Department of Biochemistry

# COVID-19 Return to Onsite Working - Departmental Risk Assessment/Work Plan

| 1. DEPARTMENTAL DETAILS | |
|---|---|
| **Head of Department:** | **Professor Kevin Talbot** |
| **Department:** | **Nuffield Department of Clinical Neurosciences** |
| **Date Completed:** | |
| **People Involved** *(status/numbers):* | **Staff (57) Postgraduate students (27) Undergraduate students (5)** |
| **Location of work** *(Building/Lab/Rooms):* | **Lower ground floor, Biochemistry Phase 2** |

**Activity Summary:**
*Which of the following applies?*

| | |
|---|---|
| • Putting experiment or facility into safe state. | N/A |
| • Completing - or reaching key milestone in - long-running experiment where data would otherwise be lost or could not easily be reproduced. | N/A |
| • Maintenance of critical research infrastructure – (plants, animals, equipment) | N/A |
| • COVID-19 related work with potential for high, near-term impact | N/A |
| • COVID-19 related work with longer lead time to impact | N/A |
| **None of the above (see below)** | |

*Further details*

**Activity Summary** (Types of activities expected & authorised to take place – brief description of the experiments and equipment used)

**Animal Tissue Collection**
Animals will be delivered from the BSB to the designated animal procedure room. Animals will be euthanized by a schedule one method and then various tissues collected for use in other experiments.

**Molecular Biology**
*Techniques:* DNA/RNA extraction, PCR and RT-PCR, Western blotting, Cloning (using bacteria to propagate vectors), Tissue sectioning, Immunohistochemistry, Flow cytometry.
*Equipment:* PCR machine(s), Gel tanks for electrophoresis and transfer, UV gel imager, cryostat for sectioning, balances, centrifuges, nanodrop, general laboratory equipment for liquid handling.

**Tissue Culture**
*Techniques:* Culture of immortalised cell lines, isolation and culture of animal tissue, bioluminescence recording of cells/tissues, microscopy of live cells/tissues, transfection of cells/tissue with plasmids/siRNA.
*Equipment:* Tissue culture hoods, incubators, microplate readers, confocal microscopes, centrifuges, general laboratory equipment for liquid handling.

**Electrophysiology**
*Techniques:* Multiunit activity recording of brain slice and retina explants

*Equipment:* Procedure room, dissection microscope, fluorescence microscope, Multi-electrode recording system, general laboratory equipment for liquid handling

**Histology**
*Techniques:* Tissue collection, immunohistochemistry, microscopy
*Equipment:* Cryostat, microtome, vibratome, microscopes, shaker, fume food, general laboratory equipment for liquid handling

**General lab work –**
Preparation for animal experiment including drug preparation, making recording device (including soldering), cleaning syringes.
Making LED light units, which involves soldering and using the workshop bench space in the main equipment room
Accessing tissue/blood samples.

**Unpacking of laboratory equipment as part of group relocation**

| **2. ESTATES SERVICES BUILDING CHECK** | |
|---|---|
| **Estates Services Building Checklist Completed:** | Yes |
| **Date Checklist Completed** *(append copy):* | 11/05/20 |
| **Have all actions in Checklist been addressed:** | Yes |

## 3. REDUCING THE SPREAD OF COVID-19

**Access to the building**

The initial aim of the RTOSW programme was to facilitate access to wet-lab space and equipment to allow research staff to undertake work that cannot be carried out while off site. This includes access to research facilities (SRFs). This remains the primary aim of Biochemistry's return to onsite working process.

However, the department is now also allowing limited access to write-up and office space. This is based on feedback we have received from members of the department who for a variety of reasons (mainly technological and personal circumstances) are struggling to carry out non-wet-lab activities remotely.

However, our advice remains that work should continue to be carried out at home wherever possible.

| **Travelling To/From Work:** | |
|---|---|
| *Outline any foreseeable and significant risks:* | *Outline risk reduction measures to be adopted:* |
| **Personnel with symptoms** | • No one is to travel to the site if they are experiencing symptoms consistent with COVID-19. They can check if they have symptoms using the NHS 111 Coronavirus Service. |

| | |
|---|---|
| **Personnel who may be classed as vulnerable** | • If a lab member has symptoms they must self-isolate, and inform their line manager. More details are to be found at nhs.uk/conditions/coronavirus-covid-19/self-isolate-advice.<br>• Personnel must not attend the site if anyone in their household is experiencing any symptoms of COVID-19 or self-isolating.<br>• If classed as a vulnerable person, the person should not come to work but instead contact the line manager and HR for advice. |
| **Travel to work challenges safe distancing advice** | • If travel arrangements to site challenge safe distancing advice (e.g. for those who need to use public transport) personnel should contact their line manager for advice and discuss the possibility of using alternative transport. |
| **Social Distancing:** | |
| *Outline any foreseeable and significant risks:* | *Outline risk reduction measures to be adopted:* |
| **Movement of reagents between Lower Ground Floor and other areas of Biochemistry** | • Caution and courtesy should be applied to wait until those who are already in the walkway/staircase/work space have passed by to observe the 2m social distancing rule. |
| **Movement of reagents, samples and equipment between Lower Ground Floor and BSB** | • Regular movement to and from Lower Ground Floor with BSB will be managed as outlined in annexed document: Appendix A, movement of personnel, equipment and samples between Biochemistry Phase II Lower Ground Floor and BSB. |
| **Movement of reagents, samples and equipment between Lower Ground Floor and other buildings** | • All Lower Ground Floor users will be required to attend the RTOSW induction for Lower Ground Floor.<br>• When in Lower Ground Floor, all users must observe the local Biochemistry as well as specific Lower Ground Floor procedures.<br>• Specific attention will be paid to hand cleaning when moving across between areas, even if the buildings are close by.<br>• Pipettes, tubes, etc. that will be used regularly will remain in Lower Ground Floor and will not be transferred between departments.<br>• If samples at room temperature or on ice are to be transported, they will be contained in leak-proof secondary containers labelled with contact details in either buildings in case of an emergency. |

| | |
|---|---|
| | • Note that samples requiring to be transported on dry ice will be transported in a box that prevents build-up of gas.<br>• Containers will be wiped down were possible, or users will wash their hands thoroughly after handling the container.<br>• Shared equipment will be cleaned before and after use as per local rules. |
| **Movement between Lower Ground Floor lab spaces** | • The secondary lab spaces and write up areas have occupancy limits to maintain social distancing. These are indicated below and in figure 1; red = stage 1 (initial stage, split to 2 phases), green = stage 2 (subsequent stage)<br>• The occupancy of the main laboratory spaces (387.10.91 and 108) will be limited to 2 people per bay for the settling in period (stage 1a, see figure 2a). This will increase to 4 people per bay (stage 1b, see figure 2b) following a local review, up to a maximum occupancy of 24 to ensure safe social distancing and limit total occupancy of Lower ground floor.<br>• When entering labs where shared equipment is situated, safe social distancing should be applied and occupancies observed. A booking system will be implemented for bench spaces and all shared equipment.<br>• When entering or exiting lab bays or side rooms caution and courtesy should be applied to wait until those who are already in the walkway/lab space have passed by to observe the 2m social distancing rule. |
| **Limited room occupancy in specific areas** | The secondary lab spaces and write up areas have occupancy limits to maintain social distancing. These are indicated below and in figure 1; red = stage 1 (initial stage), green = stage 2 (subsequent stage). A booking system will be implemented for all secondary lab spaces unless indicated otherwise and occupancies updated as Biochemistry moves from stage 1 to 2.<br>• The -80°C freezer room (387.10.134; 3/5), SCNi cold room (387.10.110; 1/2) and North Lab cold room (387.10.101; 1/1) will not be on the booking system. For these rooms a stop and wait system will be implemented to ensure work remains within occupancy limits.<br>• North side tissue culture (387.10.102; 3/4)<br>• Histology lab (387.10.103; 1/2)<br>• Procedure room (387.10.105; 1/2): Up to two people at one time, social distancing to be maintained at all times. Work will be restricted to one person where possible.<br>• Microscopy room (387.10.107; 1/2)<br>• SCNi Physiology lab (387.10.111; 2/3)<br>• SCNi tissue culture (387.10.112; 2/3)<br>• Specialist labs (387.10.116-120; 2/3): Up to three people at one time, social distancing to be maintained at all times.<br>• RNA/Protein room (387.10.133; 3/5): Up to five people will be able to use this room (stage 2) but caution and courtesy should be used to ensure social distancing is maintained at all times.<br>• iPSC tissue culture (387.10.135; 4/6)<br>• SCNi workshop (387.10.136; 1/2) |

| | |
|---|---|
| | • Lower ground floor human cognitive/media rooms (387.10.122 & 123; 2/3)<br>• The open plan office spaces have the following occupancies:<br>- 387.10.92 (12/18)<br>- 387.10.78, block A (4/7)<br>- 387.10.78, block B (8/11)<br>- 387.10.121 (8/11)<br>Users will be able to book their desks up to the maximum occupancy for that area at the current occupancy stage. Users must maintain a 2m distance when at their desks – neighbouring desks should not be booked at the same time.<br>• The maximum occupancy for the tea point is 1. A stop and wait system will be implemented to ensure this space remains within occupancy limits.<br>• Room occupancies will be monitored by user groups and Biochemistry and amended if required/as appropriate. |
| **Bringing to, and working with, human samples in Lower Ground Floor** | • In this study, urine is collected from healthy research participants at home. Containers are sent to the home address of the research participant via Royal Mail. Urine collection pack and actiwatch (https://www.camntech.com/motionwatch-8/) have been thoroughly wiped down with universal cleansing wipes/spray.<br>• The researcher will ensure that the participant notifies the researcher at the start of the urine collection if they:<br>○ Have reason to believe they have been in contact with anyone with COVID in the past 14 days<br>○ Have experienced any COVID-19 symptoms (a high temperature, a new continuous cough, a loss of sense of smell or taste) in the past 14 days<br>○ To confirm they consider themselves to be free of COVID-19 (See symptom screening questionnaire in appendix B)<br>• Samples are returned to the researcher via Royal Mail, following Royal Mail guidelines for restrictions and packaging for category B, biological samples.<br>• Packaging and samples will be wiped down with universal cleansing wipes/spray by the researcher before transporting to Lower Ground Floor and will be cleaned again on arriving at the laboratory with universal cleansing wipes/spray.<br>• Samples will be pipetted in a safety cabinet located in Lower Ground Floor. Standard laboratory PPE will be worn.<br>• Samples will be pipetted slowly and gently with the pipette touching the side of the vessel when dispensing. Tubes will never be overfilled and will be closed gently and away from the researcher ensuring that no splashes can occur on the researcher.<br>• Samples will be stored at -20°C once aliquoted.<br>• Labcoats will be sent for cleaning after each use.<br>• Participants will be instructed to inform the researcher or study coordinator if they have tested positive for COVID-19 during and within 2 |

| | |
|---|---|
| | weeks of research participation. Researchers commit to informing their PI or study coordinator, if they or the participant develop symptoms of COVID-19 during or within 2 weeks of testing participants.<br>• If a participant subsequently tests positive within 2 weeks of research participation, the associated samples will no longer be considered to be COVID free. In the event of this occurring, the safety office will be contacted and the samples will either be transferred to a CL3 laboratory to be worked on, destroyed (1% Virkon overnight), or action taken as advised by safety office. |
| **Cleaning Regimes** | |
| *Outline any foreseeable and significant risks:* | *Outline risk reduction measures to be adopted:* |
| **Multiple users of lab spaces and equipment** | **All lab spaces**<br>• Put on clean gloves prior to touching any lab equipment.<br>• Users will clean before use benches and any shared equipment, touchpoints including access buttons (including keyboards), handles and eyepieces for microscopes with Dettol disinfectant, which will be provided and accessible. The same applies to fridge/freezer handles and cabinet doors.<br>• All surfaces will be cleaned with disinfectant by the user at the end of each session.<br>• Lab benches will be kept as clear as possible in between users<br><br>**Tissue culture**<br>• Use 70% ethanol to wipe the hood control buttons and screen before use.<br><br>**Shared equipment**<br>• Before and after use, the shared equipment stations should be wiped with 70% ethanol/Dettol disinfectant by each user. |
| **Bringing samples in to the lower ground floor** | • Where necessary to bring samples in to the lower ground floor, sample boxes will be wiped down with 70% ethanol on arrival. The outside of the sample vial/container will also be wiped with 70% ethanol upon removal from the box. Users will ensure hands are washed for at least 20 seconds after handling the sample box and container. |
| **Personal Protective Equipment** | |
| *Outline any foreseeable and significant risks:* | *Outline risk reduction measures to be adopted:* |

| | |
|---|---|
| **Supervision of new staff and students** | Users will ensure that a face mask/face covering is worn at all times in line with the University guidance.<br><br>Where possible, the new starter will be associated with one lab member and work under a "bubble" arrangement. If more than one trainer is required then the new starter will not be supervised by more than one lab member in the same week. The new starter and the trainer will endeavour to maintain 2m social distancing, however, supervision and training will be required which may take place in close range. Face masks/coverings will be worn at all times.<br><br>No additional risks were identified to include PPE beyond that already outlined for lab work. |
| **Individual Needs** | |
| *Outline any foreseeable and significant risks:* | *Outline risk reduction measures to be adopted:* |
| **Work required out of hours** | • Work to be centred between the hours of 8am-6pm when the building will be at maximum occupancy.<br>• A system will be put in place so that lone workers will message their pre-agreed contact on arrival and again when leaving the building.<br>There are no additional risk factors which require alteration of working practices related to out-of-hours working. |
| **Communications** | |
| **Conflict due to ineffective communication within the lab and office spaces** | • All RTOSW risk assessments will be circulated by e-mail and made available on the relevant departmental intranets.<br>• The available lab space is allocated by research group. This will remain but where a group is not using their space on a certain day/time flexibility is expected for others to use this space. This will maximise use of space for everyone.<br>• All bookings, via Bookkit, will be made openly available to view by all lower ground floor staff and students.<br>• Bookings (desk space, lab space and equipment) should be made well in advance to ensure everyone can plan their experiments accordingly.<br>• Bookings should only be made following discussion and planning with your group lead.<br>• In all cases where there are competing demands on the same space or equipment, people should be as flexible and considerate as possible so that all users are able to complete their work. Any conflicts which cannot be resolved with group leads will be adjudicated by Russell Foster and ultimately Kevin Talbot.<br>• If you need to shorten or cancel a booking, update the calendar as soon as you can. |

| | |
|---|---|
| | • If you do not have a booking in the calendar do not enter the building.<br>• The shared calendar must be checked prior to travel to the building. |

## 4. MANAGING EXISTING RISKS

| | |
|---|---|
| **Have existing risk assessment been reviewed:** | **Yes** |
| **Are additional control measures required:** | **No** |
| **Outline any additional control measures below:** | |
| **N/A** | |

## 5. UNIVERSITY SAFETY OFFICE REVIEW / HEAD OF DEPARTMENT APPROVAL

- The Risk Assessment/Work Plan must be reviewed by the University Safety Office during Phase 1.
- Heads of department are expected to take in account the comments raised by the University Safety Office and incorporate in their Risk Assessment/Work Plans.
- The University Safety Office will capture the outcome of Phase 1 Departmental Risk Assessments/Work Plans to help develop the guidance for Phase 2.

| | |
|---|---|
| **University Safety Officer Name:**<br>(reviewing risk assessment/work plan) | Tiphaine Bouriez-Jones |
| **University Safety Officer Signature:**<br>(reviewing risk assessment/work plan) |  |
| **Date of Review:** | 28/4/2021 |
| **Any Review Comments:** | |
| NDCN safety committee members reviewed the document and had no further recommendation for this risk assessment. | |
| **Head of Department Name:**<br>(approving risk assessment/work plan) | **Professor Kevin Talbot** |
| **Head of Department Signature:**<br>(approving risk assessment/work plan) |  |
| **Date of Approval:** | 11th May 2021 |
| **Any Approval Comments:** | |
| | |

## 6. FURTHER REVIEW STAGE

| |
|---|
| |

| 7. REVISIONS | |
|---|---|
| | |

**Appendix A:**

**Movement of personnel, equipment and samples between Biochemistry Phase II lower ground floor and the BSB**

**Bringing equipment from Biochemistry Phase II lower ground floor to BSB Level 1, 2 or 3**

- For equipment that cannot be autoclaved prior to transportation, wipe the surface of the equipment with 70% ethanol/Anistel surface disinfectant
- Then put everything into a transparent plastic box, and wipe the surface of the plastic box with 70% ethanol/Anistel surface disinfectant prior to transportation and upon arrival at BSB Level 3
- To bring polystyrene boxes containing wet/dry ice to the BSB, wipe the surface of the polystyrene box with 70% ethanol/Anistel surface disinfectant prior to transportation and after arrival at BSB Level 3
- No equipment should be taken to level 2 unless vital.

**Before leaving Biochemistry**

- Check on BSB SharePoint calendar to see if the room to be used is available.
- All procedure rooms are bookable and should be reserved on the sharepoint booking system prior to use
- On Level 3, LTC rooms 30.22a and 30.23 are restricted to 1 person per room, whereas the large LTC room and the procedure/surgery room allow 2 people at a time

**Entering the BSB:**

- Any research staff wanting to enter the Animal houses should try to access the facility between 09:00 - 14:30 (07:00 - 08:30 and 15:00 – 16:00 are high staff traffic periods due to starting and finishing BMS staff). Research staff can also access the facility after 16:00 until 21:00 when reception closes.
- When arriving at the BSB reception please be aware it can only accommodate 2 people at one time

**At BSB Level 1:**

- Follow the most recent level specific risk assessment, which can be found by changing room exit near the telephone on the wall
- Maximum room occupancy is noted on each room, and this should be followed
- Fitted face masks should be worn at all times for protection from animal allergens.

**At BSB Level 2:**

- Follow the most recent level specific risk assessment, which can be found at the main entrance to level 2
- Maximum room occupancy is noted on each room, and this should be followed
- Animal Holding rooms are to be avoided where possible by research staff, unless agreed otherwise by Level 2 management
- If Animal rooms are required to be entered by research staff this should be planned to take place after 16:00 but level must be vacated by 18:30, unless special extension of time has been granted
- Face masks should be worn when it is not possible to maintain social distance.

**At BSB Level 3:**

- Follow the most recent level specific risk assessment, which can be found by the door upon entry into BSB Level 3 mouse room
- Fitted face masks should be worn within BSB Level 3 mouse room to protect from animal allergens and in situations where it is not possible to maintain social distance.

**Bringing samples and equipment from BSB Level 1, 2 or 3 back to Biochemistry**

- Wipe the surface of equipment and boxes with 70% ethanol/Anistel surface disinfectant before leaving BSB Level 3 and after returning to Biochemistry

## Appendix B:

### This screening information must be completed for all research staff and participants at the start of urine collection

The following information is collected to ensure that research studies are not carried out if the individuals involved or members of their household are currently experiencing any symptoms related to COVID-19. Contact details are kept in case participants or researchers, for any reason, develop symptoms so that individuals who came in close contacted can be advised.

<table>
<tr><td>Name:<br>Participant / Researcher</td><td colspan="2">Iona Alexander</td></tr>
<tr><td>Name of Study:</td><td colspan="2">Quantification of circadian rhythms in the Vision Impaired (REC 18/WM/02900 IRAS 248419) / A randomised placebo controlled trial to access the effect of melatonin on circadian sleep-wake disturbances in ocular disease (REC 17/LO/12)</td></tr>
<tr><td>Contact details:<br>Email / phone number</td><td colspan="2">Iona.alexander@ndcn.ox.ac.uk<br>01865 546582</td></tr>
<tr><td rowspan="3">Current Symptoms<br>(select all that apply)</td><td>Fever > 37.8° or feverish symptoms: ☐</td><td>Date of onset of fever:</td></tr>
<tr><td>Persistent cough: ☐</td><td>Date of onset of cough:</td></tr>
<tr><td colspan="2">Loss of / change in sense of smell/ taste: ☐</td></tr>
<tr><td>To the best of your knowledge, does anyone from your household have any of the above symptoms?</td><td>Yes: ☐<br>If yes, which symptoms are they experiencing:</td><td>No: ☐</td></tr>
</table>

***Researchers*:** I understand that I need to contact the study coordinator in case I develop any of the above symptoms at any point.

***For research participants*:** I understand that I need to contact the research team if I develop any of the above symptoms within 2 weeks of taking part in the research study. (Contact details are provided in the Supplementary Information for Participants'.)

I understand and consent for my information to be held on a secure file for the duration of the study.

| Date: | Signature: |
|---|---|
| | |