

**3Rs subgroup for the
ANIMAL WELFARE AND ETHICAL REVIEW BODY**

Minutes of the meeting held on 22 June 2022

Present:



Apologies:



1. Minutes

Agreed: That the minutes of the meeting held on 23 March 2022 were approved.

2. Retrospective reviews of Project Licences requiring licence holder attendance at meeting

2.1. [REDACTED], Glucocorticoids and stress in the development of diabetes and obesity

Considered: A completed Retrospective review form and presentation

Interviewed: [REDACTED]

- Discussed:*
- Single housing of mice was discussed and how this might impact on the behaviour of the animals. The researchers said that stress hormone levels are not hugely changed when animals are singly housed. The reliability of these measures was mentioned given that the animals behaviour does change when singly housed.
 - Handling techniques for the animals was discussed. No habituation period was used but animals are handled daily when weight is obtained therefore they are already used to being handled before any experiment begins.

2.2. [REDACTED], Extracellular matrix in development and disease

Considered: A completed Retrospective review form and presentation

Interviewed: [REDACTED]

- Discussed:*
- The ex-vivo tissue explant model listed as a replacement was discussed, and if this was a refinement rather than replacement as in vivo models are still required. The ex-vivo tissue explant model provides the researchers with confidence for efficacy following treatment.

2.3. [REDACTED], Brainstem circuits controlling gut-brain communication

Considered: A completed Retrospective review form and presentation

Interviewed: [REDACTED]

- Discussed:*
- The group asked if the techniques used by the group (e.g. optogenetics, chemogenetics, the use of fluorescent probes) are widely used at the University of Manchester and how the group could support wider uptake regarding the 3Rs benefits. The researcher explained that the techniques are widespread in the neuroscience community but they could be applied to other fields.
 - It was discussed that an introduction to the techniques would be beneficial. A workshop will be set-up for people interested in the techniques.

3. Retrospective reviews of Project Licences not requiring licence holder attendance at meeting

3.1. [REDACTED], Radiolabelled molecules for cancer imaging and therapy

Considered: A completed Retrospective review form

- Discussed:*
- The group noted that no work had taken place on the licence since it was transferred to the University of Manchester when the researchers moved institutions.
 - The group were informed that the researcher is in the process of submitting a new licence to the Home Office.
 - [REDACTED] discussed getting touch with the researcher about potentially collaborating as she uses explant models which might be of interest to the researcher.

4. Mid-term reviews of Project Licences not requiring licence holder attendance at meeting

4.1. [REDACTED], A study on treatment and penetrance of inherited cardiac conditions

Considered: A completed mid-term review form

- Discussed:*
- The mid-term review states that the researchers have demonstrated that circadian rhythms influence the susceptibility to arrhythmias and that they are designing new studies to understand whether circadian rhythms can be utilised for therapeutic purposes. [REDACTED] said that the licence made no mention of work on circadian rhythms and wondered if this was a new area of research for the licence holder.

Outcome: The subgroup supported continued work on this licence.

4.2. ██████████, Peripheral Nerve Regeneration

Considered: A completed mid-term review form

Discussed:

- The group were pleased to read that changing the rat strain to Lewis had reduced the level of autotomy to 0%. Autotomy, where an animal bites/scratches the numb paw resulting from nerve damage, had previously been as high as 50% when using Wistar or Sprague Dawley rats.

Outcome: The subgroup supported continued work on this licence.

5. Schedule 1 methods (LW)

█████ gave an update on the use of CO₂ as a method for Schedule 1. Licence holders are being trained in different models and encouraged to use these where possible in place of CO₂. The data for usage of Schedule 1 methods will be looked at in a few months.

6. Rat restraint methods (LW)

█████ and BSF staff are looking at better ways of handling rats. The tubes are not ideal as they are too small and not correctly shaped for rats. Options include using netting like a mosquito bag. The rat can then enter the netting and the net be gathered around the rat. Licence holders using rats will be asked for input on the options being created.

7. Number of animals used and requested on licences (HH)

█████ raised the point that there is often a big discrepancy between the number of animals used compared to the number requested for use on some of the reviews that the group have seen. A discussion took place as to if this means experiments are therefore not adequately powered or if licence holders overestimated the number on the licence.

█████ noted that there is some contingency included for the number of animals that are requested on licences to ensure licence holders do not go over that number, but in addition the numbers are being calculated 5 years ahead of those reported on the retrospective reviews so things may have changed in that time, plus the amount of research carried out in the last few years has been reduced due to the lockdowns.

█████ requested that the number of animals bred on the licence should be added to the retrospective review form. ██████ will consider if this should be over the licence or per protocol, where relevant

8. Tissue sharing (AB)

█████ asked about tissue sharing and if a system was going to be put in place. ██████ said plans were being made to re-investigate tissue sharing in the BSF and how this can be increased.

The next meeting will be held on 14 September 2022, at 2-4pm, via Zoom