

**ANIMAL WELFARE AND ETHICAL REVIEW BODY**

**Minutes of the meeting held on 27 March 2025**

Present:

[REDACTED]

Apologies:

[REDACTED]

In attendance:

[REDACTED]

**1. Minutes**

*Agreed:* That the minutes of the meeting held on 27 February 2025 were approved, subject to an update to note that [REDACTED] left the meeting when [REDACTED] met with AWERB regarding his project licence application.

**2. Applications for New Project Licences**

**2.1. [REDACTED], Circadian Regulation of Behaviour, Physiology & Metabolism**

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

*Interviewed:* [REDACTED]

*Committee discussion:* • The Chair asked the NACWOs present if the mention of decapitated was acceptable and was informed it was.

*Discussed with applicant:* • AWERB raised single housing and queried how frequently this would be allowed to occur up to 3 months. The applicant explained that it would be rare to single house animals for 3 months, and where the animals are housed is important. The animals would be in open top

cages and not on the usual ventilation system, therefore they would be able to smell the other animals and not be isolated.

- The use of tamoxifen and alternatives were explored.
- The Chair asked about acclimatization and habituation, and what, if any, the differences are. The applicant explained that when he uses the terms he is thinking of habituation as getting used to injections and handling, so that the animals do not find it stressful after a while. Acclimatization would be getting used to the set-up of a new cage.

*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.

- AWERB requires more assurance on the use of tamoxifen and why 4-hydroxytamoxifen is not appropriate for your study. AWERB understand that the cost of the drug was not the only explanation for its use and ask that you provide a fuller justification. It would be helpful to know from your previous licence how many animals approached the Humane End Point and had to be culled under this procedure. A concise response is all that is required.
- Page 36, e.g. Protocol 2 - for behavioural assessment e.g. feeding/drinking rhythms, will animals need to be individually housed and if so for how long? - this might be included in Step 4, so could be up to 3 months? Can you give an idea of what sort of experiment would require this.
- Page 63, e.g. Protocol 3 - Regarding humane end points for Modulation of diet - is it correct to compare weight loss of 20% to starting body weight - as if mice have been on high-fat diet for 26 weeks their starting weight would be significantly less - so might you have to cull after a smaller reduction?
- 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] )
  - Some minor comments: can you explain what Wave breeding and bioluminescence are for a lay audience?
  - Page 3 - endogenous - would internal be simpler and less technical?
  - Page 3 - "... outputs from our work have, and will continue to inform on the use of timed feeding, specific light interventions and improvement of behavioural routine to achieve health benefits. Benefits will include the identification of molecular targets at which new pharmaceutical products could be aimed." - is this human (clinical) and animal (veterinary, animal welfare)?
  - Page 4 - Outreach activities' - outreach is a dated term and often associated with linear dissemination. Could you consider 'Engagement'?
  - Page 5 - has access to' - shift in sense here could you rephrase to be more active? e.g. will use
  - Page 5 – Please can you define diurnal as this is technical.
  - Page 7, Reduction - for mice number of animals is stated as 13500, which is the same as number of mice bred. So does this

mean that only in-house bred animals will be used and none purchased externally?

- Page 8 Can you explain how the development of genetic reporters can reduce animal use?
- Page 8 - "in animal behaviour and physiology" - consider adding welfare?
- Page 8 - energy balance, systemic energy homeostasis, cardiac function, and neural-peripheral tissue interactions' introduces several technical terms. Arguably the sentence works very well without the examples and deleting the examples may therefore improve the NTS

*Outcome:* The Chair asked members to discuss the harm – benefit analysis and confirm they were satisfied with it in relation to the proposed licence. The Chair asked members to discuss and confirm they were satisfied with the implementation of the 3Rs. 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], Development & Validation of Animal Models for Neurodevelopmental Disorders**

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

*Interviewed:* [REDACTED]

*Committee discussion:* The statistician confirmed he was happy with the experimental design.

*Discussed with applicant:*

- Single housing was discussed with the applicant who explained that they try to avoid doing this.
- AWERB explained that more information is required on what constitutes a 'mild stressor' and that frequencies and durations were needed to be included in the licence.
- The Chair queried the mention of enrichment as the wording implied it was not always used, however the applicant explained that home cages always had enrichment.

*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.

- Might the title benefit from addition of 'with' to read 'Further development and validation of animal models for neurodevelopmental disorders with a focus on mechanisms and testing therapeutic interventions'?
- Please include a list of what the mild stressors may be, but we advise that you word it so that it is not restrictive. Please seek advice from the Named Persons in the [REDACTED] for this.
- With regards the mild stressor, information on frequency and duration need to be included in the licence.
- Please ensure to make it absolutely clear that you do not use intend to use any form of forced swimming.

- Any mention of the LASA guidelines should be removed and replaced by the current guidance Joint Working Group on Refinement. It is important we align our activities with the latest advice and guidance. Please consult with the NIO(s) if you require assistance on this.
- Please check the consistency for the [REDACTED] grant award - sometimes £1.2 million, sometimes £1.3 million.
- Page 16 of 60 - "Schizophrenia presents a personal burden to the sufferer and an economic burden to society, estimated at £11.8 billion per year in the UK. Schizophrenia is rated as one of the top 25 leading causes of disability worldwide." - it is not uncommon for PPLs to also state this kind of information briefly in the NTS to convey the importance of the work (Q of importance under aims).
- Page 20 of 60 - "working with a collaborator on the [REDACTED] grant utilising human microglia cells (hiPSC) to complement the animal work" – Please seek advice from the Named Persons if this should this be mentioned briefly in NTS.
- Page 48 - Protocol 2 - Step 4 - for food intake studies will rats be housed individually and if so for how long?
- Page 44 - Protocol 2 - for exposure to stressors "animals will receive systemic administration of agents" subsequent list is board in the types of exposures/treatments given. Should they all be grouped together - surely possible adverse effects are very distinct??
- Page 50 - for behavioural tests how often will tests be repeated if any and how often will rats be food restricted?
- Page 52 – the adverse effects for step 8 are all associated with anaesthesia. Would there be some due to the actual EEG brain measurements as well? "electrodes lowered into brain to require depth"
- 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])
  - Page 3 - "In this regard, the 'Second-Hit' appears critical for exaggeration of a pre-existing risk." - may need rewording in STS to be clear. Is Second Hit a scientific concept and is that why it is capitalized? Does it refer to stress during puberty? May be better to explain this in non-expert terms clearly.
  - Page 3 - Would it be possible to express the benefits with projected timescale; e.g. short, medium and long-term indicating which are expected within time-frame of this project and which not? Particularly for NTS it is important to provide some clarity as to what is realistically achievable as well as where it is expected to go in the longer term.
  - Page 6 - "We did not consider" - perhaps better to say "We cannot use non-animal alternatives" as the latter would be more accurate and avoid your meaning being misrepresented. The fact you know NAMs do not exist implies you did consider because you have checked this and will continue to monitor the area.
  - Page 7 – please briefly explain crack it for non-expert.

- Page 8 - Can you explain how have you improved the methods of restraint - as mentioned in the NTS? Is it possible to conduct procedures without using restraint at all by habituating the animals? Would restraint be more stressful in pregnant animals?

*Outcome:* The Chair invited members to discuss and confirm they were satisfied with the harm – benefit analysis.

The Chair invited members to discuss and confirm they were satisfied with the implementation of the 3Rs.

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. [REDACTED], Immune & Inflammatory Mechanisms in Cerebrovascular Disease.

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

*Interviewed:* [REDACTED]

*Discussed with licence holder:*

- AWERB discussed in depth the use of Freund's complete adjuvant vs incomplete adjuvant in Collagen induced arthritis model. The licence holder explained he is following a protocol of a colleague who he will seek advice from.
- The Chair questioned the licence holder if AWERB could have foreseen the need for the two surgeries to be done at different times. The licence holder explained that with the new technology they were using they could not have foreseen that time would be needed for the electrodes to 'settle down' before induction of a stroke. The licence holder explained that researchers should be encouraged to make changes to protocols if they learn as they are being informed by evidence of carrying it out, and in this instance, while an animal will undergo 2 surgeries instead of one combining the implantation of the electrodes and induction of a stroke, by splitting them the surgeries are shorter improving recovery and animals can adjust to the wearing the head-mounted transmitter prior to induction of a stroke.

- Revisions:*
- Please discuss the necessity of the use of Freund's complete adjuvant further with [REDACTED]. AWERB understand that the current advice is that incomplete adjuvant is used for collagen boosters. Depending on the outcome of the discussion it may be beneficial to use the wording 'suitable effective adjuvant' instead.
  - Page 72, 117, 159, 201, 308 and 349 - The additional co-morbidities plus the induction of stroke should also be stated in the Animal experience sections.
  - Page 5 - Can we expect a non-expert reader to know what "systemic sclerosis" is? Is there a less technical term or concise explanation that could be used?

*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. Report on licences processed from 13/02/25 to 11/03/25**

The following amendments were approved by the executive committee.

##### **4.1. Amendments to Project Licences**

[REDACTED], Brain Immune Responses Driving Behavioural Symptoms Associated With Mild Traumatic Brain Injury (mTBI) & Repeated mTBI (rmTBI).

[REDACTED], Understanding Gene Function in Cardiovascular Disease.

[REDACTED], Cell Therapy for Muscular Dystrophy with Generically Corrected Cells.

[REDACTED], Molecular Basis of Infection-Induced Sickness Behaviour

[REDACTED], Immunomodulation in Cancer

[REDACTED], Inflammation in Parasitic Worm Infection & Allergic Disease

[REDACTED], Genetic & External Influences on Regulation of the Immune System

A discussion took place about the fact that two of the amendments are from [REDACTED] whose project licences have moved to the University of Edinburgh with additional availability at the University of Manchester to allow the programmes of work to wind down what he was overseeing here. The amendment subgroup was sufficiently confident that the individual he has nominated to be overseeing this wind-down process has the ability to do so.

##### **4.2. Applications for Category B work**

[REDACTED], Sex Differences in Inflammation Across the Lifespan.

A discussion took place about whether the student would be able to complete this work if they were in the UK. The Compliance and Licensing Manager agreed that it would be likely that this research could be completed in the UK under ASPA and added that the individual is going to an AAALAC accredited establishment, so there are additional checks and balances over and above any standard USA establishment. This gave the Category B subgroup assurance that the work is being overseen by suitably qualified individuals.

#### **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 committee discussed the issue that main AWERB meeting slots are full until December 2025 and that there may be a point where there has to be reapplications for a meeting. The Chair explained the need for the Committee to have the time required to fully consider PPLs and that it would be quite a push to consider three in one meeting for the large majority of cases. The Committee agreed, concluding that there may need to

be a creative approach to dealing with the increasing numbers of PPLs in the future that could entail restructuring the way AWERB works and/or substantially increasing membership. AWERB will keep the matter under review.

## **6. Estates Update**

- 6.1.** The Interim Deputy Director of [REDACTED] provided a brief update on the issues concerning the estates team:
- [REDACTED] have had a number of meetings with Estates.
  - Work has been completed for the air handling units.
  - There is currently an ongoing discussion with estates about the concerns of potential minus temperatures and avoiding the same situation as in January.
  - Some of the spare parts have arrived, but it is proving difficult to obtain the more bespoke parts speedily due to their being custom produced.
  - A discussion has taken place concerning cleaning and thorough servicing of parts to avoid them breaking.
  - The Estates team have noted that some of the kit is outside. They are covered from above and at the top, but underneath it is open to the elements so at times they are exposed to freezing temperatures. There have been ongoing discussions about getting insulation underneath to allow the parts to potentially withstand much lower temperatures, but again this will take time.
- 6.2.** The Chair noted particular concern that the absence the bespoke parts heightened risk. If it is going to take time to obtain the parts, it would be wise that spares be kept on site so that a timely fix can be made should an issue occur. The Interim Deputy Director agreed and explained that this was the situation we were working toward.
- 6.3.** The Chair asked whether the dedicated estates liaison individual is in place. The Interim Deputy Director stated that he is, but his workload has not necessarily been reduced, and she is not sure whether other individuals in estates know that they should be speaking to the individual about [REDACTED] issues. The Chair raised the issue of rebalancing the liaison contact's workload at the EAG to enable him to focus on the [REDACTED] but this appears to be taking some time. The Interim Deputy Director agreed.
- 6.4.** The Chair concluded that the relations between the [REDACTED] and Estates appeared to be heading in the right direction, albeit slowly.

## **7. Standard Conditions 18s and non-compliances**

- 7.1.** The committee were provided with a table of reports submitted to ASRU along with a narrative account for each incident.
- 7.2.** The Compliance and Licensing Manager explained how the narrative account is generated: If there has been and SC18s in the last 3 months, he looks back at the preceding 12 months to identify any patterns, as 3 months is not a sufficiently long period. There are certain project licences that will naturally have more SC18s because of them working with more animals or the fact that the work is more challenging.
- 7.3.** The Compliance and Licensing Manager reported that for this period there was no pattern to the SC18s except for the complexity of work or the animal numbers. The Chair noted that the summary was particularly useful and thanked the Compliance and Licensing Manager for the time and effort spent on this.
- 7.4.** The Compliance and Licensing Manager reported that there were three non-compliances that were concluded by ASRU. Two of these were inspector advice only. These were considered to be self-reported and there was no additional welfare impact.

- 7.5. The more serious non-compliance to note was where an individual was subject to a letter of reprimand as there were avoidable welfare impacts. One mouse was left without food and had to be humanely culled. This was not through wilful neglect, but through error and miscommunication. The individual has been fully retrained, has engaged with the investigation fully and was accepting of their role. There has been no suggestion of concern about their engagement and working practices since. In addition, the SOP on food withholding has been revised, as well as the notation on cages to make it absolutely clear that food has been intentionally withheld and the intended time point at which food will be returned. This strengthens communication between researchers and technicians and assists technicians undertaking routine checks.
- 7.6. The Chair questioned whether this information can be clearly presented for the Quality Assurance report presented to the Research Compliance Committee. The Compliance and Licensing Manager agreed to update the report for clarity.
- 7.7. The Chair also praised the honesty and transparency of reporting across the research community [REDACTED] which is essential in enabling our learning and improvement. The Chair suggested that, henceforth, AWERB minute their gratitude for transparency and cooperation and ensure this is communicated to the individuals concerned for SC18s and non-compliances as appropriate. The Committee agreed.

## **8. Any other business**

### **8.1. RSPCA/LASA/LAVA/IAT AWERB-UK meeting 2025**

There is an upcoming RSPCA/LASA/LAVA/IAT AWERB-UK meeting on the 18<sup>th</sup> June discussing the strengthening AWERBs, specifically looking at resources, engagement and recognition for AWERB work. The Chair will attend and opened the invite to other committee members. The Chair added that he is trying to put together a dedicated AWERB budget going forward so that the Committee are fully resourced to be able to attend key meetings such as this and their other activities.

### **8.2. AWERB Away Day – [REDACTED]**

The upcoming away day will be held in the [REDACTED] [REDACTED] [REDACTED] has been invited to present, and some time will be spent by the committee to clarify the role of governance of animal research at the university, specifically an AWERB-led audit [REDACTED] which is important for AAALAC. It was also agreed that members of the subgroups would be invited to future away days to promote further structural cohesion.

### **8.3. Clarification of Subgroup Structure**

The Chair expressed a need to clarify the subgroup structure and the way in which the main AWERB delegates tasks. It must also be ensured that each of these subgroups have terms of reference and an updated members list. This topic will be discussed at the away day.

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**The next meeting will be on 24 April 2025 at 10am-12.30pm.**

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



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  
29 January 2026  
26 February 2026  
26 March 2026  
30 April 2026  
28 May 2026  
25 June 2026  
30 July 2026

**Dates of meetings for the 2026/2027 academic year are:**

24 September 2026  
22 October 2026  
19 November 2026  
17 December 2026  
28 January 2027  
25 February 2027  
25 March 2027  
29 April 2027  
27 May 2027  
24 June 2027  
29 July 2027