CONFIDENTIAL MATERIAL

THE UNIVERSITY OF BIRMINGHAM

ANIMAL WELFARE AND ETHICAL REVIEW BODY (AWERB)

28th January 2021 (via Zoom)

MINUTES

Present:

21/01-01	Apologies Apologies had been received
21/01-02	Minutes The minutes of the meeting held on 10th December were considered by the Committee and were approved subject to some minor amendments.

21/01-03	Matters Arising The project Targeting proteins involved in nucleotide synthesis in T-cell Acute Lymphoblastic Leukaemia considered on 10th December 2020 (ref: 20/12-07-2) will be recirculated electronically to AWERB members for comment.
21/01-04	Chairperson's Items There were no Chairpersons Items
21/01-05	Verbal Reports from the Director of BMSU and Named Persons An Assistant Director of BMSU will be leaving on 31st March 2021. An update on staffing issues was provided. BMSU staff are utilising the campus lateral flow testing facility at least once per week. PIs are being advised to restrict long term experimental work for a few weeks as a precaution due to the unknow spread of the new Covid variant. Health status of the animals remains stable. All aquatic work is going well and fish are exhibiting normal behaviour. Brexit is having an impact on export of animals, but BMSU is being assisted by reputable courier company. Home Office returns are on-going. PPLs and PILs in groups are encouraged to access ASPeL so that all information relating to a licence can be viewed in a single place. There has been one FOI request. All of the information is available on the website, and links were provided.
21/01-06	Report from the Fast Track Procedure Fast track procedures are in progress as normal and no queries had been raised.
21/01-07-1	Project Licence Applications *a) Examining SLFN14 function in haemostasis and thrombosis* Summary: • The aim of this project is to determine how the novel gene / protein SLFN14 regulates cell development and how an excess of SLFN14 leads to excessive bleeding in humans. • Reduced number of platelets and abnormal red blood cells are associated with excessive bleeding. • By investigating SLFN14, and understanding its role in how platelets and red blood cells are produced, new targets for drug development can be identified. • Drugs that can prevent excessive bleeding that occurs in patients, help inform patient management and lead to more specific and tailored treatments. The Committee raised the following points:

	The application needs to be revised to increase the number of protocols as the majority of animals will undergo a mild procedure rather than a moderate procedure. Potential adverse effects need to be included in all of the relevant protocols. It was discussed whether anaesthesia affects platelet function. Controls are put in place, and it was confirmed that there are no known effects. A literature review will be undertaken to establish if it is known whether different anaesthesia regimes produce a difference in platelet responses. It was queried whether mice with bleeding disorders have problems in group housing due to fighting and injury. It was stated that this is a mild phenotype and there has not been any observed issues with these animals. The different routes of drug administration need to be further clarified. The issue of taking blood samples was discussed, and whether taking via a superficial vessel activates platelets. Most of the blood sampling is taken under general anaesthetic and is terminal. Where blood samples are required, superficial vessels are suitable and do not significantly affect platelet production. The presentation was clearer than the NTS, which is still quite technical. Justification of animal numbers needs to be clearer and the application could also be strengthened by increasing detail relating to human samples **Decision: Committee agreed that further discussions are needed between the NVS, BMSU, NACWO and PI. The project will be re-circulated for electronic approval prior to being sent to the HOI.**
21/01-07-2	*b) Immune cell migration and function in inflammatory arthritis* <u>Summary:</u> • The aim of this project is to explore the ability of new chemical therapies to restore normal immune cell movement and function during inflammatory arthritis and induce clinical remission. • The movement of immune cells from the blood into tissues is an important protective response to infection and injury • The movement and function of immune cells are very tightly controlled, like security checkpoints, to prevent unwanted inflammatory responses. However, many of these security checkpoints are lost in chronic diseases such as rheumatoid arthritis. • This work aims to provide more detailed knowledge on the factors responsible for maintaining these security checkpoints, and if certain new chemical therapies can restore the normal function of these checkpoints. The Committee raised the following points: The presentation was clear. Drugs data for mono-arthritis has already been published and this application is to consider drugs for treatment of poly-arthritis. Work to date shows that these drugs work in diabetic mono-arthritic models and induces clinical remission in inflammation in the diabetic model. The arthritic models use male mice, whereas in humans it's normally females who develop arthritis. The poly-arthritic model better replicates the disease in humans rather than mono-arthritis model. To date, there is only data available from mono-arthritis studies, and poly-arthritis studies are the next stage before potentially developing into a full clinical trial. It was queried whether, as a control, drugs should be given to a non-arthritic animal. There is no intention to do this and it's not part of the PPL, as humans would not be given the drugs without evidence of arthritis. It is not clear in the application what the dosing protocol is. It was stated pilot studies have been undertaken to establish dosage. This needs to be more clearly stated in the application and links made to the published data. A variety of drugs are proposed, and administration routes will vary depending upon each one. It was recommended that the project should focus on one or two drugs initially, and submit an amendment if further drugs are to be considered. The administration of drugs at various times assists with the basic science of disease progression. The animal numbers in the application stated up to 300 animals would be used over 3 years. Animal numbers need to be justified, and the Committee recommended that the numbers be reviewed and increased as necessary. The PI stated that there is an experiences team who will undertake this animal work, and they have hands-on experience with arthritis models, with protocols being continually refined as available.

	BMSU also has a well defined scoring system in place for this model. Humane end points are informed by the scoring system. However, the term 'well tolerated' needs to be re-considered. The Committee agreed that the NTS should include some benefits to humanity / clinical patients rather than just economics. **Decision: Committee agreed that further discussions are needed between the NVS, BMSU, NACWO and PI. The project will be re-circulated for electronic approval prior to being sent to the HOI.**
21/01-08	Matters relating to the 3Rs • The NC3Rs International 3Rs Prize is open for applications with a deadline of 3 March. The prestigious award, including a £28k prize grant and £2k personal award, is for an outstanding research paper with 3Rs impacts published in the past 3 years: www.nc3rs.org.uk/3rsprize • Researchers using, or considering using, microsampling of blood (less than 50µl) for drug pharmacology, pharmacokinetics or toxicology studies are encouraged to take part in this NC3Rs survey by 24 February: www.nc3rs.org.uk/microsampling • Upcoming NC3Rs webinars include one on best practice in mouse colony management (1 March, 2.30pm) and a series showcasing new 3Rs technologies with scientific, business and animal welfare benefits, developed through the CRACK IT open innovation programme: www.nc3rs.org.uk/webinars • The Assistant Director (TG) of the BMSU attended the RSPCA Lay Members' Forum on the invite of the organisers in order to contribute to the 3Rs discussions. A researcher from the university was also invited to give a presentation on both how they apply the 3Rs in their research, and their experiences on AWERB. The talk was extremely well received. • The Assistant Director of the BMSU is delivering an online lecture to MSc Toxicology students to provide training in the ethics of the use of animals in research and the 3Rs. This will be followed-up with a question and answer session between the students and the BMSU Director and Assistant Director. • The 3Rs Focus Group has been primarily working through the 3Rs Self-Assessment Tool question set.
21/01-09	Any Other Business The was no further business
21/01-10	Date of Next Meeting The date of the next meeting – 11th March 2021

GLOSSARY

3Rs	Replacement, Reduction and Refinement
ASPeL	Animals Scientific Procedures e-Licensing
AWERB	Animal Welfare and Ethical Review Body
BMSU	Biomedical Services Unit
HOI	Home Office Inspector
MicroCT	Micro computed tomography (X-ray imaging in 3D)
MRes	Masters of Research
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
PIL	Personal licence (Procedure Individual Licence)
PPLs	Project licence (Procedure Project Licence)
UoB	University of Birmingham