MANCHESTER 1824
The University of Manchester

ANIMAL WELFARE AND ETHICAL REVIEW BODY

Minutes of the meeting held on 25 January 2024

Present: [redacted]

Apologies: [redacted]

In attendance: [redacted]

1. Minutes

Agreed: That the minutes of the meeting held on 16 December 2023 were approved.

2. Applications for New Project Licences

2.1. [redacted], Examining New Ways to Tackle Dementia

Considered: A completed AWERB form and PPL application

Interviewed: [redacted]

Discussed with applicant:

- Differences between sexes were discussed. The applicant reported minor differences. The proposed licence will be able to look at sex differences while also being able to pool the data.
- The differences between humans and animals in terms of memory modalities were discussed. The applicant is aware that they cannot

mirror everything that is seen in clinic with dementia but they are able to look at a number of different types of deficits in the animals. The applicant explained that it is a balance of using more than one test to reduce numbers of animals requested for use on the licence, with not over burdening the animals with too many tests.

- The NVS raised the possibility of looking at perfusion. The applicant explained that they would be able to look at this ex vivo.
- AWERB members discussed the differences between the Morris Water Maze test and the Forced Swim Test, the latter test not being supported for use by researchers at the institution. Potential alternatives to the Morris Water Maze test will be explored by the applicant, however while the test is included on the licence they do not expect that they will have to use it.

Revisions: It was explained to the applicant that the committee had provided comments to the Secretariat prior to the meeting and while some would be discussed in the meeting, the list below includes all the comments whether they were raised in the meeting or not.

- Title - The title is clear but the language of 'to tackle' may lean too heavily into 'lay' language? To understand? To treat? To 'understand and treat' - to manage - something a little more precise but still lay may be wise here to give a clearer sense of purpose.
- Page 14 - Background: Could you flag a paper here (or in protocol 1) that has the APP or APP23 mouse models you are using ?
- As discussed in the meeting, please can you explore alternatives to the Morris Water Maze (MWM) test. The committee understand you are unlikely to use the MWM but they would like you to explore more refined tests. Inclusion in the NTS of the MWM test and an explanation of when it would be used should also be considered, however as per the discussion in the meeting there are pros and cons to mentioning it. Any mention of the MWM in the NTS could make it clear that the forced swim test is **not** being used.
- Page 23. Why ABL (local anaesthesia for sampling for genotyping?
- Page 30 of 42. Will animals be subjected to more than one kind of test each, or will there be a Y-maze cohort, a Barnes cohort, and so on? If they're only doing one kind of test each, how well does that replicate the kind of intellectually rich environment of reality, which may - one would assume - make a difference to universal processing and therefore disease presentation and progress?
- Page 30 - Would it be good to include a time length (e.g. maximum) for the period of acclimatisation of mice prior to behavioural testing?
- Page 31 - Should there be adverse effects for substance administration (e.g. via Gavage or I.P.?)
- 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]
    - The committee thank you for a very clear lay summary.
    - Page 3 – Please consider revising the statement that dementia is the leading cause of death. *Something* has to be the leading cause of death: the better we get at treating other stuff,

assuming that people don't become immortal, then the higher up the list of killers dementia will rise. This tells us nothing much about the urgency of the dementia problem per se. In fact, a rise in the proportion of people dying with/ of dementia could be taken as evidence of people's lives getting longer and healthier: nothing else - infectious disease, industrial accidents, COPD, whatever - has killed them yet.

- Page 4 – Please consider including some information on how good a model does the mouse provide in terms of the different types of memory. As discussed in the meeting, episodic memory may be analogous, but it's not obvious that semantic or propositional memory would be.
- Page 4 – Please could you look at the NTS in regards to administration of drugs, as it was felt that it might be a bit misleading and suggested drugs would only be provided in the diet, when in reality they may also be administered by gavage or by injection.
- Page 4 - "Using tests" is a bit vague. It would be good to have some indication of what those tests are so that the interested public reader will have some clear idea of what exactly will happen.
- Page 4 - adverse effects' - mice are modelling dementia yet the only negative symptom that seems to be tracked by this model/procedure is memory loss. Lay readers, familiar with dementia, may have experienced family who exhibit considerable distress - confusion, anxiety, extreme emotion. Whilst I acknowledge mouse emotion and cognition is a somewhat difficult area to speculate upon - would mice not be expected to experience similar distress or heightened propensity to distress if they display the symptom of memory loss? If not, why would this be? the mice are said to 'develop the major symptoms' plural - but only memory loss is flagged as adverse. Do we need some further clarification here?

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. Report on licences processed from 29/11/2023 to 09/01/2024

The following amendments were approved by the executive committee.

3.1. Amendments to Project Licences

[redacted], Genes and Essential Nutrient Influences on Behaviour

3.2. Applications for Category C work

[redacted], MSci Practical Project: Detection of Immune Cell Populations in Mouse Lymphoid Organs

3.3. Applications for additional availability for new or current project licences

[redacted]: Mechanisms of Organ Development & Disease (Primary at University of Cambridge)

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

4.1. The committee were provided with a document showing the status of applications considered previously and those pencilled in for future meetings.

4.2. An applicant from the meeting on 15 December 2022 will be contacted by the BSF Compliance and Licensing Manager to ask for an update on when AWERB can expect their revisions to be submitted. If they are not received by the next meeting then AWERB will withdraw their support and a new application will need to be submitted for AWERB to reconsider.

5. NVS report

5.1. Nothing pressing was reported verbally by the NVS. Reports for previous months will be submitted for the next meeting.

6. 3Rs AWERB subgroup reports from 4 October 2023 and 6 December 2023 meetings

6.1. No comments were made on the minutes or forms submitted by licence holders.

6.2. The Chair of the 3Rs subgroup asked if members could speak with their research groups about joining the 3Rs subgroup as recently a couple of people have stepped down.

6.3. The Chair of AWERB stated that he will raise workload allocation for the 3Rs subgroup with the Faculty as he did for AWERB membership.

7. Xenopus letter to ASRU

7.1. AWERB discussed the documents provided by the BSF in response to an audit by ASRU from October 2023. A letter to ASRU outlined how the BSF had responded to a query from the inspector about the light intensity (lux) to tanks containing albino Xenopus laevis and the enrichment provided to all adult laevis, and the plans to explore future refinements to optimise amphibian care. A supporting document of current husbandry practices was provided.

7.2. AWERB supported the updated Environmental Enrichment Guide from the BSF and the actions taken and planned by the BSF in response to the query from the Home Office Inspector.

7.3. The Director of the BSF stated that a business case is going to be submitted to provide a more stable environment for the Xenopus and enrichment will be included as part of any new system.

7.4. An AWERB member asked how researchers could be encouraged to include the husbandry practices in publications as supplementary materials.
Action: The Chair will contact current Project and Personal Licence holders to encourage the inclusion of the enrichment guide in publications. The Chair will use the opportunity to ask for other refinements licence holders have put in place.

The next meeting will be on 22 February 2024 at 10am-12.30pm.

Dates of meetings for the 2023/2024 academic year are:
21 March 2024
25 April 2024
23 May 2024
20 June 2024
25 July 2024
August break

Dates of meetings for the 2024/2025 academic year are:
19 September 2024
17 October 2024
14 November 2024
12 December 2024
30 January 2025
27 February 2025
27 March 2025
24 April 2025
29 May 2025
26 June 2025
31 July 2025
August break

Dates of meetings for the 2025/2026 academic year are:
25 September 2025
23 October 2025
20 November 2025
18 December 2025