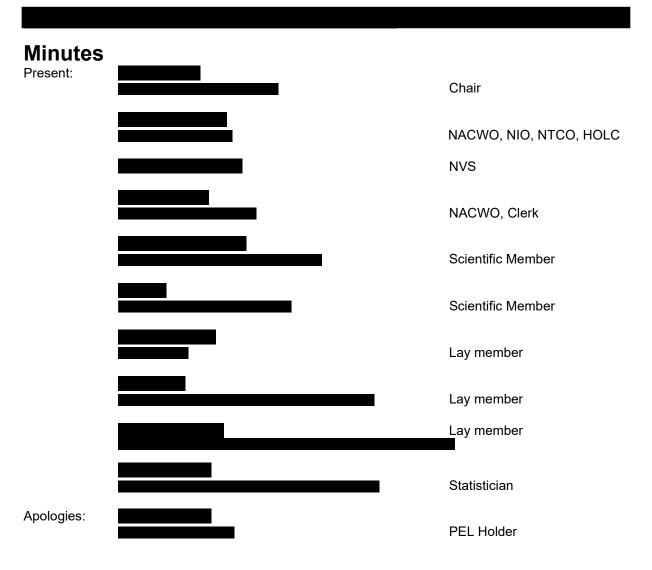
Animal Welfare and Ethical Review Body (AWERB)





STANDING ITEMS

- 1. Apologies for absence
 - Apologies were noted as above.
- 2. Quoracy

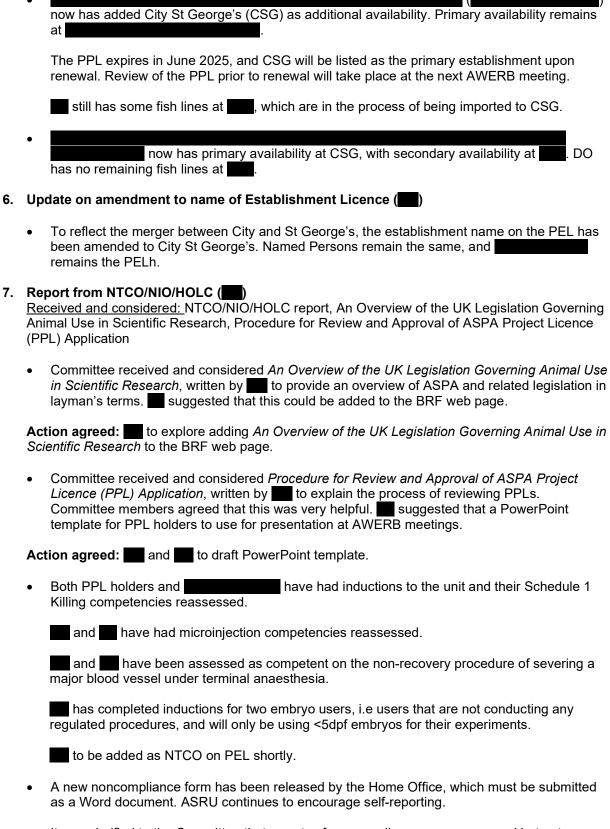
The quorum was met.

- 3. Introduction of new members
 - The Committee welcomed and and was previously a member of the AWERB prior to the closure of the BRF in 2021.
- 4. Minutes

Considered and approved: the minutes of the meeting held on 26/4/2024.

UPDATES TO THE AWERB

5. Update on transfer of Project Licences (



It was clarified to the Committee that reports of noncompliance are encouraged but not mandatory, as opposed to reports under Standard Condition 18 of PPLs. There is no set deadline for noncompliance reports but it is good practice to submit these ASAP.

ASRU will be changing the standard protocol templates for the breeding and maintenance of genetically altered (GA) mice and zebrafish. They are asking for input from Establishments on this.

There is a change to the conflict of interest declaration process for new NVSs and NACWOs. Declarations must now be submitted to the PELh prior to submission to ASRU.

To	receive and consider: NACWO report
•	Wildtype (WT) fish, imported from adults and breeding well. Fish from both imports spawned successfully at 8 weeks post-fertilisation, which is a sign of good health and welfare. Nursery survival rates were higher in the April import than the March group, with 70% and 62% survival rates respectively at 5 weeks of age.
	Both groups of WT fish showed skeletal malformations of the tail, but many have been observed to have grown out of these. Neither group showed a significant bias in sex ratio.
	A new generation of WT fish will be bred shortly, and parents selected from the April import.
•	Large mass spawning tanks, adapted from old conventional mouse cages, are now in use for the WT embryo service. Anecdotally embryo quality appears to be better than the previous method of setting up fish in pairs or trios. This method has saved BRF staff considerable time in setup and collections.
•	Five lines of signary's GA fish were imported as embryos in mid July. These are all maintained under Protocol 1 (mild) of signary's PPL. 5 week survival rates have not yet been recorded, but there have been few observable losses and they are growing well.
•	One line of transgenic fish has been created under wis mild breeding protocol from injected WT embryos. Significant losses (>50%) were noted by 3 weeks of age. It was noted that this may be attributed to their WT background, as their parents were from the March import from which also showed significant nursery losses. In case this was the case, the fish from the March import have been retired from breeding.
•	has generated three lines of GA fish under his moderate breeding protocol. All fish were monitored closely for harmful phenotypes and all three lines were not raised past 18dpf. is discussing husbandry refinements with that may help to raise the fish to an older age without reaching humane endpoints, as this would be very valuable for the experiments.

- A third standalone rack was installed in May and is now being seeded. So far this process is going well.
- All adult fish are provided with enrichment in the form of plastic plants. They have been
 observed interacting with these and there have been no negative effects seen. Samples of
 plastic 'tents' are being tried out as further enrichment. Anecdotally there appears to be lower
 incidence of eggbound females in tanks with the 'tents', suggesting the fish may be using
 these as a spawning substrate.

9. Report from NVS ()

8. Report from NACWO (

To receive and consider: NVS report

- Fish appear to be healthy and growing well, and systems are running well.
- Detritus samples have been taken from the racks to send for health screening where a
 Mycobacterium spp. PCR panel will be carried out. Currently due to the young age of the fish
 it is not necessary to send out whole fish for testing.

PROPOSED LICENCE AMENDMENTS

10.	Proposal for amendment to Establishment Licence – Rehoming ()
	Received and considered: Rehoming Scheme Proposal, Policy for the rehoming of zebrafish
	(Draft)

proposed amendment to the PEL whereby wild-type zebrafish that have not undergone any procedures would be rehomed at the end of their breeding life. This was proposed as an invitation-only trial in the first instance, whereby fish would only be rehomed to those known personally by BRF staff such as friends, family, and colleagues.

Decision made: Whilst the proposal of a rehoming scheme was well received by the Committee, the proposed amendment was not approved in this instance. The primary concerns raised were:

- Accidental rehoming of GA fish though this was acknowledged as very unlikely and
 clarified that accidental release of GMOs is covered in the risk assessment for GMO use at
 CSG.
- Misunderstandings from the general public may lead to damage to reputation of CSG.
- Questions were raised about the liability of CSG if there were any issues with the rehoming process.

The Committee agreed that the proposal should be reviewed by Governance, Legal and Assurance Services (GLAS) for advice. Following advice from GLAS, the proposal will be reconsidered at a future AWERB meeting.

Action agreed: to send proposed amendment to GLAS to review.

Other business

*Starred items not discussed unless notified to the Chair or Clerk in advance of the meeting.

11. Terms of Reference

Updated Terms of Reference approved by all members of the Committee other than two new members (and). TOR to be sent out to new members for approval.

Action agreed: to send TOR to and and for approval by next AWERB.

12. *Dates of Future Meetings