PLAN FOR THE PHASED RETURN TO RESEARCH IN THE TRINITY COLLEGE INSTITUTE OF NEUROSCIENCE, DURING THE COVID-19 PANDEMIC.

Part 1: Return of laboratory-based research.

(Part 2 to follow will cover plans for human-facing studies)

Summary

Trinity College Institute of Neuroscience will resume laboratory-based research work in a phased manner and has developed plans for a safe working environment during the COVID-19 pandemic (detailed below) in keeping with Government and College guidelines. Key elements of the first phase of this plan are: a) dividing the working day into two 5 hours shifts, with groups of researchers assigned one working shift per day; (b) ensuring that work of researchers between shifts will not overlap except in cases where the need is set out and justified. (c) social distancing by requiring no more than one person to working one room at any one time, with exceptions for large rooms in unusual circumstances to be justified; and (d) timetabling across labs within each shift in advance to ensure that adequate distancing can take place within each room/laboratory and to facilitate contact tracing. Desk-based research will continue to be carried out at home. By implementing this plan, we believe it is possible to safely resume critical laboratory-based activities and in doing so negate transmission and health risks associated with the COVID-19 pandemic while maintaining research activity. In this first phase of reopening, only a small number of researchers will be allowed in each shift. In later phases, we hope that researcher numbers can increase in number safely over time.

The need for resuming laboratory-based research in TCIN

The research undertaken by PhD students and postdoctoral researchers in TCIN commonly requires comparative medicine models and associated molecular, genetic, biochemical, cell and tissue culture experiments. Many experiments that began early this year had to be prematurely terminated when College closed at the beginning of the COVID-19 lockdown. Most researchers based in TCIN have lost several months of laboratory time, with little data generated since the start of the year. For researchers who: (a) are due to finish their projects this year; (b) have grants terminating; or (c) have grants needing to be renewed shortly, it is critically important for their careers and mental health that they are permitted to return imminently to safe laboratory-based research. This is particularly the case for PhD students who are due to finish and postdoctoral researchers working on funded projects with key deliverables due in the coming months. No funding is available to extend the contracts/stipends of these researchers and salary costs continue to be accrued during the period of the lockdown. Thus, we need to resume limited laboratory-based activities to help address the career needs and psychological states of those researchers most affected as well as to slowly regain momentum and a sense of purpose for TCIN researchers.

Who needs to undertake laboratory-based research in TCIN?

Postgraduate and postdoctoral researchers require access to laboratories in TCIN to complete and to build momentum on time-sensitive projects. In Phase 1 of this TCIN return to work plan, we have identified 10 Pl's/biological laboratory based research groups who require access to labs urgently. We are proposing that these researchers return on a phased basis from **May 25**th. Lab based researchers with less critical time sensitive projects will be added over a period of weeks/months and as restrictions further ease. Later dates will be proposed in a follow up plan for the return to work of researchers undertaking research involving direct contact with human subjects for studies requiring,

for instance, sample collection, EEG, MRI or TMS. The times for reopening such human studies in the Lloyd Building will be elaborated in Part 2 to be submitted in June, which is being by developed by TCIN in coordination with Schools of Psychology and Medicine, while taking account of Government and College advice.

Ensuring a safe working environment in TCIN during the COVID-19 pandemic

Each PI led research group will complete a plan including a risk assessment and rota for the proposed experimental work to be carried out and name of a member in charge of their lab safety arrangements. The plan will be submitted to a 'Return to workplace' Committee established to oversee the phased return of research personnel. The Committee will be responsible for reviewing submissions, making recommendations and taking decisions relating to the resumption of laboratory based activity initially, and in later phases, of human oriented research. The Committee will meet online (e.g. Microsoft Teams, Zoom) to consider submissions on a weekly basis. Plans will be monitored and restrictions or counter-measures will be taken where there is evidence of non-compliance with submitted plans which have been approved. The numbers of researchers returning to work (May 25th to June 29th) will be limited to 1 per work area so that appropriate social distancing and traceability can be maintained in order to minimize the risk of transmission of COVID-19.

Initially those researchers wishing to return to work in TCIN, and who cannot undertake this work at home, will be offered either a morning or afternoon shift. Researchers on the morning shift will have access to the workplace from 8am-1pm and those on the afternoon shift will be granted access from 2pm-7pm. These times may be altered by the TCIN Committee in consultation with Estates & Facilities, based on the availability of attendants and enforcement of a no lone working safety policy in the building. In order to maintain social distancing protocols and to facilitate contact tracing, researchers assigned to shifts will not overlap or interact. There may be instances however where a researcher will have to work throughout the day and in both shifts. This will be considered on request. Assignment to shifts will be based on practical considerations such as equipment availability and experimental duration. Researchers who live together will work together and researchers who intend to perform similar activities on shared equipment (e.g. cell culture) may be assigned to separate shifts to maximize resource availability and physical distancing.

Logistics & Management

- A Return to workplace Committee has been established composed of the Deputy Director of TCIN (Prof Andrew Harkin) and Health and Safety Officer (Mr Ciaran Conneely) and a number of other PIs whose research teams are the main laboratory users. PIs/lab heads will timetable activities within the designated shifts, and will be responsible for notifying the Health and Safety Officer of any change or breach in plan.
- The Return to Work Committee chaired by the Deputy Director of TCIN and the TCIN Safety Officer will have overall responsibility for the management and implementation of Return to workplace plans. Pls/lab heads and researchers are expected to play a pro-active role.
- Each day will be divided into 2 shifts of 5 hours each i.e. from 8am to 1pm and from 2pm to 7pm. The working week will be 6 days (Monday to Saturday). Therefore, each researcher may be allocated up to 6 periods of laboratory time each week. Longer access hours will be considered if needed but will be allocated based on priority and need and must be fully justified.

- The TCIN administration offices will be operating remotely and any requests should be emailed to the relevant contact. TCD Mail services in in the Lloyd building are operational with mail delivered to the administration outer office (3.05). Courier services should be avoided or minimised and may have to operate from the Lloyd building attendants desk (with permission on a case by case basis) or parcel motel (if couriers will not call to an office).
- The TCIN Safety Officer or Deputy Director TCIN will liaise with Estates & Facilities and any Building User Group established to manage the safe running of the Lloyd building as a whole.

Health & Safety actions / Risk assessment

Based on an analysis of the risks related to resuming laboratory based activates during the COVID-19 pandemic, the following will be implemented:

- The return to the workplace should be agreed and voluntary for both researcher and PI.
- No individuals in the 'very high' risk category for COVID-19 (as defined by HSE guidelines) will
 be allowed return to campus at this time. Researchers with dependents or housemates in a
 very high risk category should also not return to work at this time.
- In case of doubt about potential risks of a return to work, medical advice should be sought by the researcher intending to return to work.
- Access will be denied to any individual who: (1) is feeling unwell; (2) has been in close contact
 with a confirmed or suspected COVID-19 case; (3) is unable or non-compliant with these
 operational & hygiene procedures. All workers must stay out of TCIN Lloyd building until all
 symptoms of COVID-19 have cleared following self-isolation.
- All researchers will follow relevant government guidelines if they display any of the symptoms of COVID-19, as will those who have been in contact with any person displaying symptoms (i.e. their group members).
- If anyone displays symptoms of COVID-19 they must self-isolate and contact by phone the TCIN health & safety officer. If necessary, these individuals can also contact the college heath service for further advice. If a researcher with prior access to the workplace should develop symptoms of Covid 19, the work area will be cordoned off for 1 week, a review will be undertaken and appropriate cleaning will be arranged through Estates & Facilities.
- A quarantine area will be established in the TCIN board room, if isolation of an unwell individual is required.
- TCIN lab users will be made aware of all measures taken to manage the Lloyd building as a
 whole. This will be done as part of the return to workplace training that all researchers will
 have to undertake (online) prior to their return.
- A hand sanitizing station will be available at the entrance to the building.
- Lifts will not be used as a rule and reserved for people with poor mobility or those moving heavy items.
- Stairs use will be designated as either upwards or downwards and agreed with other users of the Lloyd building. In case of Fire Alarm people should naturally leave by the nearest Exit.
- Signage will be in place to advise, remind and assure workers that safety is being taken seriously. Revised and defined cleaning rotas from E&F/Housekeeping or nominated external cleaners will be implemented.

- Mail is to be delivered to and collected from the attendants desk at the Lloyd building entrance (while the current restrictions are in place)
- Use of shared facilities will be minimized where possible and confined to separate working shifts facilitated by locking shared rooms. e.g. toilets on south side of building used in the early shift, toilets on the north side of the building used in the evening.
- Users must wash their hands both upon arrival and upon completion of each research activity.
 This will be emphasized regularly and communicated with signage at all entrances to the labs and offices.
- Users are only permitted to access TCIN and the Lloyd building to perform lab-related activities. When they have completed their lab work and disinfected their work area, they should leave TCIN immediately. Office work must be carried out from home. The TCIN buddy system will be in place at all times. Also, in accordance with College policy, the SafeZone App will be used when arriving and leaving College.
- Any contact tracing app that might be recommended by College or Government must be used by all TCIN members.
- The lab spaces will be divided into work areas to maintain physical/social distancing protocols. See drawings provided in the appendix below. Only one person is permitted to use a work area at any given time (though people who are already living together are exempt from this requirement) and a booking system will be made available.
- The lab room booking system will also function as a contact tracing log.
- Physical distancing (minimum 2m) must be maintained during breaks.
- Until further notice, lunch or refreshments should not be consumed in the Lloyd building common areas to prevent social distancing issues. Spar in Westland Row and a number of other businesses are open for lunch takeaway or people can bring something in and eat outside weather permitting.
- Any breaches of safety rules will result in lab privileges being revoked.
- The final 30 minute slot of each block each day will be reserved to allow a safe handover to those working on the next shift (a checklist/SOP will be circulated).
- Access to common areas (e.g. kitchen, sink, coffee machine) and boardroom is not permitted
 until further notice. Use of office landline phones is not permitted until further notice (except
 in case of emergencies).
- All work areas and instruments used must be disinfected by the lab user both before commencing and after finishing work activities. This includes disinfecting door handles to all labs used.
- Standard laboratory PPE must be used by all researchers as they would normally do in the
 course of their work. If mandated by government or the TCIN health and safety officer, the
 wearing of additional PPE such as masks may also be implemented.
- Public transport should be avoided where possible, especially at peak times due to capacity limitations. General guidance and updates are available on TFI: https://www.transportforireland.ie/news/covid-19-information/.

Return to work checklist

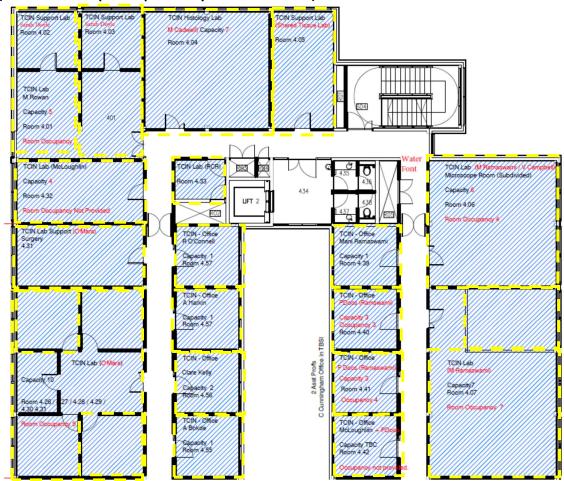
- Training will be provided to all returning researchers. This training will be provided by the Safety Officer of TCIN (or nominee) followed by a Q&A session. All lab users must self-certify that they have undertaken this training and records will be maintained by the Safety Officer.
- Place hygiene posters/signage in all laboratories.
- Researchers have been made aware of relevant college/government guidelines in relation to COVID-19 (https://www.gov.ie/en/campaigns/c36c85-covid-19-coronavirus/). This includes understanding the requirements of the COVID-19 questionnaire (see appendix 3 at the bottom of this document).
- At least 3 days prior to returning to work, all workers must complete and return to work questionnaire/form (see appendix 2). Furthermore, all researchers must inform their PI if there are any other circumstances relating to COVID-19, not included in the form, which may need to be disclosed to allow their safe return to work.
- The SafeZone App has been downloaded and installed by all researchers.
- All researchers have downloaded the Microsoft Teams app and are members of the TCIN
 'Team', with relevant notifications activated. A weekly working schedule will be posted with
 access via the Teams app.
- All researchers must follow the TCIN lone working policy and use a buddy system on Whatsapp or similar while in their labs.
- All researchers agree to maintain a daily contacts log whilst in college which can be shared
 online with co-workers and the Acting TCIN safety officer (Mr Ciaran Conneely) during the
 phased return to operations. This will supplement the room booking system which will
 function as the employers contact log.
- All workers are informed of the purpose of the contact log.
- All workers are aware of the instructions to follow if they develop symptoms during work or at home.
- Provide work permits from TCIN Director (if still necessary).
- All health and safety related equipment (e.g. oxygen and fire alarms) will be checked to
 ensure they are operational.
- Ensure staff and students are aware of who they can report safety concerns to (TCIN Safety Officer Mr Ciaran Conneely and/or TCIN Deputy Director, Prof Andrew Harkin.
- A dedicated set of PPE will be secured for First Aiders. This (in addition to hand sanitiser, masks, wipes etc) will be stored in the TCIN admin office.

Building and site level considerations

- The director of TCIN and the TCIN Health and Safety officer will liaise with the relevant people
 in the Lloyd building (GBHI/Computer Science/Research Computing/Estates & Facilities) to
 ensure all building level requirements are being addressed. TCIN members will follow all
 building level instructions on how access/egress will be managed and how circulation and
 common space will be managed.
- It is recognized that a functioning delivery bay (perhaps at the attendant's reception desk) and Hazardous Material Facility in the Smurfit Institute are required for operations to resume in TCIN.

References

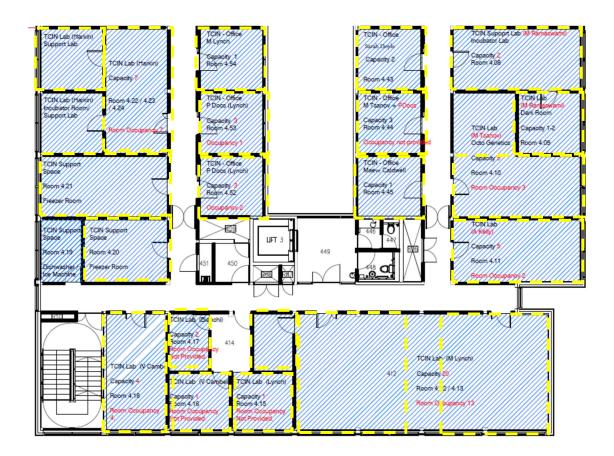
Appendix 1 - Drawings of physical distancing measures Lloyd 4th Floor (Restriction of 1 person per each yellow boxed area)



¹ https://www.gov.ie/en/publication/dfeb8f-list-of-essential-service-providers-under-new-public-health-guidelin/#professional-scientific-and-technical-activities

²https://www.gov.ie/en/news/58bc8b-taoiseach-announces-roadmap-for-reopening-society-and-business-and-u/

³https://www.safezoneapp.com/



Appendix 2 Detailed Room Usage in TCIN Lloyd (Phase 1)

Room No	PI Group	Activity/Procedure	No of People
4.02	Doyle	Office	1
4.03	Doyle	Tissue culture/analysis	1
4.04	Caldwell	Tissue culture/analysis	1
4.05	Shared	Tissue culture/analysis	1
4.06	Ramaswami	Imaging & Microscopy	1
4.07a	Ramaswami	Fly Prep Room	1
4.07b	Ramaswami	General lab area with fume hood	1
4.08	Ramaswami	Incubator lab	1
4.09	Ramaswami	Dark room	1
4.10	Tamara Boto	General lab area with fume hood	1
4.11	Aine Kelly	General lab area with fume hood	1
4.12	Lynch	General lab area with fume hood	1
4.13	Lynch	General lab area with fume hood	1
4.14	All	Fridge storage	1
4.15	Lynch	Tissue culture/analysis	1
4.16	Campbell	Tissue culture/analysis	1
4.17	TPI Ltd	Odyssey Equipment	1
4.18	Campbell/Ulysses Ltd	General lab area with fume hood	1
4.19	Shared	Ice Room/Dishwasher	1
4.20	Shared	Walk-in Fridge	1
4.21	Shared	ULT Freezers	1
4.22	Harkin	Tissue culture/analysis	1
4.23	Harkin	General lab area with fume hood	1
4.24	Harkin	General lab area with fume hood	1
4.26/4.27	O'Mara	Animal behaviour	1
4.28/4.29	O'Mara	Skinner boxes	1
4.31	O'Mara	General lab area with fume hood	1
4.32	McLoughlin	General lab area with fume hood	1
4.33	Shared	PCR room	1
4.34	Shared	Lift area	1
4.35/4.36	Shared	Male Toilet	1
4.37/4.38	Shared	Female Toilet	1
4.39	Ramaswami	Office	1
4.4	Ramaswami	Group office	1
4.41	Ramaswami	Group office	1
4.42	McLoughlin	Group office	1
4.43	Doyle	PI Office	1
4.44	Tamara Boto	PI Office	1
4.45	Caldwell	PI Office	1
4.46/4.47	Shared	Male Toilet	1
4.48	Shared	Disabled Toilet	1
4.49	Shared	Lift area	1
4.5	Lynch	ERP room	1
4.52	Lynch	Group office	1

4.53	Lynch	Group office	1	
4.54	Lynch	PI Office	1	
4.55	Bokde	PI Office	1	
4.56	Clare Kelly	PI Office	1	
4.57	Harkin	PI Office	1	
4.58	O'Connell	PI Office	1	
	Phase 1	Total researcher's allowed on 4th floor		31

We expect that in Phase 1 no more than 5 PIs will be present at any one time and that following all wet lab experimental procedures all subsequent analysis will be performed at home.

Appendix 3 - Return to Work Screening Questionnaire

This must be completed daily, on a self-assessment basis, before accessing the campus or building. If the answer to any of these questions is 'Yes' then you do not have permission to access the building, and you are strongly advised to seek medical advice.

- 1. Do you have symptoms of cough, fever, high temperature, sore throat, runny nose, breathlessness or flu like symptoms now or in the past 14 days? Yes/No,
- 2. Have you been diagnosed with confirmed or suspected COVID-19 infection in the last 14 days? Yes/No,
- 3. Are you a close contact of a person who is a confirmed or suspected case of COVID-19 in the past 14 days (i.e. less than 2m for more than 15 minutes accumulative in 1 day)? Yes/No,
- 4. Have you been advised by a doctor to self-isolate at this time? Yes/No,
- 5. Have you been advised by a doctor to cocoon at this time? Yes/No.

Note: This form must be completed at least 3 days prior to return to work.

Emergency Contact List:

Prof. Andrew Harkin, Chair of RTW Committee: <u>AHARKIN@tcd.ie</u> Tel. Ext: 01-8962807 Ciaran Conneely, Safety Officer on RTW Committee: <u>conneec@tcd.ie</u>, Ext: 01-8968493

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