

### Minutes: AWERB

**Status:** Chair approved

**Meeting held:** 17 April 2018 at 2pm in Hawkshead Council Room videolinked to U5 Camden

Attendees: 9 members present; 2 in attendance; 6 apologies

## 1 MINUTES OF PREVIOUS MEETINGS

The minutes of the meeting held on 29 March 2018 were confirmed as an accurate record.

## 2 UPDATE ON ACTIONS

2.1 Item 1.1: Environmental Audit Report (March 2018 meeting)

A meeting would be arranged to put together a development plan and to also discuss potential BSc projects that could be offered in the autumn to investigate enrichment options.

**2.2** Item 5.3: Refresher training for project licence holders workshop (March 2018 meeting) This was being written and would incorporate a section on ASRU compliance. It would be a taught course (rather than an online course).

## 2.3 Item 6: Lab Animal Welfare Question (March 2018 meeting) Academics had been approached to see if they were interested in joining the working group to co-ordinate the proposed event.

#### 2.4 Item 7.3: Rabbits (March 2018 meeting)

Estates had been contacted for their advice on how to deal with the increasing numbers of rabbits in the fields, but waiting a response.

2.5 Item 8: Sharing Resources (March 2018 meeting)

The figures for Hawkshead were in the process of being calculated for the period January to March 2018. There have been several conversations about sharing animal tissues and more opportunities were being identified which was good to see and encouraging as it was good animal management to use animals to their full potential as well as endorsing 3Rs.

#### 2.6 Item 9: Training records (March 2018 meeting)

A copy of the database that had been set up to record the skills in BSU would come to the May AWERB meeting. There were a lot of skills in the units which needed to be utilised and these skills would be promoted as well as an opportunity to use staffing resources better. It was also a key way of identifying where there was a shortfall of skills. The database would be promoted within the College so that researchers would be aware of the skills that the technicians can offer.

#### 2.7 Item 5: Fish (January 2018 meeting)

The whole fish facility was in the process of being reviewed. The aim was to revamp and upgrade it and to look at the processes to see how they could be improved.

### 3 MID TERM REVIEW

Two mid term reviews had been submitted.

For the first review, it was noted that work from this project licence had been published and presented to veterinary surgeons and the outcomes had been advertised by the funders. There was discussion whether an amendment to the project licence should be classed as an animal refinement or an experimental refinement, with the consensus being that it was an experimental refinement.

For the second review, there was discussion about actual severity recording and it was agreed that actual severity recording should be added as an element to the refresher training for project licence holders that was being arranged.

### 4 END OF PROJECT REPORTS

One end of project licence report had been received. One of the main goals for this project licence was to perform the natural history study as a baseline for future therapeutic tests. Pilot studies had subsequently been initiated for the first experimental therapeutic study.

## 5 WORKING GROUPS

There were no updates for the working groups.

### 6 NVS REPORTS

It was noted that a suturing workshop had been organised.

# 7 ESTATES ISSUES

#### 7.1 Water ingress: Camden

The cladding was due to be replaced but no timescale had been indicated by estates due to the renovation works taking place in the Hobday building. There had been heavy rain during the previous weekend but there had been no reports of any further leaks, so it looked like the ingress was linked to the duration of the rain.

#### 7.2 Pallets: Camden

Pallets had been left outside BSU, but it was not known who had left them there. These had been reported as a fire risk.

#### 7.3 H60: Hawkshead

Refurbishment for H60 was continuing.

**7.4 Finishing cage wash: Hawkshead** This was now back on line

#### 7.5 Pigeon netting: Hawkshead

The pigeon netting for the remaining barn was due to installed shortly.

## 7.6 Animal Welfare Barn

This was nearly finished. Data was being collected and technicians were being trained. Following a validation period then the barn could be used again.

### 8 PRESENTATION BY NEW PROJECT LICENCE HOLDER

The new Project Licence Holder was welcomed to the meeting, as well as one of the scientists that had been involved in reviewing the project licence on behalf of AWERB, who had provided a scientist's perspective to the planned work.

It was explained that the work from this project licence, was continuation of work from a project licence that was due to expire. Infectious diseases compromise chicken meat and egg production, causing severe welfare problems and are a source of human zoonotic disease. This project aimed to address fundamental issues related to control of poultry infectious disease with an emphasis on parasites with the greatest impact on broiler (coccidial parasites of the species Eimeria) and layer (the poultry red mite Dermanyssus gallinae) chickens. A mouse model for the study of poultry red mite would also be developed to provide an efficient methodology for testing vaccine efficacy.

The following queries were raised:

- Would any of the drugs be novel? No, as the focus was not on testing new drugs.
- AWERB noted that the intention was to house some of the mice individually in adapted transport containers for research purposes. Their recommendation was to avoid this and to ensure that the mice were always in pairs. If the mice did need to be individually housed then justification would need to be included about why this was required.
- Could the mice be kept in adapted transport cages during the whole project rather than having to keep transferring the mice in and out as that would be stressful to the mice? It was explained that the containers were not suitable to keep the mice in all of the time.
- The option of IVC cages instead of the transport boxes was suggested. It was explained that as these had not been used in the pilot the preference was to continue to use the transport boxes. The idea however would be kept under consideration in order to reduce the need to consistently move mice from cage to cage.
- Was it possible to use blood sources from mice that had already died to avoid exposing live mice? This had been looked into but the figures had proved so variable it was not justifiable to do.
- Clarity was needed on the observation time points so that it indicated that there would be increased monitoring. This section would be rewritten to make it clearer.
- The non-technical summary included a lot of technical language. This should be rewritten to make it easier for lay people to understand.

#### Discussion after the project licence holder had left the meeting

AWERB were of the consensus that this project was worthwhile and that they were comfortable with the risk/benefit analysis. The diseases that this project licence would be working on were all endemic problems for chickens so it was justified to do this research in order to advance treatment and preventative measures.

As this work was carrying on from existing work, the first section of the project licence should set out the work that had been done under the previous project licence and what the next stages were and why this work should continue. This rationale in particular should be very clear and straightforward.

## 9 QUERY FROM PROJECT LICENCE HOLDER

The Project Licence Holder explained that the project sponsor was currently working on the first human clinical trial designs prior to a meeting with MHRA. Looking ahead it was anticipated that MHRA may state that prior to running a human trial a similar multiple dose tolerance study in sheep would be required. AWERB were therefore being asked whether they would approve an amendment to the project licence to enable that to happen. By approving this amendment now it would enable work to be started as soon as possible after the meeting with MHRA if they did ask for a multiple dose tolerance study.

Several potential issues were raised and discussed, with AWERB's conclusions being:

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- The study was still in development stage as not got a formulation yet.
- An amendment should not be applied for until the meeting with MHRA had been held and their requirements were known. Project licence amendments involved a lot of work for both the AWERB and also the Home Office. Amendments should therefore not be applied for just in case they were required as it was asking the Home Office to do work that might not be necessary.
- A scientific rationale was required for the time period between doing the injections.
- The bigger a gap between each anaesthesia the better. Ideally for animal welfare this should be a minimum of 3 days over a 10 days period.
- The compound had not yet passed quality control (QC), although the project licence holders were confident that the next batch would pass QC as the supplier of the finished product had been changed.

# 10 PROJECT LICENCE - DISCUSSION

The project licence holders were welcomed to the meeting. AWERB were reminded that they had originally attended the meeting in January to discuss an amendment to the project licence. They were attending this time to provide an update on the further work that had been carried out under this project licence.

AWERB were reminded that the aim of this project licence was to augment or reconstruct the bladder using a segment of vascularised intestine/bowel. Such an operation (called enterocystoplasty) was used in current surgical practice, but has severe side effects because the epithelial lining of the intestine/bowel was mucus producing and absorptive, compared to the natural lining of the bladder (called urothelium) which provided a urinary barrier. To get round these problems, the scientists have devised "composite cystoplasty" where the lining of the bowel/intestine segment used to augment/reconstruct the bladder is removed and replaced by barrier forming cells grown in the laboratory. This has been successfully achieved in healthy pigs using in vitro generated autologous pig urothelium; but in order to build evidence for clinical trials in human patients, the technique needed to be tested using suitable in vitro-propagated human cells.

The requested amendment to the project licence had been approved by the Home Office and another surgery had been carried out on a pig. However the pig had started straining again, this time several hours after surgery. The NVS and the Home Office Inspector had been consulted for approval to try interventions to stop the straining, which were approved. Initially the volume in the catheter was reduced but this did not result in any noticeable difference; however following the administration of an anti spasmodic drug there was improvement.

A number of discussions had since taken place on how to progress with the study. AWERB stressed that the complications that had been experienced with the project did need to be properly addressed. Discussion was also needed about whether it was justified to carry on with this work. To continue with this project would take time and money. Were these available? Was the investment worth it scientifically? What was important was to resolve these issues. This should be done without changing the severity of the project licence from moderate to severe and the end points should remain the same.

AWERB asked the following questions:

- What caused the pigs to strain? The first 2 pigs had strained but in a different way to the last pig but a different catheter had been used. What therefore were the differences in the cathetisation of the pigs?
- How much fluid was needed in the balloon? The amount of fluid in the balloon was different between the 3 animals. The aim was to fill the balloon enough so that the graft was stretched and to have a similar amount of pressure on the bladder wall. It was important to ensure graft survival and integration. The size of the graft did not matter provided it was between 5 and 10 cm.

The project licence holders were thanked for attending the meeting. They were asked to put together a proper plan and to come back to AWERB with their recommendations for AWERB to review. Once AWERB were happy with it, then it should go to the Home Office for review.

# 11 DATE OF NEXT MEETING

This was scheduled for 17 May 2018.

Secretary 01 May 2018