

Email address

carmichael.1@nd.edu

1. What is your name (First, Last)?

Ian Carmichael

2. What is your cell phone number (include area code)?

574-339-8930

3. Which College, School, or Organization is your primary affiliation?

Notre Dame Research

4. Which specific laboratory, studio, or core facility are you affiliated with?

Notre Dame Radiation Laboratory

Request to Reopen

1. Indicate the rationale for reopening your laboratory, studio, or core facility (i.e., indicate why your research requires physical access to campus facilities) and source(s) of funding.

The Radiation Research Laboratory is funded by a DOE cooperative agreement, fund number 202988. There are also some smaller grants that also use the space. LaVerne is the primary investigator for funds 202952, 203265, 208134 and 203693. Bartels is the primary investigator for 203452. All of the grants and the cooperative agreement require access to the equipment housed in the Radiation Lab for experimental chemistry and physics in order to complete the objectives outlined in proposals to the various funding sources.

2. Provide a plan for how physical distancing will be implemented in your laboratory, will be brought from studio, core facility, office, and team spaces. Address the six-foot interpersonal spacing home so that and nominal occupancy requirements for Phases 2 and 3 as they relate to all activities to be undertaken (e.g., microscopes, tissue cultures, small control rooms, etc.). Indicate how your interaction with others will manage working hours and/or shifts. For core facilities, also indicate how you will and will not need to manage user access to maintain appropriate physical distancing.

NDRL in general: 25% nominal capacity is 30 people. Emeriti and undergraduates will not be permitted at this time. If investigators are uncomfortable coming in and can work from home, they may continue to do so. Those in risk groups or having caregiver roles are not obliged to return during this period. Access to the Radiation Research building is restricted to NDRL research and support staff only. Visitors are not permitted to enter the building at this time. In Phase 3, use of facilities by researchers from other departments requires approval from the Director. If a researcher becomes unwell or develops likely COVID-19 symptoms after working in NDRL, they must report this to Laura immediately.

Face masks should be worn at all times when in public spaces – e.g., corridors, restrooms and when working in laboratories unless superseded by other PPE.

Restrooms will be signed to indicate occupancy and only one person at a time should enter. Hands should be washed after entry and before exit.

All staff/faculty offices are single occupancy, visitors to these spaces should maintain appropriate social distancing.

Occupancy of student offices should be carefully designed to avoid unnecessary proximities. This will require some relocations and/or staggered occupancy timings. These arrangements are specified in the plans filed by individual faculty members.

The break-room will be restricted to single occupancy and accessed only for supply pickup. Pedestrian traffic in halls and corridors should pass on the right.

Meeting spaces, conference rooms etc. will remain closed at this point. Group meetings should continue to be conducted online.

The northeast stairwell will be reserved for upward traffic only (except in the event of a fire alarm), and the southwest stairwell will be reserved for downward traffic only. These directions will be marked on stairwell doors

Laboratories: All laboratories shall be restricted to single occupancy, unless more than one person is essential to the experiment. If two people are required, face masks should accompany other appropriate PPE if safe to be worn, any exceptions should be documented in the plan of the individual PI in charge. Surfaces and equipment interfaces should be appropriately disinfected before and after use. No gloves should leave the laboratory.

Shared instrumentation. A number of pieces of shared instrumentation exist in the NDRL. These include, but are not limited to, the LINAC, the two van de Graaff generators, the gamma sources, the nanosecond laser facility, and the EPR instrument.

Once again these experimental spaces should be scheduled as single occupancy unless the nature of the activity requires an additional investigator, when face masks should be worn and appropriate social distancing employed.

Equipment should be wiped down both before and after use.

In each incidence, a run book should be maintained listing start and end times and experimenter(s) name(s) along with the funding source supporting the particular activity.

Access to these instruments is through shared transit space (designated as public space – face masks must be worn). In detail, room 003 will be separated into two halves 003W and 003E (tape marked divide). The west side, 003W, will be limited for access to the 2 MeV van de Graaff (003A) and is specified as a single research lab, maximum occupancy 2 posted. The east side, 003E, provides access to the gamma sources (003B), the EPR spectrometer (003C) and (eventually) the ultrafast laser facility (007) and will have a maximum occupancy of 3 posted. Masks are compulsory in this area.

3. All requests must include a schedule such that Building Managers and other support services know which research personnel should be in the building/research space at any given time. Please complete the draft schedule in Appendix D, which can be downloaded here, https://research.nd.edu/assets/388931/fullsize/appendix_d_lab_ramp_up_schedule_f01.xlsx, and upload part of your response with your lab/core facility name saved as the file name. The schedule should cover a two-week interval. While this schedule serves as an initial planning tool, faculty are encouraged to utilize their preferred scheduling means (e.g. Google Sheets, Calendars, etc.) moving forward:

<https://drive.google.com/open?id=1g5gbFr5o9Y4SQzfSFSRwulj-c5tAOVXN>

4. What is your plan for logging researchers' arrival and departure within laboratory/studio/core facility spaces and their self-assessment of their health?

- Sign in
- The building will remain locked and entry will be by individual swipe card.
- A Google form for health certification should be completed upon entering the building. It's a link that can be completed on a smartphone by scanning the QR code placed at the building entrance upon entry. The form should then be completed on your smartphone. Laura will be reconciling sign-in sheets with proximity care entries daily. Anyone not following this procedure will be asked to leave the building.
- Everyone leaving the building will sign out, provide the departure time, and list what rooms they used.
- Doors
- Building entry will be through the north side of the building, specifically the northeast door. There will be no exit at this door (except in the event of a fire alarm).
- Building exit will be through the south side of the building, either door. There will be no entry (other than ADA access) at these doors.
- Passage through the loading dock door will be restricted to deliveries and contractors and NDRL members transporting large items.

5. How will your personnel maintain physical distancing for breaks, lunches, etc.?

Lunch and breaks will be taken in offices or outdoors. Personnel choosing to leave the building for lunch will wear any appropriate PPE and maintain appropriate six foot physical distancing.

6. Describe your procedures to clean and sanitize shared items, equipment, and work surfaces prior to use by others (see Hygiene Plan as a minimum example:

https://research.nd.edu/assets/388928/fullsize/appendix_h_example_hygiene_plan_f01.pdf)

These plans are specified in the plans of our individual investigators, our custodian will be cleaning common areas of the Radiation Lab once per day with special attention to high-touch areas such as the restrooms, lobby tables, door handles, and the handles of the common refrigerator and sink in the break area. (Chairs will be removed from the break area, which will have a maximum occupancy of one person.)

7. Do you require a specific core facility to be opened in order to reopen your lab?

8. If yes, identify the research core facility (ies) or other support services that are essential for lab reopening. The full list of core facilities can be found here:

<https://research.nd.edu/our-research/facilities-and-resources>

8. If you selected a core facility(ies) in the previous question, please fill out the following form (one for each core facility) to request the use of the core facility(ies):

https://docs.google.com/forms/d/e/1FAIpQLSfLN1CZJ7_AOtI6QcX1L_1WmYb2r0sFpkzy1k9jowrdVVhAyg/viewform. Will you complete this form?

No.

Safety and Research Team

1. The lab/studio/core facility reopening plan will be presented to Risk Management and Safety to ensure the reopening is feasible and safe given the reduced status of University operations. Therefore, please address any safety measures or changes that need to be adopted to allow for a reduced density in the laboratory, studio, or core facility. Please specifically detail plans for disinfecting, including what will be used, the concentration and contact time. Provide information about general safety resulting from the plan (e.g. how will you deal with working alone, etc.)

We see no specific safety measures that are needed to accommodate our research operation. However the variety of contact times required for the disinfectants listed below presents a training opportunity. The occupancy of the building will be such that more than one person will always be working. These schedules are documented in the plans of individual PIs.

Our disinfectants are as follows:

- Alpha-HP Multi Surface Disinfectant Cleaner -active ingredients 4.25%Hydrogen Peroxide-contact time 1 minute.
- Oxivir Tb Wipes- active ingredients .5% Hydrogen Peroxide-contact time 1 minute.
- IWC hand sanitizer-active ingredients 70% alcohol-contact time 20 seconds.
- Ultra Cruz Hydrogen Peroxide- 3%-contact time 1 minute.
- The lab also has some original Pine Sol, which has an EPA approval and should be let stand for 10 minutes.
- Building Services will be providing 40 RCT. We will dilute it per the manufacturer's instructions. The contact time is 3 minutes.

2. Please review your previous ramp-down plan. In the event of a return to Phase 1 (hibernation), are there any changes necessary? Please list those changes here.

None necessary, the entire NDRL can be moved to hibernation within 8 hours.

3. Which building are you located in?

Radiation Laboratory

4. Identify your research personnel (or core personnel for the core facilities), including yourself, below. Include their names, status (For example, faculty, staff, postdoc, graduate student), emails, and cell phone numbers) Note that in Phase 2, all graduate students and postdoctoral scholars on the list will be asked through an independent method to sign an opt-in form before they will be allowed to participate.

Ian Carmichael, Director, Carmichael.1@nd.edu, 547-339-8930

Laura Mortlock- McMinn, Assistant Director, Laura.Mortlock@nd.edu, 574-532-2580

Julie Admave-Hartle, Inventory Coordinator, jadmaveh@nd.edu, 269-325-8862

Jim Nissley, Building Custodian, jnissley@nd.edu, 574-339-8256

All other personnel are listed in individual faculty and shop plans.

4. Is there anything else we should be aware of?

No.

5. If you selected a core facility(ies), please complete the core facility request form, which can be found in Appendix C here:

https://docs.google.com/forms/d/e/1FAIpQLSfLN1CZJ7_AOtl6QcX1L_1WmYb2r0sFpkzy1k9jowrdVVhAyg/viewform

6. What room number(s) is your lab/studio/core facility located in?

Entire building.

7. Do you require a specific core facility to be opened in order to reopen your lab?

No.

Owner (Self-ID by College/School or NDR)

Melanie DeFord, NDR

Has the CF Director approved (if relevant), Y/N?

not this process per BB

Initial Owner Review: Approve/Deny (If denied, mark why).

Approved

3. Which College, School, or Organization is your primary affiliation?

Notre Dame Research

Send to RMS (Include name of reviewer request was sent to, date/time email was sent, and their Approval/Denial)

EK, 6/1

If approved, send to VPR (include date/time)

VPR Approve/Deny

Assigned Reopen Date and Building Manager Notified (include date/time of notification)

Email address

ijanik@nd.edu

1. What is your name (First, Last)?

Ireneusz Janik

2. What is your cell phone number (include area code)?

574-210-0183

3. Which College, School, or Organization is your primary affiliation?

Notre Dame Research

4. Which specific laboratory, studio, or core facility are you affiliated with?

Radiation Laboratory

Request to Reopen

1. Indicate the rationale for reopening your laboratory, studio, or core facility (i.e., indicate why your research requires physical access to campus facilities) and source(s) of funding.

My experimental research group needs to continue DOE funded research.

2. Provide a plan for how physical distancing will be implemented in your laboratory, will be brought from studio, core facility, office, and team spaces. Address the six-foot interpersonal spacing home so that and nominal occupancy requirements for Phases 2 and 3 as they relate to all activities to be undertaken (e.g., microscopes, tissue cultures, small control rooms, etc.). Indicate how your interaction with others will manage working hours and/or shifts. For core facilities, also indicate how you will and will not need to manage user access to maintain appropriate physical distancing.

The Janik group currently does not have any trainees. (Starting late August or early September there may be two visiting graduate students joining my group for training of 1 and 3 months. The plans for their visits are not finalized yet and are awaiting for the developments in the phases 2 and 3 of RadLab/UND reopening). The upcoming early phase operating plan is to have only myself working in the laboratories at any time. There are no objectives of working alone in spaces which are indicated below (areas 003 and 016). Masks must be worn at all times, not only when the appropriate physical distancing is unable to be met (unless superseded by other PPE requirements in the lab). Masks do not need to be worn in private offices, when only one person is in the office.

The Janik laboratory is designated for the west half of room 003 in the basement which is overall 1464 sq feet in total and has two entrance doors on the west and east sides. This area comprises a major open transit area with six adjoining rooms that are behind steel doors (003B, 007, 025A), wood doors (003C, 003D,) or sliding concrete gate (003A). The west half of room 003 (designated 003W and assigned by

room partitioning marking tape on the floor extending south from wall separating entrances to rooms 003A and 003B) is used exclusively by Janik group. 003W has 1 large fume hood and entrances to rooms 003A, 003D as well as 025A and can only be accessed by the west door of the larger 003 area. There will never be more than one person in room 003W or any one of the adjoining rooms. Rooms 003D and 025A are right now serving as storage areas and will not be occupied for operational purposes. There might be instances of the presence of two people in larger 003 area, when users of 003 east part (003E) will be accessing rooms 003B, 003C and 007 through the east door of 003 area when there is already occupant in room 003W or vice versa. The potential distance between occupants of west and east part of room 003 will always be larger than required 6 feet in such an instance. Additionally operators of scientific equipment located in rooms 003A, 003B, 003C and 007 will be required to wear face masks when entering the 003 transit area either on its west or east side. When working in 003A which is a gated laser safety area only one occupant is allowed and safety operation procedure for room 003A applies.

My group will also perform experimental work in room 016A which is accessible via transit/prep area in room 016. Room 016A is a small 152sq ft room designated just for one occupant. It has glass windows on the sidewall as well as on the entrance door hence its occupancy is apparent from outside of the room at all times. There will only be one operator working in this room and he/she will be required to wear a face mask all the time when accessing area 016 and room 016A. All trainees will have to agree to follow the RadLab hygiene plan. Trainees will also abide by previous default PPE requirements (safety glasses, closed-toe shoes with substantial soles, pants or skirt to the ankles, and shirts with coverage equal to or greater than a T-shirt) while working in the laboratory. Trainees will abide by new physical controls that are implemented by RadLab such as select stairways being designated up or down only, doors to the outside being designated entry or exit only, and bathrooms being designated single occupancy only.

3. All requests must include a schedule such that Building Managers and other support services know which research personnel should be in the building/research space at any given time. Please complete the draft schedule in Appendix D, which can be downloaded here, https://research.nd.edu/assets/388931/fullsize/appendix_d_lab_ramp_up_schedule_f01.xlsx, and upload part of your response with your lab/core facility name saved as the file name. The schedule should cover a two-week interval. While this schedule serves as an initial planning tool, faculty are encouraged to utilize their preferred scheduling means (e.g. Google Sheets, Calendars, etc.) moving forward:

https://drive.google.com/open?id=1GIS_5pPx75uaVxrnhb0P-kH7jHbFKPQr,
<https://drive.google.com/open?id=1o-zUcX808cAZjesl4X1yWOvgFmlwgb8K>

4. What is your plan for logging researchers' arrival and departure within laboratory/studio/core facility spaces and their self-assessment of their health?

The Google form for health certification will be completed upon entering the building and monitored by our building administration. At the beginning of each shift, me and my eventual team will sign via smartphone using QR codes placed at the building entrances. Anyone not feeling 100% will have to stay home.

5. How will your personnel maintain physical distancing for breaks, lunches, etc.?

The Janik group has temporary sole access to three separate and enclosed offices in Radiation Lab (319-276 sq ft, 302-668sq ft, 304D-89sq ft) where one trainee per shift can sit while eating and drinking.

6. Describe your procedures to clean and sanitize shared items, equipment, and work surfaces prior to use by others (see Hygiene Plan as a minimum example:

https://research.nd.edu/assets/388928/fullsize/appendix_h_example_hygiene_plan_f01.pdf)

- Disinfection of hard surfaces and commonly touched surfaces will be performed by the equipment operator at the start of each shift. This will include:
 - Door handles and door surfaces
 - Table tops, bench tops, and all work surfaces
 - Chairs and chair arms Monitors, keyboards, and mice.
- Disinfecting solutions will follow CDC guidance: ethanol (70% min.), isopropanol (70% min.), 0.12% sodium hypochlorite solution with a contact time of 5-10 minutes
- A log will be posted at each research space (individual rooms) to record the date/time it was last cleaned.
- Personnel will wash hands before entering the research space.
- Minimize any personal belongings in the research space. Only take what is essential.
- Wipe down any shared instruments, equipment, or tools before switching users.
- Personnel will wash hands before leaving the research space.

7. Do you require a specific core facility to be opened in order to reopen your lab?

8. If yes, identify the research core facility (ies) or other support services that are essential for lab reopening. The full list of core facilities can be found here:

<https://research.nd.edu/our-research/facilities-and-resources>

8. If you selected a core facility(ies) in the previous question, please fill out the following form (one for each core facility) to request the use of the core facility(ies):

https://docs.google.com/forms/d/e/1FAIpQLSfLN1CZJ7_AOtI6QcX1L_1WmYb2r0sFpkzy1k9jowrdVVhAyg/viewform. Will you complete this form?

No.

Safety and Research Team

1. The lab/studio/core facility reopening plan will be presented to Risk Management and Safety to ensure the reopening is feasible and safe given the reduced status of University operations. Therefore, please address any safety measures or changes that need to be adopted to allow for a reduced density in the laboratory, studio, or core facility. Please specifically detail plans for disinfecting, including what will be used, the concentration and contact time. Provide information about general safety resulting from the plan (e.g. how will you deal with working alone, etc.)

Students in my lab are not allowed to work without appropriate safety training.

2. Please review your previous ramp-down plan. In the event of a return to Phase 1

(hibernation), are there any changes necessary? Please list those changes here.

No. We can repeat ramp-down if necessary in 24 hours.

3. Which building are you located in?

Radiation Laboratory

4. Identify your research personnel (or core personnel for the core facilities), including yourself, below. Include their names, status (For example, faculty, staff, postdoc, graduate student), emails, and cell phone numbers) Note that in Phase 2, all graduate students and postdoctoral scholars on the list will be asked through an independent method to sign an opt-in form before they will be allowed to participate.

Ireneusz Janik, ijanik@nd.edu, 5742100183 (PI)

4. Is there anything else we should be aware of?

No.

5. If you selected a core facility(ies), please complete the core facility request form, which can be found in Appendix C here:

https://docs.google.com/forms/d/e/1FAIpQLSfLN1CZJ7_AOtI6QcX1L_1WmYb2r0sFpkzy1k9jowrdVVhAyg/viewform

6. What room number(s) is your lab/studio/core facility located in?

003W, 003A, 016, 016A

7. Do you require a specific core facility to be opened in order to reopen your lab?

No.

Owner (Self-ID by College/School or NDR)

Melanie DeFord, NDR

Initial Owner Review: Approve/Deny (If denied, mark why).

Approve

3. Which College, School, or Organization is your primary affiliation?

Notre Dame Research

Send to RMS (Include name of reviewer request was sent to, date/time email was sent, and their Approval/Denial)

IC, 5/30

If approved, send to VPR (include date/time)

BB 6/3

VPR Approve/Deny

BB Approved 6/4

Assigned Reopen Date and Building Manager Notified (include date/time of notification)

6/4, Reopen 6/9

Email address

dbartel1@nd.edu

1. What is your name (First, Last)?

David Bartels

2. What is your cell phone number (include area code)?

574-360-8813

Request to Reopen

1. Indicate the rationale for reopening your laboratory, studio, or core facility (i.e., indicate why your research requires physical access to campus facilities) and source(s) of funding.

DOE-funded experimental research can only be carried out at the Radiation laboratory

2. Provide a plan for how physical distancing will be implemented in your laboratory, will be brought from studio, core facility, office, and team spaces. Address the six-foot interpersonal spacing home so that and nominal occupancy requirements for Phases 2 and 3 as they relate to all activities to be personnel can limit undertaken (e.g., microscopes, tissue cultures, small control rooms, etc.). Indicate how your interaction with others will manage working hours and/or shifts. For core facilities, also indicate how you will and will not need to manage user access to maintain appropriate physical distancing.

At present my research group on campus consists only of myself. I will carry out experiments at shared facilities, e.g. linac and 3MeV van de Graaff accelerators, that already operate on the basis of a calendar. Radiation laboratory management will provide guidelines for individual room occupancy and access of these shared facilities that I will follow. Given that it is only myself, there is simply no issue about maximum occupancy of lab spaces, or arranging a schedule to minimize overlap of group members. I will simply follow all existing laboratory protocols. There are no "working alone" restrictions during normal hours for these spaces. If I am not working on an experiment, I will spend my time working from home or in my private office 203C. Presently office space 216 is unoccupied and lab 210 is unused apart from parts or chemical storage. Other spaces listed belong to the common accelerator areas.

Having said that, all laboratories in the building are to be treated as common areas, so that face masks will be worn at all times. Hand sanitizer will be used before entering the areas. After a space is used/worked in, surfaces will be disinfected as per item 6 below.

3. All requests must include a schedule such that Building Managers and other support services know which research personnel should be in the building/research space at any given time. Please complete the draft schedule in Appendix D, which can be downloaded here, https://research.nd.edu/assets/388931/fullsize/appendix_d_lab_ramp_up_schedule_f01.xlsx, and upload part of your response with your lab/core facility name saved as the file name. The schedule should cover a two-week interval. While this schedule serves as an initial planning tool, faculty are encouraged to utilize their preferred scheduling means (e.g. Google Sheets, Calendars,

etc.) moving forward:

https://drive.google.com/open?id=1A7Lc_wYud2nqdV708WtlqJwOeW6ahDsO

4. What is your plan for logging researchers' arrival and departure within laboratory/studio/core facility spaces and their self-assessment of their health?

I will follow the plan included in the Radiation Laboratory reopening plan to log arrivals and departures. A Google form for health certification will be completed upon entering the building. It's a link that can be completed on a smartphone by scanning the QR code placed at the building entrance upon entry. The form will then be completed on the smartphone, and recorded automatically.

5. How will your personnel maintain physical distancing for breaks, lunches, etc.?

I will eat only at my desk in my office, alone.

6. Describe your procedures to clean and sanitize shared items, equipment, and work surfaces prior to use by others (see Hygiene Plan as a minimum example:

https://research.nd.edu/assets/388928/fullsize/appendix_h_example_hygiene_plan_f01.pdf)

Disinfection of hard surfaces and commonly touched surfaces will be performed at the start of each shift or at the start of each day, which is typically the same thing. Typically this will include:

- Door handles and door surfaces
- Table tops, bench tops, and all work surfaces
- Chairs and chair arms
- Monitors, keyboards, and mice

Personnel will wash hands or use hand disinfectant before entering and when leaving the research space.

Personnel will wipe down any shared instruments, equipment, or tools before switching users. A log will be posted at each research space to record the date/time it was last cleaned.

Disinfectants available in the Radlab are:

- Alpha-HP Multi Surface Disinfectant Cleaner -active ingredients 4.25%Hydrogen Peroxide-contact time 1 minute.
- Oxivir Tb Wipes- active ingredients .5% Hydrogen Peroxide-contact time 1 minute.
- IWC hand sanitizer-active ingredients 70% alcohol-contact time one minute.
- Ultra Cruz Hydrogen Peroxide- 3%-contact time 1 minute.
- The lab also has some original Pine Sol, which has an EPA approval and should be let stand for 10 minutes.
- Building Services will be providing 40 RCT. We will dilute it per the manufacturer's instructions. The contact time is 3 minutes

7. Do you require a specific core facility to be opened in order to reopen your lab?

8. If yes, identify the research core facility (ies) or other support services that are

essential for lab reopening. The full list of core facilities can be found here:
<https://research.nd.edu/our-research/facilities-and-resources>

8. If you selected a core facility (ies) in the previous question, please fill out the following form:

Safety and Research Team

1. The lab/studio/core facility reopening plan will be presented to Risk Management and Safety to ensure the reopening is feasible and safe given the reduced status of University operations. Therefore, please address any safety measures or changes that need to be adopted to allow for a reduced density in the laboratory, studio, or core facility. Please specifically detail plans for disinfecting, including what will be used, the concentration and contact time. Provide information about general safety resulting from the plan (e.g. how will you deal with working alone, etc.)

I will be working on my own, 1 person in the room, well separated from other individuals, on maintenance of equipment and/or doing accelerator experiments. (There will typically be plenty of other people in the building, including electronics shop personnel who monitor the accelerator performance.) These activities are already very "low density", and no particular changes need to be made to standard operating procedures apart from maintaining social distance (including wearing face masks), and disinfection of common equipment when users change. The Radiation lab has general guidelines for social distancing and pathways to follow in the building to minimize contacts. The disinfectants available in the Radlab are already included in the previous page upload:

Disinfection of hard surfaces and commonly touched surfaces will be performed at the start of each shift or at the start of each day, which is typically the same thing. Typically this will include:

- Door handles and door surfaces
- Table tops, bench tops, and all work surfaces
- Chairs and chair arms
- Monitors, keyboards, and mice

Personnel will wash hands or use hand disinfectant before entering and when leaving the research space.

Personnel will wipe down any shared instruments, equipment, or tools before switching users.

A log will be posted at each research space to record the date/time it was last cleaned.

Disinfectants available in the Radlab are:

- Alpha-HP Multi Surface Disinfectant Cleaner -active ingredients 4.25%Hydrogen Peroxide-contact time 1 minute.
- Oxivir Tb Wipes- active ingredients .5% Hydrogen Peroxide-contact time 1 minute.
- IWC hand sanitizer-active ingredients 70% alcohol-contact time one minute.
- Ultra Cruz Hydrogen Peroxide- 3%-contact time 1 minute.
- The lab also has some original Pine Sol, which has an EPA approval and should be let stand for 10 minutes.
- Building Services will be providing 40 RCT. We will dilute it per the manufacturer's instructions. The contact time is 3 minutes

2. Please review your previous ramp-down plan. In the event of a return to Phase 1 (hibernation), are there any changes necessary? Please list those changes here.

No changes.

3. Which building are you located in?

Radiation Laboratory

4. Identify your research personnel (or core personnel for the core facilities), including yourself, below. Include their names, status (For example, faculty, staff, postdoc, graduate student), emails, and cell phone numbers) Note that in Phase 2, all graduate students and postdoctoral scholars on the list will be asked through an independent method to sign an opt-in form before they will be allowed to participate.

David Bartels, faculty, bartels.5@nd.edu, 574 360 8813
Safiqul Islam, postdoc, mislam@nd.edu , presently "stuck" in Bangladesh

4. Is there anything else we should be aware of?

Very likely, but not from me.

5. If you selected a core facility(ies), please complete the core facility request form, which can be found in Appendix C here:

https://docs.google.com/forms/d/e/1FAIpQLSfLN1CZJ7_AOtl6QcX1L_1WmYb2r0sFpkzy1k9jowrdVVhAyg/viewform

6. What room number(s) is your lab/studio/core facility located in?

203,210,216,(B012,A,B,C),(B016,B,C),(B020,A,B,C)

7. Do you require a specific core facility to be opened in order to reopen your lab?

No.

Owner (Self-ID by College/School or NDR)

Melanie DeFord, NDR

Initial Owner Review: Approve/Deny (If denied, mark why).

Approve

Department (Designate Who Submission was Sent to i.e. Dean, Chair, or designee and confirm date/time of issue by email, and their Approval/Denial)

IC, 5/30

3. Which College, School, or Organization is your primary affiliation?

Notre Dame Research

Grad School (Include name trainee names were sent to and date/time email was sent)

Approved

Send to RMS (Include name of reviewer request was sent to, date/time email was sent, and their Approval/Denial)

EK, 6/1 Approved 6/2

If approved, send to VPR (include date/time)

BB 6/2

VPR Approve/Deny

BB Approved 6/3

Assigned Reopen Date and Building Manager Notified (include date/time of notification)

6/3, reopen 6/9

Email address

pgeorge3@nd.edu

1. What is your name (First, Last)?

Phillip George

2. What is your cell phone number (include area code)?

260-466-3895

3. Which College, School, or Organization is your primary affiliation?

Notre Dame Research

4. Which specific laboratory, studio, or core facility are you affiliated with?

Radiation Lab Electronics Shop

Request to Reopen**1. Indicate the rationale for reopening your laboratory, studio, or core facility (i.e., indicate why your research requires physical access to campus facilities) and source(s) of funding.**

Scientific Instrument equipment needs repaired and put back into service for PI's and Post-Doc's to continue research.

2. Provide a plan for how physical distancing will be implemented in your laboratory, will be brought from studio, core facility, office, and team spaces. Address the six-foot interpersonal spacing home so that and nominal occupancy requirements for Phases 2 and 3 as they relate to all activities to be undertaken (e.g., microscopes, tissue cultures, small control rooms, etc.). Indicate how your interaction with others will manage working hours and/or shifts. For core facilities, also indicate how you will and will not need to manage user access to maintain appropriate physical distancing.

We will wear face coverings and maintain six-foot interpersonal spacing and follow any and all COVID-19 protection protocols that NDR leadership authorizes.

The electronics shop team consists of Phillip George, Daniel Williams, and Hoon Lee with offices in the Radiation Lab Building. Our "customers" are primarily researchers from within the Radiation Lab Building. We plan to control "traffic" by physically separating the researchers from the electronics shop staff as much as possible with explicit breakdown of these procedures in the following paragraphs.

The electronics shop team will advise researchers to not enter the rooms with radiation instrumentation until the E-shop team notifies them that maintenance is finished and the lab equipment is ready and available for researchers to enter. At this point, the electronics shop staff will be back at their own offices and shop areas and the accelerator rooms will be utilized by the researchers. When a researcher

encounters a malfunction, the researcher shall have the affected instrumentation rooms cleared of all people except for one to illustrate or explain the malfunction to one electronics shop person.

Room 115B is an office for Hoon Lee. 200 sq feet.

Procedure: Office door closed with sign stating to call or email for an on-line appointment. If a person needs to meet in the office, there is room for one visitor and both parties shall wear face coverings and maintain six feet spacing.

Room 120B is an office for Phillip George. 220 sq feet.

Procedure: Office door closed with sign stating to call or email for an on-line appointment. If a person needs to meet in the office, there is room for one visitor and both parties shall wear face coverings and maintain six feet spacing.

Room 120 is the electronics shop with an office area for Daniel Williams. 717 sq feet.

Procedure: Office door closed with sign stating to call or email for an on-line appointment. If a person needs to meet in the office, there is room for three visitors and all parties shall wear face coverings and maintain six feet spacing.

Room B16 is a chemical prep room and water filtration room and common walk path for access to the 8MEV Linear Accelerator. B16 is spacious with over 470 square feet of open area.

Procedure: Self responsibility to follow all NDR COVID-19 protocols.

Room B16B is a parts storage area and common walk path for access to the 8MEV Linear Accelerator. B16B is spacious with over 450 square feet of open area.

Procedure: Self responsibility to follow all NDR COVID-19 protocols.

Room B120 is the 8MEV LINAC Control Room. 253 sq feet.

Procedure: We shall post a sign that this room is limited to 2 people capacity and they shall maintain 6 foot interpersonal spacing and wear face coverings. The electronics shop team will advise researchers to not enter the rooms with radiation instrumentation until the E-shop team notifies them that maintenance is finished and the lab equipment is ready and available for researchers to enter. At this point, the electronics shop staff will be back at their own offices and shop areas and the accelerator rooms will be utilized by the researchers. When a researcher encounters a malfunction, the researcher shall have the affected instrumentation rooms cleared of all people except for one to illustrate or explain the malfunction to one electronics shop person. Equipment consoles have a log book for date, start time, finish time, name and comments. Equipment consoles will also have a disinfection cleaning log book.

B20A LINAC Modulator Room. 150 sq ft.

Procedure: This room is locked and requires the LINAC operator key to open. We shall post a sign that states that if the door is propped open, that means that there is someone in the room. The modulator room door is part of the vault interlock system and the system will not operate with the door open. The sign will state that the preferred limit is 1 person, but 2 people can be in the room for maintenance as long as 6 foot spacing and face covering protocol is followed.

B20 to B20B Multi turn corridor between LINAC Control Room and LINAC Vault 2.

Procedure: We will post a log at the corridor entrance. All persons shall sign in and out of the log so that others will know who and how many people are already in the corridor.

We will post a sign at the corridor entrance that the corridor is limited to 2 people at a time and they must

follow protocols to protect from COVID-19. This corridor has space for 2 people at a time and the 90 degree turns have mirrors but we will include a rule stated on the entrance sign that all must verbally announce their entrance and check the mirrors to observe for proper clearance around the corners of the corridor.

B20B is 8MEV LINAC Vault 2. Over 600 sq feet.

B20C is 8MEV LINAC Vault 3. Over 600 sq feet.

B16C is 8MEV LINAC Vault 1. Over 600 sq feet.

Procedure: Self responsibility to follow all NDR COVID-19 protocols.

B12 is the 3MEV Van de Graaff accelerator control room. Over 600 sq feet.

Procedure: Self responsibility to follow all NDR COVID-19 protocols.

B12A is part of a corridor to B12C (3MEV Van de Graff accelerator)

Procedure: Self responsibility to follow all NDR COVID-19 protocols.

B12C is the 3MEV Van de Graaff accelerator. Over 1570 sq ft.

Procedure: Self responsibility to follow all NDR COVID-19 protocols. The electronics shop team will advise researchers to not enter the rooms with radiation instrumentation until the E-shop team notifies them that maintenance is finished and the lab equipment is ready and available for researchers to enter. At this point, the electronics shop staff will be back at their own offices and shop areas and the accelerator rooms will be utilized by the researchers. When a researcher encounters a malfunction, the researcher shall have the affected instrumentation rooms cleared of all people except for one to illustrate or explain the malfunction to one electronics shop person. Equipment consoles have a log book for date, start time, finish time, name and comments. Equipment consoles will also have a disinfection cleaning log book.

Primarily there will be only two people (Phil George and Daniel Williams) maintaining the electronics shop and associated labs. I plan to split the shifts so that the two of us reduce our time together in the building to half days. There is a third person supporting the software for our shop (Hoon Lee). Hoon rarely needs to leave his private office and so he will be physically distanced. Hoon's shift will start later in the day and end in the evenings. Hoon will have access to program lab equipment in the evenings when others are not present.

3. All requests must include a schedule such that Building Managers and other support services know which research personnel should be in the building/research space at any given time. Please complete the draft schedule in Appendix D, which can be downloaded here, https://research.nd.edu/assets/388931/fullsize/appendix_d_lab_ramp_up_schedule_f01.xlsx, and upload part of your response with your lab/core facility name saved as the file name. The schedule should cover a two-week interval. While this schedule serves as an initial planning tool, faculty are encouraged to utilize their preferred scheduling means (e.g. Google Sheets, Calendars, etc.) moving forward:

<https://drive.google.com/open?id=1xA8jlotSYePhQyUqiyEfq5jdmwKbYOxy>

4. What is your plan for logging researchers' arrival and departure within laboratory/studio/core facility spaces and their self-assessment of their health?

Personal temperatures will be checked prior to departing homes as per NDR protocol. Researchers will certify their own health self-assessment by established protocols which are presently paperwork at the entrance but will become electronic as mentioned in the latest announcement from the NDR VP. Scan cards will log building entrances as per NDR protocol.

The electronics shop team will advise researchers to not enter the rooms with radiation instrumentation until the E-shop team notifies them that maintenance is finished and the lab equipment is ready and available for researchers to enter. Equipment consoles have a log book for date, start time, finish time, name and comments.

5. How will your personnel maintain physical distancing for breaks, lunches, etc.?

We will take our breaks and eat lunch in our private offices or outside in open areas.

6. Describe your procedures to clean and sanitize shared items, equipment, and work surfaces prior to use by others (see Hygiene Plan as a minimum example:

https://research.nd.edu/assets/388928/fullsize/appendix_h_example_hygiene_plan_f01.pdf)

We will have 70% to 80% alcohol based cleaning products available in each room and disposable tissues and disposable nitrile gloves at each equipment console. All users shall don gloves and wipe down all switches and work surfaces areas before and after use and ensure the solution has at least one minute of contact on the surface prior to touching it.

7. Do you require a specific core facility to be opened in order to reopen your lab?

8. If yes, identify the research core facility (ies) or other support services that are essential for lab reopening. The full list of core facilities can be found here:

<https://research.nd.edu/our-research/facilities-and-resources>

8. If you selected a core facility (ies) in the previous question, please fill out the following form:

Safety and Research Team

1. The lab/studio/core facility reopening plan will be presented to Risk Management and Safety to ensure the reopening is feasible and safe given the reduced status of University operations. Therefore, please address any safety measures or changes that need to be adopted to allow for a reduced density in the laboratory, studio, or core facility. Please specifically detail plans for disinfecting, including what will be used, the concentration and contact time. Provide information about general safety resulting from the plan (e.g. how will you deal with working alone, etc.)

We will have 70% to 80% alcohol based cleaning products available in each room and disposable tissues and disposable nitrile gloves at each equipment console. All users shall don gloves and wipe down all switches and work surfaces areas before and after use and ensure the solution has at least one minute of contact on the surface prior to touching it. We plan to do

this wiping with nitrile gloves and then dispose of them and the wipes. All users shall record appropriate entries into the cleaning log books.

The electronics shop team consists of Phillip George, Daniel Williams, and Hoon Lee with offices in the Radiation Lab Building. Our "customers" are researchers from within the Radiation Lab Building. We plan to control "traffic" by physically separating the researchers from the electronics shop staff as much as possible with explicit breakdown of these procedures in the following paragraphs.

The electronics shop team will advise researchers to not enter the rooms with radiation instrumentation until the E-shop team notifies them that maintenance is finished and the lab equipment is ready and available for researchers to enter. At this point, the electronics shop staff will be back at their own offices and shop areas and the accelerator rooms will be utilized by the researchers. When a researcher encounters a malfunction, the researcher shall have the affected instrumentation rooms cleared of all people except for one to illustrate or explain the malfunction to one electronics shop person.

Room 115B is an office for Hoon Lee. 200 sq feet.

Procedure: Office door closed with sign stating to call or email for an on-line appointment. If a person needs to meet in the office, there is room for one visitor and both parties shall wear face coverings and maintain six feet spacing.

Room 120B is an office for Phillip George. 220 sq feet.

Procedure: Office door closed with sign stating to call or email for an on-line appointment. If a person needs to meet in the office, there is room for one visitor and both parties shall wear face coverings and maintain six feet spacing.

Room 120 is the electronics shop with an office area for Daniel Williams. 717 sq feet.

Procedure: Office door closed with sign stating to call or email for an on-line appointment. If a person needs to meet in the office, there is room for three visitors and all parties shall wear face coverings and maintain six feet spacing.

Room B16 is a chemical prep room and water filtration room and common walk path for access to the 8MEV Linear Accelerator. B16 is spacious with over 470 square feet of open area.

Procedure: Self responsibility to follow all NDR COVID-19 protocols.

Room B16B is a parts storage area and common walk path for access to the 8MEV Linear Accelerator. B16B is spacious with over 450 square feet of open area.

Procedure: Self responsibility to follow all NDR COVID-19 protocols.

Room B120 is the 8MEV LINAC Control Room. 253 sq feet.

Procedure: We shall post a sign that this room is limited to 2 people capacity and they shall maintain 6 foot interpersonal spacing and wear face coverings. The electronics shop team will

advise researchers to not enter the rooms with radiation instrumentation until the E-shop team notifies them that maintenance is finished and the lab equipment is ready and available for researchers to enter. At this point, the electronics shop staff will be back at their own offices and shop areas and the accelerator rooms will be utilized by the researchers. When a researcher encounters a malfunction, the researcher shall have the affected instrumentation rooms cleared of all people except for one to illustrate or explain the malfunction to one electronics shop person. Equipment consoles have a log book for date, start time, finish time, name and comments. Equipment consoles will also have a disinfection cleaning log book.

B20A LINAC Modulator Room. 150 sq ft.

Procedure: This room is locked and requires the LINAC operator key to open. We shall post a sign that states that if the door is propped open, that means that there is someone in the room. The modulator room door is part of the vault interlock system and the system will not operate with the door open. The sign will state that the preferred limit is 1 person, but 2 people can be in the room for maintenance as long as 6 foot spacing and face covering protocol is followed.

B20 to B20B Multi turn corridor between LINAC Control Room and LINAC Vault 2.

Procedure: We will post a log at the corridor entrance. All persons shall sign in and out of the log so that others will know who and how many people are already in the corridor.

We will post a sign at the corridor entrance that the corridor is limited to 2 people at a time and they must follow protocols to protect from COVID-19. This corridor has space for 2 people at a time and the 90 degree turns have mirrors but we will include a rule stated on the entrance sign that all must verbally announce their entrance and check the mirrors to observe for proper clearance around the corners of the corridor.

B20B is 8MEV LINAC Vault 2. Over 600 sq feet.

B20C is 8MEV LINAC Vault 3. Over 600 sq feet.

B16C is 8MEV LINAC Vault 1. Over 600 sq feet.

Procedure: Self responsibility to follow all NDR COVID-19 protocols.

B12 is the 3MEV Van de Graaff accelerator control room. Over 600 sq feet.

Procedure: Self responsibility to follow all NDR COVID-19 protocols.

B12A is part of a corridor to B12C (3MEV Van de Graff accelerator)

Procedure: Self responsibility to follow all NDR COVID-19 protocols.

B12C is the 3MEV Van de Graaff accelerator. Over 1570 sq ft.

Procedure: Self responsibility to follow all NDR COVID-19 protocols. The electronics shop team will advise researchers to not enter the rooms with radiation instrumentation until the E-shop team notifies them that maintenance is finished and the lab equipment is ready and available for researchers to enter. At this point, the electronics shop staff will be back at their

own offices and shop areas and the accelerator rooms will be utilized by the researchers. When a researcher encounters a malfunction, the researcher shall have the affected instrumentation rooms cleared of all people except for one to illustrate or explain the malfunction to one electronics shop person. Equipment consoles have a log book for date, start time, finish time, name and comments. Equipment consoles will also have a disinfection cleaning log book.

Primarily there will be only two people (Phil George and Daniel Williams) maintaining the electronics shop and associated labs. I plan to split the shifts so that the two of us reduce our time together in the building to half days. There is a third person supporting the software for our shop (Hoon Lee). Hoon rarely needs to leave his private office and so he will be physically distanced. Hoon's shift will start later in the day and end in the evenings. Hoon will have access to program lab equipment in the evenings when others are not present.

2. Please review your previous ramp-down plan. In the event of a return to Phase 1 (hibernation), are there any changes necessary? Please list those changes here.

No changes to the previous ramp down hibernation plan.

3. Which building are you located in?

Radiation Laboratory

4. Identify your research personnel (or core personnel for the core facilities), including yourself, below. Include their names, status (For example, faculty, staff, postdoc, graduate student), emails, and cell phone numbers) Note that in Phase 2, all graduate students and postdoctoral scholars on the list will be asked through an independent method to sign an opt-in form before they will be allowed to participate.

Phillip George, Staff, pgeorge3@nd.edu 260-466-3895
Daniel Williams, Staff, dwilli30@nd.edu 317-800-3838
Hoon Lee, Staff, hlee24@nd.edu 608-957-6240
Laura Mortlock, Laura.Morlock@nd.edu 574-532-2580

4. Is there anything else we should be aware of?

No.

5. If you selected a core facility(ies), please complete the core facility request form, which can be found in Appendix C here:

https://docs.google.com/forms/d/e/1FAIpQLSfLN1CZJ7_AOtl6QcX1L_1WmYb2r0sFpkzy1k9jowrdVVhAyg/viewform

6. What room number(s) is your lab/studio/core facility located in?

120+A,B,C B12+A,B,C B16+A,B,C B20+A,B,C 115A,B 116

7. Do you require a specific core facility to be opened in order to reopen your lab?

No.

Owner (Self-ID by College/School or NDR)

Melanie DeFord, NDR

Initial Owner Review: Approve/Deny (If denied, mark why).

Approve

Department (Designate Who Submission was Sent to i.e. Dean, Chair, or designee and confirm date/time of issue by email, and their Approval/Denial)

IC, 5/26 Approved 5/27

3. Which College, School, or Organization is your primary affiliation?

Notre Dame Research

Grad School (Include name trainee names were sent to and date/time email was sent)

N/A

Send to RMS (Include name of reviewer request was sent to, date/time email was sent, and their Approval/Denial)

EK, 5/27 Approved 5/29

If approved, send to VPR (include date/time)

BB, 5/29

VPR Approve/Deny

BB approved 6/2

Assigned Reopen Date and Building Manager Notified (include date/time of notification)

6/2/2020

Email address

pkamat@nd.edu

1. What is your name (First, Last)?

Prashant Kamat

2. What is your cell phone number (include area code)?

574-261-2388

3. Which College, School, or Organization is your primary affiliation?

Notre Dame Research

4. Which specific laboratory, studio, or core facility are you affiliated with?

Radiation Laboratory

Request to Reopen

1. Indicate the rationale for reopening your laboratory, studio, or core facility (i.e., indicate why your research requires physical access to campus facilities) and source(s) of funding.

To conduct DOE sponsored research

2. Provide a plan for how physical distancing will be implemented in your laboratory, will be brought from studio, core facility, office, and team spaces. Address the six-foot interpersonal spacing home so that and nominal occupancy requirements for Phases 2 and 3 as they relate to all activities to be personnel can limit undertaken (e.g., microscopes, tissue cultures, small control rooms, etc.). Indicate how your interaction with others will manage working hours and/or shifts. For core facilities, also indicate how you will and will not need to manage user access to maintain appropriate physical distancing.

The Kamat group currently has 8 trainees and they all work on the second floor of Radiation Laboratory. There are 6 laboratory rooms (#201,202,206,214,215, 220, 224, 225) with separate wet labs., synthesis lab with hoods, and instrument labs. The lab space is used exclusively by the members of Kamat group.

The upcoming early phase operating plan is to have only one person working in the research laboratory at a time (25% capacity). Should there be a need for someone to pick up a chemical or a utility from the room occupied by another researcher, he/she will wear a mask and maintain a safe distance during the short visit.

There will be two shifts of four people each. The first shift of 4 trainees will be from 7 am to 2 pm, and the second shift of 4 trainees will be from 2:30 pm to 9:30 pm. For each shift, one senior trainee is designated as the safety leader to ensure safety practices. A minimum of two people on the second floor are required to carry out experiments. We will abide by the recommendation of the working alone policy of the

Radiation Lab and Risk Management office. A schedule is provided at the end of this plan that describes when and where trainees will work (Appendix D).

The student offices are located in Room 209 and 211 (maximum capacity of 10 desk areas). Two researchers will occupy each room during each shift and will maintain required physical distance measures. They will clean their desk areas and computers with disinfectant wipes before, during and after the use. No undergraduate researchers or visitors will be allowed in these offices.

At the beginning of each shift, trainees will sign the Certification of Wellness following the guidelines set by Rad Lab administration (Appendix G). At the beginning and end of each shift, a hygiene plan will be implemented by the shift safety leaders to disinfect surfaces and is provided at the end of this plan following Appendix H. All trainees have agreed to follow the hygiene plan (Appendix H). They will wear face masks when others are present or may be encountered (e.g., lab, group rooms, hallways). Trainees will also abide by previous default PPE requirements (safety glasses, closed-toe shoes with substantial soles, pants or skirt to the ankles, and shirts with coverage equal to or greater than a T-shirt) while working in the laboratory. Trainees will abide by new physical controls that are implemented by Radiation Lab such as select stairways being designated up or down only, doors to the outside being designated entry or exit only, and bathrooms being designated single occupancy only.

Undergraduate researchers and visitors are not permitted to conduct any experiments or enter research laboratories.

Note: Please use the revised file Revised-kamatlab_rampupschedule_f01 Excel file in the next section. I could not delete the previous file

3. All requests must include a schedule such that Building Managers and other support services know which research personnel should be in the building/research space at any given time. Please complete the draft schedule in Appendix D, which can be downloaded here, https://research.nd.edu/assets/388931/fullsize/appendix_d_lab_ramp_up_schedule_f01.xlsx, and upload part of your response with your lab/core facility name saved as the file name. The schedule should cover a two-week interval. While this schedule serves as an initial planning tool, faculty are encouraged to utilize their preferred scheduling means (e.g. Google Sheets, Calendars, etc.) moving forward:

https://drive.google.com/open?id=1MKnb7Zv5-aQP_Dz1hLtKkaaYz3BwOZ2N,
https://drive.google.com/open?id=1I_IXqpCBDzcoehzygLuQcx3utTBWOGxq,
<https://drive.google.com/open?id=1ZsKaxAtgQ2o1APgf538gyitejDJacqhb>

4. What is your plan for logging researchers' arrival and departure within laboratory/studio/core facility spaces and their self-assessment of their health?

The Rad Lab will have a sign up form to disclose wellness. These forms are checked and administered by Laura Mortlock (People who fail to sign will not be allowed to work that day.)

5. How will your personnel maintain physical distancing for breaks, lunches, etc.?

The lunch and breaks will be held in the student office (or in Room 235), making sure only one person is present in the room. A strict physical distance rule will apply. The individual is responsible for cleaning up

and disinfecting the surface after its use.

6. Describe your procedures to clean and sanitize shared items, equipment, and work surfaces prior to use by others (see Hygiene Plan as a minimum example:

https://research.nd.edu/assets/388928/fullsize/appendix_h_example_hygiene_plan_f01.pdf)

- Disinfection of hard surfaces and commonly touched surfaces will be performed by the trainee before the start of their experiments at the start of each shift. (This will include: Door handles and door surfaces, Table tops, bench tops, and all work surfaces, Chairs and chair arms Monitors, keyboards, and mice. Disinfecting solutions will follow CDC guidance: ethanol (70% min.), isopropanol (70% min.), 0.12% sodium hypochlorite solution with a contact time of 5-10 minutes
- A log will be posted at each research space (individual rooms) to record the date/time it was last cleaned.
- Personnel will wash hands before entering the research space.
- Minimize any personal belongings in the research space. Only take what is essential.
- Wipe down any shared instruments, equipment, or tools before switching users.
- Personnel will wash hands before leaving the research space.

7. Do you require a specific core facility to be opened in order to reopen your lab?

Yes

8. If yes, identify the research core facility (ies) or other support services that are essential for lab reopening. The full list of core facilities can be found here:

<https://research.nd.edu/our-research/facilities-and-resources>

Materials Characterization Facility

8. If you selected a core facility(ies) in the previous question, please fill out the following form (one for each core facility) to request the use of the core facility(ies):

https://docs.google.com/forms/d/e/1FAIpQLSfLN1CZJ7_AOtl6QcX1L_1WmYb2r0sFpkzy1k9jowrdVVhAyg/viewform. Will you complete this form?

Yes.

Safety and Research Team

1. The lab/studio/core facility reopening plan will be presented to Risk Management and Safety to ensure the reopening is feasible and safe given the reduced status of University operations. Therefore, please address any safety measures or changes that need to be adopted to allow for a reduced density in the laboratory, studio, or core facility. Please specifically detail plans for disinfecting, including what will be used, the concentration and contact time. Provide information about general safety resulting from the plan (e.g. how will you deal with working alone, etc.)

Although there is a decrease in the number of students working in each shift, we will ensure at least two people are working together in nearby laboratories. Students in my lab are not allowed to work alone regardless of experiment risk level. Students will be advised to adhere to this policy and recommendations of Radiation Lab and Risk Management Office

2. Please review your previous ramp-down plan. In the event of a return to Phase 1 (hibernation), are there any changes necessary? Please list those changes here.

We can ramp down the laboratory operation within one working day. No changes are necessary to the hibernation plan.

3. Which building are you located in?

Radiation Laboratory

4. Identify your research personnel (or core personnel for the core facilities), including yourself, below. Include their names, status (For example, faculty, staff, postdoc, graduate student), emails, and cell phone numbers) Note that in Phase 2, all graduate students and postdoctoral scholars on the list will be asked through an independent method to sign an opt-in form before they will be allowed to participate.

Jeff DuBose
Graduate Student
209
602-459-2365
jdubose@nd.edu

Preethi Susan Mathew
Graduate Student
211
914-646-6860
pmathew@nd.edu

Bo-An Chen
Graduate Student
211
574-440-1574
bchen6@nd.edu

Jishnudas Chakkamalayath
Graduate Student
211
574-340-1477

jchakkam@nd.edu

Anthony Kipkorir
Graduate Student
209
574-323-0232
akipkori@nd.edu

Yizhi Wu
Visiting Scholar
211
ywu22@nd.edu

Junsang (Jun) Cho
Postdoc
209
979-574-1733
jcho3@nd.edu

Manjeet Chhetri
Postdoc
211
574-323-6345
mchhetri@nd.edu

Prashant Kamat
PI / Advisor
223B
574-631-5411
pkamat@nd.edu

4. Is there anything else we should be aware of?

No.

5. If you selected a core facility(ies), please complete the core facility request form, which can be found in Appendix C here:

https://docs.google.com/forms/d/e/1FAIpQLSfLN1CZJ7_AOtI6QcX1L_1WmYb2r0sFpkzy1k9jowrdVVhAyg/viewform

6. What room number(s) is your lab/studio/core facility located in?

Room 201, 202, 206, 214, 215, 220, 224, 225

7. Do you require a specific core facility to be opened in order to reopen your lab?

Yes.

Owner (Self-ID by College/School or NDR)

Melanie DeFord, NDR

Initial Owner Review: Approve/Deny (If denied, mark why).

Approved

Department (Designate Who Submission was Sent to i.e. Dean, Chair, or designee and confirm date/time of issue by email, and their Approval/Denial)

IC 5/27

3. Which College, School, or Organization is your primary affiliation?

Notre Dame Research

Send to RMS (Include name of reviewer request was sent to, date/time email was sent, and their Approval/Denial)

EK, 5/28, Approved 5/29

If approved, send to VPR (include date/time)

BB, 6/2

VPR Approve/Deny

BB, 6/2

Assigned Reopen Date and Building Manager Notified (include date/time of notification)

6/2, reopen 6/9

Email address

jla@nd.edu

1. What is your name (First, Last)?

Jay LaVerne

2. What is your cell phone number (include area code)?

574-274-5487

3. Which College, School, or Organization is your primary affiliation?

Notre Dame Research

4. Which specific laboratory, studio, or core facility are you affiliated with?

316 Radiation Laboratory (LaVerne Group)

Request to Reopen

1. Indicate the rationale for reopening your laboratory, studio, or core facility (i.e., indicate why your research requires physical access to campus facilities) and source(s) of funding.

In fulfillment of promised work on the DOE NDRL core program and several other programs funded by NEUP, NNSA, and EMSP, graduate students and postdocs must have access to the laboratory to perform experiments that cannot be conducted remotely. These activities include sample preparation, radiolysis and analysis.

2. Provide a plan for how physical distancing will be implemented in your laboratory, will be brought from studio, core facility, office, and team spaces. Address the six-foot interpersonal spacing home so that and nominal occupancy requirements for Phases 2 and 3 as they relate to all activities to be undertaken (e.g., microscopes, tissue cultures, small control rooms, etc.). Indicate how your interaction with others will manage working hours and/or shifts. For core facilities, also indicate how you will and will not need to manage user access to maintain appropriate physical distancing.

In this first phase, the LaVerne group will consist of two postdocs and three graduate students, 5 total. The main laboratories to be accessed are 310 and 314 Radiation Laboratory. These laboratories are both over 500 square feet and designed for at least four people each. Each of these laboratories will be limited to 1 person each (25%) until limits are raised by the university. Personnel will work schedules of 8 am to 2 pm and 2:30 pm to 9:00 pm. We will try to maintain two people in the area for safety purposes.

Irradiations will be performed in the source room, 003B Radiation Laboratory. This room houses the radiation sources and has very restricted access. One person will be allowed in this room at a time because of its small size of about 200 square feet. Duties in this room involve loading or unloading samples at a wide variety of intervals, and occupancy will only be a few minutes at a time. This room will

be treated as a transient area in terms of scheduling occupancy. No sink is available in this room so personnel will be required to sanitize their hands before and after leaving the room and wearing a mask while in the room. There are no safety issues for one person working alone in this area.

Selected experiments require rapid analysis following radiolysis. Instruments in 003 and 003C will be utilized for this purpose. These experiments are time sensitive so two persons are required. Room 003 is almost 1500 square feet and can easily accommodate two people working in the eastern part of the room. PPE and face masks along with social distancing will be maintained. Room 003C is only about 150 square feet so only one person will be allowed to utilize that area. The second person will be right outside of this room so there are no safety issues related to having one person in this room.

Personnel will follow specific protocols for the NDRL as well as overall requirements for working in a laboratory at Notre Dame. Upon entering the building, personnel will sign the Certification of Wellness (Appendix G) and record their destination on that shift. Movement throughout the building will follow established rules such as using the designated entrance and exit and well as appropriate stairways and single usage of restrooms. Everyone will wear face masks when in the hallways or laboratories. Face masks are optional when working alone in the offices. Standard PPE for working in a laboratory such as appropriate clothing, as well as eye, face, and hand protection will be required.

Personnel will wash their hands upon entering the laboratory and disinfect all surfaces they expect to touch during the course of their shift. All surfaces that have been touched will be disinfected followed by hand washing upon the end of the shift.

Personnel will be encouraged to work from home when possible. However, data transfer and initial data manipulation may require personnel to access their offices and computers. Offices will be restricted to one person at a time and will use 316, 336, 304B and 304C. Only two workers are allowed during a shift at any one time so overlap is not expected. Each student has their own desktop or laptop computer so cross contamination is not expected, but in the interest of safety everyone will be required to disinfect all touched surfaces at the end of their shift.

3. All requests must include a schedule such that Building Managers and other support services know which research personnel should be in the building/research space at any given time. Please complete the draft schedule in Appendix D, which can be downloaded here, https://research.nd.edu/assets/388931/fullsize/appendix_d_lab_ramp_up_schedule_f01.xlsx, and upload part of your response with your lab/core facility name saved as the file name. The schedule should cover a two-week interval. While this schedule serves as an initial planning tool, faculty are encouraged to utilize their preferred scheduling means (e.g. Google Sheets, Calendars, etc.) moving forward:

https://drive.google.com/open?id=1ztVFLv_3YZ8HeLxK-B-s-0BqtoHShUrB

4. What is your plan for logging researchers' arrival and departure within laboratory/studio/core facility spaces and their self-assessment of their health?

Upon arrival to the NDRL, personnel will log in at the building entrance and list rooms they will be occupying. Everyone will sign the Certification of Wellness (Appendix G). Anyone not feeling well will be told to stay home.

5. How will your personnel maintain physical distancing for breaks, lunches, etc.?

Personnel will wear face masks if contact with other personnel is anticipated. CDC recommended social distancing will prevail throughout. Each person will have an office space available to them and breaks, drinks or food will be limited to those areas. Personnel will not be allowed to congregate in office areas.

6. Describe your procedures to clean and sanitize shared items, equipment, and work surfaces prior to use by others (see Hygiene Plan as a minimum example:

https://research.nd.edu/assets/388928/fullsize/appendix_h_example_hygiene_plan_f01.pdf)

Disinfection of hard surfaces and commonly touched surfaces will be performed by research/core facility personnel at the start and end of each shift. This will include: door handles and door surfaces; table tops, bench tops, and all work surfaces; chairs and chair arms; monitors, keyboards, and mice. A CDC approved cleaning solution will be used.

A log will be posted at each research space (individual rooms) to record the date/time it was last cleaned. Personnel will wash hands before entering the research space and upon leaving the research space. Minimize any personal belongings in the research space. Only take what is essential. Wipe down any shared instruments, equipment, or tools before switching users.

7. Do you require a specific core facility to be opened in order to reopen your lab?

Yes

8. If yes, identify the research core facility (ies) or other support services that are essential for lab reopening. The full list of core facilities can be found here:

<https://research.nd.edu/our-research/facilities-and-resources>

Materials Characterization Facility, Radiation Laboratory Glassblowing Shop, Radiation Laboratory Machine Shop

8. If you selected a core facility (ies) in the previous question, please fill out the following form:

Safety and Research Team

1. The lab/studio/core facility reopening plan will be presented to Risk Management and Safety to ensure the reopening is feasible and safe given the reduced status of University operations. Therefore, please address any safety measures or changes that need to be adopted to allow for a reduced density in the laboratory, studio, or core facility. Please specifically detail plans for disinfecting, including what will be used, the concentration and contact time. Provide information about general safety resulting from the plan (e.g. how will you deal with working alone, etc.)

No changes to the overall safety measures will be required. Personnel will have to have completed all safety training. Shifts are designed so that other personnel are available for emergencies.

Disinfecting solutions will follow CDC guidance: Alpha-HP Multi Surface Disinfectant Cleaner -active ingredients 4.25%Hydrogen Peroxide-contact time 1 minute; Oxivir Tb Wipes- active ingredients .5% Hydrogen Peroxide-contact time 1 minute; IWC hand sanitizer-active ingredients 70% alcohol-contact time 1 minute; 40 RCT – active ingredient 70-80% alcohol – contact time 3 minutes.

2. Please review your previous ramp-down plan. In the event of a return to Phase 1 (hibernation), are there any changes necessary? Please list those changes here.

No changes are required. Laboratories can be brought to a safe standby mode in hours.

3. Which building are you located in?

Radiation Laboratory

4. Identify your research personnel (or core personnel for the core facilities), including yourself, below. Include their names, status (For example, faculty, staff, postdoc, graduate student), emails, and cell phone numbers) Note that in Phase 2, all graduate students and postdoctoral scholars on the list will be asked through an independent method to sign an opt-in form before they will be allowed to participate.

Jay LaVerne 574-274-5487 (faculty)
Patricia Huestis 254-559-0482 (graduate student)
Melissa Rier 309-258-2867 (postdoc)
Alejandro Ramos 574-334-1926 (postdoc)
Elizabeth Briley 714-204-2500 (graduate student)
Savannah Benjamin 615-618-4860 (graduate student)
Daniel Felton 208-830-0773 (graduate student)
Maria Araos 574-275-0587 (staff)

4. Is there anything else we should be aware of?

No.

5. If you selected a core facility(ies), please complete the core facility request form, which can be found in Appendix C here:

https://docs.google.com/forms/d/e/1FAIpQLSfLN1CZJ7_AOtl6QcX1L_1WmYb2r0sFpkzy1k9jowrdVVhAyg/viewform

6. What room number(s) is your lab/studio/core facility located in?

310, 314, 316, 003, 003B, 003C, 336, 304B, 304C

7. Do you require a specific core facility to be opened in order to reopen your lab?

Yes

Owner (Self-ID by College/School or NDR)

Melanie DeFord, NDR

Initial Owner Review: Approve/Deny (If denied, mark why).

Approved

Department (Designate Who Submission was Sent to i.e. Dean, Chair, or designee and confirm date/time of issue by email, and their Approval/Denial)

IC, 5/30

3. Which College, School, or Organization is your primary affiliation?

Notre Dame Research

Grad School (Include name trainee names were sent to and date/time email was sent)

Approved

Send to RMS (Include name of reviewer request was sent to, date/time email was sent, and their Approval/Denial)

EK, 5/31 Approved 6/1

If approved, send to VPR (include date/time)

BB 6/3

VPR Approve/Deny

Approved 6/4

Assigned Reopen Date and Building Manager Notified (include date/time of notification)

6/4, Reopen 6/9

Email address

alisousk@nd.edu

1. What is your name (First, Last)?

Aliaksandra Lisouskaya

2. What is your cell phone number (include area code)?

815-210-9654

3. Which College, School, or Organization is your primary affiliation?

Notre Dame Research

4. Which specific laboratory, studio, or core facility are you affiliated with?

Linear Accelerator; EPR

Request to Reopen**1. Indicate the rationale for reopening your laboratory, studio, or core facility (i.e., indicate why your research requires physical access to campus facilities) and source(s) of funding.**

We need to restart DOE-supported experimental research

2. Provide a plan for how physical distancing will be implemented in your laboratory, will be brought from studio, core facility, office, and team spaces. Address the six-foot interpersonal spacing home so that and nominal occupancy requirements for Phases 2 and 3 as they relate to all activities to be undertaken (e.g., microscopes, tissue cultures, small control rooms, etc.). Indicate how your interaction with others will manage working hours and/or shifts. For core facilities, also indicate how you will and will not need to manage user access to maintain appropriate physical distancing.

My group now includes one postdoc. My postdoc has her office in 105A (306 ft²) in RadLab, which is not shared with other people. My office is located next to her, 105c (124 ft²). All are isolated in the office, only one person is in the office. At the beginning of each day we will sign the Certification of Wellness. We will wear face masks all times (unless superseded by other PPE requirements in the lab). Masks will not be worn in private offices.

We conduct experiments in the basement on a Linear Accelerator (preparation laboratory B016B is 452 ft²; the linac control room B020 is 253 ft²; Vault 3 B020B is 634 ft²; Vault 1-2 B020C; Vault 1 B016C is 1382 ft²) and EPR spectrometer (the epr room, B003C is 144 ft², 1 person in the room). We also prepare samples in laboratories on the second floor 210 (schlenk lines, 575 ft²) and 224 (UV-VIS spectrometer, 558 ft²). To work on a linear accelerator and EPR, we sign up in advance (for a couple of weeks) using the Google calendar, which is available for RadLab users.

All laboratories will be restricted to single occupancy. There are no working alone issues for spaces indicated for one person only. Surfaces and equipment interfaces will be appropriately disinfected before and after use. Hands will be washed upon entry and after exit.

3. All requests must include a schedule such that Building Managers and other support services know which research personnel should be in the building/research space at any given time. Please complete the draft schedule in Appendix D, which can be downloaded here, https://research.nd.edu/assets/388931/fullsize/appendix_d_lab_ramp_up_schedule_f01.xlsx, and upload part of your response with your lab/core facility name saved as the file name. The schedule should cover a two-week interval. While this schedule serves as an initial planning tool, faculty are encouraged to utilize their preferred scheduling means (e.g. Google Sheets, Calendars, etc.) moving forward:

<https://drive.google.com/open?id=19rTR1g1qQFYZYfl7cAjDcXmLHxJTCLxW>

4. What is your plan for logging researchers' arrival and departure within laboratory/studio/core facility spaces and their self-assessment of their health?

The building will remain locked and entry will be by individual swipe card. Everyone entering should sign a Google form (reading a QR code on the outside door and filling in an electronic form on your phone) to receive the health certification confirming that they have no symptom of Covid-19. Anyone not doing this will be asked to leave the building. Anyone not feeling well will be told to stay home. [These forms are checked and administered by Laura Mortlock]

5. How will your personnel maintain physical distancing for breaks, lunches, etc.?

My group has access to 105 suite with their own space where they can maintain physical distance for breaks, lunches, etc.

6. Describe your procedures to clean and sanitize shared items, equipment, and work surfaces prior to use by others (see Hygiene Plan as a minimum example:

https://research.nd.edu/assets/388928/fullsize/appendix_h_example_hygiene_plan_f01.pdf)

Personnel will wash hands before entering the research space; Wipe down any shared instruments, equipment, or tools before switching users; A log will be posted at each lab to record the date/time it was last cleaned. Disinfecting solutions provided by Building Services is 3M™ Disinfectant Cleaner RCT Concentrate (40 RCT) and has a contact time of 3 minutes (antimicrobial agents - 8.9% benzyl-C12-16-alkyldimethyl ammonium chlorides; 6.7% octyldecyldimethylammonium chloride).

7. Do you require a specific core facility to be opened in order to reopen your lab?

8. If yes, identify the research core facility (ies) or other support services that are essential for lab reopening. The full list of core facilities can be found here:

<https://research.nd.edu/our-research/facilities-and-resources>

8. If you selected a core facility(ies) in the previous question, please fill out the

following form (one for each core facility) to request the use of the core facility(ies):
https://docs.google.com/forms/d/e/1FAIpQLSfLN1CZJ7_AOtl6QcX1L_1WmYb2r0sFpkzy1k9jowrdVVhAyg/viewform. Will you complete this form?

No.

Safety and Research Team

1. The lab/studio/core facility reopening plan will be presented to Risk Management and Safety to ensure the reopening is feasible and safe given the reduced status of University operations. Therefore, please address any safety measures or changes that need to be adopted to allow for a reduced density in the laboratory, studio, or core facility. Please specifically detail plans for disinfecting, including what will be used, the concentration and contact time. Provide information about general safety resulting from the plan (e.g. how will you deal with working alone, etc.)

I plan to work alone or together with my postdoc. In general, there are no safety risks arising from my work plan.

2. Please review your previous ramp-down plan. In the event of a return to Phase 1 (hibernation), are there any changes necessary? Please list those changes here.

No.

3. Which building are you located in?

Radiation Laboratory

4. Identify your research personnel (or core personnel for the core facilities), including yourself, below. Include their names, status (For example, faculty, staff, postdoc, graduate student), emails, and cell phone numbers) Note that in Phase 2, all graduate students and postdoctoral scholars on the list will be asked through an independent method to sign an opt-in form before they will be allowed to participate.

Rupali Deokar, postdoc, 105A, rdeokar@nd.edu, 5746315355 (work); 5743185079 (mobile);

Aliaksandra Lisouskaya, Research Assistant Professor (PI), 105C, 5746315457 (work); 8152109654 (mobile).

4. Is there anything else we should be aware of?

No.

5. If you selected a core facility(ies), please complete the core facility request form, which can be found in Appendix C here:

https://docs.google.com/forms/d/e/1FAIpQLSfLN1CZJ7_AOtI6QcX1L_1WmYb2r0sFpkzy1k9jowrdVVhAyg/viewform

6. What room number(s) is your lab/studio/core facility located in?

Suite 105; Room 020 Linear Accelerator; EPR room

7. Do you require a specific core facility to be opened in order to reopen your lab?

No.

Owner (Self-ID by College/School or NDR)

Melanie DeFord, NDR

Initial Owner Review: Approve/Deny (If denied, mark why).

Approved.

Department (Designate Who Submission was Sent to i.e. Dean, Chair, or designee and confirm date/time of issue by email, and their Approval/Denial)

IC, 5/30

3. Which College, School, or Organization is your primary affiliation?

Notre Dame Research

Grad School (Include name trainee names were sent to and date/time email was sent)

Approved

Send to RMS (Include name of reviewer request was sent to, date/time email was sent, and their Approval/Denial)

EK, 6/1 Approved 6/2

If approved, send to VPR (include date/time)

BB, 6/4

VPR Approve/Deny

Approved 6/5

Assigned Reopen Date and Building Manager Notified (include date/time of notification)

6/5, Reopen 6/9

Email address

Jadmave@nd.edu

1. What is your name (First, Last)?

Joseph Admave

2. What is your cell phone number (include area code)?

269-208-7909

3. Which College, School, or Organization is your primary affiliation?

Notre Dame Research

4. Which specific laboratory, studio, or core facility are you affiliated with?

Radiation Lab Machine Shop

Request to Reopen

1. Indicate the rationale for reopening your laboratory, studio, or core facility (i.e., indicate why your research requires physical access to campus facilities) and source(s) of funding.

I request the reopening of my shop due to the fact that I have work that needs to be completed for grad students whose appointments were for a short time and they will be leaving the country soon. Along with other projects from the PI's that have to be completed to further their research. Since I run a machine shop all the necessary equipment I need to get the work done is on campus.

2. Provide a plan for how physical distancing will be implemented in your laboratory, will be brought from **studio, core facility, office, and team spaces. Address the six-foot interpersonal spacing** home so that **and nominal occupancy requirements for Phases 2 and 3 as they relate to all activities to be** personnel can limit **undertaken (e.g., microscopes, tissue cultures, small control rooms, etc.). Indicate how your** interaction with others **will manage working hours and/or shifts. For core facilities, also indicate how you will** and will not need to **manage user access to maintain appropriate physical distancing.**

It will be really easy for me to distance myself from anyone due to the fact that I work alone. My plan is to keep my shop door closed and when a job is requested, it is to be requested by email, or by phone. When the job is completed I will put it in a designated spot for the user to pick up. Any consultations that cannot be addressed through zoom or email will be made by appointment only and I will wear appropriate PPE (Face mask and gloves) and demand the other party have the appropriate PPE while keeping the 6 foot distance. Appts are conducted in the main shop, and no one comes into my office. There will be signage on your door explaining this protocol.

3. All requests must include a schedule such that Building Managers and other support services know which research personnel should be in the building/research space at any given time.

Please complete the draft schedule in Appendix D, which can be downloaded here, https://research.nd.edu/assets/388931/fullsize/appendix_d_lab_ramp_up_schedule_f01.xlsx, and upload part of your response with your lab/core facility name saved as the file name. The schedule should cover a two-week interval. While this schedule serves as an initial planning tool, faculty are encouraged to utilize their preferred scheduling means (e.g. Google Sheets, Calendars, etc.) moving forward:

<https://drive.google.com/open?id=168GW6pHH0zWWv1R5UwwxbFFuAOlactYQ>

4. What is your plan for logging researchers' arrival and departure within laboratory/studio/core facility spaces and their self-assessment of their health?

Our arrival and departure time will be monitored by our scan card to get into the building. I will be taking my temperature everyday.

5. How will your personnel maintain physical distancing for breaks, lunches, etc.?

Lunch will be taken in my shop office, If during break I am to walk outside for some fresh air, I will make sure before I walk out of my shop I am equipped with the proper PPE. I will distance myself from anyone that might be in the hallway (very easy to do, because we have multiple entrance to the hallways and very few people that work in our lab) I will also continue to maintain distance from anyone that may be walking outside.

6. Describe your procedures to clean and sanitize shared items, equipment, and work surfaces prior to use by others (see Hygiene Plan as a minimum example:

https://research.nd.edu/assets/388928/fullsize/appendix_h_example_hygiene_plan_f01.pdf)

There are no shared items in my shop due to the fact that I am the only user and no one will be allowed to enter the shop. But all surfaces in my shop, including door knobs will be cleaned multiple times a day by me personally with a Chlorine Bleach solution by mixing 5 tablespoons (1/3 cup) bleach per gallon of water. I will also be using Lysol spray and wipes.

The solution will be sprayed on the surfaces and let to air dry.

7. Do you require a specific core facility to be opened in order to reopen your lab?

8. If yes, identify the research core facility (ies) or other support services that are essential for lab reopening. The full list of core facilities can be found here:

<https://research.nd.edu/our-research/facilities-and-resources>

8. If you selected a core facility (ies) in the previous question, please fill out the following form:

Safety and Research Team

1. The lab/studio/core facility reopening plan will be presented to Risk Management and Safety to ensure the reopening is feasible and safe given the reduced status of

University operations. Therefore, please address any safety measures or changes that need to be adopted to allow for a reduced density in the laboratory, studio, or core facility. Please specifically detail plans for disinfecting, including what will be used, the concentration and contact time. Provide information about general safety resulting from the plan (e.g. how will you deal with working alone, etc.)

I would say that thorough cleaning of the door knobs and handrails twice per day should be implemented and it might be a good idea to bring our custodian back to do this work. It should be implemented that anyone outside their work area should wear a face covering (in hallways and bathrooms) at all times. We will be sanitizing using Alpha HP which consists of 4.25% hydrogen peroxide, also a Chlorine bleach solution by mixing 5 tablespoons (1/3 cup) bleach per gallon of water, Lysol wipes and spray, and a 70% alcohol hand sanitizer will be accessible in my shop. The solution will be sprayed on a surface until it air dries. This will happen multiple times per day.

The Glass shop manager and I will be working the same hours, and will check in with each other every two hours.

2. Please review your previous ramp-down plan. In the event of a return to Phase 1 (hibernation), are there any changes necessary? Please list those changes here.

There are no changes to my hibernation plan, I would be ready to shut down operation right away if need be.

3. Which building are you located in?

Radiation Laboratory

4. Identify your research personnel (or core personnel for the core facilities), including yourself, below. Include their names, status (For example, faculty, staff, postdoc, graduate student), emails, and cell phone numbers) Note that in Phase 2, all graduate students and postdoctoral scholars on the list will be asked through an independent method to sign an opt-in form before they will be allowed to participate.

Joseph Admave /Machine Shop Manager/ Staff
Jadmave@nd.edu
269-208-7909

4. Is there anything else we should be aware of?

N/A

5. If you selected a core facility(ies), please complete the core facility request form,

which can be found in Appendix C here:

https://docs.google.com/forms/d/e/1FAIpQLSfLN1CZJ7_AOtI6QcX1L_1WmYb2r0sFpkzy1k9jowrdVVhAyg/viewform

6. What room number(s) is your lab/studio/core facility located in?

006

7. Do you require a specific core facility to be opened in order to reopen your lab?

No.

Owner (Self-ID by College/School or NDR)

Melanie DeFord, NDR

Initial Owner Review: Approve/Deny (If denied, mark why).

Approved

Department (Designate Who Submission was Sent to i.e. Dean, Chair, or designee and confirm date/time of issue by email, and their Approval/Denial).

N/A

3. Which College, School, or Organization is your primary affiliation?

Notre Dame Research

4. Grad school (include name trainee names were sent to and date/time email was sent)

N/A

Send to RMS (Include name of reviewer request was sent to, date/time email was sent, and their Approval/Denial)

EK, 5/20 Approved 5/21

If approved, send to VPR (include date/time)

BB, 5/21

VPR Approve/Deny

BB Approved 5/21

Assigned Reopen Date and Building Manager Notified (include date/time of notification)

Reopen 5/27, notified 5/21

Email address

sptasins@nd.edu

1. What is your name (First, Last)?

Sylwia Ptasinska

2. What is your cell phone number (include area code)?

574-387-9631

3. Which College, School, or Organization is your primary affiliation?

Notre Dame Research

4. Which specific laboratory, studio, or core facility are you affiliated with?

Radiation Laboratory

Request to Reopen

1. Indicate the rationale for reopening your laboratory, studio, or core facility (i.e., indicate why your research requires physical access to campus facilities) and source(s) of funding.

To conduct experimental research funded by DOE grant

2. Provide a plan for how physical distancing will be implemented in your laboratory, will be brought from studio, core facility, office, and team spaces. Address the six-foot interpersonal spacing home so that and nominal occupancy requirements for Phases 2 and 3 as they relate to all activities to be undertaken (e.g., microscopes, tissue cultures, small control rooms, etc.). Indicate how your interaction with others will manage working hours and/or shifts. For core facilities, also indicate how you will and will not need to manage user access to maintain appropriate physical distancing.

leave the lab once they are there.

My group consists of five trainees, but only two and three of them will be actively working in the first and the following weeks of lab opening (phase 2 and 3). One trainee will remain at home working on his dissertation write up and only coming once per week to perform maintenance of the equipment (see details in the attached schedule). Another trainee is co-supervised by Prof. Kamat and won't be working in my laboratory space within Phase 2 and 3 (because his equipment is currently being repaired in Germany) so he is included to Prof. Kamat's schedule but in my schedule I assign him an individual office.

My scientific instrumentation is located in four laboratories in Rad Lab therefore the six-foot interpersonal spacing will be implemented easily. In this case, if two trainees will need to occupy the same laboratory. In addition, the shifts have been introduced as in the attached file (one trainee will be working from 9AM-12PM and the second one from 12PM till 6:30PM in the second week of the schedule). Thus according to Rad Lab current policy all of my laboratories will be restricted to single occupancy, (unless

more than one person is essential to the experiment, when face masks will be accompanied by other appropriate PPE). Also, it is allowed to work alone in the laboratory during regular working hours. Masks will be worn at all times, not only when the appropriate physical distancing is unable to be met (unless superseded by other PPE requirements in the lab). Masks do not need to be worn in private offices, when only one person is in the office.

3. All requests must include a schedule such that Building Managers and other support services know which research personnel should be in the building/research space at any given time. Please complete the draft schedule in Appendix D, which can be downloaded here, https://research.nd.edu/assets/388931/fullsize/appendix_d_lab_ramp_up_schedule_f01.xlsx, and upload part of your response with your lab/core facility name saved as the file name. The schedule should cover a two-week interval. While this schedule serves as an initial planning tool, faculty are encouraged to utilize their preferred scheduling means (e.g. Google Sheets, Calendars, etc.) moving forward:

https://drive.google.com/open?id=1eum2kl_R55xDU39iZloMNKBdsgjGTITL,
<https://drive.google.com/open?id=1sH825uxG82qsSUAZZZnPEr-faEznWZDZ>

4. What is your plan for logging researchers' arrival and departure within laboratory/studio/core facility spaces and their self-assessment of their health?

The Rad Lab building will remain locked and entry will be by individual swipe card and the procedures for signing in and out applied to all members:

Sign in: Everyone entering should leave a signed sheet (available at the desk inside the second door upon entry) stating date and time and certifying they are Covid-19 symptom free and leave it in the adjacent box. Anyone not doing this will be asked to leave the building. Sign out: Everyone exiting should sign out with his/her own pen in the book provided, indicating exit time and which rooms he/she occupied. ND will provide the link to Google form (and a QR code to scan using a smartphone) to capture the health certification (no paper forms) of my lab members. Laura will have access to the sheet with the form responses to compare to the swipe entry data. You may need to log what spaces someone will use in a different manner.

5. How will your personnel maintain physical distancing for breaks, lunches, etc.?

Rad Lab break-room will be restricted to single occupancy and accessed only for supply pickup. In addition, each trainee has been assigned an office only for him/herself, therefore breaks and lunches can be taken in their own offices. My trainees will clean/disinfect the space they use for breaks and lunches after each use.

6. Describe your procedures to clean and sanitize shared items, equipment, and work surfaces prior to use by others (see Hygiene Plan as a minimum example:

https://research.nd.edu/assets/388928/fullsize/appendix_h_example_hygiene_plan_f01.pdf)

Surfaces and equipment interfaces will be disinfected before and after use. All trainees will wash or sanitize their hands prior to entering and departing any laboratory. A log to record the date/time will be posted in the shared Google Doc to record by each trainee when the research space used by him/her was last cleaned.

7. Do you require a specific core facility to be opened in order to reopen your lab?

8. If yes, identify the research core facility (ies) or other support services that are essential for lab reopening. The full list of core facilities can be found here:

<https://research.nd.edu/our-research/facilities-and-resources>

8. If you selected a core facility (ies) in the previous question, please fill out the following form:

Safety and Research Team

1. The lab/studio/core facility reopening plan will be presented to Risk Management and Safety to ensure the reopening is feasible and safe given the reduced status of University operations. Therefore, please address any safety measures or changes that need to be adopted to allow for a reduced density in the laboratory, studio, or core facility. Please specifically detail plans for disinfecting, including what will be used, the concentration and contact time. Provide information about general safety resulting from the plan (e.g. how will you deal with working alone, etc.)

Disinfectants which will be used in Rad Lab:

- Alpha-HP Multi Surface Disinfectant Cleaner -active ingredients 4.25%Hydrogen Peroxide- contact time 1 minute
- Oxivir Tb Wipes- active ingredients .5% Hydrogen Peroxide - contact time 1 minute
- the IWC hand sanitizer-active ingredients 70% alcohol - contact time 1 minute
- 40 RCT (70-80% alcohol) - contact time 3 minute

2. Please review your previous ramp-down plan. In the event of a return to Phase 1 (hibernation), are there any changes necessary? Please list those changes here.

No.

3. Which building are you located in?

Radiation Laboratory

4. Identify your research personnel (or core personnel for the core facilities), including yourself, below. Include their names, status (For example, faculty, staff, postdoc, graduate student), emails, and cell phone numbers) Note that in Phase 2, all graduate students and postdoctoral scholars on the list will be asked through an independent method to sign an opt-in form before they will be allowed to participate.

Sylvia Ptasinska, faculty, sptasins@nd.edu, 574-387-9631
Dipayan Chakraborty, post-doc, dchakra2@nd.edu, 574-440-2083
Bo-An Chen, graduate student, bchen6@nd.edu, 574-440-1574
Lauren Eckerman, graduate student, leckerma@nd.edu, 585-703-0081
Pitambar Sapkota, graduate student, psapkota@nd.edu, 574-302-7103
Amal Sebastian, graduate student, asebast1@nd.edu, 574-314-4568

4. Is there anything else we should be aware of?

If our equipment will be sent back from repairing, the schedule will need to be changed to accommodate two more trainees. This schedule will also be adjusted to accommodate a repair technician.

5. If you selected a core facility(ies), please complete the core facility request form, which can be found in Appendix C here:

https://docs.google.com/forms/d/e/1FAIpQLSfLN1CZJ7_AOtI6QcX1L_1WmYb2r0sFpkzy1k9jowrdVVhAyg/viewform

6. What room number(s) is your lab/studio/core facility located in?

219, 239, 242, and 320

7. Do you require a specific core facility to be opened in order to reopen your lab?

No.

Owner (Self-ID by College/School or NDR)

Melanie DeFord, NDR

Initial Owner Review: Approve/Deny (If denied, mark why).

Approved.

Department (Designate Who Submission was Sent to i.e. Dean, Chair, or designee and confirm date/time of issue by email, and their Approval/Denial)

IC, 5/30

3. Which College, School, or Organization is your primary affiliation?

Notre Dame Research

Grad School (Include name trainee names were sent to and date/time email was sent)

Approved

Send to RMS (Include name of reviewer request was sent to, date/time email was sent, and their Approval/Denial)

EK, 5/31 Approved 6/1

If approved, send to VPR (include date/time)

BB, 6/4

VPR Approve/Deny

BB, 6/5

Assigned Reopen Date and Building Manager Notified (include date/time of notification)

6/5 Reopen 6/9