

**3Rs subgroup for the  
ANIMAL WELFARE AND ETHICAL REVIEW BODY**

**Minutes of the meeting held on 4 October 2023**

Present:

[REDACTED]

Apologies:

[REDACTED]

**1. Minutes**

*Agreed:* That the minutes of the meeting held on 14 June 2023 were approved.

**2. Retrospective reviews of Project Licences requiring licence holder attendance at meeting**

**2.1. [REDACTED], [REDACTED], Immunogenicity of biologics.**

*Considered:* A completed Retrospective review form and presentation

*Interviewed:* [REDACTED]

- Discussed:*
- An overview of the work completed to date was provided, which has concentrated on understanding why aggregated humanised proteins cause an immune response.
  - Discussion points included the development of a new in vitro model, which is ongoing, the extensive use of pilot studies to minimise number of animals used, and the housing of littermate animals with counterparts that have been dosed to reduce singly-housing animals.

**2.2. [REDACTED], The role and regulation of reactive oxygen species in development and regeneration.**

*Considered:* A completed Retrospective review form and presentation

*Interviewed:* [REDACTED]

- Discussed:*
- An overview of the work completed on this licence was presented, which focussed on understanding the molecular and cellular mechanisms involved in tissue repair, regeneration and formation.
  - [REDACTED] was congratulated on the large number of publications arising from the licence, and confirmed that an ARRIVE checklist was completed where appropriate.
  - A number of good examples of Replacement were observed throughout the project, including in silico modelling, which were discussed.

### 2.3. [REDACTED], Drug discovery for parasitic helminths.

*Considered:* A completed Retrospective review form and presentation

*Interviewed:* [REDACTED]

- Discussed:*
- An overview of the research carried out to date was provided, which has focussed on developing new treatments for whipworm infection.
  - It was discussed that Replacement is difficult to address in this project, particularly as there is no way to progress the life cycle of whipworms entirely in vitro. [REDACTED] keeping a close eye on the current organoid work of [REDACTED] as this may provide Replacement opportunities in the future.
  - [REDACTED] was commended on her extensive sharing of data, and it was discussed how to encourage others to do similar.

### 2.4. [REDACTED], Maintenance of barrier immunity in health and disease.

*Considered:* A completed Retrospective review form and presentation

*Interviewed:* [REDACTED]

- Discussed:*
- An overview of the work completed to date was presented, which has concentrated on the long-term effects of viral lung infection e.g. influenza on immune cell function and tissue structure.
  - [REDACTED] was commended on the large number of publications arising, and a discussion on the use of the ARRIVE guidelines during the planning stage of studies was had.
  - [REDACTED] confirmed that negative results were regularly published as part of submitted manuscripts.
  - A discussion on the difficulties of efficiently managing tissue sharing was had.
  - It was noted that significantly more animals had been used on the breeding protocol than requested. The committee were advised that this had been picked up by the Compliance and Licensing team, who were working with [REDACTED] to advise ASRU of this licensing breach.

## 3. Updated Retrospective reviews from previous meeting

**3.1.** [REDACTED], Regulation of Glomerular Barrier Function in Health and Disease

*Considered:* An updated retrospective review form

*Discussed:*

- The committee thanked the researchers for providing an updated form to clarify number of animals used on the licence.

**4. Mid-term reviews of Project Licences not requiring licence holder attendance at meeting**

**4.1.** [REDACTED], Mechanisms regulating local and distal immune responses in barrier site health and inflammation.

*Considered:* A completed mid-term review form

*Discussed:*

- Excellent implementation of the 3Rs, including an extensive use of clinical samples, bioinformatics and improved in vitro models. Improved technology is allowing more data to be obtained from blood samples, reducing number of animals used. The group has also refined their LPS model via increased monitoring, and been able to reduce tamoxifen dosing.
- The committee wish to congratulate the group on their commitment to the 3Rs.

**4.2.** [REDACTED], The aetiology of diabetic neuropathy.

*Considered:* A completed mid-term review form

*Discussed:*

- Noted an interesting use of drosophila neurons.
- Limited progress has been made so far, the committee have no concerns.

**4.3.** [REDACTED], Understanding the role of the body clock in behaviour and physiology.

*Considered:* A completed mid-term review form

*Discussed:*

- Noted the use of the ARRIVE guidelines. Interesting to read about the use of 3D adipose tissue organoids as a potential replacement model. The group will be encouraged to disseminate at e.g. the next 3Rs symposium.

*Outcome:* The subgroup supported continued work on all three licences.

**5. Upcoming Events**

The Chair highlighted some relevant upcoming events, including an Experimental Design Workshop on 10<sup>th</sup> October with Pete Ceuppens and Prof Jann Hau from Copenhagen University. It was also highlighted that a public debate on the Culture of Care will be held on 28<sup>th</sup> November, chaired by Mike Addelman.

**6. Dates for next year**

The Chair will be in touch shortly with proposed dates for meetings next year. The Chair also thanked all those at the meeting for their hard work and engagement over the past year.