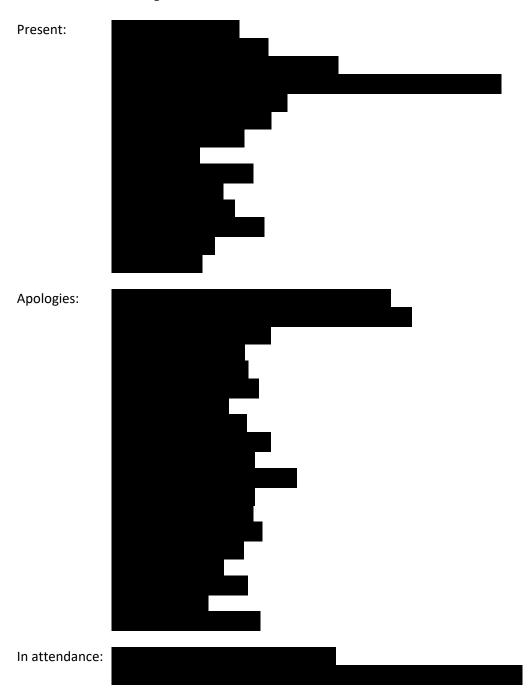


ANIMAL WELFARE AND ETHICAL REVIEW BODY

Minutes of the meeting held on 14 November 2024



1. Minutes

Agreed: That the minutes of the meeting held on 17 October 2024 were approved.

2. Applications for New Project Licences

2.1. Understanding Immune Responses to Complex Bacterial Vaccines

Considered: A completed AWERB form, PPL application and presentation.

Interviewed:

Discussed with • applicant:

- The banding of moderate rather than mild was raised with the applicant given that the adverse effects were described as very minimal. The applicant explained that most animals would experience mild distress or suffering, however moderate is in place for those instances where some reaction to the vaccine may occur.
- The incorrect placement of the Humane End Points was raised, as detailed below, and will require moving to the correct part of the licence and expanding on so that the animal technicians have clear guidance.
- The applicant was asked to expand on when they thought any benefits from the work would be translated to the human population. The researcher explained that some information from their work is available now which could inform pharmaceutical companies on how to develop a vaccine to for instance gonorrhoea. The applicant is not aiming to develop their own vaccine but to provide information on how the immune response is changing across different groups across the world.

Feedback to applicant: •

- The committee thank you for such a clear presentation and a Non-Technical Summary (NTS) which the public would have no issues understanding as it is concise and clear and an exemplar of communicating complex information in a way that is meaningful for the non-expert.
- An AWERB member that was absent from the meeting commended you on your approach to the publication of negative results.
- While not required for revision to the licence, it was noted that 'staff engaged in the project will, in addition to mandatory training, be encouraged to engage with relevant webinars from NC3Rs and elsewhere which provide up-to-date advice and information on best practice.' This is excellent to see included in the design of a project. From an improving research culture perspective, I wonder if time is allocated to allow the team to improve knowledge of 3Rs? In this case, it would seem the team is a doctoral student; presumably encouragement will occur during supervisor meetings. If time is provided, as general practice, within your lab to the wider team, this would be a great contribution to improving research culture (a concern of funders and relevant to culture of care). If not, it may be good to include discussions with the team on this as it can be hard to make time for wider reading and learning particularly for early career researchers just to ensure time is not a barrier.

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.

 Page 11 – a minor point, but would the internal competition not be a form of peer review? Or do you mean 'MRC studentships are awarded through an internal funding competition, so are not subject to external peer review.'

- Page 23 On the advice of the Named Animal Care and Welfare
 Officers (NACWOs) and Named Veterinary Surgeon (NVS) please
 move the details on hunched posture, reduced activity levels, etc,
 from the question 'How will you monitor for, control, and limit any of
 these adverse effects?' to 'What are the humane endpoints for this
 step?'. In addition, more specific humane endpoints are required,
 such as clinical observations, piloerection, etc. If you require input
 from the NACWOs please contact
- Page 23 please check if the number of animals listed for use is correct in this section (42) as on Page 5 it is listed as 330.
- Page 24 the wording for the rationale for the adoptive T cell transfer may benefit from revision.
- Page 28 as discussed in the meeting, please revise the time for the humane end point to 6 hours, instead of 8 hours, as you explained the period has been reduced.
- A number of minor 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
 - It may be useful to add (if possible) a very brief outline of what the alternative to a complex vaccine is or whether most vaccines in use are complex. Perhaps a specific example or if accurate 'many [or most] vaccines in use today are complex vaccines'. Some useful description appears on p.13 (not part of the public NTS) and could perhaps be adapted for inclusion in NTS for nonexpert reader.
 - Page 2 I wonder if for aim of project inserting 'better' to read 'better understand immune responses' may be more meaningful? Particularly for the non-expert, it may prevent any unwarranted concern about not yet knowing enough about how vaccines work. Better is used in answering the subsequent question.
 - Page 4 It is difficult to fully grasp where the moderate effects are expected, rather than mild, - is this the localised swelling after inoculation over 2-3 days (e.g. as described on p.22) or something else? Perhaps you could clarify this as the NTS will be a public document separate from the main PPL.
 - Page 5 One of the ultimate aims of this research programme is to improve this predictability through better understanding and quantitative measurement.' - is the implication here that outputs from your research may enable alternative methods (in silico or in vitro) to be improved thereby contributing to 3Rs? If so, would it be helpful to state explicitly here that there may be improvements to non-animal approaches (this comes through in next sentence but appears to be a separate line of work with human subjects).

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. Applications for Amendments to Project Licences requiring full committee review

3.1. , Regulation of Basement Membrane Function in Health & Disease.

Considered: A Home Office amendment summary sheet and highlighted revised project licence.

Interviewed:

Committee discussion: •

The committee were informed that the amendment has been deemed to require full committee review rather than be considered by the amendment subgroup because of the nature of the amendment.

Discussed with • applicant:

- The Chair asked for reassurance from the licence holder that the amendments did not change the severity banding. It was explained that from the information they had received from their collaborator a moderate banding was appropriate, and it was not expected to reach a severe level.
- The researcher explained more about how the window is attached to the animal and the mitigations that are in place for any displacement or damage to the window, or to the animals. The committee were reassured that the use of a purse-string suture ensures the window is kept in place.
- As outlined in the revision section below, the licence holder was asked to clarify the Humane End Points and revise the licence accordingly.
- Single housing was discussed and advice given on how to reduce the incidence of this and/or limit stress to the animals when single housing is used. This included increasing enrichment, use of bedding from the shared cage, and housing the animals close to the group cage they came from.
- The NACWO explained that there are specific cards in the animal unit which flag the presence of aged mice to the technicians so that extra checks can be made.
- The reduction of the maximum age of the hemizygous male Col4a5 tm1b mice from 12 to 6 months was welcomed.

Feedback to applicant: • The committee thank you for showing a video of a mouse with the transdermal GFR measurement system in place.

Revisions: •

- Consider updating aspects of the NTS to concisely reflect these changes, amending the "what will be done to the animals", "adverse effects" and refinements sections.
- Page 5 is a commercial company name; generally we try to anonymise NTS as they are public records. You may wish to consider just referring to the device as a 'transdermal GFR measurement system'?
- Page 5. "In experiments when the interventions are mild or moderate will follow the progress of mice". Please check as something not quite clear with the sentence.

- Page 30 The NACWO queried if the 'mild' rating for aged mice was appropriate as a moderate banding is usually associated with aged mice. Please discuss with accordingly. The weight loss of up to 20% may also require the banding to be moderate rather than mild.
- Page 32 Please revise the Humane End Points so that it is clear that
 the HEP is if a tumour is seen, as 'increased incidence of tumour
 formation' which may imply the HEP is for the appearance of more
 than one tumour.
- As discussed in the meeting, please consider whether inclusion of an adverse event of the animal interfering with the window could be
- Please speak with the NACWO and NVS about revising wording in the amendment to ensure it is clear when single housing may occur and what mitigation measures such as environmental enrichments may be put in place, e.g. the use of bedding from the group cage to the animals have a familiar smell.

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

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. Some changes had occurred since the papers for the meeting had been circulated including ASRU asking ac couple of applicants for revisions.
- 4.2. Licence applications have been scheduled in for AWERB meetings up to May 2025.

5. Director and NACWO report

5.1. The committee were provided with a document outlining some key updates from the Director covering Strategic Initiatives, Operational Updates and Ongoing Projects and Feasibility Studies.



- 5.4. ASRU have reported that they plan to increase the number of Home Office Inspectors by 30% which should be in place by April 2025.
- 5.5. ASRU are in the process of writing guidance on the most common non-compliances and providing this to institutions.



6. UPDATE: Cat C Dissection of pithed frog (Rana or Xenopus) practical

6.1. The Chair provided the members with an update regarding the proposed practical using frogs. Some progress has been made in finding an appropriate method of humane killing which would resolve the ethical concerns and which provides the students with a functional frog nerve. However, the approach has not yet been tested and may not be wholly suitable for the learning objectives as they are currently framed. The Chair noted the need for AWERB to take a decision on this in December or January at the latest; the Chair committed to following up with the applicant to learn when the proposed compromise could be tested.

Action: The Chair will contact the practical lead for an update.

7. UPDATE: Away days

- 7.1. Dates are now in the calendar for the next three 'away days'. The plan at present is to have two meetings fixed so people can plan around them, but have the other two per calendar year subject to change.
- 7.2. If people have topics that want to raise at future away days then can contact the Secretary or the Chair.

8. Any other business

8.1. AWERB SharePoint site

The site is being populated with information for the members including slides from external meetings that the Chair or animal unit staff may attend, and also resources that may be useful. The members are encouraged to look at the information.

8.2. Culture of care

Culture of care will be a new standing item on the agenda. A decision on if this should be considered monthly or quarterly needs to be made.

The next meeting will be on 12 December 2024 at 10am-12.30pm.

Dates of meetings for the 2024/2025 academic year are:

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