

CONFIDENTIAL MATERIAL

THE UNIVERSITY OF BIRMINGHAM

ANIMAL WELFARE AND ETHICAL REVIEW BODY (AWERB)

14th November 2019

MINUTES

Present:

19/11-01	<u>Apologies</u>
19/11-02	<u>Minutes</u> The minutes of the meeting held on 3 rd October 2019 were considered by the Committee and were approved subject to minor amendments.
19/11-03	<u>Matters Arising</u> There were no matters arising. All three licences discussed previously were agreed and operational
19/11-04	<u>Chairperson's Items</u> The Chair is a member of the University Governance, Ethics and Implementation Committee and has to produce an annual report outlining the work of the Committee, the remit, and responsibilities. It has been clarified how much work is included in being a member of AWERB.
19/11-05	<u>Verbal Reports from the Director of BMSU and Named Persons</u> BMSU hosted the RSCPA meeting in November. The event was well attended and there were 5 BMSU representative and about 60 delegates in all. Slides from the speakers will be available for circulation. Animal sentence was one of the focuses of the event. The single incident of pin worm has been eradicated and no further cases have been found. Regarding BMSU staffing, one member of staff left, and two returned following maternity leave. Animal numbers are steady. BMSU is a stable facility and there are no outbreaks of disease. The microbiome of Birmingham mice was discussed. Had an approach from a researcher who wanted to study dead fish. Rather than buying in live fish and euthanizing, an agreement has now been made with an aquarium to take fish that die naturally. If a sufficient supply of dead fish cannot be obtained, it needs to be made clear to any supplier that any live fish purchased will be euthanized immediately.
19/11-06	<u>Report from the Fast Track Procedure</u> There were no Fast Track Procedures to be reported.
19/11-07-1	<u>Project Licence Applications</u> <i>a) Arginine Methylation and Tumourigenesis</i> Summary: <ul style="list-style-type: none">• Every day 31 people die of breast cancer in the UK, equating to 11,400 deaths per year.• Breast cancer is a highly complex disease with many subtypes that each require specific drug targeting.• The discovery of oncogenes and tumour suppressor protein and the concept that cancer arises from aberrant activity or expression of such proteins has led to a more targeted approach to rational drug design.• The principle output from this project will be in the form of new information that will be disseminated to the pharmaceutical and academic community via high impact publications and presentations at conferences.• We expect to show that genetic and pharmacological disruption of PRMTs or their methylated substrates, alters mammary cancer growth providing evidence that drugging PRMTs is a novel strategy for breast cancer therapy.• This is the renewal of an existing license.

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	<p>The Panel raised a query regarding protocol 3 as to whether the mouse is already pregnant or not, and it was confirmed that the mouse would not be pregnant at the time of initial treatment. Mice pups will be monitored closely when born and culled if necessary to avoid any suffering. Mice are injected at 5 weeks of age to review tumour progression rather than tumour initiation. Tamoxifen administration was discussed, and traditionally use IP rather than gavage but the gavage is a more refined method and this needs to be included as an option across all protocols for tamoxifen administration.</p> <p>Regarding animal numbers it was confirmed that 6 litters is standard for a mouse. End points was discussed and standard wording needs to be included with advice from NVS.</p> <p>The end point regarding weight gain should be amended to reflect age related weight gain as compared to tumour related weight gain.</p> <p>It needs to be confirmed when culling takes place, and timescales / windows for each protocol need to be included during drug treatment and drug holidays. Need to justify number of imaging sessions that need to be included.</p> <p>Regarding mammary tumour size, measuring and effects needs to be consistent across all protocols. States that oestrogen pellets will be used, and side effects and appropriate end points need to be included. Pellets have previously been purchased from the US, but this needs to be revised due to a ban on exporting of hormone treatments from the US.</p> <p>Radiation is very low DNA damaging dose rather than tissue damaging.</p> <p>Discussion around what's changed between old licence and this application was discussed.</p> <p>Decision: Committee agreed with the licence with some minor amendments for clarity.</p>
19/11-07-2	<p>b) <i>Generation and Differentiation of Blood and The Cardiovascular System</i></p> <p>Summary:</p> <ul style="list-style-type: none"> • Our overall aim is to understand how vertebrate embryos make a haematic system and cardiovascular system as they develop in homeostasis and how genetic programming is corrupted in disease. • Each tissue type is a result of a cellular hierarchy of precursor cells going back to the stem cell. • To understand the workings of the blood and cardiovascular systems, we need to be able to assign or map regulatory networks to each stage of development of precursor cells in the embryo and to follow their activities as they mature to adults. • More understanding of the mechanisms controlling tissue-specific gene expression will shed light on congenital and developmental human diseases and direct a way for potential tissue engineering, disease modelling and drug screening. • The information gained from this research may have impact on the area of therapeutic approaches to human disease using stem cell replacement technology. <p>3Rs standard text needs to be included. There needs further work on the adverse effects section. Fish from Protocol 2 cannot be taken to Protocol 3 i.e. moving from a moderate to mild. Imaging needs to be included as an optional alternative to Schedule 1 in Protocol 2. There is some standard text around fin clips and analgesia which needs to be included, and discussions need to take place with the NVS, NAWCO and BMSU.</p> <p>A query was raised regarding the various imaging in each of the Protocols, and the main difference is age related, and some imaging is non-recovery. 9 months is the standard end point. Defects may present earlier, but analysis will take place at the same age of 9 months. Breeding will not take place with fish that exhibit a phenotype. The Breeding Protocol has a maximum age of 18 months, whereas the Ageing Protocol as a 24 month timescale. Breeding normally reduces after 12 months. Stress-free breeding was queried and whether this should be included. It was recommended that the term natural breeding be used.</p> <p>Current staff contract runs to October 2020, and further funding is being sought. It was queried whether a 5 year licence would be agreed, or whether this should be a 2 year licence. AWERB should be informed of grant outcomes.</p> <p>It was noted that there were some inconsistencies between Protocols and this needs to be amended.</p> <p>Decision: Committee agreed in principle, however further discussions will be undertaken between the NVS, BMSU, NACWO and PI. The project will be recirculated for electronic approval.</p>

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19/11-08	<p>Matters relating to the 3Rs</p> <p>The Regional Programme Manager held a repeat workshop ‘Improving the Quality of Research Applications’ on Thursday 24 October as part of the ECR workshop series in Birmingham. This included training on experimental design, randomisation and blinding. Around 16 people attended with 100% of attendees finding the workshop to be very or extremely useful.</p> <p>The Regional Programme Manager has also held a number of meetings with researchers for various reasons. These include providing advice on strengthening funding proposals for other funders (The Royal Society) and training two PIs in use of the EDA. The Regional Programme Manager has also met with a NC3Rs PhD student who has been newly recruited to the University and attended an NC3Rs mid-term award meeting with a Research Fellow.</p> <p>Meetings have also been held with key staff to establish strategies for providing training in the 3Rs and experimental design to postgraduate students, and postdoctoral researchers. These plans will be implemented in the new year.</p>
19/11-09	<p><u>Any Other Business</u></p> <p>It was discussed whether licences should be limited based on funding. In general, licences should be for the duration of the project funding.</p> <p>A Nature paper entitled Ethical Research and Transparency will be circulated to AWERB for information.</p>
19/11-10	<p><u>Date of Next Meeting</u></p> <p>The date of the next meeting will be 12th December 2019 at 10am in the Stanley Barnes Meeting Room</p>

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GLOSSARY

3Rs	Replacement, Reduction and Refinement
AWERB	Animal Welfare and Ethical Review Body
BMSU	Biomedical Services Unit
DNA	Deoxyribonucleic acid
ECR	Early Career Researchers
EDA	Experimental Design Assistant
NC3Rs	National Centre for the Replacement, Refinement and Reduction of Animals in Research
NACWO	Named Animal Care and Welfare Officer
NVS	Named Veterinary Surgeon
PhD	Doctor of Philosophy
PI	Principal Investigator
PRMT	Protein Arginine Methyltransferases
UoB	University of Birmingham