## THE UNIVERSITY OF BIRMINGHAM

# ANIMAL WELFARE AND ETHICAL REVIEW BODY (AWERB)

24<sup>th</sup> September 2020 (via Zoom)

## **MINUTES**

## Present:

20/09-01

Apologies

20/09-01	Apologies
20/09-02	Minutes The minutes of the meeting held on 20 <sup>th</sup> August were considered by the Committee and were approved subject to some minor amendments.
20/09-03	Matters Arising
	20/01-05 Suggestion of including a statistician. No-one has yet been identified, and this will remain on the agenda.
	20/07-14 Chair to write to the Pro-Vice Chancellor for Research and Knowledge Transfer re. Workload Allocation Model credit allocation
20/09-04	Chairperson's Items There were no Chairperson's items
20/09-05	Verbal Reports from the Director of BMSU and Named Persons An invitation has been sent to all PPL holders to attend the BMSU Users Forum on 8 <sup>th</sup> October. BMSU is currently in a position where the priority is to keep people and animals safe and the more people that come into BMSU, the greater the risk of infection and having to self-isolate. The system is working well so far and everyone who needs access has been able to be accommodated. Social distancing is still the limiting factor with activity within BMSU and everyone is working within the guidelines. The two-shift system will be retained for the foreseeable future. PIs agreed that having BMSU Technicians to undertake some routine procedures is beneficial, and considered whether this could continue in the longer term if funding could be identified via research grants.  Pinworm tests have come back negative. Standard checks are still ongoing to ensure there are no outbreaks. There are no issues regarding animal health and welfare. Occupancy levels are around two thirds what they were at this time last year.
20/09-06	Report from the Fast Track Procedure  Fast track procedures are in progress as normal and no queries had been raised.
20/09-07-1	<ul> <li>Project Licence Applications         <ul> <li>Glucocorticoids and Vitamin B3 Metabolism</li> </ul> </li> <li>Summary:         <ul> <li>The aim of the project is to investigate glucocorticoid interactions with nicotinamide adenine dinucleotide (NAD+) pathways to determine their combined effect on energy metabolism and the underlying mechanisms that facilitate the potential relationship between the two.</li> <li>Glucocorticoids are stress response hormones that are released as a response to changing metabolic demands and as such are key regulators of muscle energy homeostasis.</li> <li>A mild excess of glucocorticoids, often seen in Cushing's syndrome leads to metabolic dysfunction and disease, particularly in muscle.</li> <li>Glucocorticoids interact with the NAD+ metabolome and synthetic pathways in muscle, but the nature and impact of their combined interactions on metabolic function, as well as dysregulation, has not been studied.</li> </ul> </li> </ul>

• It is proposed that interrogation of this new axis of metabolic regulation will illuminate novel muscle biology and therapies in a range disease process

The Committee raised the following points:

It was queried whether there was sufficient funding to cover this licence. Grants are going to continue to be submitted.

The classification of the licence is moderate, but this needs further clarification. The anticipated adverse effects need to be included and again explain why the protocols are moderate. Each individual step is mild, but it is the cumulative treatments which make the licence moderate. The handling method for the animals needs to be confirmed to ensure that the animal is not undergoing undue stress.

Protocol 1 needs to be expanded to include the adverse effects including multiple injections and high levels of steroids. The animals will have additional stress which is associated with being singly housed. Treatments will include injections as well as supplements in water and diet. The licence introduction needs to include more scientific information regarding Cushing's Syndrome as this is referred to later in the application.

Consistent formatting for references is required. The NTS does not explain what the aim of the project is, but if further information is provided in the introduction on Cushing's Syndrome this should be automatically included in the NTS.

Decision: Committee agreed that further discussions are needed between the NVS, BMSU, NACWO and PI. The project will be re-circulated for electronic approval and then sent to the HOI.

#### 20/09-07-2

# b) Immune Cell Migration in Health, Age and Chronic Disease Summary:

- Immune cell movement from the blood into tissues is an important protective response to infection and injury.
- This project explores the process controlling the movement of immune cells from the blood into tissue in health; and how these go wrong in age and disease; and tests the ability of new chemical and cell-based therapies to restore normal immune cell movements.
- Immune cell movement is tightly controlled, like checkpoints, to prevent unwanted inflammatory responses. However, many of these checkpoints are lost in chronic diseases such as rheumatoid arthritis and cancer, but also as we age.
- This work aims to provide more detailed knowledge on factors responsible for maintaining these security checkpoints, exactly how the checkpoints are altered during the aging process and in chronic disease, and if certain new chemical or cell-based therapies can restore the normal function of these checkpoints.

The Committee raised the following points:

It was stated that the presentation was very clear and should be translated to the licence. The number and frequency of injections were discussed. Work is being undertaken with chemists to lengthen the half-life of the interventions. The Committee queried whether daily injections of 30 days could be justified.

There were discussions around age- and gender-related arthritis, and timescales for testing once ovaries are removed.

The powering of the experiments was raised as an issue. This was a capacity issue initially, and pooling of data hadn't been undertaken. There are ways to block data and utilise the two cohorts of data. The ongoing issue regarding the need for a biostatistician was discussed.

The title of the protocol within the licence needs to be amended to reflect the purpose of the ovariectomy process. It was confirmed that the scoring sheet for arthritis is very detailed and fit for purpose but is not used in isolation.

Title of the project is too general, and needs to be more specific i.e. inflammatory arthritis model. The use of analgesia is encouraged and is an important refinement.

	Decision: Committee agreed that further discussions are needed between the NVS, BMSU, NACWO and PI. The project will be re-circulated for electronic approval and then sent to the HOI.
20/08-08	<ul> <li>Matters relating to the 3Rs</li> <li>The NC3Rs has developed two online 3Rs self-assessment tools that enable individual research groups and research institutions to collate, track and benchmark their 3Rs activities over time. It was agreed that the University would complete an institutional assessment for discussion at AWERB.</li> <li>A new web resource on best practice in colony management of GA mice has been produced by an expert working group of the NC3Rs, with representation from the University. The resource contains guidance for researchers returning to mouse work following COVID-19 lockdown.</li> <li>The NC3Rs Skills and Knowledge Transfer scheme is now open to applications, with informal outlines due 27 November. This scheme supports the transfer of validated 3Rs methods between laboratories.</li> <li>The BMSU have recently updated a number of internal review forms. The update has included the addition of further 3Rs focussed questions to ensure current best practice is being applied.</li> <li>The Assistant Director of the BMSU has supported two individuals with their applications for NC3Rs Training Fellowships.</li> <li>The 3Rs Focus Group has reviewed the recommendations in two recent RSPCA documents (Humane Killing and Housing of Mice and Rats). Both the group, and the NACWOs more widely, are satisfied that the BMSU is working according to the recommendations.</li> <li>Awareness of the 3Rs Focus Group is being increased via various routes, including posters, articles in institution newsletters, and inclusion in the next BMSU user forum.</li> <li>The latest 3Rs relevant information is being actively disseminated to researchers via the 3Rs Focus Group and the 3Rs Champions themselves as appropriate.</li> </ul>
20/08-09	Any Other Business The issue of including AWERB as part of WAMS was raised, and this will be raised again at the Strategy Committee.
20/08-10	Date of Next Meeting The date of the next meeting – 12 <sup>th</sup> November 2020

## **GLOSSARY**

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3Rs	Replacement, Reduction and Refinement
AWERB	Animal Welfare and Ethical Review Body
BMSU	Biomedical Services Unit
GA	Genetically altered
HOI	Home Office Inspector
NC3Rs	National Centre for the Replacement, Refinement and Reduction of Animals in Research
NACWO	Named Animal Care and Welfare Officer
NTS	Non-Technical Summary
NVS	Named Veterinary Surgeon
PI	Principal Investigator
PPLs	Project Licences
RSPCA	Royal Society for the Prevention of Cruelty to Animals
UoB	University of Birmingham
WAM	Workload Allocation Model