

CONFIDENTIAL MATERIAL

THE UNIVERSITY OF BIRMINGHAM

ANIMAL WELFARE AND ETHICAL REVIEW BODY (AWERB)

30th June 2022 (via Zoom)

MINUTES

Present:

22/06-01	<u>Apologies</u> Apologies had been received
22/06-02	<u>Minutes</u> The minutes of the meeting held on 19 th May 2022 were considered by the Committee and were approved subject to some minor amendments.
22/06-03	<u>Matters Arising</u> There were no matters arising
22/06-04	<u>Chairperson's Items</u> There were no Chairperson's Items
22/06-05	<u>Verbal Reports from the Director of BMSU and Named Persons</u> BMSU is working well, and the health status is consistent. Usage numbers and some other statistics on to the BMSU shared site for PPL holders. PPL holders can then feed this information down to individuals. Training for new license holders is up to date, with a Home Office course being completed in July. There is a meeting with the Home Office Chief Inspector shortly. From Birmingham's perspective, all licences are going through on ASRU deadlines. If good quality applications and amendments are made, licenses are going through the system and being approved with no comments. There has been some new guidance produced that if a license for amendment is submitted, there is a new breeding protocol that has to be altered and amended but this will be done automatically by BMSU. The new training module for ARMIS has been purchased, and is currently being populated. There are some BMSU Covid cases which is resulting in a few staff shortages. There were no concerns raised by the NVS. A new Communications Officer has been appointed.
22/06-06	<u>Report from the Fast Track Procedure</u> There have been two fast track applications circulated. One other application will be circulated relating to concussions studies in race horses following a fall. BMSU have been reassured by the Home office that a fast track application is appropriate. There was also a discussion regarding an application to observe wild beavers and a request has been made to the National Trust for the paperwork.
22/06-07-1	<u>Project Licence Applications</u> <i>a) Exploring the Mechanisms of Tertiary Lymphoid Organ Formation</i> <u>Summary:</u> The stated aim of this project is to examine the role of tissue resident fibroblasts in the formation and maintenance of tertiary lymphoid organs (TLOs) in chronic inflammation. <ul style="list-style-type: none">• Work has shown that TLOs have a pathogenic role in chronic salivary glands and joint inflammation, however the disease mechanisms that drive the formation of these structures is unknown.• The treatment options for patients with Sjogren's Syndrome (SS) (an autoimmune disease characterised by salivary gland inflammation) and treatment refractory rheumatoid arthritis (RA, a type of inflammatory arthritis) are extremely limited and TLO formation is associated with severe disease in both SS and RA.

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	<ul style="list-style-type: none"> • If the mechanisms can be understood that underlie the formation of these structures in the target tissues of these diseases novel ways of therapeutically modulating the disease may be developed. <p>The Committee raised the following points:</p> <p>The presentation was very clear and accessible for all members of AWERB. A query was raised around the number of times cannulation was required. It was confirmed that this is dependent upon the reagent half-life. 80% of the experiments will involve a single second cannulation and over the next 12 months the plan is to refine that number down. It was stated that any treatment targeting fibroblasts can have side effects which can be lethal to mice, however the application states no expected harmful phenotypes. It was confirmed that agents will be delivered locally to within the saliva glands, so the risk of off-target effects are significantly reduced.</p> <p>The issue of delivery and targeting in this model was discussed, and it was queried whether tamoxifen has been used in the cannulation to target exclusively the salivary gland. This has not been used in the salivary gland, but has been used in joints, and is also now being used in tumours in the colon. This may be used in future projects. The number of targets was discussed, and how they have been selected. It was stated that the first target is to look at fibroblast activation proteins based on previous studies in both the salivary gland and the joints, which will take 8-12 months. In protocol 2, every step is optional, other than death, as not all animals will be cannulated. Logistically this needs to be reviewed, so that principles won't change but the protocols may look different if they need to be split and an additional protocol added.</p> <p>It was stated that the aim of the project mentions RA and it was confirmed that SS is also supported by the grant funder, as the process pathway is the same in both diseases.</p> <p>The issue of looking at treatments, and whether animals are getting better by themselves or due to the treatment was discussed. It was stated that by targeting the fibroblasts you would see an effect on resolution within 1-2 days.</p> <p>A chronic model was going to be included using diabetic mice, but that is to be removed.</p> <p>It was asked whether the degree in inflammation in the salivary glands affects the eating behaviour of the mice. It was stated that there is some swelling in the first 2 days, and they do get a reduction on saliva glands flow. For the first 24-48 days, there is access to gel food and water, but after that there is no problem with husbandry of these animals.</p> <p>Decision: Committee agreed that further discussions are needed between the NVS, BMSU, NACWO and PI prior to being sent to ASRU.</p>
22/06-07-2	<p><i>b) Investigating the effects of obesity on cardiac structure and function</i></p> <p><u>Summary:</u></p> <p>The stated aim of this project is to investigate the effects of obesity on cardiac structure and function.</p> <ul style="list-style-type: none"> • Currently, nearly one-fifth of all humans are currently obese; in UK around 30% of adults are obese and in the United States this proportion exceeds 40%. • Obesity contributes directly to development of cardiovascular disease and cardiovascular disease mortality. This is independent of other cardiovascular risk factors, such as kidney disease, high blood pressure etc. • The mechanisms driving this are unclear. There is even less known whether obesity changes the cardiac structure and function in a manner that is different to other co-morbidities. <p>The Committee raised the following points:</p> <p>It was stated that protocol 3 needs to be reconsidered, as everything is optional. As 50% of the animals are actually going to be mild severity, and a lot of the options are not going to be used, it was advised that an additional protocol could resolve any issues.</p> <p>It was queried whether the Ob Ob mice are to be brought in or bred, as breeding is not a mild protocol. It was confirmed that buying them in would be easier as they are commercially available. Ob Ob mice are only to be used for one of the drugs. This justification needs to be included in the application. It was confirmed that there would be non-obese animals undergoing the same treatment and, that these animals had been included in the power calculation.</p>

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	<p>The choice of drug was discussed, and whether there was any commercial input. It was confirmed that there was no commercial input, but they have gone through carefully controlled clinical trials for the treatment of heart failure. There has not yet been any work undertaking on how they respond in patients who are obese and ischemic, and there is no clinical data.</p> <p>Decision: Committee agreed that further discussions are needed between the NVS, BMSU, NACWO and PI prior to being sent to ASRU.</p>
22/06-08	<p><u>Matters relating to the 3Rs</u></p> <ul style="list-style-type: none">• Two researchers from the University of Birmingham have been invited to submit full applications for the current NC3Rs PhD Studentship call.• There is a joint funding call from the BBSRC/NC3Rs. The focus is on non-animal technologies and encourages collaborations with SMEs and industrial partners. Proposals must fall within the BBSRC remit. https://nc3rs.org.uk/bbsrc-nc3rs-joint-call-development-next-generation-non-animal-technologies• There is a joint NC3Rs/MRS webinar: Using both sexes in animal experiments on Thursday 21st July 10-11am, (BST) https://www.nc3rs.org.uk/events/nc3rs-mrc-joint-webinar-using-both-sexes-animal-experiments• This year's 3Rs Prize Event is taking place online on 13th July 3.30-4.30pm (BST) https://www.nc3rs.org.uk/events/3rs-prize-event• FELASA are running a survey on pain alleviation in mice which closes on 1 July. Aimed at all personal involved in mouse models in which analgesia or other pain-relieving methods are applied. https://felasa.eu/Announcements/id/34• COST Teatime survey on home-cage monitoring.
22/06-09	<p><u>Condition 18 Reports</u></p> <p>For breeding, the Home Office have amended the wording so applications and amendments need to include the amended protocol. There has been one Condition 18 report which has confirmed as being completely acceptable.</p>
22/06/10	<p>Any Other Business</p> <p>There was no further business.</p>
22/06-10	<p><u>Date of Next Meeting</u></p> <p>The date of the next meeting – 11th August 2022 via Zoom</p>

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GLOSSARY

3Rs	Replacement, Reduction and Refinement
ARMIS	Management System for Biological Services Units
ASRU	Animals in Science Regulation Unit
AWERB	Animal Welfare and Ethical Review Body
BBSRC	Biotechnology and Biological Sciences Research Council
BMSU	Biomedical Services Unit
BST	British Summer Time
COST	European Cooperation in Science and Technology
FELASA	Federation of European Laboratory Animal Science Associations
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
PEL	Establishment licence
PI	Principal Investigator
PIL	Personal licence (Procedure Individual Licence)
PPLs	Project licence (Procedure Project Licence)
RA	Rheumatoid Arthritis
SS	Sjogren's Syndrome
TLO	Tertiary Lymphoid Organs
UoB	University of Birmingham