

ANIMAL WELFARE & ETHICAL REVIEW BODY

Minutes: 1:30pm, 6th December 2022, Online meeting

	Items.	AWERB Outcome
1	Attendance: 16 members, 3 x observers	
2	Minutes of the last meeting.	
2.1	Approved and finalised for ASUMB.	Complete
3	Matters arising from the notes of previous meeting (8 th November 2022)	
3.1	3.1 Biostatistician recruitment campaign expected to start in January 2023.	Ongoing.
3.2	3.2 Generation of communal SOPs for audit preparation progressing	Ongoing.
3.3	3.3 Lay member recruitment: one new lay member and one new scientific member have now officially joined and 3 others are progressing through the recruitment process.	Ongoing.
3.4	3.4 Governance routes for commercial work carried out under service PPLs.	Ongoing.
3.5	3.5 Chair, NVS, NIO and NC3Rs regional manager progressing through NC3Rs Self-Assessment Institution, scheduled a meeting to complete.	Ongoing.
3.6	3.6 Increase visibility of AWERB on ASU Intranet – template circulated and some submissions from members received. Reminder to all AWERB members to send in their profile.	Ongoing.
3.7	3.7 University of Bristol 3Rs award – discussion for all regarding the application format and judging panel	Ongoing.
3.8	3.9 Umbrella UIN for iTSN under construction.	Ongoing.
3.9	3.10 AWERB to discuss how to engage with the student union about animal research.	Ongoing
3.10	3.11 Upcoming Neuroscience Festival – discussed further in Chairs Report	

3.11	Report filed following error in use of fish housing equipment.	Complete.
4	Chair's Report	
4.1	Recent virtual meeting with a group committed to the rights of animals.	University to consider some apparent inconsistencies in language used in different communications meeting planned with Information Governance Team.
4.2	Proactive information requested to be planned for upcoming Neuroscience. FAQ datasheet to be produced.	FAQ factsheet to be produced by scientific member. ELH to provide contact details for external speakers policy risk assessment.
4.3	Confirmation that this is the first meeting of the rotational themed agenda meetings.	
5	Project Licences – New Applications.	
5.1	<p>PPL.1Dec22</p> <p>Aims: Immune cells play an important role in preventing and limiting the growth and spread of cancer. In recent years, this fact has been exploited in the form of cell therapies for specific cancer (non-solid tumour). No immune cell therapies have been approved for the treatment of solid tumours. A major problem in treating solid cancers with cell therapy is the suppressive microenvironment within the tumour mass which prevent the immune cells from effectively recognising and killing their targets.</p> <p>The purpose of the work is to evaluate the potential of immune cells, either modified directly in the animal or manipulated within the laboratory to enhance their potential to target and kill tumour cells. This will be achieved by modulating immune cells using Artificial Membrane Binding Proteins to upregulate their cancer killing potential and thereby counter the immunosuppressive effects of the solid tumour microenvironment</p> <p>Benefits: The acquisition of new information on the survival and therapeutic efficacy of modulated immune cells targeting a range of cancers. This would lead towards the identification of candidate compounds, for progression towards first in human clinical trials.</p>	Approved subject to minor changes.

	<p>Harms: Mice, 80% moderate due to metastatic tumour model, chemotherapy or irradiation treatment, adverse effects of immune-modulating treatments.</p> <p>Discussion:</p> <ul style="list-style-type: none"> • Clear and well-written application • Use of in-vitro assays • Adverse events in response to chemotherapy • Refinement and selection of the immunocompromised model animals • Frequency of imaging and general anaesthesia • Selection criteria for the movement of target molecules from in vitro assessment to in vivo assessment • Funding sources and duration • Assessment of multi-factorial pathways • The typical treatment regime for an animal • Development of score sheets for tumour development • Use of single sex • Establishment of model and use of control groups • Use of non-invasive imaging as a refinement • Recommendation of NC3Rs webinar regarding use of both sexes • Pilot study group size • Internal training monitoring process. 	
6	Project Licences – Amendments. (None)	
7 7.1 7.1.1	<p>Project Licence Reviews Mid Term Reviews</p> <p>PPLMTR.1Sep22 – understanding the basal ganglia and how neural dysfunction leads to various diseases and disorders including Parkinson’s, OCD and drug addiction.</p> <ul style="list-style-type: none"> • COVID-19 pandemic has impacted the number of animals used to date • Part of working group to refine head-fixed animal procedures • Animal use has been maximised by the of sharing tissues • Use of treadmill to maximise comfort of head-restrained animals during training and recording • Significant refinement in use of computerised system to improve water restriction controls and allow group housing of restricted animals. 	Approved

7.1.2	<p>PPLMTR.1Oct22 – Investigating the impact of overactive neurones during exhalation, hyperreflexive oxygen chemosensors and/or blunted carbon dioxide sensitivity on rhythm and apnoea in various conditions:</p> <ul style="list-style-type: none"> • Objectives have been investigated with a combination of <i>in silico</i>, regulated procedures and non-regulated methods. • Lower numbers of animals used due to replacement <i>in silico</i> and <i>ex vivo</i> experiments. • Optimised protocol for voluntary administration of drugs which also showed superior outcomes in pharmacokinetic profiles compared to standard oral gavage. • Outcomes of the work have been shared with the research community through publications 	Approved
7.1.3	<p>PPLMTR.1Nov22 - evaluating therapeutic strategies to alleviate pro-inflammatory responses during the development and progression of atherosclerosis and aortic aneurysms.</p> <ul style="list-style-type: none"> • COVID-19 pandemic has impacted the number of animals used to date • No unexpected adverse effects • Outcomes of the work have been shared with the research community through publications 	Approved
7.1.4	<p>PPLMTR.1Dec22 - elucidating the neural processes involved in the cerebellar networks involved in cognitive and emotional behaviour and motor control</p> <ul style="list-style-type: none"> • COVID-19 pandemic has impacted the number of animals used to date • Rat tickling now in use with regular play time • Protocols adapted to reduce restraint stress • Outcomes of the work have been shared with the research community through publications 	Approved
7.2	Home Office Retrospective Assessments. (None)	
7.3	Final Reviews.	
7.3.1	<p>PPLFR.1Sep22 – investigating if maladaptive changes to heart muscles cause problems in cardiac function and disturbances to heart rhythm in heart failure.</p> <ul style="list-style-type: none"> • Analgesia protocol reported as appropriate based on animal behaviour • Isolated cells shared with other research groups • Outcomes of the work have been shared with the research community through publications • Retrospective assessment required 	Approved
7.3.2	<p>PPLFR.1Sep22 - investigating heart contraction regulation during heart failure.</p> <ul style="list-style-type: none"> • COVID-19 pandemic has impacted the number of animals • Major aims of the project met 	Approved

7.3.3	<ul style="list-style-type: none"> • Outcomes of the work have been shared with the research community through publications • Retrospective assessment required <p>PPLFR.3Sep22 - advancing understanding of how platelets function at a molecular and cellular level in the context of health and disease</p> <ul style="list-style-type: none"> • Numbers of animals used remained within expected limits • Improved techniques within surgical protocol, increasing survival rate to >95% and a faster recovery post-surgery. • Refined injection routes • Significant impact on the 3Rs by developing an <i>in vitro</i> method of generating and genetically modifying platelets. Future funding secured to further develop <i>in vitro</i> replacement technology • Outcomes of the work have been shared with the research community through publications • Retrospective assessment required due to severity 	Approved
7.3.4	<p>PPLFR.1Dec22 - gaining a better understanding of the neural mechanisms underlying cognitive and emotional behaviour and how these are altered in psychiatric disorders to identify new treatments</p> <ul style="list-style-type: none"> • COVID-19 pandemic has impacted the number of animals • Handling and habituation methods were refined for substance administration and restraint methods • Extra hanging-style enrichment used • Use of playpens for animals not assigned to behavioural tasks • Outcomes of the work have been shared with the research community through publications 	Approved
13	Report on Non-Regulated Projects UIN and VIN applications.	
13.1	<p>Non-Regulated Projects – UINs</p> <p>Reviewed: UIN 1 - 11 AWERB approved: 2, 3, 5, AWERB approved pending clarifications: 1, 4, 6, 7, 8, 9, AWERB did not yet approved:</p>	Secretary to inform
13.1.1	<p>UINs to note:</p> <p>UIN.1 – Applicant to confirm cameras are out of the reach of the calves.</p> <p>UIN.4 – Duration and frequency information required for predator model and alarm call use.</p>	

	<p>UIN.6 – Include stipulation that if an animal is showing signs of cumulative distress the restrain practice will be stopped for that animal.</p> <p>UIN.7 – Provide owner consent for form photos and clipping.</p> <p>UIN.8 – Add consent form and owner information sheet</p> <p>UIN.9 – Confirm Schedule 1 route to be used. Provide a power calculation to support experimental design.</p> <p>UIN.10 – more clarity required regarding consent for the capture of human images.</p> <p>UIN.11 –Tissue sharing options as first source to gain required materials.</p>	
13.2	<p>Non-Regulated Projects – VINs.</p> <p>Reviewed: VIN.1 -13 AWERB approved: 1, 2, 3, 4, 6, 7, 8, 9, 11, 12, 13 AWERB approved pending clarifications: 10, AWERB not yet approved: 5</p>	Secretary to inform
13.2.1	<p>VINs to note:</p> <p>VIN.5 – Provide justification for target monitoring site, or change to a more clinically relevant site.</p> <p>VIN.10 – Resubmit on the correct form with an Owner information sheet and consent form.</p>	
14	Non-Regulated Projects - UIN and VIN amendments	
14.1	VINAmend.1Dec - approved	
15	AWERB Hub. (None)	
16	For Information.	
16.1	<p>Recent member attendance at Understanding Animal Research workshop focused on openness and communication regarding the use of animals in science:</p> <ul style="list-style-type: none"> • Be reflective of audience concern 	Consider asking for a UAR workshop at GW4/Bristol

	<ul style="list-style-type: none">• Composing key messages and shaping narratives• Who you represent, why that matters to you and why that matters to the person you're talking to• Openness is important but not at the cost of personal safety	
17.	Any Other Business. (None)	
18.	Dates of Next Meetings (Online until further notice): 17 th January 2023 21 st February 2023 21 st March 2023 25 th April 2023 23 rd May 2023 20 th June 2023 18 th July 2023	