

ANIMAL WELFARE AND ETHICAL REVIEW BODY

Minutes of the meeting held on 17 March 2022

Present:

[REDACTED]

Apologies:

[REDACTED]

In attendance:

[REDACTED]

1. Minutes

Agreed: That the minutes of the meeting held on 10 February 2022 and 24 February 2022 were approved subject to clarification in the 10 February 2022 minutes that RG referred to [REDACTED] not [REDACTED].

2. Applications for New Project Licences

2.1. [REDACTED], Understanding & Targeting the Inflammatory Response

Considered: A completed AWERB form and PPL application.

Interviewed: [REDACTED]

- Discussed:*
- Animals will not be individually housed and food intake will not be used to monitor weight. Animals will be weighed.
 - The animals will be given a high fat diet in order for them to become obese. They eat to capacity unlike humans who can become obese due to overeating.

- The level of obesity that animals reach under this licence are not expected to cause body sores.
- There are some parts of the licence that are carry-overs from the previous licence; these will be removed with the input from the Named Persons.

Revisions:

- AWERB noticed there were a couple of times that aspects of a previous licence had been left in the application, for example, on page 44/45 you talk about body sores but as you explained in the meeting these are unlikely to happen, therefore please remove mention on this in the application.
- Please update the wording from culling to humanely killed throughout the licence.
- Page 71 – please include specific details of maximum volumes that will be used.
- 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



- Title – Overall a very clear NTS - I wonder if the word "inform" would be better than "discover" in the title as I was unsure if new treatments were likely to be discovered within the time frame and by this project or whether the knowledge produced here will inform the development of new treatments?
- Page 3 - TYPO - "that can lead a greater severity" - should this be "that can lead to a greater severity".
- Page 3 – Section 'Why is it important to undertake this work?'. Consider removal of 'that will work in most people' from the sentence 'A more detailed understanding of the inflammatory response is therefore necessary for the identification and development of future effective therapies that will work in most people'.
- Page 3 - "critical regulators" - is there a clearer way (or short explanation in parentheses) you could include to explain what this is for lay readers - presumably biological or physiological mechanisms that regulate inflammation?
- Page 3 - " We also hope that our research could provide the basis for new clinical trials to target unwanted/inappropriate inflammation in patients" - within the time frame of this project? If not perhaps "in the long term we hope".
- Page 4 – In the section 'Typically, what will be done to an animal used in your project?' please remove the words 'a lot of animals' to 'animals will be humanely killed'.
- Page 4 – it was suggested that in the section 'Typically, what will be done to an animal used in your project?' you could describe this in reference to the animal's welfare.
- Page 4 - Please clarify the two types of obese mice and their relevance. Are the mice genetically altered to have a predisposition to obesity?

- Page 4 - Can you mention in the "what will be done" section of the NTS that procedures such as oral gavage, use of a rectal probe, daily intraperitoneal injection and daily subcutaneous injection are carried out? How do you induce inflammation via the nasal route?
- Page 7 – Refinement section - Consider removal of technical details of components of inflammation. The third paragraph starting 'a key objective' may contain too much detail and the first and last sentence might suffice.
- In the NTS you mention you will use zebrafish whenever possible. Please can you briefly clarify why it might not be possible.

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], Immune & Inflammatory Mechanisms in Cerebrovascular Disease

Considered: A completed AWERB form and PPL application.

Interviewed: [REDACTED]

Discussed:

- Details from the statistician report are not usually included in licences and should be removed.
- The justification for use of rats needs to be expanded on.
- Reduction of severe suffering occurred using the traffic light system that they introduced and will be using in this licence.

Revisions:

- There are a number of typographical errors in your application. Whilst these do not change the meaning of the sentences it would benefit from a detailed proof-reading.
- In your response to this letter, please can you include details of how you monitor and maintain compliance with the IMPROVE guidelines on a day-to-day basis covering all licensees and other staff who may be working under this licence. IMPROVE includes 43 separate detailed guidelines, so AWERB are interested to know how you ensure that all your co-workers are familiar enough with each of the 43 guidelines in order to apply them on a daily basis to every animal.
- The information you received from the statistician is not usually included in the format you have included it in Project Licence applications. For example, AWERB suggests removal of flow chart on page 8.
- The justification sections need to contain more detail regarding why rats are being asked to be used on the licence.
- Page 52 and Page 110 – There is no step 8 in this section. Do you mean step 7?
- Please clarify for protocols 5 and 6 that the number of deaths you expect are 30% of the 30% of the animals that enter the severe category. There was some confusion that it was 30% plus 30% (therefore 60%) which as you explained in the meeting is not the case.

- Page 215 – please can you clarify under which circumstances you would treat up to 6 months as it is thought on this protocol that animals will be humanely killed 3 days post induction of a stroke.
- 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

- Please include an explanation of small vessel disease.
- Page 5 – Section ‘What are the expected impacts and/or adverse effects for the animals during your project?’ It’s helpful to add a little more detail about what the animals experience such as injections, gavage, ear biopsy, blood sampling, hair sampling and mouth swabbing. Also I'd like to read more in the NTS about the physiological impact (if any) of induced hypertension, obesity, diabetes, atherosclerosis and infection on the animals. Even if mild, it's worth explaining. How do the symptoms of dementia and cerebral ischaemia impact on a mouse or rat? Also good to add that sham surgery is needed and that some animals are put in a stereotaxic frame to have their skull exposed.
- Page 6 - Under 'what are the expected severities and the proportion of animals in each category', there was no mention of mild, moderate and severe protocols. The impression given was that as small vessel disease is not as 'severe' as acute stroke the experience would be mild, however please can you state what level of suffering this is expected to be in this section.
- Page 9 – Section ‘Why can’t you use animals that are less sentient?’. The second paragraph does not seem relevant and its removal should be considered.
- Page 9 – Section ‘How will you refine the procedures you're using to minimise the welfare costs (harms) for the animals?’ - after IMPROVE guidelines (See next section); this parenthesis should be removed.

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], Studying Cognitive Function in Animal Models of CNS Disorders

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

Interviewed: [REDACTED]

Discussed:

- Continued use and re-use of animals was discussed. The Home Office have a advice notice on this: <https://www.gov.uk/guidance/animal-research-technical-advice#use-keeping-alive-and-re-use>

- Revisions:*
- Please check with the BSF if the number of animals in the application are correct given some are classified as continued use and some as re-use.
 - Please change the wording from culled to humanely killed throughout the licence.
 - Page 25 – please reword the ‘150% lower in females’ as discussed in the meeting.
 - Page 30 – the phrase “Animals (housed in groups) will experience weight loss which will be no greater than 90% free feeding body weight” should be re-written. AWERB think you mean that there will be no more than 10% weight loss when compared to free feeding animals.
 - Page 31 and in other protocols. Please receive advice from the Named Persons in the BSF if the application should list all the humane end points rather than using the phrase ‘such as’ and listing some of them.
 - Page 45 – please include some brief details of how digging is measured.
 - Please update the application regarding the dose volumes. The Joint Working Group on refinement gives 10mL/kg for PO, not 20mL/kg as in your table.
 - Page 49 – Step 7 – In Behavioural Training/Testing – the first sentence appears not to be complete.
 - A number of comments were made regarding your Non-Technical Summary which are listed below. The NTS should be written for a lay audience and avoid scientific/technical terms where possible. Please update your NTS based on the comments and send it to the following lay members for their review ([REDACTED])
 - Title – CNS - what is this? Could it be stated in terms accessible to lay reader? For instance "Studying cognitive function in animal models of Central Nervous System (CNS) disorder."
 - Some terms are introduced without explanation/definition for the non-technical reader, including: CNS, psychotomimetic. Please include brief explanations of these.
 - Can you briefly explain why making a task more demanding induces forgetfulness.
 - Page 3 - If an aim is "To develop new tests and new models for mimicking the symptoms of CNS disorders" (p.2 of 74) would an expected output be new models or techniques/tests?
 - Page 4 - complimentary should be complementary.
 - Page 7 – please remove the flow chart from the NC3Rs Experimental Design Assistant.

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. Retrospective Assessments of Project Licences requiring full committee review

3.1. [REDACTED], Understanding mechanisms of fibrosis

Considered: A completed Retrospective Assessment form and supporting publications.

Interviewed: [REDACTED]

Discussed:

- The models on the severe protocols are very good models.
- Animals on severe protocols may develop jaundice and liver disease.

Revisions: None required.

Outcome: AWERB support submission of the Retrospective Assessment to the Home Office.

4. Report on licences processed from 04/02/2022 to 25/02/2022

The following amendments were approved by the executive committee.

4.1. Amendments to Project Licences

[REDACTED], Type 2 Immunity in Infection & Maintenance of Tissue Health.

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

- 5.1. The committee were provided with a document showing the status of applications considered previously and those pencilled in for future meetings.
- 5.2. The Home Office missed the submission by [REDACTED] which means animals need to be moved onto other licences for continued use.

6. NVS report

- 6.1. No comments made on the report submitted.

7. Standard Conditions 18s and non-compliances

- 7.1. The BSF Compliance Committee was welcomed by AWERB.
- 7.2. Updates were provided for the following incidents:
- 7.3. ASRU_University of Manchester_[REDACTED]_2022-01-31_sc18. Further informed was provided to ASRU and they have now closed the matter.
- 7.4. ASRU_establishment name [REDACTED]_2022-02-04_sc18. Further information was provided to ASRU and they have advised more rigorous checking of rats prior to surgery.
- 7.5. ASRU_University of Manchester_[REDACTED]_2022-02-17_sc18. The Lister Hooded Rats will no longer be restrained during blood sampling. The animals appear prone to extreme stress leading to cardiac failure.

8. NC3Rs Regional Programme Manager update

International 3Rs Prize

1 – The 2021 3Rs prize is now open. The prize is open to researchers across the world who have published an outstanding paper with demonstrable 3Rs impacts in the last three years.

This globally recognised award is sponsored by GSK and consists of a £28k prize grant and a £2k personal award. It is awarded annually to highlight the contributions of individual researchers across the medical, biological and veterinary sciences, and further support the development of their work and career.

If you would like further information please contact [REDACTED] – deadline for applications is Wednesday 6 April.

Resources

2 – We have two new resources online. The first looks at minimizing aggression in group-housed male mice, with recommendations to help avoid the use of single housing, based on our international crowdsourced study. [Minimising aggression in group-housed male mice | NC3Rs](#)

3 – The second resource covers skin swabbing for DNA sampling in zebrafish. This is an extensive resource which includes video clips of how to perform the technique, as well as a Q&A feature with researchers who have developed or used skin swabbing. It will help researchers decide if it's a suitable alternative to fin clipping for their needs, and help them get started. [Skin swabbing for DNA sampling of zebrafish | NC3Rs](#)

4 – Two new e-learning modules have been launched on our website – the modules provide detailed practical information on choosing and using analgesics, as well as how to assess post-operative pain. [NC3Rs Supported Resources \(researchanimaltraining.com\)](#)

4 – Finally, the latest issue of Tech3Rs is out and can be read online now. It includes features on skin swabbing in fish, rodent welfare resources and skin preparation before surgery in mice and rats. [Tech3Rs newsletter for animal technicians | NC3Rs](#)

9. Any other business

9.1. Retrospective Review and Retrospective Assessment

Updates have taken place to the form to reflect the questions asked by the Home Office so that the process is more efficient for licence holders. The time on the agenda for Retrospective Assessments and severe mid-term and retrospective reviews has increased to 30 minutes with a 10 minute presentation to allow for a fuller discussion.

9.2. Animal policy

The animal policy has been updated:

<https://www.manchester.ac.uk/research/environment/governance/ethics/animals/governance/>

9.3. Culture of Care document

[REDACTED] will be submitting the culture of care document to a future AWERB for input from members.

9.4. ASRU audit

The report has not yet been submitted by ASRU following the audit earlier in the year.

The next meeting will be on 28 April 2022 at 10am-12.30pm.

Dates of meetings for the 2021/2022 academic year are:

11 November 2021
16 December 2021
10 February 2022
24 February 2022
17 March 2022
28 April 2022
26 May 2022
23 June 2022
21 July 2022