
Minutes: AWERB

Status: Chair approved

Meeting held: 1 October 2019

Present

Attendees: 10 plus 2 in attendance, 3 by invitation, 10 apologies.

1 WELCOME

The Chair welcomed everyone to the meeting including a technician who was attending the meeting as an observer.

2 NEW PPL LICENCE APPLICATION:

An application for a new project licence had been received. This was to replace an existing licence that was due to expire. This new project had a stronger emphasis on *in vitro* (schedule 1) compared to regulated procedures. The project would study the amphibian musculoskeletal system and develop it as a model to understand how healthy limbs evolved to move accurately, rapidly and robustly. The project would also investigate how altered musculoskeletal properties (e.g. due to age, injury or disease) lead to deficits in limb function. The aim was to massively improve understanding of how the nervous system and muscles work together to control limb motion. For effective movement, muscles have intrinsic properties which can modulate interactions with the environment far quicker than processes which involve the brain or spinal cord. As fingers grasp an object or feet move over terrain, such interactions allow limbs to adaptively respond to varying environments or sudden changes. Despite the crucial importance of these limb-environment interactions, they were not well understood. This project aimed to close these gaps in knowledge towards an understanding of healthy limb function and how it changes with age, disease and injury. Scientific outputs would form the basis for future translational applications such as advanced *in vitro* assays that can test efficacy of treatments for musculoskeletal disease and injury.

The following queries were raised:

- Rather than performing *in vivo* experimentation to implant markers in bone or muscle tissue, could motion capture data be used instead to track the motions of frogs as had been done on other animals? The project licence holder confirmed that using external markers did work for some types of motions but not for bone rotating. This needed to be characterised properly. However what they had started doing was using external markers to see if the rotations could be reconstructed and then calculations checked to see if they matched up with the implanted markers. The aim was to refine the mathematical tools used to eliminate markers in bones and do the rest of the reconstruction mathematically and so reduce the need for *in vivo* experimentation in the future.
- What refinements had been made from the previous project licence? The procedure used had been streamlined; the focus was to move over to non-invasive approaches and use

external markers on the animals – the intention was to do computational and predictive modelling, so eliminating some of the experimental conditions.

- One of the adverse effects mentioned was exercise fatigue. Was there an explicit value used to identify exercise fatigue or was it down to researcher interpretation? The project licence holder recognised that this was a subjective element: the effect was generally identified by slower speed locomotion, lethargic movement or refusal to exercise upon stimulation (such as light prodding) by the researcher. Animals were then given time to rest and recover.
- It was noted that the project licence stated that animals would be allowed up to 72 hours to recover following surgery. How would the animals be monitored? How would it be known if they had recovered? How had the time period of 72 hours been decided upon? The researcher explained that this is what had been used for the previous project licence, following advice received. In practice though the animals took no longer than a few hours to recover.

AWERB were concerned that allowing 72 hours for recovery was too long and it was agreed that it should be amended to allow for 24 to 48 hours for monitoring. Recovery also needed to be defined: there did not need to be one definition: timelines should be given for different stages. For example immediate recovery would be drinking and eating; whereas full recovery would be given a different timeline.

AWERB asked that the non-technical summary be re-written so that the work to be done was explained in a more lay friendly manner as currently it was too technical.

The project licence holder was thanked for attending. After he had left the licence was further discussed. A query was raised about the statistical analysis that had been used to determine the number of animals required. The project licence holder would be asked to reference the test that he had used.

AWERB confirmed that they were happy in principle with the proposed licence.

3 PROJECT LICENCE AMENDMENT

The project licence holder was welcomed to the meeting and the proposed amendment discussed. The amendment involved adding an extra surgery and changing the duration of the study in order to give the animals more time to recover so they could be studied for any long term physical/structural changes. AWERB were in principle supportive of the amendment, feeling that it was a logical step to take. However, it was decided to recommend that an adverse effect related to device removal be added to the licence. There was the possibility of a seroma developing and that if it did the animals should be monitored to make sure that it did not grow and become infected; and if the seroma caused concern, the licence should set out what action should be taken.

4 VIRTUAL BSU

The Chair reported that the virtual BSU tours for Camden and Hawkshead had been completed for those areas that had not been refurbished. Those areas that had been refurbished still needed to be done. The contract with the contractor who did the work needed to be finalised though as some issues had been raised. The project was therefore not finished. It was noted that another department had received an internal grant to put together virtual tours. Further information would be found out to see if there was opportunity to use the same equipment so that the project could be completed.

5 INFORMATION DISSEMINATION

5.1 AWERB Hub Chairs Workshop

It was noted that the AWERB Hub Chairs had held a workshop in March 2019. The aim of the workshop included sharing and discussing key aspects of the role and operation of an AWERB.

AWERB would review the report and identify if there were any suggestions in the report that this AWERB should implement.

6 NACWO REPORT

6.1 Camden report

6.1.1 Cladding

The cladding work was progressing but that the work was proving to be very noisy from all the drilling. Problems had been encountered which had resulted in the work being temporarily stopped. The NACWOs were undertaking additional monitoring of the affected animals.

The work had originally been due to finish at the end of October but it was likely that it would last for another month.

6.1.2 Condition 18 reports

Two condition 18 reports have been submitted to the Home Office. Post mortems have been carried out but no obvious reasons had been identified that had caused the deaths.

6.1.3 Ferret group

The yellow floor was currently housing rodents as well as ferrets. In order to combat smells and control biosecurity, consideration had been given on how best to transfer the ferrets from their holding room to procedure room without stressing them out. The solution was to purchase cat back pack carriers which the ferrets were really liking as it meant they could see out whilst they were being transported but were also protected. This showed that expensive solutions were not always needed.

6.2 Hawkshead

6.2.1 Animal Welfare Barn

There had been fan failures in Rooms 7 and 8 of the animal welfare barn. The final engineer's report had not yet been received but discussions have been held about the possible cause. Actions have been put in place to address the possible factors that might have caused the fan failures.

6.2.2 New fencing

New fencing for the horse and dog areas was being installed.

7 NVS REPORT

There had been a change to the NVS support for Camden and BSU, with the NVS having joined the BSU Management Team and would also be helping with the Home Office courses training and bringing in new techniques into the College.

8 ESTATES

8.1 Hawkshead

8.1.1 Autoclave/cage wash

This was still not working. Tests were being undertaken that week to try to get it to run.

8.1.2 Pavement

The pavement by the gate area was very rough and there was concern that people could trip. Estates have tried to repair the area.

8.1.3 H60 dog area and theatre

Mats had been placed for biosecurity.

8.1.4 Power outage

Power outage was scheduled for that weekend which would affect the welfare barn. Discussions were being held with estates to make sure that there was power for the crucial areas.

9 PROJECT LICENCES AMENDMENTS APPROVED BY THE HOME OFFICE

AWERB noted that there had been one project licence amendment approved by the Home Office.

10 PROJECT LICENCES – MID TERM PROJECTS NOT YET RECEIVED

AWERB were disappointed that a mid term review that had been requested for the February meeting still had not been received. The Chair of AWERB would send a reminder.

11 PROJECT LICENCES – END OF PROJECT REPORTS

Two end of project licence reports had been received, both of which were very high quality and the AWERB reviewers had been very happy with them.

11.1 Project Licences – End of Project reports

AWERB were very disappointed that two end of project licence reports that had expired back in February and April still had not been received. The Chair of AWERB would speak to the Establishment Licence Holder about how to handle these.

12 ASSESSORS LIST REVIEW

It was confirmed that this list was up to date. It was agreed that at the next meeting there would be a report on how the list worked and a run down given of the training provided to assessors.

13 MINUTES

The minutes of the meeting held on 3 September 2019 were confirmed as an accurate record.

14 ACTION UPDATE

14.1 Item 9: Dog rehoming pamphlet (April 2019 meeting)

This had been circulated to AWERB for comment. AWERB's consensus was that this looked very good.

14.2 Item 7: Checklist for reviewing project licences (April 2019 meeting)

The latest version would be reviewed. Once approved it would be placed on the intranet.

14.3 Item 9: Companion Animals query (June 2019 meeting)

Purchasing a plastic pig was discussed again. Although they were expensive (over £1000) it was felt that this might be a worthwhile investment, particularly as it would avoid having to bring in a companion pig. It was suggested that this could be held as a RP2 enrichment project for a student. The projects required an academic to be a supervisor.

14.4 Item 8.2: Animal Suppliers (June 2019 meeting)

The questionnaire had been finalised and circulated to suppliers. A copy of the questionnaire would be circulated to AWERB and the responses that were being received.

15 ANY OTHER BUSINESS

15.1 3Rs

It was agreed that this should be a standing item on the AWERB agenda. It would be an opportunity to have a discussion about 3Rs, such as drawing attention to items from the NC3Rs newsletter and activities that were being organised.

15.2 Meeting feedback

Members were asked for feedback on the meeting and whether any changes were needed on how they were organised. The consensus was that it was felt that the meetings worked well and no significant changes were needed.

15.3 Date of next meeting

This was scheduled for 5 November at 2pm.

Secretary, 8 October 2019