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.

[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 5HGDFWHG6HF@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.
- > 5 H G D F W H G 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 > 5 H G D F W H G' clients in selecting drug candidates – preventing inappropriate compounds being progressed inro research and development.
- > 5 H G D F W H G 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

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 visit6ui

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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 > 5 H G D F W H G would be copied in).

It was agr