THE UNIVERSITY OF MANCHESTER

ANIMAL WELFARE AND ETHICAL REVIEW BODY

Wednesday, 27th July 2016

1. Minutes

Confirmed: The minutes of the meeting held on 2^{nd} June 2016.

2. Matters arising

2.1 Preclinical Evaluation of Cancer Therapeutics

Reported: That minor corrections had been completed and the project approved.

3. Report on licences processed 23.05.16 to 08.07.16

Reported: (a) That the following amendments to project licences had been approved by the executive group:

70/7844	The aetiology of diabetic neuropathy.
70/8382	Novel vitrectomy cutter project phase II animal surgery study.
40/3587	The role of the Circadian clock in chronic inflammation

(b) Amendments to 40/3409, Generation, breeding and maintenance of genetically altered animals:

To generate a PMCA4muy D673E mouse. To generate an Itga11-Venus mouse using CRISPR To generate novel TG FTLD/MND mouse models To generate a DUOX2 P303R tm1 mouse To generate a P65 (ReIA) knockout mouse using CRISPR To generate an LRRC8A flax mouse using CRISPR

(c) Amendments to 40/3619, Creation, breeding and maintenance of genetically altered rodents:

To determine the role of MOZ in Development, Haematopoiesis & Leukaemogenesis

(c) That for Personal Licences there were 8 new licences, 5 amendments, 3 surrendered and 0 renewed.

4. Application for new Project Licence

4.1 Extracellular Matrix in Development & Disease

Considered: A completed AWERB1 form, with written comments by the NVS, NACWO and NTCO.

Interviewed:

- Noted: (a) That the project was a continuation of a previous project, but was being transferred to the applicant as the current licence holder was expecting to retire before the end of the five year licence.
 - (b) That the applicant had been working on the project for a number of years and was very experienced.
 - (c) That the NTS would benefit from editing in more lay language.
- *Resolved*: To recommend approval, subject to editing the NTS.
- 4.2 Zebrafish: Development, Physiology & Disease Modelling
 - *Considered*: A completed AWERB1 form, with written comments by the NVS, NACWO and NTCO.

Interviewed:

- Noted: That the licence application was essentially for the generation and breeding of genetically modified zebrafish supporting four projects, but three of these involved less than five day old larvae and therefore lay outside the scope of ASPA . It was felt that confirmation should be obtained from the Home Office as to whether this was the best approach, or whether there should be one application for the generation and breeding of transgenic zebrafish and one application for the applicant's project with adult zebrafish (involving only 540 animals), which would result in a more accurate report on the number of animals to be used. The non-ASPA projects could then be approved under the Category D procedures.
- Agreed: That advice be sought from the Home Office Inspector and, if necessary, the applicant be advised to amend the application in accordance with that advice.
- 4.3 Understanding Mechanisms of Fibrosis
 - *Considered*: A completed AWERB1 form, with written comments by the NVS, NACWO and NTCO.

Interviewed:

- *Noted*: (a) That this was a continuation of the current licence, incorporating the amendments that had been made to that licence.
 - (b) There are 11 protocols: one substantial in severity the remaining being moderate.
 - (c) Under the existing licence there had been significant refinement, notably in post- operative care, with a reduction of mortality rate from 30% to 10% in the substantial severity protocol. This had been reported at meetings.
 - (d) That there were three typo errors:
 - "established" for "establishment" on page 3
 - "ureteral" for "urethral"
 - "principle" for "principal" on page 21
- Resolved: (1) To recommend approval
 - (2) To encourage dissemination of information on procedures to have led to refinement in the model.
- 4.4 Immunopathology of Experimental Malaria Infection
 - *Considered*: A completed AWERB1 form, with written comments by the NVS, NACWO and NTCO.

Interviewed:

- *Noted*: (a) This was the continuation of an existing licence.
 - (b) That the mouse model was being used to replicate cases where cerebral malaria caused human deaths (20% of cases)
 - (c) That behavioural testing was used to investigate the health deficits suffered by the 80% who survive
 - (d) Details were given of the likely degree of suffering by those animals which reached the substantial severity effects. About 5% of the total would reach this stage and the maximum length of time would be five hours.
- *Resolved*: To recommend approval, subject to explaining the proportion reaching the substantial stage in the NTS and including the rationale for the behavioural study in the NTS.
- 4.5 Modelling Therapies for Renal Malformations
 - *Considered*: A completed AWERB1 form, with written comments by the NVS, NACWO and NTCO.

Interviewed:

 Noted: (a) That this was a continuation of a current licence, but moving from an understanding of the reasons for renal malformation to finding ways of ameliorating the condition. (b) It was explained that frogs were used in the project because they produced more embryos and could be manipulated better.

Resolved: To recommend approval.

5 Research Project for Review

5.1 The Aetiology of Diabetic Neuropathy (70/7844)

Considered: A completed AWERB Rev form, with written comments by the NVS, NACWO and NTCO,

- *Noted*: (a) That there were no issues to report
 - (b) That the applicant be thanked for publishing negative results
 - (c) That there had been refinements in the assessment of pain.
- *Resolved*: To approve the report and recommend continuation of the project.
- 5.2 Anti-Cancer Therapies & Biomarkers (70/7760)

Considered: A completed AWERB Rev form, with written comments by the NVS, NACWO and NTCO.

- *Noted*: That there were no issues to report
- *Resolved*: To approve the report and recommend continuation of the project.
- 5.3 Early Development & Implantation (70/7838)
 - *Considered*: A completed AWERB Rev form, with written comments by the NVS, NACWO and NTCO.
 - Noted: (a) That there were no issues to report(b) That there had been a successful collaboration with clinical partners.
 - *Resolved*: To approve the report and recommend continuation of the project.
- 5.4 Type 2 Inflammation in Health & Disease (70/7815)
 - *Considered*: A completed AWERB Rev form, with written comments by the NVS, NACWO and NTCO.
 - *Noted*: That there were no issues to report
 - *Resolved*: To approve the report and recommend continuation of the project.
- 5.5 Signalling Pathway Analyses in Mouse Models of Gut Inflammation (70/7800)

- *Considered*: A completed AWERB Rev form, with written comments by the NVS, NACWO and NTCO.
- *Noted*: (a) That there were no issues to report
 - (b) That, as there was only one publication listed, the applicant should be asked if there were any linked publications
- *Resolved*: To approve the report and recommend continuation of the project, and to ask the applicant if there were any other linked publications.
- 5.6 Engineering Synthetic Vectors for Various Gene Therapy Applications (70/7763)

Considered: A completed AWERB Rev form, with written comments by the NVS, NACWO and NTCO.

- *Noted*: That there were no issues to report
- *Resolved*: To approve the report and recommend continuation of the project.
- 5.7 Prefrontal-Hippocampal Function (70/7843)

Considered: A completed AWERB Rev form, with written comments by the NVS, NACWO and NTCO.

- *Noted*: That there were no issues to report
- *Resolved*: To approve the report and recommend continuation of the project.
- 5.8 Development & Optimisation of Infection Models (40/3687)

Considered: A completed AWERB Rev form, with written comments by the NVS, NACWO and NTCO.

- *Noted*: (a) That there were no issues to report
 - (b) That there were a significant number of publications, but the applicant should be asked if sponsor companies were co-operative in turning the poster presentations into publications and in publishing negative results.
- *Resolved*: To approve the report and recommend continuation of the project.

6. Update on Home Office Training Courses

- *Received*: A verbal update by the NTCO on the new Home Office training course.
- Noted: (a) That the transition to the new Home Office courses had been completed.
 - (b) That, so far, there had been no change in pass rates.
 - (c) It was debateable whether multiple-choice questions were appropriate.

- (d) The assessments demanded a thorough understanding of the issues and remembering the facts.
- (e) A quality audit would be undertaken in September.
- *Agreed*: That the NTCO be thanked for his report and work.

7. Northern Hub

Reported: That the Northern Hub for AWERBs had held its first meeting and it had been agreed that a separate NW Hub should be created and that what a hub could do was discussed. Meanwhile each AWERB was submitting a summary of how it operated.

8. New Website

Reported: That the new University website on research involving animals had gone live in the last week and it was agreed that it made a significant contribution to openness on the issue of animal research.