ANIMAL WELFARE & ETHICAL REVIEW BODY

Minutes: 1:30pm, 23rd April 2024, Online meeting

	Items.	AWERB Outcome
	Attendance: 11 x members (16 attendees including invited presenters)	
1 1.1	Minutes of the last meeting. Approved	 Complete
2	Matters arising from the notes of previous meeting (19th March 2024)	
2.1 2.2 2.3 2.4	3.6 Zebrafish GAA Passport. 3.8 Ethical approval and governance routes involved with the use of animals overseas. 11.1 Prepare standard wording on likely areas of questioning in attendee scheduling email. 11.1 Development of AWERB poster for animal units.	Ongoing. Ongoing. Complete. Ongoing.
3 3.1 3.2 3.3 3.4 3.5	Chair's Report Themed meeting 3Rs and Culture of Care – to be continued next meeting. Discussion on rehoming policy and role of AWERB – see item 6. Potential new members identified and will be invited to observe a meeting before progressing further. Meeting with group interested in the rights of animals and the University Vice Chancellor. Meeting scheduled to review the Wildlife Conservation and Global Health UINs.	
4	Culture of Care Subgroup Report	

4.1 4.2	Aquarium Technical Team presentation – fish sharing project proposal – for internal and external research use – involving non-ASPA-related, non-zebrafish species. Discussion considered 3Rs, sustainability, confidentiality, transport, health screening, maintenance costs, timescales, staff time and promotion. Rehoming presentation – discussion of re-homing definition, applicable animal types and factors for consideration, such as potential benefits, challenges and expectations including handling and care guidelines, transport, home assessment, post-homing monitoring. Appropriacy and reputational impact would be discussed on a case-by-case basis. Draft re-homing policy to be discussed at next meeting.	
5 5.1	3Rs update To be discussed at next meeting.	
6 6.1	Project Licences – New Applications. PPL.1Apr24 Aims: For humans, the loss of function and disfiguring scar tissue that forms following injury or disease is a major cause of suffering and disability e.g. heat and chemical burns and loss of function after a heart attack due to scar tissue. The aim is to advance understanding of the cellular and genetic processes involved in tissue healing with the ultimate goal of facilitating the development of interventions that could be used clinically to restore the normal appearance and function of tissues following injury such as skin and heart. Benefits: Unlike mammals, many fish, including Zebrafish, are able to restore full function to tissues following injury. In advancing the understanding of the cellular and genetic processes involved in the healing of skin and cardiac tissues in Zebrafish the work will help understanding of how the processes involved in healing and tissue repair differ between fish and mammals in order to identify interventions that could be applied to improve healing outcomes in humans. Harms: Fish 75% mild, 25% moderate 95% genetically altered (majority killed for tissue) assays. 25% will undergo tissue injury experiments. Injury will be induced under general anaesthesia by dermatological laser or small cryogenic injury to muscle of the heart. Treatments given through the tank water.	Approved subject to minor revisions

	Discussion: • Total numbers and use of non-animal methods. • Analgesia protocols, potential transference to other species, aged animals – including maximum age, monitoring and welfare score sheets. • Statistics - effect size, animal numbers and sample sizes. • How experimental protocol informs the breeding protocol. • Anaesthetic protocol and frequency. • Pros and cons of swabbing versus fin clipping. • Timescales of translation into the human condition.	
6.2	PPL.2Apr24 Aims: To evaluate gene therapies targeting the choroid plexus for the treatment of diseases associated with disruption to Central Spinal Fluid homeostasis and physiology, such as Hydrocephalus. Benefits: The choroid plexus is an important structure for brain health and development. Located within the lining wall of the ventricles of the brain, it produces and secretes the cerebral spinal fluid, protecting the central nervous system, from impact with the bony structures that surround it during movement, as well as producing growth factors essential for brain development. Modulating the function of the choroid plexus has potential benefits in the treatment of a number of clinically important conditions such as hydrocephalus, impaired developmental disorders, and neurodegenerative diseases. The purpose of the programme of work is to assess the feasibility of targeting specific cell subsets within the choroid plexus with gene therapies with the long-term aim of providing improved treatment for a range of clinically important conditions. There are no therapeutic treatments for hydrocephalus, it is often fatal. Harms: Mice, Pigs, Sheep, 100% Moderate, stereotactic surgery, administration of substances into CSF and sampling Discussion: • Induction of hydrocephalus and establishment of immune model via a staged approach prior to gene therapy. • Use of different species models. • Statistics – numbers, power and significant results. Effect size and hazard ratios. • Use of both sexes	Approved subject to changes and review by sub-group

	• Efficacy data. • Pain assessment. • Behaviour post-surgery. • Species-specific differences in effectiveness of anaesthetics. • Progression of the experiment from one species to another.	
7 7.1	Project Licences – Amendments. PPLAmend.1Apr24 • Additional species rationale • Animal numbers justification	 Not yet approved
8	Report on Non-Regulated Projects UIN and VIN applications.	
8.1	Non-Regulated Projects – UINs Reviewed: UIN.1 - 3 AWERB approved: 2 AWERB approved pending clarifications: 1 AWERB did not yet approve: 3	Secretary to inform
8.1.1	UINs to note: UIN.1 Type of blood to be specified plus clarification on why human blood cannot be used. UIN.3 Level of restriction to be discussed with supervisor plus discuss project with biostatistician.	
8.2	Non-Regulated Projects – VINs. Reviewed: VIN.1 - 6 AWERB approved: 2, 3, 4, 5, 6 AWERB approved pending clarifications: AWERB not yet approved: 1	Secretary to inform
8.2.1	VINs to note: VIN.1 – Applicant to discuss with NVS and clinical veterinary representative General note – Biostatistician to propose an additional question regarding justification of numbers on UIN & VIN forms.	

8.3 8.3.1	Non-Regulated Projects - UIN and VIN amendments UINAmend.1 – Approved with advice to fine tune numbers with biostatistician.	
9	AWERB Hub. (None)	
10	For Information Guidance being created for PPL applicants regarding what to expect from an AWERB meeting - to be shared next meeting.	
11	Any Other Business. (None)	
12	**Dates of Next Meetings** (Online until further notice but twice yearly in person): 21 May 2024 18 Jun 2024 16 Jul 2024	