Animal Welfare and Ethical Review Body (AWERB)

22/20 A meeting of the Animal Welfare and Ethical Review Body (AWERB) was held via teams on Thursday 29 September 2022 at 10.00 am.

Present: [Redacted. Sec.40]
[Redacted. Sec.40]
[Redacted. Sec.40]
[Redacted. Sec.40]

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[Redacted. Sec.40]

In attendance: [Redacted. Sec.40] (for Minute 22/23 only) and [Redacted. Sec.40] (for Minute 22/23 only)

Apologies were received from [Redacted. Sec.40] and [Redacted. Sec.40].

The AWERB noted that [Redacted. Sec.40] was now working in a new role at FRAME. The AWERB saw no conflicts of interest with this.

22/21 Minutes of the last meeting

The minutes of the last meeting held on 12 May 2022 were approved as a correct record subject to the addition on 22/13 point 5 of severe.

22/22 Matters Arising

22/12 Input around animal free innovations

It was noted that a meeting had been held and that progress was being made. [Redacted. Sec.40] and [Redacted. Sec.40] had discussed a communication to the wider University to highlight resources in this area on animal free alternatives.

It was agreed that [Redacted. Sec.40] and [Redacted. Sec.40] would speak further with [Redacted. Sec.40] on how best to highlight external resources and share good practice, for e.g. postcard, link/QR code to a list of resources.

Action: [Redacted. Sec.40]**,** [Redacted. Sec.40]**,** [Redacted. Sec.40]

Consideration would also need to be given as to how to evidence change in practice as a result.

22/13 Mid-Term Review and animal lived experience

The AWERB were asked to forward any further changes to the mid-term review to [Redacted. Sec.40].

22/16 Future topics – compassion fatigue and other mental health challenges

It was noted that no progress had been made on this action yet. The AWERB agreed that it would be helpful to understand what other institutions were doing in regard to this item.

22/23 Mid-Term Review

The Board received a presentation from [Redacted. Sec.40] in respect of the current Project Licence – Understanding platelet function and regulation in a Zebrafish model. The following points and questions were noted:

- One of the main changes in the direction of work was the ability to use Zebrafish embryos from day 1 and to not let them go beyond day 5. That approach meant that there was no going beyond the independent feeding point.
- The use of the Zebrafish Embryonic Genotyper (ZEG) enabled rapid automated DNA extraction of live Zebrafish embryos. The ZEG vibrated embryos which released material that could be used to determine the genetic status of the embryos meaning that they did not have to be grown to adulthood, and the number of fish used overall was reduced.
- The ZEG was non-invasive, its use also meant that fish did not need to be fin clipped at the adult stage.
- In regard to the lived experience it was reported that experience at other institutions and research literature had shown that there was no lasting impact for the fish through use of the ZEG.
- In regard to the 3Rs [Redacted. Sec.40] was collaborating and sharing experiences through her personal networks with colleagues at other institutions. The [Redacted. Sec.40] were also in contact with colleagues through their networks.
- Instead of fin clipping could a swabbing technique be used? - that step was currently not being used but would be explored if needed.

- The BRU had initially struggled to get Zebrafish to breed and survive but that was now improving. The BRU team were now trialling a protocol used at Portsmouth.

AWERB thanked [Redacted. Sec.40] for the presentation.

The AWERB received a presentation from [Redacted. Sec.40] in respect of the current Project Licence – In vivo profiling of novel compounds, and the following questions and points were noted:

- The Project started in April 2020 and was due to end in April 2025.
- It involved:
    - Drug metabolism and pharmacokinetics (what the body does to the drug; dosing animals with candidate drugs; obtaining blood and tissue samples for analysis of drug concentration)
    - Pharmacodynamics studies (PD) (what the drug does to the body, biomarker studies, cardiovascular studies)
- The difference between a pharmacological tool and a medicine could be the pharmacokinetics (PK) characteristics – enough of the drug should reach the site of action to be efficacious; the drug should have an appropriate duration of action; drugs should reach the target organ.
- PK was a multifactorial process – absorption, distribution, metabolism and elimination.
- There was an extrapolation from animals to humans.
- The objective of the licence was to determine the PK and PD profile of novel compounds and to supply high quality data to clients.
- [Redacted. Sec.40] undertook a pre-study questionnaire to ensure only appropriate molecules were tested as well as a justification for in vivo studies
- Animal numbers used to date were 975/1931 (Rats) 3541/50 Mice.
- The main benefit of the work was to provide data that would help [Redacted. Sec.40] ' clients in selecting drug candidates – preventing inappropriate compounds being progressed inro research and development.
- [Redacted. Sec.40] were on track towards the objectives of the licence and had worked with over 25 different biotech and pharmaceutical companies supporting their drug discovery programmes.
- In regard to the 3Rs the techniques used were already highly refined and used the least number of animals as possible to achieve the objective of the study. Some of the procedures had been modified to reduce animal numbers, such as: using cannulated rats twice for oral and intravenous studies; serial sampling of mice; temporary cannulation of the tail vein in rats; environmental enrichment; clear-cut end points.
- In the lived experience – animals were given low doses; blood samples were taken at set times; blood samples were analysed for compound or biomarkers. In some cases animals were killed to harvest tissues to see if a compound got to the right target. Blood samples were taken remotely in

rats usually whilst they were asleep. Plastic cages were used in order to observe behaviours. The rats were housed in groups. For mice a small cut was made in the tail vein to draw blood; in order to draw additional samples the scabs were removed.

- It would be useful to know how many compounds were tested on the 5000 animals and at the next review to have those figures. It would also be useful to see the information that went into the pre-study questionnaire and justification.

AWERB thanked [Redacted. Sec.40] for the presentation.

The AWERB enquired whether the University's licence related to its geographic area and consequently if there were an increase in further commercial lettings whether there would be a responsibility to monitor those organisations.

Action [Redacted. Sec.40]

22/24 Report from Technical Services

It was noted that:

- The [Redacted. Sec.40] was now expanding in animal numbers and use. Mouse breeding had started successfully and new colonies were being brought in. Researchers had begun some projects and this had included extensive use of the surgery suite.
- Technical Services were continuing to look at the operation of the unit and refine procedures as necessary. The vast majority of users had been very good at following the local rules in place. There was an induction programme in place for all new users and this had been well attended.
- There had been a number of issues over the past few months regarding failure of plant machinery. This had had potential impacts on the humidity and temperatures in the unit. Technical Services were working closely with Estates to mitigate any impact and would continue to follow this up.
- There was one small project in the AMS BRU which needed to run over slightly. This was due to end the 27th of September and there would be no more animals in the unit after this time. A lot of clearing work had already taken place and this would continue into October.

It was reported that the [Redacted. Sec.40] was reviewing the areas licensed for animal research in order to ensure that the right type of support was in place.

It was noted that a manual wheelchair should be made available in the unit for use by visitors.

Action: [Redacted. Sec.40]

22/25 Establishment Licence (PEL) amendment – addition of areas licensed for regulated pig studies at CEDAR, Hall Farm

The AWERB received a briefing note on the application, on ASPEL, to add the new CEDAR Pig Unit at Hall Farm to the current Establishment Licence. It was noted that there was a 40-working-day clock running on the application and that the University should hear back from ASRU by the end of October 2022.

The unit comprised three distinct licensed areas: farrowing room; nursery/rearing room; dry sow room. All were to be deemed suitable for 'LA' (large animals, with a 'pigs only' condition) and 'NSEP' (non-sterile experimental procedures).

The application was currently with ASRU and – based on the most recent ASRU advice – the University was in the process of supplying additional information (plans, building specifications, environmental control data) that ASPEL did not capture.

Whilst not certain, it was anticipated that incorporation of a new building on to the PEL would require an on-site visit by the appointed [Redacted. Sec.40].

22/26 Home Office Regulatory Requirements

It was reported that two sessions had been run since the last AWERB in order to prepare colleagues for a potential audit.

[Redacted. Sec.40] and [Redacted. Sec.40] had produced a list of requirements that would need to be demonstrated/evidenced in an audit. The AWERB were asked to forward any comments on the list to [Redacted. Sec.40] and [Redacted. Sec.40].

The list was helpful in identifying where the University was not meeting the requirements, where there were gaps, and consequently where to focus efforts. Some of the actions to take forward were fairly simple, for e.g. production of an organogram, others would require more work, for e.g. a coherent strategy on the 3Rs. It was noted that the NC3Rs Strategy Tool would be helpful in developing a 3Rs strategy.

In addition to the work on addressing the gaps further work would be required to ensure that evidence was available in a central resource, as at present this was located in different areas.

The AWERB agreed that it would be useful to have a list of all attendees at the recent sessions as well as a list of all licence holders. It was suggested that it might be helpful to hold future events on a School basis. It was agreed that [Redacted. Sec.40], [Redacted. Sec.40] and [Redacted. Sec.40] would discuss further next steps for implementation.

Action: [Redacted. Sec.40]**,** [Redacted. Sec.40] **and** [Redacted. Sec.40]

[Redacted. Sec.40] reminded the AWERB that academics were not measured nor were there any incentives on 3R performance. Time was also a significant factor in having availability to attend sessions.

22/27 Communications

The AWERB received and noted the ASRU operational newsletter for September 2022.

The AWERB noted that the communications from the Home Office were becoming clearer.

It was suggested that it would be helpful to circulate the information to colleagues but with a coherent narrative to accompany it along with linking into the messages on audit and training (relevant [Redacted. Sec.40] would be copied in).

It was agreed that [Redacted. Sec.40], [Redacted. Sec.40] and [Redacted. Sec.40]would meet to discuss this further.

22/28 Future topics

It was suggested that future topics could include improvements to the web pages

22/29 Any other business

[Redacted. Sec.40] reported that his School had received enquiries from local schools to talk about ethical and legal obligations in animal research. It was noted that UAR had a number of tools/resources that could be used as outreach tools.

22/30 Dates of meetings in the Session 2022-23

Monday 6 February 2023 at 10.00 am
Thursday 11 May 2023 at 10.00 am