

Minutes: AWERB

Status: Chair approved

**Meeting held:** 20 July 2017 at 2pm in F82 Hawkshead videolinked to U5 Camden/LBIC VC Room

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outweigh having to use animals for its development.

This project licence would be a development project to get the system up and running. The project proposed using very few animals, but as a proof of concept study, the justification seemed sound.

# 3 PRESENTATION FROM SECOND PPL HOLDER

The project licence holder explained that she was working on Lysomal storage diseases (LSDs). These were a group of approximately 50 rare inherited metabolic disorders that result from defects in lysosomal function. Lysosomal storage diseases affect mostly children who often die at a young and unpredictable age, many within a few months or years of birth. Many other children die of this disease following years of suffering from various symptoms of their particular disorder. They were classified as rare diseases.

The project licence holder had previously been doing work on a zebrafish model of CLN2, one of the LSDs, and found a compound that alleviated seizures. This compound was as effective as sodium valproate at controlling seizures in the zebrafish but it was not known if these findings could be replicated in mammals. It was also not known if a combination of this compound and sodium valproate or other therapies (such as enzyme replacement therapy) would provide a synergistic therapeutic effect, as seen when other experimental therapies were combined. The next stage was therefore to quantify and characterise seizures in mouse models of NCL. Quantitative assessment of relevant signs in mouse models would better enable establishment of the relative merits of novel single or combined treatments and help the community to prioritise which experimental therapies should be tested in patients. Knowing that the treatment worked in two animal models (zebrafish and mouse) would improve confidence that the treatment would work in human patients. With no effective therapies available, all children affected by one of these disorders will die prematurely after a protracted period of disability. Given that these disorders were the largest cause of childhood dementia, the LSDs represent a substantial burden upon the NHS. Therefore any discovery of a means to prevent, or slow down the course of these devastating diseases would be of enormous benefit. Indeed, treatments which could significantly improve the quality of life for affected individuals would represent a tremendous breakthrough for these children, their families and the healthcare professionals who support them. Furthermore, the burden on the health and care services, and hence the economy, would be reduced.

AWERB discussed the project licence after the project licence holder had left. The consensus was that the diseases that aiming to resolve, caused the patients to lead a horrible life – plus their families also suffered. Using this mouse model might result in improvements, and was associated with a mild to moderate level of suffering so justified the animal use involved.

### 4 ETHICALLY SOURCING ANIMALS FOR ANATOMY CLASSES

Following concerns raised by AWERB at a previous meeting about transporting ponies to be used for teaching, the anatomy team had been looking into alternatives. One option had been identified which they presented to AWERB for their consideration. A fter discussion A WERB's consensus was that the alternative option was still not acceptable and that sources that were closer to the College should be identified or alternative methods for delivering the practicals should be looked into.

#### 5 STUDY 13

AWERB noted that a new commercial supplier of defibrinated blood had recently been identified and tests undertaken to validate this as an alternative to the blood that had been supplied by the RVC. AWERB were pleased to hear that an alternative source had been identified and checks had been done to see that it did in fact work.

## 6 INFORMATION DISSEMMINATION

### 6.1 RSPCA/LASA/LAVA/IAT AWERB-UK FORUM

A member of AWERB had attended this event. As part of the event he had attended a rare diseases workshop where it had been debated whether research using animals should be done on these types of diseases as rare diseases only affect a small amount of the population. How valuable should the research be classed as? Did it depend on the age of the people generally affected and how debilitating the disease was? For example Duchenne muscular dystrophy generally only affected young boys –

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16.4 Item 10.2 (April meeting): Animals used at Camden poster