with OGC before asking people to sign anything. Recommend against it, and believe the essential designation negates the need for this.
2. Current draft includes:
   “UMN personnel will fall into different disease risk categories and decisions for return to campus will be made in accordance with medical and public health guidance for risk stratification (e.g. age, health status).”
   a. Who makes this determination? The individual? Supervisor?
      From HR consultants:
      ● Follow policy for designating who is an “essential employee”
• Determination is based on the position and the work that is needed to be done

b. If an individual does not feel comfortable returning to work at this early point, can they be allowed to continue to work remotely? What if there is little work for them to do at a distance?

From HR consultants:
• Same as above

c. Are there any differences by staff classification?
  i. Bargaining unit/Civil Service staff

From HR consultants:
• No contract language or CS rule about who returns first as this is not a recall from layoff; seniority might be a consideration
• Currently, no recall protocol for selecting individuals among many in the same position who do “essential work,” when only one or two are needed. Might consider taking volunteers first?
• If we stagger shifts, many different considerations
  ○ Shift differential
  ○ Notice of shift changes

d. What about graduate students and Post-Docs? How do we avoid coercion? How do we address concerns about non-renewals?

General Comment from HR:
Recalling by positions and declaring essential employees should solve this. Graduate Students and Post Docs would fall into the same category, are they essential? Non-renewals should happen per normal, always good to vet with OGC.

General Comments from HR:
People are eligible for leave if impacted by Covid-19, both UMN and Federal leave. They can then use accrued time off. The question is how long do we keep paying people who are not caring for a loved one with the virus, not quarantined themselves, declared essential under expanded definition, and choose not to return to work because they're afraid, ride public transport, etc...this has to be a high-level U decision, that should be part of any overarching guideline, vetted by OGC.
3. Are there privacy issues around requiring serological tests for returning to work?

From HR consultants:
Requiring tests to return to work, would need to be vetted by OGC. (A number of companies are taking temperatures at beginning and end of each shift, assessing for symptoms beginning of shift and sending people with even the slightest symptoms home, etc)

Other General Comments from HR consultants:
I think that going down the path of further defining/expanding essential employees, and appropriately declaring people as such will solve the initial phase with a small group returning, and looking at specific positions. We do need to acknowledge a grey area between "essential employees" and return to operations, as we could end up with 1/2 the U declared essential! The U does need to issue high-level overarching guidelines for ramp-up.