

**Minutes:** AWERB summary minutes

**Status:** Chair approved

Meeting held: 08 April 2020 at 10am

Present

Attendees: 10, plus 1 in attendance, 3 by invitation and 7 apologies.

#### 1 WELCOME

Attendees were welcomed to the meeting. It was explained that these AWERB meetings would continue during the lockdown as it was important that AWERB were able to keep an eye on what was going on in the units and hear reports back on the welfare of the animals and how staffing levels were holding up. It was also important to continue reviewing Home Office project licence applications and amendments so that when things did get back to normal, there was no hold up on planned work.

An emergency plan had been introduced in the units from 18 March 2020.

All new studies and any surgeries had been postponed until further notice. Ongoing and recently commenced studies had been reviewed with the relevant individual users to see what the impact of either postponing the work or continuing was. Where possible studies that had already started would be completed, as animals had already been used, so it was important not to have wasted these animals.

The only exception to starting new studies would be any research that was related to COVID19. A number of enquiries had been received in running studies in these areas and several grant applications were being submitted.

### 2 PRESENTATION FROM PROJECT LICENCE HOLDER

An application for a new project licence had been received. The researchers explained that their research programmes focused on the development of potentially curative treatments for several monogenetic disorders and rare diseases, using advances in gene therapy technology. They were extending their focus to different inherited and immune-mediated disorders, using new vector design that enabled therapeutic expression of transgenic protein in appropriate mouse models without toxicity. Their goal was to develop novel gene therapy approaches for monogenetic disorders as well as immune system-mediated disorders using novel vector design to achieve a therapeutic expression of transgenic proteins following a single dose of AAV vector in appropriate murine models without toxicity.

Initial comments by AWERB had been forwarded to the researchers, who had responded. AWERB were asked if they had any follow-on queries. The following were raised:

A general question was asked as to whether AAV delivered gene therapy would still be a
competitive treatment option if gene editing techniques were introduced widely for
correcting genetic disorders. The project licence holder advised that whilst gene editing held

great promise, the use of AAVs has proved effective and with refinements and its targeted use would continue to have a place for many years to come – thus this work was needed and had chance of yielding lasting benefits for human medicine

- A query was raised on including both monogenetic and acquired diseases in the same project licence: it was hard to understand how these were related. What linked them apart from the therapeutic approach? Would it be more logical to have these as separate PPLs? There were instances in the project outlines and general principles where only monogenetic diseases were mentioned, leading to a lack of consistency and confusion. The project licence holder replied by explaining that immune-mediated disorders were what linked the non-monogenetic diseases in this PPL, and that for business reasons they had chosen immune-regulated diseases as the next approach for validating this gene therapy approach.
- AWERB discussed the acute body weight loss limit in the bleomycin model with the
  researchers. The response to pre-AWERB comments had stated up to 20% weight loss in 72
  hours. AWERB had queried this as it seemed to be extreme. The researchers explained that
  going by experience, in reality this was only ~10% body weight loss on average in this acute
  period. They would amend the project to be a maximum 15% body weight loss in 72h period
- A question on the extent of in vitro work accompanying this licence revealed that in vitro
  work was extensive, covering both validation work on the mechanisms of action of a
  potential AAV, as well as in vitro models of disease such as organoids and organ-on-a-chip.
  This would be reflected in the PPL.
- AWERB asked for a further explanation of the 'alternative routes of administration' work that
  was mentioned and why so many different routes in the licence were required. It was
  explained that not all of them would be used however they wanted to have the options
  available in case they were required for future exploratory work and also it was not known if
  they would achieve the same tolerance of effect. It was suggested that an explanation be
  added to say that they were trialling different routes to look at this.

The researchers were thanked for attending the meeting. They were advised that their project licence would be discussed further and that if there were any further comments they would be forwarded on after the meeting.

AWERB agreed that they were happy with the proposed project. They were very impressed that the researchers had taken the comments raised on board and addressed them very well.

# 3 MINUTES

The minutes of the meeting held on 10 March 2020 were agreed to be an accurate record of the meeting.

#### 4 ACTION LOG

# Item 8: Rehoming policy (March 2020 meeting)

The rehoming policy had been updated to include the process that should be followed if an animal developed a chronic health condition prior to being rehomed. A copy of the updated policy would be placed on the intranet.

### 4.1 Item 2: DMD dogs (February 2020 meeting)

It was clarified that the expert that would be invited to the meeting was a dog reproduction specialist.

### 4.2 Item 4: BSU Virtual Tour (October 2019 meeting)

An NDA had now been signed for this work and proposed budget had been discussed. As the company could not currently access the site it had been suggested that the BSU bought its own Go Pro and tripod and did the videoing and then passed the results to the company for them to put together the virtual tour.

### 4.3 Item 12: ARRIVE guidelines (November 2019 meeting)

The two AWERB members had discussed further and decided that they needed the NVS input. They were concerned that the majority of project licence holders did not follow ARRIVE guidelines when writing their papers and it was felt that this was probably because they did not have the required information to hand. This was information that could easily be retrieved though as it should have been recorded as part of pre study meetings. Therefore when project licence holders were preparing their manuscripts they should obtain a copy of this information as it would facilitate some of the information required in the ARRIVE guidelines.

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

It was agreed that the NVS would review the latest version of the checklist and compare it one that had been received from another establishment and also the guidance provided by the Home Office on how to handle retrospective applications to see if there was anything from these documents that should be added to the check list. The document would then be circulated to AWERB for a final review.

### 4.5 Item 9: Companion Animals Query (June 2019 meeting)

An update on how the use of mirrors had gone for the lone pig was deferred to the next meeting.

#### 5 NVS REPORT

- Lame stud dog: A neuro examination had been carried out on the dog and no issues found. An orthopaedic exam had also been carried out which found mild muscle atrophy in the limb but no reason for the lameness. An orthopaedic x-ray needed to be done but this could not currently be carried out as only emergency x-rays were being carried out. The x-rays would be needed before the dog could be rehomed though.
- Horses: one of the horses had an abscess on its foot which had now been drained. The horse had been kept in a stable for 2 weeks but had now been given the all clear to go back into the fields.
  - One of the anatomy horses had got her leg tangled up in a fence causing damage. She had gone to the Equine Hospital for treatment and bandaging and was recovering well.
- One of the DMD dogs was having problems with drinking. Technicians were trialling
  providing the dog with a water thickener. The thicker liquid should travel more slowly down
  the throat so making it easier for the dog to control and direct the fluid towards the stomach.
  This seemed to be working and was maintaining the dog's rehydration status with minimum
  intervention.
- Camden Large Animals: it was confirmed that the cows and horses used for teaching had been moved from Camden back to Hawkshead prior to the lockdown happening.

#### 6 NACWO REPORT

 BSU staff were closely monitoring the ferrets for hormonal changes as the light cycles were being gradually changed which was normal for this time of year.

- An EEG study rat was found with a long cut on the right hand side of its abdomen. It was a
  suspected brush somewhere from the cage so the entire cage was changed and was being
  inspected for any evidence of hazards. The rat seemed well in itself, the wound was dry and
  doesn't look infected. The NVS was being kept up to date with any changes.
- There were ongoing humidity issues around the building. Access to the parameter monitoring system was an ongoing problem. This had been reported to Estates.
- For the moment the staff were fully kitted out in PPE in the unit but masks were running very low.

### 7 3RS UPDATE

- Pan-London 3Rs Symposium had been postponed: it was unlikely that this would be able to take place this year and was more likely to be rescheduled to 2021.
- NC3Rs funding showcase talk 14<sup>th</sup> April 2020: NC3Rs would be giving an overview of the different funding schemes available at the NC3Rs. The NC3Rs offered a range of funding schemes to support projects, early career awards and skills and knowledge transfer. The talk would include how to submit a competitive grant application to the NC3Rs.
- NC3Rs PhD studentships call: The call for NC3Rs PhD Studentship was now open for outline
  applications, deadline 4 May. These supported the training of graduate scientists from a broad range
  of scientific backgrounds within one of the three areas of replacement, reduction and refinement
  and in any area of medical, biological or veterinary research. Studentships were worth up to £30,000
  per year for three years.
- NC3Rs were working on a number of webinar materials to make available to researchers to support them in these current times, for example, it may be that more researchers were taking time to work on project licence or grant applications

# 8 CONDITION 18 REPORT

AWERB noted that a condition 18 report had been submitted to the Home Office.

### 9 NEW PROJECT LICENCES GRANTED BY THE HOME OFFICE

AWERB noted that 4 project licences had been granted by the Home Office since the previous meeting.

# 10 PROJECT LICENCES AMENDED BY THE HOME OFFICE

AWERB noted that one project licence had been amended by the Home Office since the previous meeting.

#### 11 AWERB LONDON HUB MINUTES

AWERB noted the minutes from the AWERB London Hub meeting held on 26<sup>th</sup> February. No one from the RVC had been available to attend.

### 12 DATE OF NEXT MEETING

This was scheduled for 12<sup>th</sup> May at 2pm.

Secretary 8 April 2020