DRAFT

CONFIDENTIAL MATERIAL

THE UNIVERSITY OF BIRMINGHAM

ANIMAL WELFARE AND ETHICAL REVIEW BODY (AWERB)

2nd December 2021 (via Zoom)

MINUTES

Present:

21/12-01	Apologies Apologies had been received
21/12-02	Minutes The minutes of the meeting held on 14th October 2021 were considered by the Committee and were approved subject to some minor amendments.

21/12-03	Matters Arising No matters arising
21/12-04	Chairperson's Items There were no Chairpersons Items
21/12-05	Verbal Reports from the Director of BMSU and Named Persons Time has been spent preparing for audit and ensuring that all SOPs are in place. A number of actions have been identified including running another CPD session for all Project Licence Holders. This will be run by on 31st January 2022 and will be a refresher and reminder session of PPL responsibilities. It will be a mandatory session, and invitations will be sent from the Registrar. An advert is currently out for a Named Trainee and Competency Office to join the BMSU Senior Management Team. Dates for ordering animals before Christmas have been sent to Licence Holders. Schedule 1 training is ongoing, and it is accepted that new staff sometimes find it difficult to undertake. OH are increasing the number of staff they take through spirometry testing, which is helpful for new BMSU users.
21/12-06	Report from the Fast Track Procedure Fast Track applications are being progressed for the following licences: • Exploring the role of the cell surface molecule podoplanin in fibroblast-macrophage cross talk in arthritis • Mechanisms behind T-cell function and regulation
21/12-07-1	Project Licence Applications *a) Determining what happens to intestinal T cells* Summary: The stated aims of this licence are: • to determine the nature of the memory T cell populations that are formed following intestinal infection • The intestinal tract is largest surface in our bodies at which we encounter foreign molecules and so the immune system is constantly active, suppressing responses to everything that is harmless (e.g. food and commensal bacteria) while suitably responding to pathogens seeking to enter the body to prevent infection. • When the regulation of immune responses in the intestine doesn't work properly, patients suffer intestinal inflammation. This is very common, can be life-long and highly debilitating and affects at least 7 million people in the world.

	• This inflammatory state is associated with an expanded population of T cells with altered functions, suggesting that something has gone wrong in regulating appropriate T cell responses and in the formation of memory populations. • This Project will determine what happens to the T cells generated in response to intestinal infection, how and why this affects their functions and what this means for our immune system The Committee raised the following points: The practical issues of where infection is introduced and was discussed. The issue of how the endoscope is to be cleansed was raised. It was pointed out that there is a well-known cleansing protocol which is used in clinical practice. There is no mention of tamoxifen usage until the protocols, and so this needs to be raised earlier in the application. Clarification is also needed regarding the use of three types of bacteria to generate an immune response. It was queried why the protocols have been designated as moderate, even though each step in the protocol is mild: it was explained that the designation was based on the total number of interventions. The estimated mouse numbers were discussed, as they appeared to be very high. It was explained that the breeding colony needs to be large in order to allow mice to be age and gender matched and so, to optimise the study design. It was confirmed the estimated numbers are in fact, realistic. The Power calculations were discussed in relation to how the data will be analysed. It was queried whether the NC3Rs Experimental Design Assistant had been used, and it was advised that it would be beneficial for new lab members to be aware of it and to be shown how to use it. **Decision: Committee agreed that further discussion is needed between the NVS, BMSU, NACWO and PI to ensure minor issues are clarified prior to obtaining Chairperson's approval to send to ASRU.**
21/12-07-2	*b) Understanding fundamental aspects of thymus development and function* <u>Summary:</u> The stated aims of this licence were: • To improve our understanding of the basic cellular and molecular mechanisms that control T cell development within the thymus • The thymus is a unique organ situated in the upper chest that supports the development and export of mature T cells. • T cells are a highly specialised type of immune cell that provide immune protection against infections such as bacteria and viruses, and additionally protect against cancer formation • Despite the essential requirement for normal thymus function in generating effective T cell-driven immune protection, the basic mechanisms that control i) the development of the thymus and ii) how it is uniquely able to support the development of functional T cells remains incomplete The Committee raised the following points: This is essentially a basic science licence and all of the models proposed in the licence are well known and used. The techniques have been developed and are successful in young animals. However, it was agreed that the wording describing the humane end points needs amendment to ensure clarity. It was queried whether the NC3Rs Experimental Design Assistant had been used when planning the proposed project and it was suggested that it would be beneficial for new lab members to be aware of it. The applicant confirmed that the NC3Rs resources had been utilised and agreed that the Design Assistant would provide good training for new members of the group. It was noted that some of the information on how the statistical analyses are to be performed appeared to be missing. The missing elements should be included, together with some pilot data if possible. The regulations relating to use of embryos and how the tissues are harvested and isolated were raised, which allowed these issues to be discussed by the committee. **Decision: Committee agreed that further minor discussions are needed between the NVS, BMSU, NACWO and PI prior to obtaining Chairperson's approval to send to ASRU.**

21/12-08	Matters relating to the 3Rs • The 3Rs Focus Group has refreshed its membership to ensure that the 3Rs Champions remain representative of the species and broad purposes of work undertaken in the BMSU. • A senior BMSU technician has designed a pilot study to validate various items as enrichments for zebrafish. Results will be provided once the study has been undertaken. • The in-cage enrichment provided to the cohort of ageing rats in the BMSU has been changed to adapt to their increasing size; open domes are now being provided rather than enclosed tunnels. • Following discussions with a University of Birmingham researcher, and a presentation given at LASA by a researcher at another Establishment, it has been reported that a change in restraint may be introduced to reduce stress in rats during IP injection. This approach is now being trialled in the BMSU with the support and advice of the NVS'. • The 3Rs Focus Group discussed the use of different anaesthetics for Schedule 1 killing of zebrafish, and whether some may be more appropriate than others. This has been taken to the Named Persons and fish users for further discussion. • The 3Rs Focus Group reviewed progress against the 3Rs Strategy Document. This was summarised and included in the AWERB annual review 2021. • The 3Rs Focus Group intends to undertake another 3Rs Self-Assessment early in 2022 • Researchers should be aware that the deadline for submitting an outline for NC3Rs Project Grants via Je-S is 11 January 2022 at 4 p.m. • The NC3Rs has published a new document entitled *Developing and implementing an institutional 3Rs strategy.* The Assistant Director of BMSU was consulted and provided input during the draft phases of this document. This has now been disseminated nationally and is intended to support research organisations in recognising opportunities and taking action in areas such as leadership, infrastructure, people and training. This document is available to download as a PDF from the NC3Rs website: https://www.nc3rs.org.uk/news/developing-and-implementing-institutional-3rs-strategy • Earlier in the year the NC3Rs, as part of a working group which included The Director of BMSU, published updated guidance on the sharing and archiving of genetically modified mice. The document, entitled *Sharing & archiving of genetically altered mice: opportunities for reduction and refinement,* is available to download as a PDF from the NC3Rs website: https://nc3rs.org.uk/sharing-archiving-genetically-altered-mice-opportunities-reduction-and-refinement
21/12-09	Condition 18 Reports There has been 1 report submitted.
21/12-10	AWERB review of 2021 AWERB Terms of Reference have been reviewed and a summary has been produced on the AWERB activity over the past year, and to ensure that AWERB is operating effectively. The published data from ASRU states that the average number of iterations for new Project licence applications to ASRU is 2-3 across the UK, whereas for UoB licence applications is less than 1. This reflects the quality of applications submitted post-AWERB. The issue of staff raising concerns on matters relating to research conduct was discussed. The importance of this issue is emphasised to all new Licence holders at induction and is reinforced at other opportunities for established Licence Holders. MDS has recently appointed Speak Up Guardians and Speak Up Champions to support these issues for all aspects of research. It is anticipated a similar set-up will be rolled out across the University.
21/12-11	Any Other Business There was no further business.
21/12-12	Date of Next Meeting The date of the next meeting – 13th January via Zoom

GLOSSARY

3Rs	Replacement, Reduction and Refinement
ASRU	Animals in Science Regulation Unit
AWERB	Animal Welfare and Ethical Review Body
BMSU	Biomedical Services Unit
CPD	Continuing Professional Development
Je-S	Joint Electronic Submissions
LASA	Laboratory Animal Science Association
MDS	The College of Medical and Dental Sciences
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
OH	Occupational Health
PDF	Portable Document Format
PI	Principal Investigator
PEL	Establishment licence
PIL	Personal licence (Procedure Individual Licence)
PPLs	Project licence (Procedure Project Licence)
SOP	Standard Operating Procedure
UoB	University of Birmingham