

ANIMAL WELFARE AND ETHICAL REVIEW BODY

Minutes of the meeting held on 18 November 2020 via Zoom

Present:

[REDACTED]

Apologies:

[REDACTED]

1. Minutes

Agreed: That the minutes of the meeting held on 8 October 2020 were approved subject to a correct on page 7 “mid-November” rather than “min-November”.

2. Applications for New Project Licences

2.1. [REDACTED], Peripheral Nerve Regeneration

Considered: A completed AWERB form, PPL application, and minutes from Local Management Committee Meeting

Interviewed: [REDACTED]

- Discussed:*
- Imaging was mentioned in the minutes from the Local Management meeting but not in the application. BSF staff clarified that imaging was in a previous version of the application but had since been removed.
 - The applicant explained that after removal of the nerve the animals appear to do well and they do not appear impaired in terms of their enjoyment of life, level of playing with enrichments in the cages, and they feed and drink well.

- The applicant explained that published studies report no autotomy in Lewis rats, however he thinks his definition of autotomy may differ from that in the published papers. The applicants have not used Lewis rats in their work before so have no personal experience of the level of autotomy as defined by their criteria. The applicant expressed concerns that given the directive from the Home Office regarding autotomy more animals may need to be culled. The NVS stated that refinement is seen to be better than reduction, i.e. more animals undergoing less severe procedures is preferable to fewer animals undergoing more severe procedures.

Revisions:

- Please include measured outcomes in the application for your third objective. You discussed in the meeting that this will include histology.
- Please work with the BSF to ensure that codes for anaesthetics, etc, are correct in the application.
- The licence needs to include a level of expected autotomy, even if this is your best estimate based on published studies with Lewis rats.
- Please discuss the number of animals requested for use with the BSF staff. If you require 8 animals per group then additional animals may need to be requested for use to allow for culling due to autotomy, based on the expected level of autotomy as outlined above.
- Please can you clarify the source of funding. The licence and the AWERB form are different.
- On page 15 of 31 it says simple infections will be treated with antibiotics, but further down the same page it says "Infections requiring intervention are a reason for culling animals". Can these be clarified please.
- How likely is dehiscence and what steps can be taken to avoid it?
- The Hargreave's Test measures response to infrared heat stimulus. How hot is this? Will it cause pain and stress the animal? How long will the animals be exposed to this?
- Please discuss with the BSF staff if the use of Lewis rats is a refinement, and therefore should be included in the relevant sections of the form.
- A number of comments were made regarding your Non-Technical Summary which are listed below. Please update your NTS based on the comments and send it to the following lay members for their review

[REDACTED]

- Include a brief explanation of autotomy as you define it.
- Page 27 of 31 – should "important functions such temperature control" read "such as temperature"?
- Perhaps explain briefly what a nerve graft is for the lay reader.

- It may be important to explain why using Lewis rats and why a 'calm' environment will reduce the likelihood of rats chewing their hind paws within the NTS.

Outcome: The study was given provisional approval based on the applicant making the changes/clarifications listed above to the satisfaction of the Chair/AWERB.

2.2. [REDACTED], Generation, Breeding & Maintenance of Genetically Altered Rodents

Considered: A completed AWERB form, PPL application, and minutes from Local Management Committee Meeting

Interviewed: [REDACTED]

- Discussed:*
- This licence is a follow-on from the licence currently held by [REDACTED].
 - This licence is more refined than the previous licence and the numbers of animals on the licence is lower as breeding is now being included on researcher's own Project Licences.
 - The results from the NC3R's funded project to develop a genetically sterile male mouse which could replace the vasectomy surgery could be used as a 3Rs case study on the website.

- Revisions:*
- P31 of the licence states 50,000 mice over 5 years for GAA breeding. Is this sufficient for all users growth of the Transgenics Unit?
 - Please consider if it is restrictive to not include "in vivo" in the answer to "What specific criteria will you use to decide whether to accept or reject work?" on page 10 of 63.
 - A number of comments were made regarding your Non-Technical Summary which are listed below. Please update your NTS based on the comments and send it to the following lay members for their review [REDACTED]

- Please explain pseudo-pregnancy for the lay reader.
- Could consideration be given to define some of the technical terms e.g. CRISPR-Cas9.
- Please explain in the NTS why some animals are killed after re-derivation.
- Please include some details in the NTS about how many litters a female will have on average.
- Please can the IP in "IP injection" be explained, deleted or changed to something a lay reader would understand.
- Please explain "phenotype".
- Please explain GAAs for a lay reader.
- Please explain NVS as Named Veterinary Surgeon.
- Please explain in parentheses the term "cryopreserved".
- Please explain NSET.

Outcome: The study was given provisional approval based on the applicant making the changes/clarifications listed above to the satisfaction of the Chair/AWERB.

2.3. [REDACTED], Understanding Vision & Developing Therapies for Blindness

Considered: A completed AWERB form, PPL application, and minutes from Local Management Committee Meeting

Interviewed: [REDACTED]

Discussed:

- The applicants appear to have a good handle on how to power studies and the nuances of experiment optimisation.
- The applicant explained some aspects of the injections into the eye including the use of anaesthesia and positive control stimuli during brain recordings to check that anaesthesia remains constant.

Revisions:

- Please include in the licence an approximate time for brain recordings, however AWERB recognise that some leeway should be allowed for experiments that run slightly longer.
- Please explain why tracheotomy is necessary.
- The application lists injections into the eye and brain of the same animal. Can this be avoided?
- The amount of funding is different in the licence and in the AWERB form. Please ensure the information matches.
- Please ensure the numbers in the AWERB form and the licence match (on front page of the AWERB form and page 119 of the licence compared with page 5 of the AWERB form and 125 of the licence).
- In some places (especially on page 95 of the licence) there are comments about the what will happen if the weight falls by more than 20%. If this happens does it not mean that the protocol band is “severe”. This needs to be clarified.
- For Protocol 9 please clarify if animals will be reused or killed.
- P66. Why controlled patterns of lighting in protocol 6 of up to 9 months whereas in other protocols it's a year. Is this an error?
- A number of comments were made regarding your Non-Technical Summary which are listed below. Please update your NTS based on the comments and send it to the following lay members for their review ([REDACTED])

- Please explain the term melanopsin.
- Please shorten the NTS if possible and make it clearer what will be done to the animals.
- Diurnal chronotype; please can this be explained or alternative wording used for the lay reader to understand.
- Could the following please be defined: opsin, melanopsin, optogenic.

- Please check the NTS for typographical errors, e.g. p104 clinical.

Outcome: The study was given provisional approval based on the applicant making the changes/clarifications listed above to the satisfaction of the Chair/AWERB.

3. Mid-term and retrospective reviews not requiring licence holder attendance at the meeting

3.1. [REDACTED] Advanced Education in Pharmacology

Considered: A completed mid-term review form

Discussed: No ethical concerns with the work continuing

Revisions: None

Outcome: Approval for continued work under the licence.

4. Report on licences processed from 18/09/2020 to 28/10/2020

The following amendments were approved by the executive committee.

4.1. Amendments to Project Licences

[REDACTED], Maintenance of Barrier Immunity in Health & Disease.
[REDACTED] Identifying New Therapies to Prevent Internal Scarring.
[REDACTED], Type 2 Immunity in Infection & Maintenance of Tissue Health.
[REDACTED], Designing Therapeutic & Diagnostic Nanotechnologies for Medicine

5. Update on applications outstanding from previous meetings and upcoming Project Licence applications

- A verbal summary of the status of applications previously reviewed by AWERB was given along with an overview of the number of Project Licence applications due over the next few months.
- The NCTO stated that the pathway for supporting applicants with meeting deadlines over the 12 months prior to submission of a Project Licence application was working well.

6. NACWO report

- There are two new Home Office Inspectors assigned to the BSF, [REDACTED].
- The BSF is running as it was prior to the lockdown, more research is taking place.
- The refurbishment of the mouse caging in the incubator will hopefully take place before the break for Christmas.
- The fish tanking is also being replaced and will happen in the new year.

7. NVS report

- More surgeries are taking place as researchers begin work again after lockdown.

8. Standard Conditions 18s

- The new HOIs would like notification of any Standard Condition 18s within 24 hours, but the form can follow afterwards.

9. AWERB Hub Chair meeting

- The Chair reported that it was a fantastic meeting which was really useful.

10. NC3Rs Regional Programme Manager update

- The non-mammalian models workshop is taking place on 26 November. 31 people across the three institutions have so far registered. The NC3Rs Regional Programme Manager encourages other people to register and will send a reminder email around after the meeting.
- The NC3Rs work of [REDACTED], a David Sainsbury fellow, is a case study on the website:
- <https://www.manchester.ac.uk/research/environment/governance/ethics/animals/outcomes/replacement-reduction-refinement/improving-methods-in-visual-research/>
- A study has shown that swabbing of zebrafish is less stressful than fin clipping and this has been shared with the fish user group.
- Applications for grants are now open. The NC3Rs Regional Programme Manager will work with the BSF staff to ensure that information on the grants is circulated to University of Manchester animal researchers.

11. Any other business

11.1. 3Rs subgroup

This will be chaired by the NC3Rs Regional Programme Manager who invites people to get in touch if they would like to sit on the subgroup.

[REDACTED] will start the process of recruitment and setting dates for the meetings and report back in January.

11.2. RSPCA scientist and AWERB engagement packs

The slides will be provided to AWERB members after the meeting.

11.3. RSPCA Lay Member Workshop 1 September 2020

A report from [REDACTED] and [REDACTED] had been provided to the Committee. [REDACTED] reported that he was proud of the high regard that the BSF has at the lay member workshop.

11.4. AWERB questionnaire for researchers

One change to the questionnaire will be made to ask for the three most important things that AWERB could do better.

After the change has been made the Secretary will send the questionnaire out to researchers who have been to AWERB for Project Licence reviews since Ian Roberts has been Chair.

11.5. [REDACTED] leaving

The Chair led the committee in wishing [REDACTED] all the best for the future. [REDACTED] has been incredible in his role as Director of the BSF and will be missed.

The next meeting will be on 21 January 2021 at 10am-12pm, via Zoom.

Dates of meetings for the 2020/2021 academic year are:

8 October 2020

Wednesday 18 November 2020

21 Jan 2021

4 March 2021

15 April 2021 - no licences to be seen this meeting. AWERB processes meeting.

27 May 2021

8 July 2021

19 August 2021 - no licences to be seen this meeting. AWERB processes meeting.

30 September 2021