

Local Animal Welfare and Ethical Review Body (AWERB) – HH

13.30 – 16.00 12 July 2022
Microsoft Teams meeting

Minutes

Present:

Function	Name	Position
Chair	[REDACTED]	College academic
Co-opted member (and Chair for agenda item 3)	[REDACTED]	College academic
Member	[REDACTED]	College academic
Member	[REDACTED]	College academic
Member	[REDACTED]	College Academic
Member	[REDACTED]	Co-Chair 3Rs Advisory Group
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon (NVS)
<i>Ex officio</i> Member	[REDACTED]	Named Animal Care and Welfare Officer for the site (NACWO) & NIO
<i>Ex officio</i> Member	[REDACTED]	Named Animal Care and Welfare Officer for the site (NACWO) & NIO
<i>Ex officio</i> Member	[REDACTED]	3Rs programme manager and 3Rs Group Representative
Member	[REDACTED]	Lay member
In attendance (for agenda item 4 only)	[REDACTED]	Named Animal Care and Welfare Officer at SK (NACWO)
Member and attending as secretary	[REDACTED]	AWERB Administrator and member with no responsibilities under ASPA

Apologies:

Function	Name	Position
Member	[REDACTED]	College Academic
<i>Ex officio</i> Member	[REDACTED]	College Academic
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon (NVS)
Member	[REDACTED]	PhD student representative
Member	[REDACTED]	CBS Meeting and Support Administrator and lay member with no responsibilities under ASPA

Item**Introduction**

- The Chair welcomed [REDACTED] to his first meeting.

1. Members' declarations of interest in respect of items on the agenda**Points to note**

- [REDACTED] declared an interest in Agenda item 3 as the "named alternative contact" for the project licence undergoing consideration. He noted that he would recuse himself from the AWERB's deliberations and decision making for this agenda item and that [REDACTED] would take over the Chair for this item.
- [REDACTED] declared an interest in Agenda item 3 as the applicant for the project licence undergoing consideration. She noted that she would recuse herself from the AWERB's deliberations and decision making for this agenda item.

2. Minutes and matters arising**Points to note**

- The minutes of the previous meeting were agreed.
- Updates were given on actions from the previous meeting.

3. Review of licence application – [REDACTED]**Points to note**

- An application for a new project licence was considered.
- The application was to continue a program of work that was due to expire in December.
- [REDACTED] and [REDACTED] recused themselves from the decision making process for this agenda item and discussion was led by [REDACTED]; [REDACTED] left the meeting prior to the pre-presentation discussion and returned only when discussion of this item had concluded while [REDACTED] left the meeting prior to the pre-presentation discussion and again following the PPL holder presentation, returning only when discussion of this item had concluded.
- The committee was content with the overall programme of work proposed but discussed a number of revisions that the AWERB would require to be implemented in the draft application, prior to approving the application for formal submission to the Home Office.
- The committee carried out a retrospective review of the expired PPL in parallel with consideration of the new application.
- The AWERB was pleased to note that the licence holder was using a range of reduction, replacement and refinement strategies in her work. In particular, members noted the reduction and refinement benefits arising from the use of the [REDACTED] given that its use had led to a reduction in severity, mortality and inter-individual variation in inducing [REDACTED]. The AWERB also noted that the applicant was a member of the department's Human Tissue User group that held relevant ethical approval to receive [REDACTED] and that she was also part of a departmental group that had established a system of collecting spare [REDACTED] organs from animals that had undergone [REDACTED] surgery for unrelated projects and had been able to reduce the number of animals used by utilising this "spare" tissue.

Decisions

- The application was approved for submission to the Home Office, subject to the inclusion of the revisions requested by the committee.
- The revised submission will be approved by [REDACTED].
- The interim review for this PPL should be set to the mid-point of the licence.

Actions

- AWERB Administrator to email summary of committee's feedback and required revisions to the applicant.

4. Review of licence application – [REDACTED]Points to note

- An application for a new project licence was considered.
- The application was to continue a program of work that was due to expire in December.
- The committee was content with the overall programme of work proposed but discussed a number of revisions that the AWERB would require to be implemented in the draft application, prior to approving the application for formal submission to the Home Office.
- The committee carried out a retrospective review of the expired PPL in parallel with consideration of the new application.
- The AWERB was pleased to note that the licence holder was using a range of reduction, replacement and refinement strategies in his work. In particular, members noted the reduction and refinement benefits of the group's use of the [REDACTED] with [REDACTED] and the refinements following from the use of [REDACTED] activity. Members were very pleased to learn about the development of a new method to measure [REDACTED] [REDACTED] to mimic [REDACTED] before *in vivo* experiments and the 3Rs representative asked if further information could be provided regarding this approach.

Decisions

- The application was approved for submission to the Home Office, subject to the inclusion of the revisions requested by the committee.
- The revised submission will be approved by Chair's action.
- The mid-term review for this PPL should be set to the mid-point of the licence.

Actions

- AWERB administrator to email summary of committee's feedback and required revisions to the applicant.

5. Review of licence application – [REDACTED]Points to note

- An application for a new project licence was considered.
- The application was to continue a program of work that was due to expire in December.

- The committee was content with the overall aims and objectives set out in the scientific programme of work proposed in licence, and the potential benefits likely to accrue from this work and noted the high overall quality of the science being undertaken.
- However, although members were broadly content with the majority of the overall programme of work proposed in the draft application, the AWERB had strong reservations regarding the potential use of one genotyping method specified in protocols 1 and 2.
- Members also discussed a number of other revisions that the AWERB would require to be implemented in the draft application, prior to approving the application for formal submission to the Home Office.
- The committee carried out a retrospective review of the expired PPL in parallel with consideration of the new application.
- The AWERB was pleased to note the 3Rs benefits arising from the use of longitudinal studies and the use human derived cells and organoid models as non-animal alternatives.

Decisions

- Members carefully considered the scientific justification for the use of one of the genotyping methods included on protocols 1 and 2 of the licence as outlined in the application, together with the additional verbal explanation provided by the applicant during the discussion at the AWERB meeting, but did not believe that the rationale provided outweighed the greater potential harms associated with this technique. In light of this, members agreed that as currently written, the overall harm-benefit evaluation of the project only supported allowing this proposal to proceed if the request to use this genotyping approach was removed from the application.
- The applicant was therefore advised that he would either need to remove the use of the technique from the draft application or insert additional robust scientific justification for the need to use this method of genotyping into the application and implement the other revisions requested by the committee before the local AWERB could approve the application for submission to the Home Office. The additional justification would need to be much clearer and provide compelling scientific justification for this procedure, including detailed explanations of which experimental approaches would necessitate this. It would also need to clearly explain why other methods, including post-mortem genotyping, could not provide a satisfactory alternative approach, given the recent technical enhancements to genotyping assays and the quantity of material required.
- Alternatively, the applicant could elect to request that the current draft of the application be referred to central AWERB for discussion at its next meeting, given that the local AWERB was required to escalate licence applications that included contentious issues to the central AWERB for its consideration.
- Should the applicant elect to submit a revised application for local AWERB consideration, the revised submission will be approved by Chair's action.
- The project licence holder will also be required to provide written confirmation that he and all licence holders working under the licence will, at all times, use A-tune (college's animal management system) correctly, in accordance with CBS A-tune guidance documents, prior to final approval of the licence application.

- The mid-term review for this PPL should be set to the mid-point of the licence.

Actions

- AWERB administrator to email summary of committee's feedback and required revisions to the applicant.

6. A.O.B

Points to note

In light of the fact that it had taken longer than normal to discuss some items on the agenda, it was agreed that the items circulated in the supplementary papers as additional material of interest to members should be carried over to the next meeting for consideration.

Item discussed: Membership Update

Points to note

- The Chair informed members that he was delighted to announce that [REDACTED] had kindly agreed to join the [REDACTED] AWERB as an academic member. She had been unable to attend today's meeting due to prior commitments but would be attending the next meeting of the committee.

Dates of next meetings:

14 th July 2022	11.00-13.00
22 nd August 2022	10.30-13.00
6 th September 2022	10.30-13.00
13 th October 2022	10.30-13.00
17 th November 2022	11.00-13.30
12 th December 2022	13.30-16.00

Local Animal Welfare and Ethical Review Body (AWERB) – [REDACTED]

13.30 – 16.00 13 February 2023
Microsoft Teams meeting

Minutes

Present:

Function	Name	Position
Chair	[REDACTED]	College academic
Member	[REDACTED]	College academic
Member	[REDACTED]	College academic
<i>Ex officio</i> Member	[REDACTED]	3Rs Advisory Group Representative Named Animal Care and Welfare Officer for the site (NACWO) & NIO
<i>Ex officio</i> Member	[REDACTED]	
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon (NVS) CBS Meeting and Support Administrator and lay member with no responsibilities under ASPA
Member	[REDACTED]	
Member and attending as secretary	[REDACTED]	AWERB Administrator and member with no responsibilities under ASPA Training Officer & Named Training and Competency Officer (NTCO)
In attendance	[REDACTED]	

Apologies:

Function	Name	Position
Member	[REDACTED]	College academic
Member	[REDACTED]	College academic
Member	[REDACTED]	College academic
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon (NVS) Named Animal Care and Welfare Officer for the site (NACWO)
<i>Ex officio</i> Member	[REDACTED]	

Item**1. Members' declarations of interest in respect of items on the agenda**

None identified.

2. Minutes and matters arisingPoints to note

- The minutes of the previous meeting were approved, and updates were given on actions from the previous meeting.

3. Review of licence application – [REDACTED]Points to note

- An application for a new project licence was considered.
- The application was to continue a program of work that was due to expire in September 2023.
- The committee was content with the overall programme of work proposed but discussed a number of revisions that the AWERB would require to be implemented in the draft application, prior to approving the application for formal submission to the Home Office.
- The committee carried out a retrospective review of the expiring PPL in parallel with consideration of the new application.
- The AWERB noted the group's efforts with regards to 3Rs implementation. Members were pleased to note that the group had adopted more extensive use of *in silico* simulations to drive hypothesis testing and that they had also been using post-mortem human brain tissue to address some experimental objectives. The committee was also pleased to note that the group had successfully developed a novel head-bar implant that had allowed them to interlace imaging and behavioural testing in the same animal cohorts, thus reducing the number of animals used.

Decisions

- The application was approved for submission to the Home Office, subject to the inclusion of the revisions requested by the committee.
- The revised submission will be approved by Chair's action.
- The mid-term review for this PPL should be set to the mid-point of the licence.

Actions

- AWERB administrator to email summary of committee's feedback and required revisions to the applicant.

4. Review of licence application – [REDACTED]Points to note

- An application for a new project licence was considered.
- The committee was content with the overall programme of work proposed but discussed a number of revisions that the AWERB would require to be implemented in the draft application, prior to approving the application for formal submission to the Home Office.

Decisions

- The application was approved for submission to the Home Office, subject to the inclusion of the revisions requested by the committee.
- The revised submission will be approved by Chair's action.
- The mid-term review for this PPL should be set to the mid-point of the licence.

Actions

- AWERB administrator to email summary of committee's feedback and required revisions to the applicant.

5. **Interim Review - [REDACTED]**

Points to note

- One interim review of an ongoing project was considered by the committee.
- A copy of the licence had been circulated to members for information to assist with carrying out the review.
- Members noted that insufficient information had been provided in some sections of the review form and agreed that the licence holder should be asked to provide more detailed information prior to the AWERB undertaking its formal interim review of the licence.

Actions

- AWERB Administrator to email the licence holder asking for more information to be provided.

6. **CBS updates**

Points to note

- The [REDACTED] facility manager informed members that the opening of the [REDACTED] facility had been delayed until March 2023 at the earliest.

7. **A.O.B**

None identified.

Dates of next meetings:

14 th March 2023	13.30-16.00
24 th April 2023	13.30-16.00
22 nd May 2023	13.30-16.00
19 th June 2023	13.30-16.00
18 th July 2023	13.30-16.00
21 st August 2023	13.30-16.00

Imperial College London

Local Animal Welfare and Ethical Review Body (AWERB) – [REDACTED]

13.30 – 16.00 24 April 2023
Microsoft Teams meeting

Minutes

Present:

Function	Name	Position
Chair	[REDACTED]	College academic
Member	[REDACTED]	College academic
<i>Ex officio</i> Member	[REDACTED]	3Rs Advisory Group Representative Named Animal Care and Welfare Officer for the site (NACWO) & NIO
<i>Ex officio</i> Member	[REDACTED]	Named Animal Care and Welfare Officer for the site (NACWO)
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon (NVS)
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon (NVS) CBS Meeting and Support Administrator and lay member with no responsibilities under ASPA
Member Member and attending as secretary	[REDACTED]	AWERB Administrator and member with no responsibilities under ASPA Training Officer & Named Training and Competency Officer (NTCO)
In attendance	[REDACTED]	

Apologies:

Function	Name	Position
Member	[REDACTED]	College academic
Member	[REDACTED]	College academic
Member	[REDACTED]	College academic
Member	[REDACTED]	College academic

Item**1. Members' declarations of interest in respect of items on the agenda**

None identified.

2. Minutes and matters arising**Points to note**

- The minutes of the previous meeting were approved, and updates were given on actions from the previous meeting.

3. Review of licence application – [REDACTED]**Points to note**

- An application for a new project licence was considered.
- The application was to continue a program of work that was due to expire in September 2023.
- The committee was content with the programme of work proposed in the draft application, subject to some minor revisions requested by the committee.
- The committee carried out a retrospective review of the expiring PPL in parallel with consideration of the new application.
- The AWERB was pleased to note that the licence holder was using a range of reduction, replacement and refinement strategies in her work. In particular, members noted the group's use of cell culture approaches and skin organotypic cultures prior to *in vivo* work, the collection and sharing of multiple tissues at the end of experiments, and the adoption of the use of inducible [REDACTED] models that are more refined than the established spontaneous models of [REDACTED] for some components of the work.

Decisions

- The application was approved for submission to the Home Office, subject to the inclusion of the revisions requested by the committee.
- The revised submission will be approved by Chair's action.
- The mid-term review for this PPL should be set to the mid-point of the licence.

Actions

- AWERB administrator to email a summary of the committee's feedback and required revisions to the applicant.

4. Review of licence application – [REDACTED]**Points to note**

- An application for a new project licence was considered.
- The application was to continue a program of work that was due to expire in June 2023.
- The committee was content with the overall programme of work proposed but discussed a number of revisions that the AWERB would require to be implemented in the draft application, prior to approving the application for formal submission to the Home Office.
- The committee carried out a retrospective review of the expiring PPL in parallel with consideration of the new application. Members were pleased to note that the work carried out under the licence had led to the development of two

compounds that had entered clinical trials in late 2022 and that further compounds that had been identified were in candidate selection.

- The AWERB was pleased to learn that the licence holder had been able to reduce the severity of the experimental work carried out through eliminating the need to use recovery surgery approaches to undertake the work, and that animal use had been reduced by the use of additional *in vitro* testing to identify compounds for use in *in vivo* work, and by the modification of study design to allow the collection of multiple tissues from more studies. Members were also pleased to note that ongoing assay development had led to a reduction in the total volume of blood needed during blood sampling.

Decisions

- The application was approved for submission to the Home Office, subject to the inclusion of the revisions requested by the committee.
- The revised submission will be approved by Chair's action.
- The mid-term review for this PPL should be set to the mid-point of the licence.

Actions

- AWERB administrator to email a summary of the committee's feedback and required revisions to the applicant.

5. **Review of licence amendment application –** ■

Points to note

- An application for an amendment to a project licence was considered.
- The committee was generally content with the concepts underpinning the additional programme of work proposed in the draft amendment application.
- Nevertheless, members felt that the draft amendment did not provide sufficient information regarding the additional benefits that would accrue from the additional work proposed nor provide enough detail regarding the potential harms associated with the new models and the scientific justification for their use.
- Members discussed a number of revisions that the AWERB would require to be implemented, prior to reconsidering the application.
- Members also considered the linked interim review submitted by the licence holder and noted that insufficient information had been provided in some sections of the review form.

Decisions

- In light of the number of clarifications and revisions requested by members, the AWERB agreed that a revised version of the amendment should be re-considered by all AWERB members present at the meeting.
- The AWERB also agreed that the licence holder should be asked to provide more detailed information prior to the AWERB undertaking its formal interim review of the licence.

Actions

- AWERB administrator to email the licence holder with a summary of the committee's feedback and required revisions to the amendment application.

- AWERB Administrator to email the licence holder asking for more information to be included in the interim review.

6. **Report from Central AWERB**

Points to note

- The approved minutes of the November central AWERB meeting were noted.
- A verbal update was also provided regarding items of particular interest discussed at the March central AWERB meeting.

7. **Regular report on applications submitted, self-reporting and compliance notices**

Points to note

- The regular report was noted.

8. **CBS updates**

None identified.

9. **A.O.B**

None identified.

Dates of next meetings:

22 nd May 2023	13.30-16.00
19 th June 2023	13.30-16.00
18 th July 2023	13.30-16.00
21 st August 2023	13.30-16.00

10.30 – 13.30 1st March 2024
MS Teams

Minutes

Present:

Function	Name	Position
Chair	[REDACTED]	College academic
Co Vice-Chair	[REDACTED]	College academic
Member	[REDACTED]	College academic
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon (NVS) Named Animal Care and Welfare Officer (NACWO) for the site & Named Information Officer (NIO)
<i>Ex officio</i> Member	[REDACTED]	3Rs programme manager and 3Rs Group Representative
<i>Ex officio</i> Member	[REDACTED]	CBS Meeting and Support Administrator and lay member with no responsibilities under ASPA
Member	[REDACTED]	
Member and attending as secretary	[REDACTED]	AWERB Administrator and member with no responsibilities under ASPA
In attendance	[REDACTED]	Named Training and Competency Officer (NTCO)

Apologies:

Function	Name	Position
Co Vice-Chair	[REDACTED]	College academic
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon (NVS)
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon (NVS)

Item

1. **Members' declarations of interest in respect of items on the agenda**

None identified.

2. **Minutes and matters arising**

Points to note

- The minutes of the previous meeting were agreed.
- Updates were given on actions from the previous meeting.

3. **Interim Review – [REDACTED]**

Points to note

- One interim review of an ongoing project was considered by the committee.
- A copy of the licence had been circulated to members for information to assist with carrying out the review.
- The AWERB noted that this was a very thorough and clearly written review, and that the licence holder had made good progress in achieving some of the objectives set out in the programme of work and that one paper had already been published from the work carried out to date with a number of others in preparation. Members were pleased to see that the work was having significant impact in the development of new potential therapies and that one molecule was already due to enter human clinical trials with several others in an earlier stage of evaluation.
- The committee was pleased to note the group's continuing efforts with regards to 3Rs implementation and the welfare refinements that had followed from the development of a new technique for the pre-clinical study of [REDACTED]. Members also noted that the group had been working with statisticians to optimise the introduction of animals of both sexes across their various models where appropriate. The AWERB was pleased to learn that the group had received a Provost's PhD scholarship investigating the differences between male and female [REDACTED] and sensory nerve responses and queried whether the student had been registered as a member of the 3Rs student network.

Actions

- AWERB Administrator to email summary of committee's feedback to the licence holder.
- CBS facility manager to contact the group to discuss potential refinements to reduce aggression in co-housed male mice.

4. **Interim Review – [REDACTED]**

Points to note

- One interim review of an ongoing project was considered by the committee.
- A copy of the licence had been circulated to members for information to assist with carrying out the review.
- The AWERB noted that this was a very detailed and thorough review and that the licence holder had made good progress in achieving some of the objectives set out in the programme of work.
- The committee was pleased to note the group's efforts with regards to 3Rs implementation and the group's ongoing efforts to replace animal experiments through computational immunology using both their own and publicly available datasets. Members were also pleased to see that the group had developed sophisticated flow cytometric techniques that had led to a notable decrease in the number of animals

needed in their experiments, and that the licence holder was currently preparing to publish this methodological advancement.

- Members were pleased to observe that the reported actual severity limits were predominantly less severe than those originally anticipated.
- The AWERB advised that the PPL holder should carefully review their current experimental plans to assess if an amendment to the licence might be required in order to increase the number of animals allocated to one protocol, in light of the number of animals used to date.

Actions

- AWERB Administrator to email summary of committee's feedback to the licence holder.
- [REDACTED] facility manager to be asked to contact the PPL holder in order to review breeding practices.

5. Retrospective Review – [REDACTED]

Points to note

- One retrospective review of a recently expired project was considered by the committee. The project licence holder had confirmed that he would not be submitting any further project licence applications.
- A copy of the expired licence had been circulated to members for information to assist with carrying out the review.
- Members noted this was a clearly written review and were pleased to see a number of publications had resulted from the work.

Actions

- AWERB Administrator to email summary of committee's feedback to the licence holder.

6. Report from Central AWERB

Points to note

- The approved minutes of the November 2023 Central AWERB meeting were noted.

7. Regular report on applications submitted, standard condition 18 self-reporting and potential non-compliance reports

Points to note

- The regular report was noted.

8. CBS Aseptic Surgery policy

Points to note

- The Chair reminded members that following the periodic review of ASRU Examples of Indicators of Low-level Concerns that central AWERB had undertaken at its September 2022 meeting, the Director of CBS had been asked to initiate a review of the CBS policy on aseptic surgery and to report back to central AWERB in due course.
- A copy of the revised policy had been circulated for information in the meeting pack and the NVS gave a short presentation to members, highlighting the key changes that had been adopted in the updated policy.
- Members noted that the guidance document was very clear and that the extensive photographs should be very helpful to users when reading through the policy.

9. CPD Discussion item: The Rawle report: role of review and regulatory approvals processes for animal research in supporting implementation of the 3Rs

Points to note

- The Chair advised members that the Rawle report, which had been published in February 2023, had been commissioned by the NC3Rs in order to review current regulatory and review processes aimed at ensuring compliance with 3Rs principles, to

identify any variations, gaps in coverage and lessons to be learned and to explore opportunities for effectively promoting adoption of 3Rs advances. It included a number of recommendations for funders, AWERBs and ASRU.

- A copy of the report had been circulated to members in the paper pack prior to the meeting.
- Members discussed various aspects of the recommendations put forward in the report, particularly focussing on those aimed primarily at AWERBs.
- With regards to the recommendations made on replacement, it was noted that the AWERB application processing form had been amended, prior to those discussion, in order to include a specific question on searching for alternatives **“How have you searched for information on and assessed the suitability of potential non-animal alternatives for undertaking this work? Describe which databases and websites you have used to check for practicable alternative approaches”**. An additional guidance section on searching for alternatives had also been included in the AWERB’s PPL application guidance document for applicants.
- Members took particular note of the decisions that had been taken at the November central AWERB meeting regarding the implementation of the recommended actions for AWERBs:
 - Central AWERB had agreed that the AWERBs should ensure, during project licence review, that applicants have thoroughly addressed the additional question regarding searching for animal alternatives in the AWERB processing form and that they have explained why any non-animal alternatives identified were not suitable. PPL applicants and PPL holders should not only be asked by AWERBs how they incorporate replacement models in their research but also how they keep informed of the latest replacement opportunities.
 - Central AWERB had also agreed that the AWERBs should ensure that all project licence applicants followed the recommendation in the Rawle report in setting out what parts of the work had already been funded, by whom, and the start date of the award and its duration.
 - Central AWERB had also held an in-depth discussion on the topic of AWERB member training and CPD and it had been agreed that a mechanism to record member CPD should be implemented and that AWERB discussion items constituting CPD should, in future, be specifically marked as such on the agenda.

10. **CBS updates**

Points to note

- The NVS informed members that she would shortly be leaving her role and that the Director of CBS was working closely with [REDACTED] services to ensure appropriate continuity of veterinary cover.
- Members expressed their thanks to the NVS for the invaluable contribution she had made to the College’s animal research work during her time in college and for her contribution to the work of the AWERBs over her period of membership of the committees.

11. **A.O.B**

Item discussed: Potential changes to AWERB meetings

Points to note

- The Chair advised members that he had held discussions with the Chairs of the Central and [REDACTED] AWERB’s to identify a more effective way of managing the PPL review

workload between the committees, and that a proposal to this effect would be considered further at the March Central AWERB meeting.

Item discussed: Copy of ASRU's updated Guidance Notes for Project Licence Applications

Points to note

- Members were advised that ASRU had recently released an updated version of their guidance document for PPL applicants.
- A copy of the updated guidance had been circulated in the supplementary paper pack for the attention of members.

Dates of next meetings:

9th April 2024

13.30-16.30

13.30 – 16.30 4^h March 2022
MS Teams

Minutes

Present:

Function	Name	Position
Co Vice Chair and chair of meeting	[REDACTED]	College academic
Co Vice-Chair	[REDACTED]	College academic
Member	[REDACTED]	College academic
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon (NVS) Named Animal Care and Welfare Officer (NACWO) for the site & Named Information Officer (NIO)
<i>Ex officio</i> Member	[REDACTED]	
Member <i>Deputizing for</i> [REDACTED]	[REDACTED]	Post-doctoral representative
	[REDACTED]	3Rs Group Representative
In attendance	[REDACTED]	College academic CBS Meeting and Support Administrator and lay member with no responsibilities under ASPA
Member Member and attending as secretary	[REDACTED]	AWERB Administrator and member with no responsibilities under ASPA

Apologies:

Function	Name	Position
Chair	[REDACTED]	College academic
<i>Ex officio</i> Member	[REDACTED]	College academic and 3Rs Group Representative
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon (NVS)

Item

1. **Members' declarations of interest in respect of items on the agenda**

None identified

2. **Minutes and matters arising**

Points to note

- The minutes of the previous meeting were agreed.
- Updates were given on actions from the previous meeting.

3. **Review of licence amendment - Additional Establishment Request for temporary housing during [REDACTED] facility refurbishment – [REDACTED]**

Points to note

- An application for an amendment to a project licence was considered.
- The application had been submitted by a PPL holder who currently held a project licence at an external organisation in order to add additional availability at college, so as to provide temporary housing during facility refurbishment taking place at the [REDACTED].
- No authority to permit the transfer between Establishments of any animals that had undergone experimental procedures was requested in the amendment.
- The committee was content to approve the request for additional availability at college, to carry out work on the protocols listed in the amendment request only, for the duration of the facility refurbishment works, subject to the compulsory use of study plans.

Decisions

- The amendment was approved for submission to the Home Office.
- The approval was granted on the basis that:
 - the project licence holder would be required to meet with the NVS and facility manager to discuss the proposed plan of work prior to commencing any studies at college;
 - the licence holder would be required to submit a study plan outlining the experimental procedures to be applied and the monitoring processes and humane endpoints for each study, and that the plan must be approved by the NVS and NACWO prior to each study commencing; any subsequent required variations to the approved plan would also need to be discussed and agreed in advance with the named people;
 - the licence holder would be required to provide CBS, in advance of any work commencing, with information regarding the maximum number of animals to be used at college on each protocol, in order to provide assurance that the permitted number of animals on each protocol would not be exceeded.

Actions

- AWERB Administrator to email summary of committee's feedback to the applicant.

4. **Review of licence amendment - Additional Establishment Request for temporary housing during [REDACTED] facility refurbishment – [REDACTED]**

Points to note

- An application for an amendment to a project licence was considered.
- The application had been submitted in order to allow a PPL holder holding a licence with primary availability at another Establishment, who had already been granted permission to undertake work on three protocols at college, to use one additional protocol at college.

- No authority to permit the transfer between Establishments of any animals that had undergone experimental procedures was requested in the amendment.
- The committee was content to approve the request for work on an additional protocol to take place at college, for the duration of the facility refurbishment works, subject to the compulsory use of study plans.

Decisions

- The amendment was approved for submission to the Home Office.
- The approval was granted on the basis that:
 - the project licence holder would be required to meet with the NVS and facility manager to discuss the proposed plan of work prior to commencing any studies at college;
 - the licence holder would be required to submit a study plan outlining the experimental procedures to be applied and the monitoring processes and humane endpoints for each study, and that the plan must be approved by the NVS and NACWO prior to each study commencing; any subsequent required variations to the approved plan would also need to be discussed and agreed in advance with the named people;
 - the licence holder would be required to provide CBS, in advance of any work commencing, with information regarding the maximum number of animals to be used at college on the protocol, in order to provide assurance that the permitted number of animals would not be exceeded.

Actions

- AWERB Administrator to email summary of committee's feedback to the applicant.

5. Update on ASRU Change Programme

Points to note

- The AWERB administrator updated the committee on the key points announced at ASRU's February Quarterly Update to PEL holders on the ASRU Change Programme, which had now been rebranded as the Animals in Science Regulatory Reform Programme.
- The committee noted that ASRU had now concluded that it was necessary for it to prioritize the timing of organisation redesign, in order to improve the quality and consistency of regulatory deliverables, as it was unable to progress the programme as originally outlined last year within its existing organisational design and resources.
- Members were informed that each Establishment and project licence holder would be required to submit a portfolio of evidence, by the end of the year, to outline the systems and processes they operate to ensure they meet all the conditions of their licence.
- The AWERB also noted the new requirements for project licence applications to be accompanied by an assessment report from the AWERB, and for the notifier of each PPL standard condition 18 report and potential non-compliance report to submit a CAPA (correction and preventative action) report.
- Members were particularly dismayed to learn that ASRU anticipated delays to the processing of new project licence applications and that it was now requesting that licence applications should be submitted nine months prior to the required start date.
- Members felt the new temporary timeline announced by ASRU for the submission of project licence applications was unacceptable, particularly given the lack of notice which had not allowed any time for forward planning by applicants or Establishments. Fears were also expressed regarding how long these "temporary" delays were likely to last in practice.

- It was noted that the new timelines effectively shortened the lifetime of a project licence thus increasing the regulatory burden on licence holders, AWERBs and ASRU.
- Members noted that ASRU appeared to be shifting from its previous collaborative regulatory relationship and moving to the type of approach adopted by the HSE.
- The committee was concerned at the continuing failure of ASRU to communicate changes to its operational processes in a timely manner and noted that it was difficult to fully judge the resource implications of some of the announced changes given that the detailed requirements and forms had not yet been circulated to Establishments, despite the fact that the new processes were due to be implemented shortly. Nevertheless, members were concerned about the additional burdens placed on the Establishment and on project licence holders in order to comply with these latest requirements.

6. **CBS updates**

Points to note

- The [REDACTED] facility manager informed members that she was in the process of arranging a number of meetings between [REDACTED] PPL holders and the named persons to discuss the work to be carried out at college during the [REDACTED] refurbishment. She was also scheduling a number of induction meetings with PILs based at [REDACTED] who would need to carry out work at Imperial during this period.
- The NVS advised members that one of college's animal suppliers had advised that rats held in one room at the supplier had tested positive for a virus. Users who had received animals from the affected room had been contacted and screening for the virus was ongoing.

7. **A.O.B**

None identified.

Dates of next meetings:

07 th April 2022	13.30-16.30
12 th May 2022	13.30-16.30
21 st June 2022	13.30-16.30
19 th July 2022	13.30-16.30
16 th August 2022	13.30-16.30

Minutes

Present:

Function	Name	Position
Chair	[REDACTED]	College academic
Co Vice-Chair	[REDACTED]	College academic
Member	[REDACTED]	College academic
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon (NVS) Named Animal Care and Welfare Officer (NACWO) for the site
<i>Deputising for</i> [REDACTED]	[REDACTED]	CBS Meeting and Support Administrator and lay member with no responsibilities under ASPA
Member Member and attending as secretary	[REDACTED]	AWERB Administrator and member with no responsibilities under ASPA Named Training and Competency Officer (NTCO)
In attendance	[REDACTED]	

Apologies:

Function	Name	Position
Co Vice-Chair	[REDACTED]	College academic Named Animal Care and Welfare Officer (NACWO) for the site & Named Information Officer (NIO)
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon (NVS)
<i>Ex officio</i> Member	[REDACTED]	Co-Chair 3Rs Advisory Group 3Rs programme manager and 3Rs Group Representative
<i>Ex officio</i> Member	[REDACTED]	

Item

1. **Members' declarations of interest in respect of items on the agenda**

None identified.

2. **Minutes and matters arising**

Points to note

- The minutes of the previous meeting were agreed.
- Updates were given on actions from the previous meeting.

3. **Review of licence application amendment – [REDACTED]**

Points to note

- An application for an amendment to a project licence was considered.
- The committee was content to approve the request for additional availability at college, subject to the compulsory use of study plans.

Decisions

- The application was approved for submission to the Home Office, subject to the inclusion of some minor administrative revisions requested by the committee.

Actions

- AWERB administrator to email summary of committee's feedback and required revisions to the licence holder.

4. **Review of licence application – [REDACTED]**

Points to note

- An application for a new project licence was considered.
- The committee was content with the overall programme of work proposed but discussed a number of revisions that the AWERB would require to be implemented in the draft application, prior to approving the application for formal submission to the Home Office.

Decisions

- The application was approved for submission to the Home Office, subject to the inclusion of the revisions requested by the committee.
- The revised submission will be approved by Chair's action.
- The mid-term review for this PPL should be set to the mid-point of the licence.

Actions

- AWERB administrator to email summary of committee's feedback and required revisions to the applicant.

5. **Report from Central AWERB**

Points to note

- The approved minutes of the September Central AWERB meeting were noted.

6. **Regular report on applications submitted, self-reporting and compliance notices**

Points to note

- The regular report was noted.

7. **CBS updates**

None identified.

8. **A.O.B**

None identified.

Dates of next meetings:

24 th January 2023	13.30-16.30
14 th February 2023	13.30-16.30
13 th March 2023	13.30-16.30

Local Animal Welfare and Ethical Review Body (AWERB) – [REDACTED]

11.00 – 13.30 06 February 2024
Microsoft Teams meeting

Minutes

Present:

Function	Name	Position
Chair	[REDACTED]	College academic
Member	[REDACTED]	College academic
Member	[REDACTED]	College academic
Member	[REDACTED]	College academic
<i>Ex officio</i> Member	[REDACTED]	3Rs Advisory Group Representative
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon (NVS)
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon (NVS)
<i>Ex officio</i> Member	[REDACTED]	Named Animal Care and Welfare Officer for the site (NACWO)
<i>Ex officio</i> Member	[REDACTED]	Named Animal Care and Welfare Officer for the site (NACWO)
Member	[REDACTED]	PhD student representing the student community
Member	[REDACTED]	Post-doctoral fellow representing the post-doctoral community
Member	[REDACTED]	CBS Meeting and Support Administrator and lay member with no responsibilities under ASPA
Member and attending as secretary	[REDACTED]	AWERB Administrator and member with no responsibilities under ASPA
In attendance	[REDACTED]	Training Officer & Named Training and Competency Officer (NTCO)

Apologies:

Function	Name	Position
<i>Ex officio</i> Member	[REDACTED]	Named Animal Care and Welfare Officer for the site (NACWO) & NIO
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon (NVS)
Member	[REDACTED]	College academic
Member	[REDACTED]	External member

Item: IntroductionsPoints to note

- The Chair welcomed ■ and ■, who had recently joined the ■ local AWERB as the PhD student and post-doctoral researcher representatives, to their first meeting.

1. Members' declarations of interest in respect of items on the agenda

- ■ declared an interest in Agenda item 5 as her work would be covered by the project licence application undergoing review. She noted that she would recuse herself from the AWERB's deliberations and decision making for this agenda item.
- ■ declared a potential conflict of interest in Agenda item 4 in view of the fact that she had previously collaborated with the licence applicant. Members were content that this was not prejudicial to her participating in discussion and decision making for this agenda item.

2. Minutes and matters arisingPoints to note

- The minutes of the previous meeting were approved (subject to a minor correction to one of the points made with regards to agenda item 4 in the minutes), and updates were given on actions from the previous meeting.

3. Review of licence application - ■Points to note

- An application for a new project licence was considered.
- The application was to continue a program of work that was due to expire shortly.
- The AWERB noted that the applicant had incorporated the use of replacement methods within their application and members did not consider that it was possible to replace the entirety of the programme of work with alternative methods.
- Members were content that the overall harm benefit evaluation supported allowing this proposal to proceed.
- Although the committee was content with the overall programme of work proposed, they discussed a number of revisions that the AWERB would require to be implemented in the draft application, prior to approving the application for formal submission to the Home Office.
- The committee carried out a retrospective review of the expiring PPL in parallel with consideration of the new application.
- The AWERB was pleased to note that the group had made good progress in addressing the objectives set out in the programme of work, that the animal numbers used were much lower than originally anticipated and that the reported actual severity limits were generally in line with those originally anticipated.
- The committee noted the group's ongoing efforts with regards to 3Rs implementation and members were pleased to learn that the group were using an extensive range of *in vitro* alternative methods in their programme of work including 3D spheroid cultures, tumour-stromal cell co-cultures, culture of primary tumours cells from patients and whole tumour *ex vivo* cultures,

together with the use of publicly available datasets from patient samples to address questions, and the utilisation of computational modelling, where possible. Members were particularly pleased to read that the group had been granted [REDACTED] award to develop the use of *ex vivo* perfusion devices that will allow primary human cancer samples to be maintained for several days after surgical resection to permit for example, drug assays to be performed and that they were working with the [REDACTED] [REDACTED] Institute to develop a bank of primary human [REDACTED] [REDACTED] cultures from [REDACTED] cancer ascites samples.

Decisions

- The application was approved for submission to the Home Office, subject to the inclusion of the revisions requested by the committee.
- The revised submission will be approved by Chair's action.
- The mid-term review for this PPL should be set to the mid-point of the licence.

Actions

- AWERB administrator to email a summary of the committee's feedback and required revisions to the applicant.

4. Review of licence application - [REDACTED]

Points to note

- An application for a new project licence was considered.
- The application was to continue a program of work that was due to expire in August.
- The AWERB noted that the applicant had incorporated the use of replacement methods within their application and members did not consider that it was possible to replace the entirety of the programme of work with alternative methods.
- Members were content that the overall harm benefit evaluation supported allowing this proposal to proceed.
- Although the committee was content with the overall programme of work proposed, they discussed a number of revisions that the AWERB would require to be implemented in the draft application, prior to approving the application for formal submission to the Home Office.
- The committee carried out a retrospective review of the expiring PPL in parallel with consideration of the new application.
- The AWERB was pleased to note that the group had made good progress in addressing the objectives set out in the programme of work and that the animal numbers used were much lower than originally anticipated and that the reported actual severity limits were generally in line or less severe than those originally anticipated.
- The committee noted the group's ongoing efforts with regards to 3Rs implementation. It was pleased to note that the group had been studying some aspects of cellular and molecular [REDACTED] in *in vitro* surrogate systems using both animal and human tissue, including tissue from [REDACTED] patients. Members were pleased to see that novel methods for *ex vivo* high throughput brain imaging had been developed that had led to a reduction in the number of animals undergoing moderate

severity procedures. The AWERB were also interested to read about the refinement potential of the group's recent purchase of the [REDACTED] for [REDACTED] [REDACTED] were intended to replace where possible the use of more invasive methods of [REDACTED].

Decisions

- The application was approved for submission to the Home Office, subject to the inclusion of the revisions requested by the committee.
- The revised submission will be approved by Chair's action.
- The mid-term review for this PPL should be set to the mid-point of the licence.
- The committee agreed that it would be helpful if the [REDACTED] facility manager could review, together with the licence holder, the group's breeding programme to ensure best practice in breeding and maintaining GA colonies.

Actions

- AWERB administrator to email a summary of the committee's feedback and required revisions to the applicant.
- [REDACTED] facility manager to contact the PPL holder in order to review breeding practices.

5. Review of licence application - [REDACTED]

Points to note

- An application for a new project licence was considered.
- [REDACTED] recused herself from the discussion and decision-making process for this agenda item; she left the meeting prior to the discussion and returned only when discussion and decisions regarding this item had concluded.
- The application was to continue a program of work that was due to expire shortly.
- The AWERB noted that the applicant had incorporated the use of replacement methods within their application and members did not consider that it was possible to replace the entirety of the programme of work with alternative methods.
- Members were content that the overall harm benefit evaluation supported allowing this proposal to proceed.
- Although the committee was content with the overall programme of work proposed, they discussed a number of revisions that the AWERB would require to be implemented in the draft application, prior to approving the application for formal submission to the Home Office.
- The committee carried out a retrospective review of the expiring PPL in parallel with consideration of the new application.
- The AWERB was pleased to note that the group had made good progress in addressing the objectives set out in the programme of work and that the animal numbers used were much lower than originally anticipated and that the reported actual severity limits were generally in line or less severe than those originally anticipated.
- The committee noted the group's ongoing efforts with regards to 3Rs implementation. It was pleased to note that the group had been collaborating with another college group in order to establish 3D gut models, and that they

were exploring the possibility of making such models using 3D bioprinting. Members were very interested to learn about the group's study to refine the antibiotic cocktail used in order to increase its palatability in drinking water and hoped that this advance would be widely shared with other groups using such approaches both within college and externally.

Decisions

- The application was approved for submission to the Home Office, subject to the inclusion of the revisions requested by the committee.
- The revised submission will be approved by Chair's action.
- The mid-term review for this PPL should be set to the mid-point of the licence.
- The committee agreed that it would be helpful if the [REDACTED] facility manager could review, together with the licence holder, the group's breeding programme to ensure best practice in breeding and maintaining GA colonies.

Actions

- AWERB administrator to email a summary of the committee's feedback and required revisions to the applicant.
- [REDACTED] facility manager to contact the PPL holder in order to review breeding practices.

6. **Report from Central AWERB**

Points to note

- Due to time constraints this item was deferred to the next meeting for discussion.

7. **Regular report on applications submitted, standard condition 18 self-reporting and potential non-compliance reports**

Points to note

- Due to time constraints this item was deferred to the next meeting for discussion.

8. **CBS updates**

Points to note

- Nothing to report.

9. **A.O.B**

None identified.

Dates of next meetings:

19 th February 2024	13.30-16.00
4 th March 2024	13.30-16.00
26 th March 2024	13.30-16.00
23 rd April 2024	13.30-16.00

Local Animal Welfare and Ethical Review Body (AWERB) – [REDACTED]

10.30 – 13.00 6 September 2022
Microsoft Teams meeting

Minutes

Present:

Function	Name	Position
Chair	[REDACTED]	College academic
Member	[REDACTED]	College Academic
Member	[REDACTED]	College Academic 3Rs programme manager and 3Rs Group
Member	[REDACTED]	Representative
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon (NVS) Named Animal Care and Welfare Officer for the
<i>Ex officio</i> Member	[REDACTED]	site (NACWO) & NIO Named Animal Care and Welfare Officer for the
<i>Ex officio</i> Member	[REDACTED]	site (NACWO) & NIO
Member	[REDACTED]	PhD student representative CBS Meeting and Support Administrator and lay
Member Member and attending as secretary	[REDACTED]	member with no responsibilities under ASPA AWERB Administrator and member with no responsibilities under ASPA

Apologies:

Function	Name	Position
Member	[REDACTED]	College Academic
Member	[REDACTED]	College Academic
Member	[REDACTED]	College Academic
<i>Ex officio</i> Member	[REDACTED]	Co-Chair 3Rs Advisory Group
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon (NVS)

Item**Introductions:**

- The chair welcomed [REDACTED] to her first meeting since re-joining the College as an NVS.

1. Members' declarations of interest in respect of items on the agenda

None identified.

2. Minutes and matters arisingPoints to note

- The minutes of the previous meetings were approved.
- Updates were given on actions from the previous meeting.

3. Review of licence application – [REDACTED]Points to note

- An application for a new project licence was considered.
- The committee was content with the overall programme of work proposed but discussed a number of revisions that the AWERB would require to be implemented in the draft application, prior to approving the application for formal submission to the Home Office.

Decisions

- The application was approved for submission to the Home Office, subject to the inclusion of the revisions requested by the committee.
- The revised submission will be approved by Chair's action, following re-review by the NVS, and one additional scientific member of the committee.
- The mid-term review for this PPL should be set to the mid-point of the licence.

Actions

- AWERB administrator to email summary of committee's feedback and required revisions to the applicant.

4. Review of licence application – [REDACTED]Points to note

- An application for a new project licence was considered.
- The application was to continue a program of work that had expired in August.
- The committee was content with the overall programme of work proposed but discussed a number of revisions that the AWERB would require to be implemented in the draft application, prior to approving the application for formal submission to the Home Office.
- The committee carried out a retrospective review of the expired PPL in parallel with consideration of the new application.
- The AWERB was pleased to note that the licence holder was using a range of reduction, replacement and refinement strategies in his work. In particular, members noted the group's intention to use a more refined [REDACTED] model involving the use of lower concentrations of highly purified mediators as an alternative to the use of the broad spectrum [REDACTED].

Decisions

- The application was approved for submission to the Home Office, subject to the inclusion of the revisions requested by the committee.
- The revised submission will be approved by Chair's action.
- The mid-term review for this PPL should be set to the mid-point of the licence.

Actions

- AWERB administrator to email summary of committee's feedback and required revisions to the applicant.

5. Interim Review -

Points to note

- One interim review of an ongoing project was considered by the committee.
- A copy of the licence had been circulated to members for information to assist with carrying out the review.
- The AWERB noted that this was a thorough review and that the licence holder had made good progress in achieving some of the objectives set out in the programme of work.
- Members were pleased to note that the reported actual severity limits were predominantly in line or less severe than those originally anticipated and that the animal numbers used to date were well within the limits originally anticipated.
- The committee noted the group's efforts with regards to 3Rs implementation and the ongoing efforts to refine procedures. Members were pleased to note the constructive working relationship with CBS staff and that the group had been proactively seeking advice from the veterinary services team in order to refine surgical techniques to improve surgical outcomes.
- Members were also particularly pleased to note that the group had successfully used a subcutaneous model to [REDACTED], and that this had enabled the group to limit the number of animals used under the protocol involving orthotopic models of tumour induction.

Actions

- AWERB Administrator to email summary of committee's feedback to the licence holder.

6. Report from Central AWERB

Points to note

- The approved minutes of the May central AWERB meeting were noted.
- A verbal update was also provided regarding items of particular interest discussed at the July central AWERB meeting.

7. Regular report on applications submitted, self-reporting and compliance notices

Points to note

- The regular report was noted.

8. CBS updates

Points to note

- Members were informed that [REDACTED] would be leaving her role as Facility manager and NACWO at the end of September. The Chair thanked [REDACTED] for her valuable contributions to AWERB and wished her well in her new post.

9. A.O.B

None identified.

Dates of next meetings:

13 th October 2022	10.30-13.00
17 th November 2022	11.00-13.30
12 th December 2022	13.30-16.00

Imperial College London

Local Animal Welfare and Ethical Review Body (AWERB) – [REDACTED]

10.30 – 13.00 06 December 2021
Microsoft Teams meeting

Minutes

Present:

Function	Name	Position
Chair	[REDACTED]	College academic
Vice Chair	[REDACTED]	College academic and 3Rs Group Representative
Member	[REDACTED]	College academic
Member	[REDACTED]	Post-doctoral representative
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon (NVS)
<i>Ex officio</i> Member & deputizing for [REDACTED]	[REDACTED]	Named Animal Care and Welfare Officer for the site (NACWO) & NIO
In attendance	[REDACTED]	CBS Meeting and Support Administrator
Attending as secretary	[REDACTED]	AWERB Administrator

Apologies:

Function	Name	Position
Member	[REDACTED]	College Academic
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon (NVS)
<i>Ex officio</i> Member	[REDACTED]	Site Manager & Named Information Officer (NIO) Named Animal Care and Welfare Officer for the site (NACWO) & NIO
<i>Ex officio</i> Member	[REDACTED]	

Item**1. Members' declarations of interest in respect of items on the agenda**

None identified

2. Minutes and matters arisingPoints to note

- The minutes of the previous meeting were agreed.
- Updates were given on actions from the previous meeting.

3. Review of licence application - [REDACTED]Points to note

- An application for a new project licence was considered.
- The licence was to continue a program of work that had expired in October 2021.
- The committee was content with the overall programme of work proposed but discussed a number of revisions that the AWERB would require to be implemented in the draft application, prior to approving the application for formal submission to the Home Office.
- The committee carried out a retrospective review of the expired PPL in parallel with consideration of the new application.

Decisions

- The application was approved for submission to the Home Office, subject to the inclusion of the revisions requested by the committee.
- The revised submission will be approved by Chair's action.
- The mid-term review for this PPL should be set to the mid-point of the licence.

Actions

- AWERB administrator to email summary of committee's feedback and required revisions to the applicant.

4. Response to Interim review feedback – [REDACTED]Points to note

- One updated interim review of an ongoing project was considered by the committee.
- A copy of the original AWERB meeting feedback sent to the licence holder and a copy of the licence had also been circulated to members for information to assist with carrying out the review.
- Members were content with the additional information provided in the updated review.

Actions

- AWERB Administrator to email summary of committee's feedback to the licence holder.

5. Report on AAALAC Programme Site VisitPoints to note

- The Chair updated members on the outcome of the AAALAC accreditation site visit.
- The accreditation team would be recommending to the AAALAC Council that full accreditation should continue and had identified no areas of mandatory findings.
- Six commendations had been highlighted by the AAALAC visitors including; knowledge of CBS staff, openness, facilities, PPE signage, the 3Rs programme and the AWERB.
- A number of suggestions for improvements had also been identified and CBS was considering how to proceed in implementing these proposals where applicable.

6. **Report from Central AWERB**

Points to note

- The approved minutes of the September central AWERB meeting were noted and a verbal update was also provided regarding items of particular interest discussed at the November central AWERB meeting.

7. **Regular report on applications submitted, self-reporting and compliance notices**

Points to note

- The regular report was noted.

8. **CBS updates**

- Nothing to report.

11. **A.O.B**

Item discussed: AWERB membership update

Points to note

- The Chair informed members that ██████ had now completed his tenure as a member of the AWERB and thanked him for his contribution.

Actions

- Members to email the Chair with any suggestions regarding broadening the areas of scientific expertise covered by the membership.

Dates of next meetings:

17 th January 2022	10.30-13.00
14 th February 2021	10.30-13.00
14 th March 2021	10.30-13.00
11 th April 2021	10.30-13.00

13.30 – 16.00 7^h April 2022
MS Teams

Minutes

Present:

Function	Name	Position
Chair	[REDACTED]	College academic
Co Vice-Chair	[REDACTED]	College academic
Co Vice-Chair	[REDACTED]	College academic
Member	[REDACTED]	College academic
<i>Ex officio</i> Member	[REDACTED]	College academic and 3Rs Group Representative
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon (NVS) Named Animal Care and Welfare Officer (NACWO) for the site & Named Information Officer (NIO)
<i>Ex officio</i> Member	[REDACTED]	
Member	[REDACTED]	Post-doctoral representative CBS Meeting and Support Administrator and lay member with no responsibilities under ASPA
Member	[REDACTED]	
Member and attending as secretary	[REDACTED]	AWERB Administrator and member with no responsibilities under ASPA

Apologies:

Function	Name	Position
Member	[REDACTED]	CBS Meeting and Support Administrator and lay member with no responsibilities under ASPA
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon (NVS)

Item

1. **Members' declarations of interest in respect of items on the agenda**

Points to note

- [REDACTED] declared a potential conflict of interest in Agenda item 3 in view of the fact that the licence applicant was a co-lead for the Division in which she was based. Members were content that this was not prejudicial to her participating in the decision making for this agenda item.
- [REDACTED] declared a potential conflict of interest in Agenda item 4 given that he and the project licence applicant were co-supervising a PhD student. Members were content that this was not prejudicial to him participating in the decision making for this agenda item since none of the work carried out by the PhD student would be covered by the project licence application undergoing consideration.

2. **Minutes and matters arising**

Points to note

- The minutes of the previous meeting were agreed.
- Updates were given on actions from the previous meeting.

3. **Review of licence application - [REDACTED]**

Points to note

- An application for a new project licence was considered.
- The licence was to continue a program of work due to expire in June 2022.
- The committee was content with the programme of work proposed in the application subject to revisions requested by the committee.
- The committee carried out a retrospective review of the expiring PPL in parallel with consideration of the new application.
- The AWERB was pleased to note that the licence holder was using a range of reduction, replacement and refinement strategies in her work. In particular, members noted the group's use of a lung on a chip using human cells to replace some *in vivo* work along with increased use of live and fixed Precision cut organ slices.

Decisions

- The application was approved for submission to the Home Office, subject to the inclusion of the revisions requested by the committee.
- The revised submission will be approved by Chair's action.
- The mid-term review for this PPL should be set to the mid-point of the licence.

Actions

- AWERB administrator to email summary of committee's feedback and required revisions to the applicant.

4. **Review of licence application - [REDACTED]**

Points to note

- An application for a new project licence was considered.
- The licence was to continue a program of work due to expire in September 2022.
- The committee was content with the programme of work proposed in the application subject to revisions requested by the committee.
- The committee carried out a retrospective review of the expiring PPL in parallel with consideration of the new application.

- The AWERB was pleased to note that the licence holder had successfully immortalised bone marrow-derived macrophages from new lines of transgenic/knockout mice which would provide a source of cells for future *in vitro* work.

Decisions

- The application was approved for submission to the Home Office, subject to the inclusion of the revisions requested by the committee.
- The revised submission will be approved by Chair's action.
- The mid-term review for this PPL should be set to the mid-point of the licence.

Actions

- AWERB administrator to email summary of committee's feedback and required revisions to the applicant.

5. **Report from Central AWERB**

Points to note

- The approved minutes of the January central AWERB meeting were noted.
- A verbal update was also provided regarding items of particular interest discussed at the March central AWERB meeting.

6. **Regular report on applications submitted, self-reporting and compliance notices**

Points to note

- The regular report was noted.
- The NVS provided members with an update on relevant actions put in place following post-mortem and pathology findings received after submission of some of the standard condition 18 reports.
- Members discussed the trends identified in the additional graphs that had been included on the final page of the report and noted that the number of reports submitted in 2021 had reverted towards the historical norm, following the increase documented for 2020.

7. **CBS updates**

Points to note

- The NVS provided members with further information regarding an incident reported to members at the last meeting (a delivery of rats that had originated from a room at the supplier's facility where other animals housed in the same room had subsequently tested positive for a virus). Although the animals received from the supplier had tested positive for the virus, containment measures in place within CBS had thus far successfully prevented the spread of infection to other animals held in the unit.
- The [REDACTED] facility manager updated members regarding refurbishment works that were being planned for the [REDACTED] facility; this work was necessary in order to make it suitable to accommodate the type of work currently being undertaken at [REDACTED] in light of the anticipated future closure and sale of the [REDACTED] building.

8. **A.O.B**

Item discussed: Update on the ASRU Change Programme

Points to note

- The AWERB administrator updated the committee on the key points announced in ASRU's latest operational newsletter regarding the Animals in Science Regulatory Reform Programme. Further written guidance was expected to be received shortly.

Dates of next meetings:

12 th May 2022	13.30-16.30
21 st June 2022	13.30-16.30
19 th July 2022	13.30-16.30
16 th August 2022	13.30-16.30

10.30 – 12.00 8^h September 2023
MS Teams

Minutes

Present:

Function	Name	Position
Chair	[REDACTED]	College academic
Co Vice-Chair	[REDACTED]	College academic
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon (NVS)
<i>Ex officio</i> Member <i>Deputizing for</i> [REDACTED]	[REDACTED] [REDACTED]	Named Veterinary Surgeon service (dNVS) Named Animal Care and Welfare Officer (NACWO) for the site 3Rs programme manager and 3Rs Group Representative
<i>Ex officio</i> Member	[REDACTED]	CBS Meeting and Support Administrator and lay member with no responsibilities under ASPA
Member Member and attending as secretary	[REDACTED] [REDACTED]	AWERB Administrator and member with no responsibilities under ASPA Named Training and Competency Officer (NTCO)
In attendance	[REDACTED]	

Apologies:

Function	Name	Position
Co Vice-Chair	[REDACTED]	College academic
Member	[REDACTED]	College academic
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon (NVS) Named Animal Care and Welfare Officer (NACWO) for the site & Named Information Officer (NIO)
<i>Ex officio</i> Member	[REDACTED]	

Item - Introductions and welcome

- The Chair welcomed [REDACTED] (a new member of the [REDACTED]) to their first meeting.

1. Members' declarations of interest in respect of items on the agenda

None identified.

2. Minutes and matters arising

Points to note

- The minutes of the previous meeting were agreed.
- Updates were given on actions from the previous meeting.

3. Updated Interim review – [REDACTED]

Points to note

- One interim review of an ongoing project was considered by the committee.
- A copy of the licence had been circulated to members for information to assist with carrying out the review.
- The AWERB had already considered this review at a previous meeting but had requested additional information be provided. A copy of the feedback document sent to the licence holder following the earlier discussion had been included in the paper pack.
- Members discussed the updated review and were pleased to see that the group had made good progress in achieving some of the objectives set out in the programme of work. The committee agreed that it would be helpful if the [REDACTED] facility manager could provide some additional guidance to the licence holder regarding best practice in breeding and maintaining GA colonies, in order to optimise the scientific outcomes of the group's work.

Actions

- AWERB Administrator to email summary of committee's feedback to the licence holder.

4. Report from Central AWERB

Points to note

- The approved minutes of the May Central AWERB meeting were noted and the Chair also provided members with a verbal update on items of interest discussed at the July central AWERB meeting.
- In particular, he drew members attention to the NC3Rs two self-assessment tools, one for Institutions and the other for research groups, and how these could be used for both benchmarking and as a tool to collate and track 3Rs activities over time and members were encouraged to use the tool for research groups to evaluate their own 3Rs activities.
- The 3Rs programme manager had already completed the Institutional self-assessment tool and a copy of this would be shared with members at a future meeting.

5. Regular report on applications submitted, standard condition 18 self-reporting and potential non-compliance reports

Points to note

- The regular report was noted.

6. CBS updates

Points to note

- The NACWO provided members with a staffing update and advised members on the progress of the ongoing facility refurbishment project.
- The 3Rs programme manager advised members that the Animal Research Forum would be taking place on the 23rd of November and would include a poster session showcasing PhD student and CBS staff 3Rs linked projects.

7. **A.O.B**

Item discussed: CBS Transgenic Mouse Breeding Best practice guidance document and CBS breeding policy document

Points to note

- The Chair advised members that copies of the recently drafted CBS Transgenic Mouse Breeding Best Practice guidance document and the CBS Breeding Policies document had been circulated for information to members in the supplementary paper pack.

Dates of next meetings:

23 rd October 2023	13.30-16.30
14 th November 2023	10.00-13.00
12 th December 2023	13.30-16.30

13.30 – 16.00 8th December 2021
MS Teams

Minutes

Present:

Function	Name	Position
Chair	[REDACTED]	College academic
Vice-Chair	[REDACTED]	College academic
Member	[REDACTED]	College academic
<i>Ex officio</i> Member	[REDACTED]	College academic and 3Rs Group Representative
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon (NVS) Named Animal Care and Welfare Officer (NACWO) for the site & Named Information Officer (NIO)
<i>Ex officio</i> Member	[REDACTED]	
Member	[REDACTED]	Post-doctoral representative
Member	[REDACTED]	Lay person
In attendance	[REDACTED]	CBS Meeting and Support Administrator
Attending as secretary	[REDACTED]	AWERB Administrator

Apologies:

Function	Name	Position
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon (NVS)
Member	[REDACTED]	College academic
Member	[REDACTED]	College academic

Item

1. **Members' declarations of interest in respect of items on the agenda**

Points to note

- [REDACTED] declared a potential conflict of interest in Agenda item 3 in view of the fact that she was involved in an academic collaboration and grant application with the project licence holder. As some of the work covered in the grant application would be carried out, if funded, under the project licence undergoing consideration, she noted that she would recuse herself from the AWERB's discussion and decision making for this agenda item and that the Vice-Chair would take over the Chair for this item.
- [REDACTED] declared an interest in Agenda item 8 by virtue of the fact that he worked in the group whose project licence was undergoing interim review. He noted that he would recuse himself from the AWERB's discussion and decision making for this item.

2. **Minutes and matters arising**

Points to note

- The minutes of the previous meeting were agreed.
- Updates were given on actions from the previous meeting.

3. **Review of licence amendment – transfer of primary availability – [REDACTED]**

Points to note

- An application for transfer of primary availability of a granted project licence to college was discussed.
- [REDACTED] recused herself from the decision making process for this agenda item and discussion was led by the Vice Chair; [REDACTED] left the meeting prior to the consideration of this item, returning only when discussion of this item had concluded.
- The committee was content to support the transfer of primary availability of this project licence to the college subject to the use of study plans.
- Members also noted that the licence holder would need to provide CBS with up-to-date totals for the number of animals used on each protocol to date, at the current Establishment, in advance of any work commencing at college, in order to provide assurance that the permitted number of animals on each protocol would not be exceeded during the remainder of the licence.

Decisions

- The transfer request was approved subject to some minor administrative corrections to the application.
- The approval was granted on the basis that the licence holder would be required to submit a study plan outlining the experimental procedures to be applied and the monitoring processes and humane endpoints for each study, and that the plan must be approved by the NVS and NACWO prior to each study commencing; any subsequent required variations to the approved plan would also need to be discussed and agreed in advance with the named people.

Actions

- AWERB Administrator to email summary of committee's feedback and required revisions to the applicant.

4. **Review of licence amendment - Additional Establishment Request for temporary housing during [REDACTED] facility refurbishment – [REDACTED]**

Points to note

- An application for an amendment to a project licence was considered.

- The application had been submitted by a PPL holder who currently held a project licence at an external organisation in order to add additional availability at college, so as to provide temporary housing during facility refurbishment taking place at the [REDACTED].
- No authority to permit the transfer between Establishments of any animals that had undergone experimental procedures was requested in the amendment.
- The committee was content to approve the request for additional availability at college, to carry out work on the protocols listed in the amendment request only, for the duration of the facility refurbishment works, subject to the compulsory use of study plans.

Decisions

- The amendment was approved for submission to the Home Office subject to some minor administrative corrections to the application.
- The approval was granted on the basis that:
 - the project licence holder would be required to meet with the NVS and facility manager to discuss the proposed plan of work prior to commencing any studies at college;
 - the licence holder would be required to submit a study plan outlining the experimental procedures to be applied and the monitoring processes and humane endpoints for each study, and that the plan must be approved by the NVS and NACWO prior to each study commencing; any subsequent required variations to the approved plan would also need to be discussed and agreed in advance with the named people;
 - the licence holder would be required to provide CBS, in advance of any work commencing, with information regarding the maximum number of animals to be used at college on each protocol, in order to provide assurance that the permitted number of animals on each protocol would not be exceeded.

Actions

- AWERB Administrator to email summary of committee's feedback to the applicant.

5. **Review of licence amendment - Additional Establishment Request for temporary housing during [REDACTED] facility refurbishment – [REDACTED]**

Points to note

- An application for an amendment to a project licence was considered.
- The application had been submitted by a PPL holder who currently held a project licence at an external organisation in order to add additional availability at college, so as to provide temporary housing during facility refurbishment taking place at the [REDACTED].
- No authority to permit the transfer between Establishments of any animals that had undergone experimental procedures was requested in the amendment.
- The committee was content to approve the request for additional availability at college, to carry out work on the protocols listed in the amendment request only, for the duration of the facility refurbishment works, subject to the compulsory use of study plans.

Decisions

- The amendment was approved for submission to the Home Office subject to some minor administrative corrections to the application.
- The approval was granted on the basis that:
 - the project licence holder would be required to meet with the NVS and facility manager to discuss the proposed plan of work prior to commencing any studies at college;

- the licence holder would be required to submit a study plan outlining the experimental procedures to be applied and the monitoring processes and humane endpoints for each study, and that the plan must be approved by the NVS and NACWO prior to each study commencing; any subsequent required variations to the approved plan would also need to be discussed and agreed in advance with the named people;
- the licence holder would be required to provide CBS, in advance of any work commencing, with information regarding the maximum number of animals to be used at college on each protocol, in order to provide assurance that the permitted number of animals on each protocol would not be exceeded.

Actions

- AWERB Administrator to email summary of committee's feedback to the applicant.

6. **Review of licence amendment - Additional Establishment Request for temporary housing during [REDACTED] facility refurbishment – [REDACTED]**

Points to note

- An application for an amendment to a project licence was considered.
- The application had been submitted by a PPL holder who currently held a project licence at an external organisation in order to add additional availability at college, so as to provide temporary housing during facility refurbishment taking place at the [REDACTED]
- No authority to permit the transfer between Establishments of any animals that had undergone experimental procedures was requested in the amendment.
- The committee was content to approve the request for additional availability at college, to carry out work on the protocols listed in the amendment request only, for the duration of the facility refurbishment works, subject to the compulsory use of study plans.

Decisions

- The amendment was approved for submission to the Home Office subject to some minor administrative corrections to the application.
- The approval was granted on the basis that:
 - the project licence holder would be required to meet with the NVS and facility manager to discuss the proposed plan of work prior to commencing any studies at college;
 - the licence holder would be required to submit a study plan outlining the experimental procedures to be applied and the monitoring processes and humane endpoints for each study, and that the plan must be approved by the NVS and NACWO prior to each study commencing; any subsequent required variations to the approved plan would also need to be discussed and agreed in advance with the named people;
 - the licence holder would be required to provide CBS, in advance of any work commencing, with information regarding the maximum number of animals to be used at college on each protocol, in order to provide assurance that the permitted number of animals on each protocol would not be exceeded.

Actions

- AWERB Administrator to email summary of committee's feedback to the applicant.

7. **Review of licence amendment - Additional Establishment Request for temporary housing during [REDACTED] facility refurbishment – [REDACTED]**

Points to note

- An application for an amendment to a project licence was considered.

- The application had been submitted by a PPL holder who currently held a project licence at an external organisation in order to add additional availability at college, so as to provide temporary housing during facility refurbishment taking place at the [REDACTED]
- No authority to permit the transfer between Establishments of any animals that had undergone experimental procedures was requested in the amendment.
- The committee was content to approve the request for additional availability at college, to carry out work on the protocols listed in the amendment request only, for the duration of the facility refurbishment works, subject to the compulsory use of study plans.

Decisions

- The amendment was approved for submission to the Home Office subject to some minor administrative corrections to the application.
- The approval was granted on the basis that:
 - the project licence holder would be required to meet with the NVS and facility manager to discuss the proposed plan of work prior to commencing any studies at college;
 - the licence holder would be required to submit a study plan outlining the experimental procedures to be applied and the monitoring processes and humane endpoints for each study, and that the plan must be approved by the NVS and NACWO prior to each study commencing; any subsequent required variations to the approved plan would also need to be discussed and agreed in advance with the named people;
 - the licence holder would be required to provide CBS, in advance of any work commencing, with information regarding the maximum number of animals to be used at college on each protocol, in order to provide assurance that the permitted number of animals on each protocol would not be exceeded.

Actions

- AWERB Administrator to email summary of committee's feedback to the applicant.

8. Interim review – [REDACTED]

Points to note

- One interim review of an ongoing project was considered by the committee.
- [REDACTED] recused himself from the decision making process for this agenda item; he left the meeting prior to discussion of the item, returning only when discussion of this item had concluded.
- A copy of the licence had been circulated to members for information to assist with carrying out the review.
- The AWERB noted that this was a thorough review and that the group had made good progress in achieving some of the objectives of the programme of work.
- The committee was pleased to note the group's ongoing efforts with regards to 3Rs implementation including the use of *ex-vivo* brain slices and *in vitro* cell culture as alternative approaches to replace 20% of the *in vivo* experiments originally proposed. Members were also pleased to note that a newly acquired data acquisition system had led to a two-fold increase in data collection per animal, and that the group were continuing their efforts to refine anaesthetic delivery protocols.

Actions

- AWERB Administrator to email summary of committee's feedback to the licence holder.
- NVS to contact the group to discuss their anaesthesia and analgesia methods.

9. Report from Central AWERB

Points to note

- The approved minutes of the September central AWERB meeting were noted.
- A verbal update was also provided regarding items of particular interest discussed at the November central AWERB meeting.

10. Regular report on applications submitted, self-reporting and compliance notices

Points to note

- The regular report was noted.

11. CBS updates

Points to note

- Nothing to report

12. A.O.B

Item discussed: AAALAC site visit

Points to note

- The Chair updated members on the outcome of the AAALAC accreditation site visit.
- The accreditation team would be recommending to the AAALAC Council that full accreditation should continue and had identified no areas of mandatory findings.
- Six commendations had been highlighted by the AAALAC visitors including; knowledge of CBS staff, openness, facilities, PPE signage, the 3Rs programme and the AWERB.
- A number of suggestions for improvements had also been identified and CBS was considering how to proceed in implementing these proposals where applicable.
- The Chair congratulated CBS on this achievement and extended the thanks of the AWERB to all those who had worked so hard to enable the continued accreditation status.

Item discussed: AWERB membership

Points to note

- The Chair proposed that revisions should be made to the attendance status of two local AWERB meeting attendees in order to accord them full membership rights.

Decisions

- Members agreed that [redacted] and [redacted] should henceforth become full members of the local AWERB (in the ASRU membership category “members who do not have any responsibilities under ASPA”).

Actions

- AWERB administrator to amend the attendance list accordingly.

Dates of next meetings:

11 th January 2022	13.30-16.30
15 th February 2022	13.30-16.30

Minutes

Present:

Function	Name	Position
Chair	[REDACTED]	College academic
Member	[REDACTED]	College academic
<i>Ex officio</i> Member	[REDACTED]	College academic and 3Rs Group Representative
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon (NVS)
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon (NVS)
<i>Ex officio</i> Member	[REDACTED]	Named Animal Care and Welfare Officer (NACWO) for the site
In attendance	[REDACTED]	CBS Meeting and Support Administrator
Attending as secretary	[REDACTED]	AWERB Administrator & Named Information Officer

Apologies:

Function	Name	Position
Vice-Chair	[REDACTED]	College academic
Member	[REDACTED]	College academic
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon Service (dNVS)
Member	[REDACTED]	Post-doctoral representative

Item

Introductions

- The Chair welcomed ■■■, a recently appointed NVS, to his first meeting.

1. Members' declarations of interest in respect of items on the agenda

None identified

2. Minutes and matters arising

Points to note

- The minutes of the previous meeting were agreed.
- Updates were given on actions from the previous meeting.

3. Report from Central AWERB

Points to note

- The approved minutes of the May central AWERB meeting were noted.
- A verbal update was also provided regarding items of particular interest discussed at the July central AWERB meeting.
- The 3Rs group representative provided members with a short update on the implementation of the 3Rs hub initiative.

4. Regular report on applications submitted, self-reporting and compliance notices

Points to note

- The regular report was noted, and members were provided with an update on the progress of the actions taken in response to the incident of non-compliance at the ■■■ campus.
- The NACWO also updated members regarding reporting features in A-tune which PPL holders might find helpful to assist them in monitoring the studies being carried out under their project licence.

5. Monitoring procedures for Ageing animals

Points to note

- The AWERB discussed a report submitted by a project licence holder based at the ■■■ campus, submitted as part of the retrospective review of a recently expired licence, which evaluated the effectiveness of the monitoring procedures that had been used to assess ageing animals used during the course of the licence.
- The report had recently been received and discussed by the ■■■ local AWERB, who had agreed that it would be appropriate to share this more widely in order to disseminate the lessons learnt.
- Members noted that the information provided was very informative.

6. ASRU Change Programme

Points to note

- The AWERB administrator updated the committee on the background to ASRU's Change Programme, and key policy and operational changes that were likely to be introduced as a consequence of the Change Programme.
- It was noted that project licence applications and amendments, and revisions to the PEL, were on average taking considerably longer to be processed by ASRU than had previously been the case before the implementation of the Bridging Ways of Working.

- The AWERB administrator advised that the reminder emails sent to project licence holders regarding expiring project licences had been updated to ensure that PPLh were aware of the need to submit replacement applications in good time to meet ASRU's guidance on application processing times, and that the CBS website would also be updated with this new guidance shortly.
- Members noted that it would also be helpful if project licence holders could be reminded about the impact of the Bridging Ways of Working roll-out on ASRU's processing of project licence applications and amendments at the next Campus Operation Committee meetings.

7. **CBS updates**

Points to note

- Members were advised that new dates had now been agreed for the AAALAC programme site visit.

8. **A.O.B**

Item discussed: Animal Research Forum

Points to note

- The Chair reminded members that the Animal Research Forum would be taking place on the 16th September. She also advised that the Animal Research Annual Report had also now been published and expressed her thanks to those members who had made contributions to its preparation.

Dates of next meetings:

12 th October 2021	13.30-16.30
9 th November 2021	13.30-16.30
8 th December 2021	13.30-16.30

13.30 – 16.30 10^h January 2022
MS Teams

Minutes

Present:

Function	Name	Position
Chair	[REDACTED]	College academic
Vice-Chair	[REDACTED]	College academic
Member	[REDACTED]	College academic
Member	[REDACTED]	College academic
Member	[REDACTED]	College academic College academic and 3Rs Group
<i>Ex officio</i> Member	[REDACTED]	Representative
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon (NVS) Named Animal Care and Welfare Officer (NACWO) for the site & Named Information Officer (NIO)
<i>Ex officio</i> Member	[REDACTED]	
Member	[REDACTED]	Post-doctoral representative
Member	[REDACTED]	Lay person
In attendance Member and attending as secretary	[REDACTED]	3Rs programme manager AWERB Administrator and member with no responsibilities under ASPA

Apologies:

Function	Name	Position
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon (NVS)

Item

1. Members' declarations of interest in respect of items on the agenda

None identified

2. Minutes and matters arising

Points to note

- The minutes of the previous meeting were agreed.
- Updates were given on actions from the previous meeting.

3. Review of licence amendment - Additional Establishment Request for temporary housing during [REDACTED] facility refurbishment – [REDACTED]

Points to note

- An application for an amendment to a project licence was considered.
- The application had been submitted by a PPL holder who currently held a project licence at an external organisation in order to add additional availability at college, so as to provide temporary housing during facility refurbishment taking place at the [REDACTED].
- No authority to permit the transfer between Establishments of any animals that had undergone experimental procedures was requested in the amendment.
- The committee was content to approve the request for additional availability at college, to carry out work on the protocols listed in the amendment request only, for the duration of the facility refurbishment works, subject to the compulsory use of study plans.

Decisions

- The amendment was approved for submission to the Home Office subject to some minor administrative corrections to the application.
- The approval was granted on the basis that:
 - the project licence holder would be required to meet with the NVS and facility manager to discuss the proposed plan of work prior to commencing any studies at college;
 - the licence holder would be required to submit a study plan outlining the experimental procedures to be applied and the monitoring processes and humane endpoints for each study, and that the plan must be approved by the NVS and NACWO prior to each study commencing; any subsequent required variations to the approved plan would also need to be discussed and agreed in advance with the named people;
 - the licence holder would be required to provide CBS, in advance of any work commencing, with information regarding the maximum number of animals to be used at college on each protocol, in order to provide assurance that the permitted number of animals on each protocol would not be exceeded.

Actions

- AWERB Administrator to email summary of committee's feedback to the applicant.

4. Review of licence application - [REDACTED]

Points to note

- An application for a new project licence was considered.
- The licence was to continue a program of work covered by a recently expired licence.
- The committee was content with the programme of work proposed in the application subject to revisions requested by the committee.

- The committee carried out a retrospective review of the expiring PPL in parallel with consideration of the new application.
- Members were pleased to note that the licence holder was involved in an NC3Rs funded collaborative project to develop human cerebral organoids as a potential replacement strategy for some components of the ongoing work. The AWERB also noted that the group had been implementing a number of approaches to reduce and refine their animal studies including the use of computer modelling and new methods to improve statistical analysis, and that they had been working in conjunction with the named people and an NC3Rs working group to refine their experimental techniques.

Decisions

- The application was approved for submission to the Home Office, subject to the inclusion of the revisions requested by the committee.
- The revised submission will be approved by Chair's action.
- The mid-term review for this PPL should be set to the mid-point of the licence.

Actions

- AWERB administrator to email summary of committee's feedback and required revisions to the applicant.

5. **Review of licence amendment - Additional Establishment Request for temporary housing during [REDACTED] facility refurbishment – [REDACTED]**

Points to note

- An application for an amendment to a project licence was considered.
- The application had been submitted by a PPL holder who currently held a project licence at an external organisation in order to add additional availability at college, so as to provide temporary housing during facility refurbishment taking place at the [REDACTED].
- No authority to permit the transfer between Establishments of any animals that had undergone experimental procedures was requested in the amendment.
- The committee was content to approve the request for additional availability at college, to carry out work on the protocols listed in the amendment request only, for the duration of the facility refurbishment works, subject to the compulsory use of study plans.

Decisions

- The amendment was approved for submission to the Home Office subject to some minor administrative corrections to the application.
- The approval was granted on the basis that:
 - the project licence holder would be required to meet with the NVS and facility manager to discuss the proposed plan of work prior to commencing any studies at college;
 - the licence holder would be required to submit a study plan outlining the experimental procedures to be applied and the monitoring processes and humane endpoints for each study, and that the plan must be approved by the NVS and NACWO prior to each study commencing; any subsequent required variations to the approved plan would also need to be discussed and agreed in advance with the named people;
 - the licence holder would be required to provide CBS, in advance of any work commencing, with information regarding the maximum number of animals to be used at college on each protocol, in order to provide assurance that the permitted number of animals on each protocol would not be exceeded.

Actions

- AWERB Administrator to email summary of committee's feedback to the applicant.

6. Review of licence amendment - Additional Establishment Request for temporary housing during [REDACTED] facility refurbishment – [REDACTED]

Points to note

- An application for an amendment to a project licence was considered.
- The application had been submitted by a PPL holder who currently held a project licence at an external organisation in order to add additional availability at college, so as to provide temporary housing during facility refurbishment taking place at the Institute [REDACTED]
- No authority to permit the transfer between Establishments of any animals that had undergone experimental procedures was requested in the amendment.
- The committee was content to approve the request for additional availability at college, to carry out work on the protocols listed in the amendment request only, for the duration of the facility refurbishment works, subject to the compulsory use of study plans.

Decisions

- The amendment was approved for submission to the Home Office subject to some minor administrative corrections to the application.
- The approval was granted on the basis that:
 - the project licence holder would be required to meet with the NVS and facility manager to discuss the proposed plan of work prior to commencing any studies at college;
 - the licence holder would be required to submit a study plan outlining the experimental procedures to be applied and the monitoring processes and humane endpoints for each study, and that the plan must be approved by the NVS and NACWO prior to each study commencing; any subsequent required variations to the approved plan would also need to be discussed and agreed in advance with the named people;
 - the licence holder would be required to provide CBS, in advance of any work commencing, with information regarding the maximum number of animals to be used at college on each protocol, in order to provide assurance that the permitted number of animals on each protocol would not be exceeded.

Actions

- AWERB Administrator to email summary of committee's feedback to the applicant.

7. CBS updates

Points to note

Nothing to report

8. A.O.B

Item discussed: AWERB membership

Points to note

- The Chair advised members that [REDACTED], the current Chair of central AWERB would be retiring from college at the end of March, and that she had accepted an invitation from the Provost to take on the position of central AWERB Chair.
- She was very pleased to announce that [REDACTED] had agreed to accept an invitation to join the [REDACTED] local AWERB as Chair of the committee, and that he planned to attend the February and March meetings as an observer prior to officially taking up the role from the beginning of April.

- She was also delighted to inform members that [REDACTED] had also agreed to become a Co-Vice Chair of the [REDACTED] local AWERB.
- She also advised members that it would be helpful to recruit some additional lay members/reviewers to assist with the work of the AWERB and asked members to email her with suggestions of any suitable candidates.

Actions

- Members to email the Chair with suggestions for additional lay members/reviewers.

Dates of next meetings:

15 th February 2022	13.30-16.30
04 th March 2022	13.30-16.30

Local Animal Welfare and Ethical Review Body (AWERB) – [REDACTED]

13.30 – 16.00 10 May 2022
Microsoft Teams meeting

Minutes

Present:

Function	Name	Position
Chair	[REDACTED]	College academic
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon (NVS) Named Animal Care and Welfare Officer for the site (NACWO) & NIO
<i>Ex officio</i> Member	[REDACTED]	Named Animal Care and Welfare Officer for the site (NACWO) & NIO
<i>Ex officio</i> Member	[REDACTED]	Named Animal Care and Welfare Officer for the site (NACWO) & NIO
Member	[REDACTED]	College Academic
Member	[REDACTED]	PhD student representative 3Rs programme manager and 3Rs Group Representative
Member	[REDACTED]	3Rs programme manager and 3Rs Group Representative
In attendance	[REDACTED]	Co-Chair 3Rs Advisory Group CBS Meeting and Support Administrator and lay member with no responsibilities under ASPA
Member	[REDACTED]	
Member and attending as secretary	[REDACTED]	AWERB Administrator and member with no responsibilities under ASPA

Apologies:

Function	Name	Position
Member	[REDACTED]	College Academic
Member	[REDACTED]	College academic
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon (NVS)

Item**Introduction**

- The Chair welcomed [REDACTED] to her first meeting.

1. Members' declarations of interest in respect of items on the agenda

None identified.

2. Minutes and matters arising**Points to note**

- The minutes of the previous meeting were agreed.
- Updates were given on actions from the previous meeting.

3. Review of licence application – [REDACTED]**Points to note**

- An application for a new project licence was considered.
- The application was to continue a program of work that was due to expire in October.
- The committee was content with the overall programme of work proposed but discussed a number of revisions that the AWERB would require to be implemented in the draft application, prior to approving the application for formal submission to the Home Office.
- The committee carried out a retrospective review of the expired PPL in parallel with consideration of the new application.
- The AWERB was pleased to note that the licence holder was using a range of reduction, replacement and refinement strategies in his work. In particular, members noted the group's refinements to the cabinets used to house mice during thermoneutral experiments, the use of patient derived human cancer cells for some experiments, the intention to generate mouse and patient-derived human [REDACTED] organoid models and the continued use of publicly available datasets reporting the output of later-scale human studies for identifying genes and pathways involved in regulating disease progressions to provide insight for directing future research direction.

Decisions

- The application was approved for submission to the Home Office, subject to the inclusion of the revisions requested by the committee.
- The revised submission will be approved by Chair's action.
- The mid-term review for this PPL should be set to the mid-point of the licence.

Actions

- AWERB administrator to email summary of committee's feedback and required revisions to the applicant.

4. CBS updates

- The 3Rs programme manager was working to set up a 3Rs PhD students' network to foster collaborations and initiatives.
- The next *in vivo* experimental design course would be partly funded by attendee registration fees, in order to enable more courses to be run during the

year. Members were asked to contact the 3Rs programme manager with any suggestions regarding potential course topics.

5. Update on ASRU Change Programme

Points to note

- The AWERB administrator updated the committee on the key points covered in the updated version of the ASRU Bridging Ways of Working.

6. A.O.B

None identified

Dates of next meetings:

13 th June 2022	10.30-13.00
12 th July 2022	13.30-16.00
22 nd August 2022	10.30-13.00

Imperial College London

Central Animal Welfare and Ethical Review Body (AWERB)

09:30 – 12.30 10 November 2023 (Meeting 2)

MS Teams

Present:

Function	Name	Position
Chair	[REDACTED]	Senior College academic
Vice-chair	[REDACTED]	Lay person
<i>Ex officio</i> Member	[REDACTED]	Establishment Licence Holder
<i>Ex officio</i> Member	[REDACTED]	Chair of the 3Rs Advisory Group
<i>Ex officio</i> Member	[REDACTED]	Chair of the Local AWERB – [REDACTED]
<i>Ex officio</i> Member	[REDACTED]	Director of Central Biomedical Services (CBS)
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon (NVS)
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon service (dNVS)
<i>Deputizing for</i> [REDACTED]	[REDACTED]	Named Animal Care and Welfare Officer (NACWO) & Named Information Officer (NIO)
<i>Ex officio</i> Member	[REDACTED]	Named Training and Competency Officer (NTCO)
		CBS Meeting and Support Administrator and lay member with no responsibilities under ASPA
Member	[REDACTED]	
Member and secretary	[REDACTED]	AWERB Administrator and member with no responsibilities under ASPA

Apologies:

Function	Name	Position
<i>Ex officio</i> Member	[REDACTED]	Director of Bioservices
<i>Ex officio</i> Member	[REDACTED]	Chair of the Local AWERB – [REDACTED]
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon (NVS)
<i>Ex officio</i> Member	[REDACTED]	Named Animal Care and Welfare Officer (NACWO) & Named Information Officer (NIO)
Member	[REDACTED]	Senior College academic and biostatistician
Member	[REDACTED]	PhD student representing the student community
Member	[REDACTED]	Lay person & Imperial Communications representative
Member	[REDACTED]	External Member
Member	[REDACTED]	External Member
Member	[REDACTED]	External Member

	<p><u>Item</u></p> <ul style="list-style-type: none"> The Chair welcomed [REDACTED] (a new member of the [REDACTED]) to her first meeting.
1.	<p><u>Members' declarations of interests in respect of items on the agenda</u></p> <p>None identified.</p>
2.	<p><u>Minutes and matters arising</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> The minutes of the last meeting were agreed. Updates were given on actions from the previous meeting. In particular, members were very pleased to learn that, following discussion at the last meeting, an application by the 3Rs hub for research culture funding from the Research England Enhancing Research Culture funding round 2023-24 had been submitted and granted.
3.	<p><u>Retrospective Assessment – [REDACTED]</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> A retrospective assessment of a recently expired project licence containing a protocol with a severe severity limit was reviewed. In accordance with the legislation, and the guidance provided by ASRU, the project licence holder is required to submit a copy of the assessment to the Home Office, by the due date, following consideration of the assessment by the AWERB. A copy of the licence had been circulated to members for information to assist with carrying out the assessment. The AWERB was pleased to note the scientific progress made during the course of the licence. Members were very pleased to learn that the group had been able to refine the surgical [REDACTED] model to reduce the peri-operative mortality rate and that the use of a [REDACTED] intra-procedurally had helped to treat any potential lethal [REDACTED] surgery. As a result of these refinements, the actual severity limits had been less severe than those originally anticipated. It was also noted that as part of their replacement work, the group had been developing <i>in silico</i> models of [REDACTED] and using recordings obtained from patients undergoing invasive electrophysiological procedures. <p><u>Decisions</u></p> <ul style="list-style-type: none"> The committee was content to approve the retrospective assessment for submission to the Home Office, subject to the inclusion of some revisions requested by the committee. <p><u>Actions</u></p> <ul style="list-style-type: none"> AWERB administrator to email summary of committee's feedback to the licence holder.
4.	<p><u>CBS Aseptic Surgery policy</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> The Chair reminded members that following the periodic review of ASRU Examples of Indicators of Low-level Concerns that central AWERB had undertaken at its September 2022 meeting, the Director of CBS had been asked to initiate a review of the CBS policy on aseptic surgery and to report back to central AWERB in due course.

	<ul style="list-style-type: none"> • A copy of the revised policy had been circulated for information in the meeting pack and the NVS gave a short presentation to members, highlighting the key changes that had been adopted in the updated policy. • Members noted that the guidance document was very clear and that the extensive photographs should be very helpful to users when reading through the policy.
5.	<p><u>Discussion item: The Rawle report: role of review and regulatory approvals processes for animal research in supporting implementation of the 3Rs</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> • The Chair advised members that the Rawle report, which had been published in February 2023, had been commissioned by the NC3Rs in order to review current regulatory and review processes aimed at ensuring compliance with 3Rs principles, to identify any variations, gaps in coverage and lessons to be learned and to explore opportunities for effectively promoting adoption of 3Rs advances. It included a number of recommendations for funders, AWERBs and ASRU. • A copy of the report had been circulated to members in the paper pack prior to the meeting. • Members discussed various aspects of the recommendations put forward in the report, particularly focussing on those aimed primarily at AWERBs. • With regards to the recommendations made on replacement, the Chair noted that the AWERB application processing form had been amended earlier this year to include a specific question on searching for alternatives “How have you searched for information on and assessed the suitability of potential non-animal alternatives for undertaking this work? Describe which databases and websites you have used to check for practicable alternative approaches”. An additional guidance section on searching for alternatives had also been included in the AWERB’s PPL application guidance document for applicants. • Members held an in-depth discussion on the topic of AWERB member training and CPD. Items discussed included: <ul style="list-style-type: none"> ○ what type of training should constitute CPD in terms of members’ roles on the AWERB, ○ how much CPD should members be expected to undertake and how this should be recorded and collated, ○ attendance at the college’s experimental design course, ○ reserved time for CPD training at AWERB meetings, ○ how additional CPD for AWERB members might be funded. <p><u>Decisions</u></p> <ul style="list-style-type: none"> • The AWERB should ensure that all project licence applicants followed the recommendation in the Rawle report in setting out what parts of the work had already been funded, by whom, and the start date of the award and its duration. • During project licence review, the AWERB should ensure that applicants have thoroughly addressed the additional question regarding searching for animal alternatives in the AWERB processing form and that they have explained why any non-animal alternatives identified were not suitable. • PPL applicants and PPL holders should not only be asked by AWERBs how they incorporate replacement models in their research but also how they keep informed of the latest replacement opportunities.

	<ul style="list-style-type: none"> • AWERB discussion items constituting CPD should, in future, be specifically marked as such on the agenda. <p><u>Actions</u></p> <ul style="list-style-type: none"> • The Chair, AWERB Administrator and NTCO to consider and agree on the most effective route for the recording of member CPD. • The AWERB administrator to update the Chairs' briefing templates for PPL applications to include the checking of the funding and replacement issues identified above.
6.	<p><u>Terms of Reference</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> • The Chair reminded members that the AWERB Terms of Reference (ToR) had last been reviewed and updated in September 2022, and that it was good practice to periodically review these in order to ensure that they remained fit for purpose, and to assess the processes in place to ensure that the AWERB was continuing to fulfil all areas of responsibility outlined in the ToR. • She drew attention to the AWERB's responsibilities to provide assurance that the necessary systems of control are established and followed at Imperial with regards to animal welfare and compliance with the ASPA (1986) and the AWERB Home Office Guidance, and to keep under review management procedures and protocols, including management systems, for monitoring, reporting and following up on acquisition, welfare and proper use of animals in research at Imperial. She advised that the compliance and risk group had had discussions regarding putting in place additional checks on work being undertaken on other project licence holders' licences and on the transfer of breeding animals between licences. The AWERB agreed with the concerns expressed by the compliance and risk group, and with the proposal that project licence applicants should be required to seek permission from the AWERB to permit other groups to work under their licence (unless this had been clearly set out in the original licence application). • The Chair also drew members' attention to a section in the October 2023 ASRU operational newsletter that outlined ASRU's response to the ASC report on the use of animals in the development and production of antibodies (which had been published in October 2022). A copy of the relevant sections of the newsletter had been circulated to members in the supplementary meeting papers prior to the meeting. She reminded members that a discussion on the ASC's report had been held at the November 2022 central AWERB meeting, and noted that ASRU's response to the report now set out additional guidance on how applicants should structure their licence application, including detailed guidance on their expectations for how the relevant protocol should be set out, and on the requirements for AWERB review. This included requirements for the AWERB to undertake prospective review to consider the legitimacy of each request for antibody production using live animals and an annual retrospective review, via an assessment proforma. • The AWERB also discussed whether it might be appropriate to formalise the expectations for AWERB members, particularly with regards to meeting attendance. Members noted that it was important that department heads

and line managers recognised the strategic importance of the AWERB committee to the college, and that the time devoted to AWERB work by staff members should be appropriately recognised by their departments and captured in their Workload Allocation Model.

Decisions

- Following discussion, members were content that no revisions to the Terms of Reference themselves were currently required.
- The AWERB concurred with the discussions that had taken place at the compliance and risk group regarding the need for additional checks to be put in place regarding work being undertaken on other project licence holders' licences and on the transfer of breeding animals between licences. Members agreed that:
 - The AWERB project licence application processing form should be amended to seek information as to whether the licence application was seeking to permit any additional academic groups, in addition to the licence applicant's own group, to undertake collaborative studies under the licence. AWERB approval would only be granted if appropriate justification and assurances regarding supervision were provided by the licence applicant. Specific authorisation from the AWERB would also be required for the addition of other groups to granted licences, if the text of the granted licence did not already authorise this.
 - Any request to transfer breeding animals from a project licence due to expire within 12 months to another project licence would require AWERB approval. In cases where the reason for the request followed from a failure of the licence holder to progress a replacement licence application in adequate time, any approval, if granted, would be time limited (and normally for no more than a maximum period of 6 months) and granted only to permit the licence holder additional time to put in place their own licence, or other appropriate arrangements as agreed with the AWERB. Any further failure to progress the licence holder's replacement application in a timely manner would result in de-mating of breeding stock.

Actions

- AWERB Administrator to finalise the draft breeding form, and the changes to the AWERB application review form, and to put these into use.
- The AWERB PPL application guidance document and CBS website should then be updated accordingly.
- Chair and AWERB administrator to seek input from college academics with particular expertise in antibody linked work in order to develop a suitable process to fulfil the additional requirements set out in the latest ASRU operational update.
- Chair to take forward ensuring that the importance of members' roles on the AWERB was appropriately recognised in the Workload Allocation Model.
- AWERB administrator to adapt the forms currently used to set out the duties and responsibilities of external and lay members to produce a version tailored for academic and research staff member categories.

7. Periodic review of ASRU Examples of Indicators of Low-level Concerns

Points to note

	<ul style="list-style-type: none"> • The Chair reminded members that central AWERB had previously agreed that it would be good practice to periodically review the example Indicators of Low-level Concerns previously published by ASRU in an advice note. • Members noted that CBS had recently undertaken detailed reviews of two of the indicators in the published advice note (namely breeding and maintenance, and aseptic surgery and analgesia). • Members were advised that the external company that CBS had been using to provide its anonymous reporting of concerns service had closed, and that a new mechanism for anonymous reporting therefore needed to be put in place. • Members noted that it was difficult in some instances for members to assess the indicators without additional information (for example those related to training and record keeping). It was proposed that it could be helpful for members to receive a copy of the current version of the Compliance and Risk group’s tracker for assessment of compliance against ASPA and licence conditions, in order to assist with evaluating these areas. • Members also noted it would be helpful to ensure that an early date was set to replace the previously postponed AWERB visit to the █████ facility. <p><u>Actions</u></p> <ul style="list-style-type: none"> • CBS Meeting and Support Administrator to arrange a revised date for the AWERB tour of █████. • Director of CBS to investigate an alternative anonymous reporting mechanism. • AWERB Chair to liaise with the Secretary of the Compliance and Risk group regarding circulating the latest version of the tracker in the papers of the next AWERB meeting.
<p>8.</p>	<p><u>Central AWERB PhD and Post-doctoral representative vacancies</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> • Members considered the expressions of interest that had been received for the PhD student representative and post-doctoral representative vacancies. <p><u>Decisions</u></p> <ul style="list-style-type: none"> • It was agreed that the candidates that had received the highest combined member ranking for each role should be invited to become members of the central AWERB, subject to satisfactory references. • Members agreed that the second-choice candidates should be offered roles on the relevant local AWERB, subject to satisfactory references and the agreement of the local AWERB Chair. <p><u>Actions</u></p> <ul style="list-style-type: none"> • CBS Meeting and Support Administrator to arrange for the necessary references to be obtained. • Upon receipt of references, Chair to write to the preferred candidate inviting them to join central AWERB. • After appropriate liaison with relevant local AWERB Chair and receipt of references, the second-choice candidates should be notified and offered the opportunity to join local AWERB.
<p>9.</p>	<p><u>Regular report on applications submitted, self-reporting & compliance notices</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> • The regular report was noted.

	<ul style="list-style-type: none"> Members noted that ASRU had recently recommenced responding to standard condition 18 reports, with responses thus far received for several submitted to ASRU during August, but that a large backlog, dating back to mid-February remained outstanding. The Chair advised that she had discussed the likely proportion of potential non-compliance reports submitted for the current year, relative to actual activity, with the AWERB administrator. Although it would not be possible to normalise the data until the final end of year activity measures had been collated, it was unlikely, given the small number of such reports submitted thus far, that there had been any notable increase in the normalised proportion.
10.	<p><u>Local AWERB – [REDACTED] report</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> The approved minutes of the July 2023 local AWERB meeting were received and noted.
11.	<p><u>Local AWERB – [REDACTED] report</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> The approved minutes of the June 2023 local AWERB meeting were received and noted.
12.	<p><u>3Rs Advisory group update</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> The 3Rs Chair reminded the group that this year's Animal Research forum would be taking place on 23rd November and encouraged all to attend. The 3Rs and QA programme manager had obtained funding, via the Research England Enhancing Research Culture funding round 2023-24, to enhance the 3Rs research culture at the college. It was intended to use the funding to create a dedicated website to host resources, teaching material and act as an outreach method.
13.	<p><u>Director of CBS operational update</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> The Director of CBS updated members on the progress of a number of ongoing facility refurbishment projects. CBS had recently successfully filled six trainee technician slots through the use of a specialised recruitment company.
14.	<p><u>Communications update</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> The College would be participating in UAR's Fish in Research social media campaign which would be running from the 20^h -24th November.
15.	<p><u>A.O.B</u></p> <p>None identified.</p>

Dates of next meetings:

16 Jan 2024	13.30-16.30	Virtual
19 March 2024	13.30-16.30	Virtual
21 May 2024	09.30-12.30	Virtual
23 July 2024	13.30-16.30	Virtual

13.30 – 16.00 11th February 2021
MS Teams

Minutes

Present:

Function	Name	Position
Chair	[REDACTED]	College academic
Member	[REDACTED]	College academic
<i>Ex officio</i> Member	[REDACTED]	College academic and 3Rs Group Representative
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon Service (dNVS)
<i>Ex officio</i> Member	[REDACTED]	Named Animal Care and Welfare Officer (NACWO) for the site
In attendance	[REDACTED]	CBS Meeting and Support Administrator
Attending as secretary	[REDACTED]	AWERB Administrator & Named Information Officer

Apologies:

Function	Name	Position
Vice-Chair	[REDACTED]	College academic
Member	[REDACTED]	College academic
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon (NVS)
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon (NVS)
Member	[REDACTED]	Post-doctoral representative
In attendance	[REDACTED]	Home Office Inspector (HOI)
In attendance	[REDACTED]	Home Office Inspector (HOI)

Item

1. **Members' declarations of interest in respect of items on the agenda**

Points to note

None identified.

2. **Minutes and matters arising**

Points to note

- The minutes of the previous meeting were agreed.
- Updates were given on actions from the previous meeting.

3. **Review of licence application –** [REDACTED]

Points to note

- An application for a new project licence was considered.
- The licence was to continue a program of work covered by a PPL that had expired last year.
- The committee was content with the programme of work proposed in the application subject to minor revisions requested by the committee.
- The committee carried out a retrospective review of the expiring PPL in parallel with consideration of the new application.

Decisions

- The application was approved for submission to the Home Office, subject to the inclusion of the minor revisions requested by the committee.
- The revised submission will be approved by Chair's action.
- The mid-term review for this PPL should be set to the mid-point of the licence.

Actions

- AWERB administrator to email summary of committee's feedback and required revisions to the applicant.

4. **CBS updates**

None identified

5. **A.O.B**

None identified.

Dates of next meetings:

11 th March 2021	13.30-16.30
15 th April 2021	13.30-16.30
13 th May 2021	10.30-13.30
15 th June 2021	13.30-16.30
15 th July 2021	10.30-13.30
12 th August 2021	13.30-16.30

Local Animal Welfare and Ethical Review Body (AWERB) – [REDACTED]

10.30 – 13.00 11 April 2022
Microsoft Teams meeting

Minutes

Present:

Function	Name	Position
Chair	[REDACTED]	College academic
Vice Chair	[REDACTED]	College academic and 3Rs Group Representative
Member	[REDACTED]	College academic
Member	[REDACTED]	Post-doctoral representative Named Animal Care and Welfare Officer for the site (NACWO) & NIO
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon (NVS)
Member	[REDACTED]	PhD student representative
In attendance	[REDACTED]	3Rs programme manager Named Animal Care and Welfare Officer for the site (NACWO)
In attendance Attending as secretary	[REDACTED]	AWERB Administrator and member with no responsibilities under ASPA

Apologies:

Function	Name	Position
Member	[REDACTED]	College Academic
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon (NVS) Named Animal Care and Welfare Officer for the site (NACWO) & NIO
<i>Ex officio</i> Member	[REDACTED]	CBS Meeting and Support Administrator and lay member with no responsibilities under ASPA
In attendance	[REDACTED]	

Item**1. Members' declarations of interest in respect of items on the agenda**Points to note

None identified.

2. Minutes and matters arisingPoints to note

- The minutes of the previous meeting were agreed.
- Updates were given on actions from the previous meeting.

3. Review of licence application amendment – [REDACTED]Points to note

- An application for an amendment to a project licence was considered.
- The committee was content with the overall additional programme of work proposed but discussed a number of revisions that the AWERB would require to be implemented in the draft application, prior to approving the application for formal submission to the Home Office.
- The committee also carried out an interim review of the work carried out under the PPL to date and was pleased to note that the group were continuing to deploy a range of 3Rs approaches in their work.
- Members were particularly pleased to note that group were intending to utilise a new model of [REDACTED], with significant refinements compared to the established surgical model, in the additional programmer of work and that the development of this model was being supported by a grant from the college's 3Rs hub.

Decisions

- The application was approved for submission to the Home Office, subject to the inclusion of the revisions requested by the committee.
- The revised submission will be approved by Chair's action.

Actions

- AWERB administrator to email summary of committee's feedback and required revisions to the applicant.

4. Report from Central AWERBPoints to note

- The approved minutes of the January central AWERB meeting were noted.
- A verbal update was also provided regarding items of particular interest discussed at the March central AWERB meeting.

5. Regular report on applications submitted, self-reporting and compliance noticesPoints to note

- The regular report was noted.
- The NVS provided members with an update on relevant actions put in place following post-mortem and pathology findings received after submission of some of the standard condition 18 reports.
- Members discussed the trends identified in the additional graphs that had been included on the final page of the report and noted that the number of reports

submitted in 2021 had reverted towards the historical norm, following the increase documented for 2020.

6. **CBS updates**

- The 3Rs programme manager was working to set up a 3Rs PhD students' network to foster collaborations and initiatives.
- The next *in vivo* experimental design course would be partly funded by attendee registration fees, in order to enable more courses to be run during the year.

7. **A.O.B**

Item discussed: Update on the ASRU Change Programme

Points to note

- The AWERB administrator updated the committee on the key points announced in ASRU's latest operational newsletter regarding the Animals in Science Regulatory Reform Programme. Further written guidance was expected to be received shortly.

Item discussed: Membership Update

Points to note

- The Vice Chair reminded members that the Chair was attending his last local AWERB meeting and formally extended the thanks of the AWERB to him, on behalf of all members of the committee, for his leadership and valuable and long standing contribution to the work of the [REDACTED] local AWERB.

Dates of next meetings:

10 th May 2022	13.30-16.00
13 th June 2022	10.30-13.00
12 th July 2022	13.30-16.00
22 nd August 2022	10.30-13.00

12.45 – 15.45 11th May 2021
MS Teams

Minutes

Present:

Function	Name	Position
Chair	[REDACTED]	College academic
Vice-Chair	[REDACTED]	College academic
Member	[REDACTED]	College academic
Member	[REDACTED]	College academic
<i>Ex officio</i> Member	[REDACTED]	College academic and 3Rs Group Representative
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon Service (dNVS)
<i>Ex officio</i> Member	[REDACTED]	Named Animal Care and Welfare Officer (NACWO) for the site
In attendance	[REDACTED]	CBS Meeting and Support Administrator
Attending as secretary	[REDACTED]	AWERB Administrator & Named Information Officer

Apologies:

Function	Name	Position
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon (NVS)
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon (NVS)
Member	[REDACTED]	Post-doctoral representative
In attendance	[REDACTED]	Home Office Inspector (HOI)
In attendance	[REDACTED]	Home Office Inspector (HOI)

Item

1. **Members' declarations of interest in respect of items on the agenda**

None identified

2. **Minutes and matters arising**

Points to note

- The minutes of the previous meeting were agreed.
- Updates were given on actions from the previous meeting.

3. **Review of licence amendment application –**

Points to note

- An application for an amendment to a project licence was considered.
- The committee was content with the overall additional programme of work proposed but discussed a number of revisions that the AWERB would require to be implemented in the draft application, prior to approving the application for formal submission to the Home Office.

Decisions

- The application was approved for submission to the Home Office, subject to the inclusion of the revisions requested by the committee.
- The revised submission will be approved by Chair's action.

Actions

- AWERB administrator to email summary of committee's feedback and required revisions to the applicant.

4. **CBS updates**

- Nothing to report.

5. **A.O.B**

Item discussed: Future AWERB meeting format following the lifting of government restrictions

Points to note

- Given that the current government COVID restrictions were in the process of being lifted, the Chair canvassed member preferences with regards to the format of AWERB meetings for the next academic year.
- Members considered the advantages and disadvantages of 'in person' and virtual meetings.
- It was noted that one key benefit of virtual meetings was that it enabled members and licence applicants to attend meetings even when other commitments, such as conferences held outside of college, prevented on campus attendance.

Decisions

- Members agreed that the majority of meetings for the next academic year would continue to be held virtually, but that the AWERB would aim to hold probably two 'in person' meetings a year, commencing from the spring term.
- The AWERB agreed that this decision should be reviewed when more information was available about potential improvements to the college's ability to support hybrid meeting formats.

Dates of next meetings:

15 th June 2021	13.30-16.30
15 th July 2021	10.30-13.30
12 th August 2021	13.30-16.30

Imperial College London

Central Animal Welfare and Ethical Review Body (AWERB)

13:30 – 16.30 11 September 2023 (Meeting 1)

MS Teams

Present:

Function	Name	Position
Chair	[REDACTED]	Senior College academic
Vice-chair	[REDACTED]	Lay person
<i>Ex officio</i> Member	[REDACTED]	Establishment Licence Holder
<i>Ex officio</i> Member	[REDACTED]	Director of Bioservices
<i>Ex officio</i> Member	[REDACTED]	Director of Central Biomedical Services (CBS)
<i>Ex officio</i> Member	[REDACTED]	Chair of the Local AWERB – [REDACTED]
<i>Deputizing for</i> [REDACTED]	[REDACTED]	3Rs programme manager and 3Rs Advisory Group representative
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon (NVS)
<i>Ex officio</i> Member	[REDACTED]	Named Animal Care and Welfare Officer (NACWO) & Named Information Officer (NIO)
<i>Ex officio</i> Member	[REDACTED]	Named Training and Competency Officer (NTCO)
Member	[REDACTED]	External Member
Member	[REDACTED]	CBS Meeting and Support Administrator and lay member with no responsibilities under ASPA
Member and secretary	[REDACTED]	AWERB Administrator and member with no responsibilities under ASPA

Apologies:

Function	Name	Position
<i>Ex officio</i> Member	[REDACTED]	Chair of the Local AWERB – [REDACTED]
<i>Ex officio</i> Member	[REDACTED]	Chair of the 3Rs Advisory Group
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon (NVS)
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon service (dNVS)
Member	[REDACTED]	Senior College academic and biostatistician
Member	[REDACTED]	PhD student representing the student community
Member	[REDACTED]	Lay person & Imperial Communications representative
Member	[REDACTED]	External Member
Member	[REDACTED]	External Member

	<p><u>Item</u> <u>Welcome</u></p> <ul style="list-style-type: none"> • The Chair welcomed [REDACTED], who had recently taken over as Establishment licence holder, to her first AWERB meeting in her new role. • She also expressed her thanks, on behalf of the AWERB, to the outgoing Establishment licence holder for his contribution to both the work of the AWERB and that of the animal research community during his period as Establishment licence holder.
1.	<p><u>Members' declarations of interests in respect of items on the agenda</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> • [REDACTED] declared a potential conflict of interest in Agenda item 4 in view of the fact that she was a co-applicant on a grant application submitted by the project licence applicant. She had therefore asked the Vice-Chair to take the Chair and to lead the discussion of this agenda item.
2.	<p><u>Minutes and matters arising</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> • The minutes of the last meeting were agreed. • Updates were given on actions from the previous meeting.
3.	<p><u>NC3Rs Institutional 3Rs self-assessment report outcome</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> • The 3Rs programme manager provided members with an overview of the purposes underpinning the roll-out of the NC3Rs Institutional 3Rs self-assessment tool and described the process involved in completing the college's submission. A copy of the outcome of the assessment had been circulated to members for information prior to the meeting. • It was noted that the primary purpose for completing the self-assessment was to enable institutions to collate, track and benchmark their 3Rs activities. Through using the tool, institutions would be able to monitor their 3Rs culture and its development, focus efforts on the most important 3Rs areas, receive advice and suggestions for improvement and feedback regarding successful initiatives from other institutions as well as demonstrating their commitment to the 3Rs. Importantly, the tool also offers users a clear and comprehensive method for assessing 3Rs activities in relation to best practice, together with advice on converting policy into practice. • The questions within the research institution tool reflected the breadth of possible 3Rs activities and encompassed 6 key areas: Leadership, People, Research and infrastructure, Experimental Design and Reporting, Training, and Publication and Wider dissemination. • Members were pleased to see that college had received an assessment of good in four of the areas and fair in the remaining two areas. • Members discussed potential actions that could be considered to further improve the 3Rs culture of care in college and noted the key role of the 3Rs advisory group and the Imperial 3Rs hub in leading developments in this area. <p><u>Actions</u></p> <ul style="list-style-type: none"> • Establishment licence holder to forward information regarding applying for research culture funding from the Research England Enhancing Research

	<p>Culture funding 2023-24 to the 3Rs programme manager in order that an application for funding could be submitted prior to the deadline for applications.</p>
4.	<p><u>Review of licence application –</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> • An application for a new project licence was considered. • Members noted that this was a very well drafted application. • The committee was content with the programme of work proposed in the draft application, subject to a number of minor revisions requested by the committee. <p><u>Decisions</u></p> <ul style="list-style-type: none"> • The application was approved for submission to the Home Office, subject to the inclusion of the revisions requested by the committee. • The revised submission will be approved by Chair's action. • The interim review for this PPL should be set to the midpoint of the licence. <p><u>Actions</u></p> <ul style="list-style-type: none"> • AWERB administrator to email summary of committee's feedback and required revisions to the applicant.
5.	<p><u>Retrospective Assessment –</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> • A retrospective assessment of a recently expired project licence containing a protocol with a severe severity limit was reviewed. • In accordance with the legislation, and the guidance provided by ASRU, the project licence holder is required to submit a copy of the assessment to the Home Office, by the due date, following consideration of the assessment by the AWERB. • A copy of the licence had been circulated to members for information to assist with carrying out the assessment. • The AWERB was pleased to note the scientific progress made during the course of the licence. In particular, members were very pleased to learn that the work had led to the identification of two therapeutic targets that were being taken forwards into clinical trials. <p><u>Decisions</u></p> <ul style="list-style-type: none"> • The committee was content to approve the retrospective assessment for submission to the Home Office, subject to the inclusion of some minor revisions requested by the committee. <p><u>Actions</u></p> <ul style="list-style-type: none"> • AWERB administrator to email summary of committee's feedback to the licence holder.
6.	<p><u>Regular report on applications submitted, self-reporting & compliance notices</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> • The regular report was noted.

7.	<p><u>Director of CBS operational update</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> • The Director of CBS updated members on the progress of a number of ongoing facility refurbishment projects. • It was noted that the [REDACTED] had already been moved to its new location at [REDACTED], but the designated rooms had not yet completed their environmental validation checks and would not be added to the Establishment licence until those checks had been satisfactorily completed. • He also updated members regarding a number of forthcoming staffing changes in the facilities. • He advised that the NVS and NACWOs had been working on updating guidance for aseptic surgery and it was hoped that this would be finalised and made available to users in the near future.
8.	<p><u>3Rs Advisory group update</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> • The 3Rs programme manager advised members that the Animal Research Forum would be taking place on the 23rd of November and would include a poster session showcasing PhD student and CBS staff 3Rs linked projects.
9.	<p><u>Communications update</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> • The new Imperial College London Animal Research Report, which is published every other year, is due to be published in late September, with printed copies going to key stakeholders. • In October the report will also be highlighted in Staff Briefing, the internal email newsletter that is sent to all staff at Imperial and then published online. Hard copies will also be shared at the Animal Research Forum or available from within the animal facilities.
10.	<p><u>Local AWERB – [REDACTED] report</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> • The AWERB administrator provided members with a short verbal update on the recent activity of the [REDACTED] local AWERB.
11.	<p><u>Local AWERB – [REDACTED] report</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> • The approved minutes of the June 2023 local AWERB meeting were received and noted.
12.	<p><u>A.O.B</u></p> <p><u>Item discussed: Membership Update</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> • The Chair reminded members that [REDACTED], the PhD student representing the student community on cAWERB, would be stepping down from his role as PhD student representative shortly and that the post-doctoral representative had already stepped down from their role following the July meeting of the cAWERB. <p><u>Decisions</u></p>

	<ul style="list-style-type: none">• Information regarding the opportunity for suitably qualified PhD students and post-doctoral researchers to serve as central AWERB members should be circulated to all PPL and PIL holders. Interested candidates should be advised to contact the central AWERB Chair, explaining why they were interested in taking on the role and what they believed they could contribute to the work of the central AWERB.• Anonymised versions of the applications should be circulated to members prior to the next meeting for scoring, and a decision taken at the meeting as to whom to invite to join the AWERB, subject to satisfactory references. <p><u>Actions</u></p> <ul style="list-style-type: none">• AWERB administrator/CBS Meeting and Support Administrator to arrange for CBS to circulate all PPL and PIL holders regarding these central AWERB vacancies at the start of the autumn term.• Anonymised versions of the applications to be sent to members prior to the November meeting for scoring.
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Dates of next meetings:

10 Nov 2023	09.30-12.30	Virtual
16 Jan 2024	13.30-16.30	Virtual
19 March 2024	13.30-16.30	Virtual
21 May 2024	09.30-12.30	Virtual
23 July 2024	13.30-16.30	Virtual

Local Animal Welfare and Ethical Review Body (AWERB) – [REDACTED]

10.30 – 13.00 11 October 2021
Microsoft Teams meeting

Minutes

Present:

Function	Name	Position
Chair	[REDACTED]	College academic
Vice Chair	[REDACTED]	College academic and 3Rs Group Representative
Member	[REDACTED]	College academic
Member	[REDACTED]	Post-doctoral representative
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon (NVS)
<i>Ex officio</i> Member	[REDACTED]	Site Manager & Named Information Officer (NIO) Named Animal Care and Welfare Officer for the site (NACWO) & NIO
<i>Ex officio</i> Member	[REDACTED]	
In attendance	[REDACTED]	CBS Meeting and Support Administrator
Attending as secretary	[REDACTED]	AWERB Administrator

Apologies:

Function	Name	Position
Member	[REDACTED]	College Academic
Member	[REDACTED]	College Academic
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon (NVS)

Item**1. Members' declarations of interest in respect of items on the agenda**

None identified

2. Minutes and matters arisingPoints to note

- The minutes of the previous meeting were agreed.
- Updates were given on actions from the previous meeting.

3. Interim review – [REDACTED]Points to note

- One interim review of an ongoing project was considered by the committee.
- A copy of the licence had been circulated to members for information to assist with carrying out the review.
- The AWERB noted that this was a thorough and comprehensive review and that the group had made good progress in achieving the objectives of the programme of work.
- Members observed that the licence holder had long standing 3Rs experience and that the group was continuing to adopt good practice in this regard, including the use of cell culture approaches and the establishment of [REDACTED] organotypic cultures. They were pleased to note the use of inducible models of [REDACTED] to complement and, where possible, replace the use of spontaneous models and observed that the use of topical application of [REDACTED] [REDACTED] rather than using a systemic approach was an excellent refinement with the additional advantage of permitting within animal controls.
- The committee was content to see that the reported actual severity limits were predominantly in line or less severe than those originally anticipated and were particularly pleased to learn that the use of Freund's adjuvant had not led to any adverse effects beyond mild irritation caused by the injection.

Actions

- AWERB Administrator to email summary of committee's feedback to the licence holder.

4. Interim review – [REDACTED]Points to note

- One interim review of an ongoing project was considered by the committee.
- A copy of the licence had been circulated to members for information to assist with carrying out the review.
- The AWERB noted that several papers had already been published as a result of the work carried out under the licence to date and that the actual severity of the procedures undertaken had been in line or less severe than those originally anticipated.
- Members were pleased to note the ongoing efforts being made with regards to 3Rs implementation including the increased use of *in silico* approaches and human post-mortem tissue to address some of the objectives. Members were also pleased to note the reduction and refinement benefits from the novel [REDACTED] [REDACTED] method and revised [REDACTED] [REDACTED] implantation approach,

and that the licence holder had modified husbandry approaches to avoid the use of single housing wherever possible.

- The committee observed that it would be helpful if the licence holder could provide more information regarding both the actual harms and the anaesthesia/analgesic approaches used for surgical procedures.

Actions

- AWERB Administrator to email summary of committee's feedback to the licence holder.

5. Interim review – [REDACTED]

Points to note

- One interim review of an ongoing project was considered by the committee.
- A copy of the licence had been circulated to members for information to assist with carrying out the review.
- The AWERB observed that licence holder had made good progress with respect to some of the original objectives specified in the programme of work and that several papers had already been published as a result of the work carried out under the licence to date.
- The AWERB was pleased to note that the licence holder was using a range of reduction, replacement and refinement strategies in his work. These included the development of *in vitro* [REDACTED] stimulation assays as animal replacements for some components of the work together with improvements to intravital imaging to improve statistical power and the implementation of multiorgan analysis, both of which had led to a reduction in the number of animals required to address some aspects of the programme of work.
- Members observed that the PPL holder should be advised to consider whether an amendment to the licence would be necessary in order to revise the animal numbers allocated to two protocols in the licence.

Actions

- AWERB Administrator to email summary of committee's feedback to the licence holder.

6. Interim review – [REDACTED]

Points to note

- One interim review of an ongoing project was considered by the committee.
- A copy of the licence had been circulated to members for information to assist with carrying out the review.
- The AWERB noted that this was a thorough review and that the group had made good progress in achieving some of the objectives of the programme of work. Members were pleased to observe that the work carried out under the licence to date had provided evidence in support of clinical trials due to commence next year as well as leading to several published papers.
- The committee was also pleased to note the ongoing efforts being made with regards to 3Rs implementation. In particular, members noted that the group had devised additional *in vitro* tests to pre-screen compounds prior to *in vivo* use, and had also modified study design to allow for multiple tissue collection

to occur in more studies than first anticipated, thus significantly reducing the number of animals required under one protocol on the PPL.

Actions

- AWERB Administrator to email summary of committee's feedback to the licence holder.

7. **Interim review –** ■

Points to note

- One interim review of an ongoing project was considered by the committee.
- A copy of the licence had been circulated to members for information to assist with carrying out the review.
- The AWERB was pleased to note the group's intention to increase the use of primary human cells and biopsy material as an alternative to the use of animal models and the commitment to collecting multiple tissues, fluids and cell types in order to reduce the number of mice required. Members were also pleased to note the group's introduction of improved monitoring systems.
- The committee observed that it would be helpful if the licence holder could provide more information regarding both the progress made in achieving the objectives of the programme of work and the actual harms that had arisen.

Actions

- AWERB Administrator to email summary of committee's feedback to the licence holder.

8. **Report from Central AWERB**

Points to note

- The approved minutes of the July central AWERB meeting were noted and a verbal update was also provided regarding items of particular interest discussed at the September central AWERB meeting.

9. **Regular report on applications submitted, self-reporting and compliance notices**

Points to note

- The regular report was noted.
- The AWERB administrator advised members that ASRU had recently held a series of training sessions for Named People regarding the submission of condition 18 reports, and an updated advice note would be issued by ASRU in due course.

10. **CBS updates**

Nothing to report.

11. **A.O.B**

Item discussed: AWERB membership update

Points to note

- The Chair informed members that ■, the PhD student member representing the student community had informed him that she would be leaving college soon in order to take up a post elsewhere. He wished to take this opportunity to thank

her for her contribution to the work of the AWERB over her period of membership of the committee and wished her well in her new role.

- In light of the varied areas of scientific work undertaken by project licence holders based at the campus, the Chair noted that he felt it could be beneficial to consider if it might be helpful for the AWERB to recruit one or more additional academic members with expertise in scientific areas not currently covered by the membership.

Actions

- Members to email the Chair with any suggestions regarding broadening the areas of scientific expertise covered by the membership.

Dates of next meetings:

11 th November 2021	13.30-16.00
6 th December 2021	10.30-13.00

13.30 – 15.30 12^h May 2022
MS Teams

Minutes

Present:

Function	Name	Position
Chair	[REDACTED]	College academic
Co Vice-Chair	[REDACTED]	College academic
Member	[REDACTED]	College academic
<i>Ex officio</i> Member	[REDACTED]	College academic and 3Rs Group Representative
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon (NVS) Named Animal Care and Welfare Officer (NACWO) for the site
<i>Ex officio</i> Member	[REDACTED]	
Member	[REDACTED]	Post-doctoral representative CBS Meeting and Support Administrator and lay member with no responsibilities under ASPA
Member	[REDACTED]	
Member and attending as secretary	[REDACTED]	AWERB Administrator and member with no responsibilities under ASPA

Apologies:

Function	Name	Position
Co Vice-Chair	[REDACTED]	College academic
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon (NVS) Named Animal Care and Welfare Officer (NACWO) for the site & Named Information Officer (NIO)
<i>Ex officio</i> Member	[REDACTED]	

Item

1. **Members' declarations of interest in respect of items on the agenda**

None identified.

2. **Minutes and matters arising**

Points to note

- The minutes of the previous meeting were agreed.
- Updates were given on actions from the previous meeting.

3. **Review of licence application amendment – [REDACTED]**

Points to note

- An application for an amendment to a project licence was considered.
- The committee was content with the additional programme of work proposed in the amendment subject to a few minor revisions requested by the committee.

Decisions

- The application was approved for submission to the Home Office, subject to the inclusion of the revisions requested by the committee.
- The revised submission will be approved by Chair's action.

Actions

- AWERB administrator to email summary of committee's feedback and required revisions to the applicant.

4. **CBS updates**

Points to note

- A number of meetings with PPL holders based at [REDACTED] had taken place in anticipation of work commencing at college during the refurbishment of one of their facilities. Five groups had submitted study plans to cover the work taking place at college and a number of [REDACTED] PILs had received facility inductions.
- The NVS and facility manager were evaluating health screens for the [REDACTED] breeding facility as some groups now wished to transfer GAA from that facility to college.

5. **Update on the ASRU Change Programme**

Points to note

- The AWERB administrator updated the committee on the key points covered in the updated version of the ASRU Bridging Ways of Working.

6. **A.O.B**

None identified.

Dates of next meetings:

21 st June 2022	13.30-16.30
19 th July 2022	13.30-16.30
16 th August 2022	13.30-16.30

Imperial College London

Local Animal Welfare and Ethical Review Body (AWERB) – [REDACTED]

10.30 – 13.00 12 July 2021
Microsoft Teams meeting

Minutes

Present:

Function	Name	Position
Chair	[REDACTED]	College academic
Vice Chair	[REDACTED]	College academic and 3Rs Group Representative
Member	[REDACTED]	College Academic
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon (NVS)
<i>Ex officio</i> Member and deputizing for [REDACTED]	[REDACTED]	Named Animal Care and Welfare Officer for the site (NACWO)
Member	[REDACTED]	Post-doctoral representative
In attendance	[REDACTED]	Named Animal Care and Welfare Officer for the site (NACWO)
In attendance	[REDACTED]	Named Animal Care and Welfare Officer for the site (NACWO)
In attendance	[REDACTED]	CBS Meeting and Support Administrator
Attending as secretary	[REDACTED]	AWERB Administrator and Named Information Officer

Apologies:

Function	Name	Position
Member	[REDACTED]	College Academic
Member	[REDACTED]	College Academic
Member	[REDACTED]	PhD student representative
<i>Ex officio</i> Member	[REDACTED]	Site Manager & Named Information Officer
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon Service (dNVS)
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon (NVS)

Item**1. Members' declarations of interest in respect of items on the agenda**

None identified

2. Minutes and matters arisingPoints to note

- The minutes of the previous meeting were agreed.
- Updates were given on actions from the previous meeting.

3. Review of licence amendment application - [REDACTED]Points to note

- An application for an amendment to a project licence was considered.
- The committee was content with the additional programme of work proposed in the amendment subject to minor revisions requested by the committee.

Decisions

- The application was approved for submission to the Home Office, subject to the inclusion of the revisions requested by the committee.
- The revised submission will be approved by Chair's action.

Actions

- AWERB administrator to email summary of committee's feedback and required revisions to the applicant.

4. CBS updatesPoints to note

- The NVS informed members that [REDACTED] had recently recruited an additional highly experienced veterinary surgeon; it was anticipated that he would be taking on a full time role at college from the beginning of August.

5. A.O.B**Item discussed: ASRU Change Programme**Points to note

- The Chair provided members with a short update regarding the ASRU Change Programme. Members were asked to note two ASRU documents in the supplementary paper pack which summarised the "Bridging Ways of Working" that had become operational on the 5th July.

Dates of next meetings:

16 ^h August 2021	10.30-13.00
13 ^h September 2021	10.30-13.00
11 ^h October 2021	10.30-13.00
11 ^h November 2021	13.30-16.00
6 th December 2021	10.30-13.00

13.30 – 16.00 12 October 2021
MS Teams

Minutes

Present:

Function	Name	Position
Chair	[REDACTED]	College academic
Vice-Chair	[REDACTED]	College academic
Member	[REDACTED]	College academic
Member	[REDACTED]	Post-doctoral representative
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon (NVS) Named Animal Care and Welfare Officer (NACWO) for the site & Named Information Officer (NIO)
<i>Ex officio</i> Member	[REDACTED]	
In attendance	[REDACTED]	CBS Meeting and Support Administrator
Attending as secretary	[REDACTED]	AWERB Administrator

Apologies:

Function	Name	Position
Member	[REDACTED]	College academic
Member	[REDACTED]	College academic College academic and 3Rs Group Representative
<i>Ex officio</i> Member	[REDACTED]	
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon (NVS)

Item

Introductions

- The Chair welcomed two new members, ■■■ and ■■■■, to their first meeting.

1. Members' declarations of interest in respect of items on the agenda

Points to note

- ■■■ had declared an interest in Agenda item 3 by virtue of being the project licence holder for the interim review under consideration and recused himself from participating in the discussion and decision making for that item.
- ■■■ declared a potential conflict of interest in Agenda item 5 in view of the fact that she had previously been involved in an academic collaboration with the licence applicant. Members were content that this was not prejudicial to her participating in the decision making for this agenda item.
- ■■■ also declared a potential conflict of interest in Agenda item 5 given that he had provided the licence applicant with mentorship support and technical advice when the applicant had been in the process of applying for research fellowship funding and establishing his independent research group. Members were content that this was not prejudicial to him participating in the decision making for this agenda item.

2. Minutes and matters arising

Points to note

- The minutes of the previous meeting were agreed.
- Updates were given on actions from the previous meeting.

3. Interim review – ■■■

Points to note

- One interim review of an ongoing project was considered by the committee.
- A copy of the licence had been circulated to members for information to assist with carrying out the review.
- The AWERB noted that this was a comprehensive review and that the group had made good progress in achieving the first objective of the programme of work and had already published a number of papers arising from the work carried out under the licence.
- The AWERB was pleased to note that the licence holder was using a range of reduction, replacement and refinement strategies in his work, including the use of *in vitro* models and approaches to study symbiont-pathogen antagonism. Members were particularly pleased to note the increased use of asymptomatic models which had both led to a reduction in the severity of procedures but had also made possible the collection of multiple longitudinal samples from the same mice, thus increasing the amount of data generated and reducing the overall numbers of animals required.
- The AWERB was pleased to observe that the reported actual severity limits were predominantly less severe than those originally anticipated but observed that it would be helpful if the licence holder could provide more information regarding the actual harms and assessment of severity levels.
- Members observed that the PPL holder should be advised to consider whether an amendment to the licence would be necessary in order to revise the animal numbers allocated to one protocol in the licence.

Actions

- AWERB Administrator to email summary of committee's feedback to the licence holder.

4. **Interim review update –** ■

Points to note

- One updated interim review of an ongoing project was considered by the committee.
- A copy of the original AWERB meeting feedback sent to the licence holder and a copy of the licence had also been circulated to members for information to assist with carrying out the review.
- Members were content with the additional information provided in the updated review.

Actions

- AWERB Administrator to email summary of committee's feedback to the licence holder.

5. **Review of licence application –** ■

Points to note

- An application for a new project licence was considered.
- The committee was content with the overall programme of work proposed but discussed a number of revisions that the AWERB would require to be implemented in the draft application, prior to approving the application for formal submission to the Home Office.

Decisions

- The mid-term review for this PPL should be set to the mid-point of the licence.

Actions

- AWERB administrator to email summary of committee's feedback and required revisions to the applicant. The revised version should then be checked by the NVS, AWERB administrator and Chair.

6. **Interim review –** ■

Points to note

- One interim review of an ongoing project was considered by the committee.
- A copy of the licence had been circulated to members for information to assist with carrying out the review.
- The AWERB observed that the group had made good progress in achieving some of the objectives of the programme of work and that two publications had arisen from the work that had taken place to date.
- The committee was pleased to note the ongoing efforts being made with regards to 3Rs implementation and observed that no work under protocol 2 had been carried out to date as the objective had been addressed through the *in vitro* use of a stable macrophage cell line.
- Members were content to see that the reported actual severity limits were predominantly in line or less severe than those originally anticipated but asked that project licence holder be requested to check some information in the table of animal numbers.

Actions

- AWERB Administrator to email summary of committee's feedback to the licence holder.

7. **Report from Central AWERB**

Points to note

- The approved minutes of the July central AWERB meeting were noted.
- A verbal update was also provided regarding items of particular interest discussed at the September central AWERB meeting.

8. **Regular report on applications submitted, self-reporting and compliance notices**

Points to note

- The regular report was noted.
- The AWERB administrator advised members that ASRU had recently held a series of training sessions for Named People regarding the submission of condition 18 reports, and an updated advice note would be issued by ASRU in due course.

9. **CBS updates**

Points to note

- Members were advised that new dates had now been agreed for the AAALAC programme site visit.
- The NVS updated members regarding the extensive advice and support the NVS team and other members of CBS staff had been providing to a PIL who was in the process of establishing her initial programme of work. Following discussion, the Chair advised that she would send an email to the project licence holder and the Director of CBS asking for an update on progress regarding this matter.

10. **A.O.B**

Item discussed: Animal Research Forum

Points to note

- The Chair updated members on the unfortunate infiltration and consequent disruption by animal activists to the Animal Research Forum.
- Following the event, the organizers and senior academics present had sent a message to all college staff who attended the meeting offering support, and the Director of CBS had contacted all CBS staff present at the meeting offering support. The Director of Bioservices had also informed the supervisors of the students present at the meeting of the incident.
- College will not allow this incident to stop Imperial College's commitment towards openness in animal research and following a review of the incident, additional measures will be put in place in future in order to avoid disruption.

Dates of next meetings:

9 th November 2021	13.30-16.30
8 th December 2021	13.30-16.30

13.30 – 15.30 13th September 2022
MS Teams

Minutes

Present:

Function	Name	Position
Chair	[REDACTED]	College academic
Co Vice-Chair	[REDACTED]	College academic
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon (NVS) Named Animal Care and Welfare Officer (NACWO) for the site & Named Information Officer (NIO)
<i>Ex officio</i> Member	[REDACTED]	3Rs programme manager and 3Rs Group Representative
Member	[REDACTED]	Post-doctoral representative CBS Meeting and Support Administrator and lay member with no responsibilities under ASPA
Member Member and attending as secretary	[REDACTED] [REDACTED]	AWERB Administrator and member with no responsibilities under ASPA

Apologies:

Function	Name	Position
Co Vice-Chair	[REDACTED]	College academic
Member	[REDACTED]	College academic
<i>Ex officio</i> Member	[REDACTED]	Co-Chair 3Rs Advisory Group
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon (NVS)

Item

1. **Members' declarations of interest in respect of items on the agenda**

Points to note

- [REDACTED] declared a potential conflict of interest in Agenda item 3 in view of the fact that the licence applicant was the Head of Department for the department in which he was based. Members were content that this was not prejudicial to him participating in the decision making for this agenda item.

2. **Minutes and matters arising**

Points to note

- The minutes of the previous meeting were agreed.
- Updates were given on actions from the previous meeting.

3. **Review of licence application – [REDACTED]**

Points to note

- An application for a new project licence was considered.
- The application was to continue a program of work that was due to expire shortly.
- The committee was content with the overall programme of work proposed but discussed a number of revisions that the AWERB would require to be implemented in the draft application, prior to approving the application for formal submission to the Home Office.
- The committee carried out a retrospective review of the expired PPL in parallel with consideration of the new application.
- Members were pleased to note that the licence holder was continuing to use a range of 3Rs approaches in her work, including the extensive use of cell culture systems from primary differentiated [REDACTED] cells of humans, adoption of the use of the [REDACTED] [REDACTED] to reduce the need for sentinel animals, and widespread sharing of data with research groups that model transmission of [REDACTED].

Decisions

- The application was approved for submission to the Home Office, subject to the inclusion of the revisions requested by the committee.
- The revised submission will be approved by Chair's action, following review of the revised humane end points by the NVS.
- The mid-term review for this PPL should be set to the mid-point of the licence.

Actions

- AWERB administrator to email summary of committee's feedback and required revisions to the applicant.

4. **Report from Central AWERB**

Points to note

- The approved minutes of the May Central AWERB meeting were noted.
- A verbal update was also provided regarding items of particular interest discussed at the July Central AWERB meeting.

5. **Regular report on applications submitted, self-reporting and compliance notices**

Points to note

- The regular report was noted.

6. **CBS updates**

None identified

7 **A.O.B**

Item discussed: Inspector feedback on a recently submitted project licence application

Points to note

- Members were provided with an update regarding comments made by the Inspector carrying out the ASRU review of a draft project licence application that had been considered by members at the June AWERB meeting. The comments pertained to the protocol involving generation of antisera.

Dates of next meetings:

18 th October 2022	13.30-16.30
8 th November 2022	13.30-16.30
5 th December 2022	13.30-16.30

Local Animal Welfare and Ethical Review Body (AWERB) - [REDACTED]

10.30 – 13.00 13 October 2022
Microsoft Teams meeting

Minutes

Present:

Function	Name	Position
Chair	[REDACTED]	College academic
Member	[REDACTED]	College Academic
Member	[REDACTED]	College Academic
Member	[REDACTED]	College Academic
<i>Ex officio</i> Member	[REDACTED]	Co-Chair 3Rs Advisory Group
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon (NVS) Named Animal Care and Welfare Officer for the site (NACWO) & NIO
<i>Ex officio</i> Member	[REDACTED]	CBS Meeting and Support Administrator and lay member with no responsibilities under ASPA
Member Member and attending as secretary	[REDACTED]	AWERB Administrator and member with no responsibilities under ASPA
In attendance	[REDACTED]	Named Animal Care and Welfare Officer for the site (NACWO)

Apologies:

Function	Name	Position
Member	[REDACTED]	College Academic
Member	[REDACTED]	College Academic
Member	[REDACTED]	PhD student representative 3Rs programme manager and 3Rs Group Representative
Member	[REDACTED]	Representative
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon (NVS)

Item**Introductions:**

- The chair welcomed [REDACTED] to the meeting.

1. Members' declarations of interest in respect of items on the agenda

None identified.

2. Minutes and matters arisingPoints to note

- The minutes of the previous meetings were approved.
- Updates were given on actions from the previous meeting.

3. Interim Review - [REDACTED]Points to note

- One interim review of an ongoing project was considered by the committee.
- A copy of the licence had been circulated to members for information to assist with carrying out the review.
- The AWERB noted that this was a thorough and well written review and that the licence holder had made good progress in achieving some of the objectives set out in the programme of work.
- Members were pleased to note the efforts made with regards to 3Rs implementation and that the group had been able to replace some *in vivo* experiments through the use of human cell cultures. The committee was also pleased to read about the development of an *ex vivo* high throughput fluorescent imaging approach and that this had led to a notable reduction in the number of animals undergoing procedure of moderate severity.
- The AWERB was particularly pleased to be informed regarding the constructive working relationship between the research group and the named people and their willingness to engage with and adopt named person proposals for refinements.

Actions

- AWERB Administrator to email summary of committee's feedback to the licence holder.
- [REDACTED] to contact the PPL holder to discuss GAA breeding.
- NVS/NACWO to review enrichment strategies during periods of single housing.

4. Interim Review - [REDACTED]Points to note

- One interim review of an ongoing project was considered by the committee.
- A copy of the licence had been circulated to members for information to assist with carrying out the review.
- The AWERB noted that this was a very well written and comprehensive review and that the licence holder had made good progress in achieving some of the objectives set out in the programme of work.
- Members were pleased to note that the licence holder was using a range of reduction, replacement and refinement strategies in his work including the use of sophisticated *in vitro* models and publicly available datasets from patient samples. The committee was particularly pleased to learn that the group had been successful in obtaining funding to develop *ex vivo* perfusion

devices to allow primary human cancer samples to be maintained following surgical resection and that the group was also working with an external institution to develop a bank of primary human organoid cultures from [REDACTED] cancer ascites samples.

Actions

- AWERB Administrator to email summary of committee's feedback to the licence holder.

5. Interim Review - [REDACTED]

Points to note

- One interim review of an ongoing project was considered by the committee.
- A copy of the licence had been circulated to members for information to assist with carrying out the review.
- The AWERB noted that this was another comprehensive and clearly written review and that the licence holder had made good progress in achieving some of the objectives set out in the programme of work and that several papers had been published from work that had taken place under the licence.
- Members were pleased to note the ongoing efforts being made with regards to 3Rs implementation including the use of cell lines and organoids to screen multiple agents *in vitro* and the use of contrast enhanced ultrasound for measuring blood flow *in vivo*. The committee particularly noted the development of the use of *in silico* modelling of [REDACTED] behaviour and its potential to reduce the number of agents requiring testing for their ability to [REDACTED] *in vivo*.

Actions

- AWERB Administrator to email summary of committee's feedback to the licence holder.

6. Discussion item: Using both sexes in animal experiments

Points to note

- The Chair reminded members that the MRC had recently issued new guidance and requirements for both sexes to be used as a default in research proposals. The NC3Rs and MRC had recently held a joint webinar exploring how to address common challenges when planning, conducting and analysing animal experiments involving both sexes and the presentations published after that webinar had been included for members' information in the paper pack.
- Members discussed the information provided and noted that it would be important that project licence applicants were aware of this guidance when designing their experiments and when filling in the relevant part of their project licence application form.
- Members discussed various strategies for optimal engagement with all members of the animal research community on the importance of considering these issues in their experimental design. The AWERB administrator advised members that the Compliance and Risk group had proposed that CBS should consider sending out regular "newsletter" style updates to users, and that this would be an example of the type of information that could be communicated

via this route. She had also been asked to update college's AWERB PPL application guidance to refer to the MRC/NC3Rs guidance, and to consider changes to internal forms. These changes were currently being implemented. Members also proposed that the experimental design slide on the AWERB PowerPoint template for applicants should be updated accordingly.

7. **Report from Central AWERB**

Points to note

- The approved minutes of the July central AWERB meeting were noted. The Chair advised members that in order to provide members with additional context to the discussion that had taken place re ASRU audit processes, the supplementary paper pack contained copies of ASRU's guidance documents regarding full system audits.
- A verbal update was also provided regarding items of particular interest discussed at the September central AWERB meeting.

8. **Regular report on applications submitted, self-reporting and compliance notices**

Points to note

- The regular report was noted.

9. **CBS updates**

Points to note

- Members were informed that [REDACTED] had taken on the role of Facility manager for [REDACTED] and that [REDACTED], currently a NACWO at the [REDACTED] facility, would take up the role of [REDACTED] Facility manager at the end of October.
- Work on validation of the [REDACTED] facility was due to commence shortly.

10. **A.O.B**

Item discussed: ASRU - Guidance Notes for Project Licence Applications

Points to note

- Members were advised that ASRU had now issued Guidance notes for project licence applicants to use when preparing their applications and a copy of these would be circulated to members in the supplementary papers for the next meeting.

Item discussed: Animal Research forum

Points to note

- Members were informed that the annual Animal Research Forum, which had originally been due to take place on the 19th of September, had now been rescheduled to take place in November. Members were advised that they would need to complete a new registration form for the rescheduled event.

Dates of next meetings:

17 th November 2022	11.00-13.30
12 th December 2022	13.30-16.00

Local Animal Welfare and Ethical Review Body (AWERB) – [REDACTED]

13.30 – 15.30 13 November 2023
Microsoft Teams meeting

Minutes

Present:

Function	Name	Position
Chair	[REDACTED]	College academic
Member	[REDACTED]	College academic
<i>Ex officio</i> Member	[REDACTED]	3Rs Advisory Group Representative & NIO
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon (NVS) Named Animal Care and Welfare Officer for the site (NACWO) & NIO
<i>Ex officio</i> Member	[REDACTED]	Named Animal Care and Welfare Officer for the site (NACWO) CBS Meeting and Support Administrator and lay member with no responsibilities under ASPA
Member Member and attending as secretary	[REDACTED]	AWERB Administrator and member with no responsibilities under ASPA Training Officer & Named Training and Competency Officer (NTCO)
In attendance	[REDACTED]	

Apologies:

Function	Name	Position
Member	[REDACTED]	College academic
Member	[REDACTED]	College academic
Member	[REDACTED]	College academic
<i>Ex officio</i> Member	[REDACTED]	3Rs Advisory Group Representative
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon (NVS)
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon service (dNVS)
External	[REDACTED]	External member

Item**1. Members' declarations of interest in respect of items on the agenda**

None identified.

2. Minutes and matters arisingPoints to note

- The minutes of the previous meeting were approved, and updates were given on actions from the previous meeting.

3. NC3Rs Institutional 3Rs self-assessment report outcomePoints to note

- The 3Rs programme manager provided members with an overview of the purposes underpinning the roll-out of the NC3Rs Institutional 3Rs self-assessment tool and described the process involved in completing the college's submission. A copy of the outcome of the assessment had been circulated to members for information prior to the meeting.
- It was noted that the primary purpose for completing the self-assessment was to enable institutions to collate, track and benchmark their 3Rs activities. Through using the tool, institutions would be able to monitor their 3Rs culture and its development, focus efforts on the most important 3Rs areas, receive advice and suggestions for improvement and feedback regarding successful initiatives from other institutions as well as demonstrating their commitment to the 3Rs. Importantly, the tool also offers users a clear and comprehensive method for assessing 3Rs activities in relation to best practice, together with advice on converting policy into practice.
- The questions within the research institution tool reflected the breadth of possible 3Rs activities and encompassed 6 key areas: Leadership, People, Research and infrastructure, Experimental Design and Reporting, Training, and Publication and Wider dissemination.
- Members were pleased to see that college had received an assessment of good in four of the areas and fair in the remaining two areas.
- The AWERB discussed potential actions that could be considered to further improve the 3Rs culture of care in college and noted the key role of the 3Rs advisory group and the Imperial 3Rs hub in leading developments in this area. Members were delighted to hear that an application by the 3Rs hub for research culture funding from the Research England Enhancing Research Culture funding round 2023-24 had been submitted and approved, following discussion at the September central AWERB meeting.

4. Interim Review – [REDACTED]Points to note

- One interim review of an ongoing project was considered by the committee.
- A copy of the licence had been circulated to members for information to assist with carrying out the review.
- The AWERB noted that this was a clearly written review and that the licence holder had made good progress in achieving some of the objectives set out in the programme of work.
- Members were pleased to note that the licence holder had developed an *in vitro* method to study [REDACTED] cell interactions in [REDACTED] and that this had enabled the interactions

to be studied in a [REDACTED]. This method had led to both replacement and reduction benefits.

- The NVS informed members that the group had switched to ordering CD1 mice from [REDACTED] to [REDACTED], following issues with one batch of animals, and members noted that CBS staff should ensure that this was brought to the attention of any other groups, were similar problems to be encountered in future.

Actions

- AWERB Administrator to email summary of committee's feedback to the licence holder.

5. **Retrospective Review – [REDACTED]**

Points to note

- A retrospective review of a recently expired project was considered by the committee.
- A copy of the licence had been circulated to members for information to assist with carrying out the review.
- The AWERB noted that this was a clearly written review, that the licence holder had made good progress in achieving some of the objectives set out in the programme of work and that a number of papers had been published from work carried out under the licence.
- The committee noted the group's ongoing efforts with regards to 3Rs implementation and was pleased to see that the group had been using [REDACTED] *silico* predictions and cell culture methods with high content imaging to successfully replace some components of their animal work. Members were also pleased to learn about the positive benefits that had been observed from the use of environmental enrichment and that the group had been working constructively with the NVS team in order to refine their analgesic regimen.

Actions

- AWERB Administrator to email summary of committee's feedback to the licence holder.

6. **Report from Central AWERB**

Points to note

- The approved minutes of the July Central AWERB meeting were noted and the Chair also provided members with a verbal update on items of interest discussed at the September and November central AWERB meetings.

7. **Regular report on applications submitted, standard condition 18 self-reporting and potential non-compliance reports**

Points to note

- The regular report was noted.

8. **CBS updates**

Points to note

- A number of junior staff had recently been recruited by CBS.

9. **A.O.B**

None identified.

Dates of next meetings:

11 th December 2023	13.30-16.00
11 th January 2024	10.30-13.00
19 th February 2024	13.30-16.00
18 th March 2024	13.30-16.00
23 rd April 2024	13.30-16.00

Imperial College London

Local Animal Welfare and Ethical Review Body (AWERB) – [REDACTED]

10.30 – 13.00 14 March 2022
Microsoft Teams meeting

Minutes

Present:

Function	Name	Position
Chair	[REDACTED]	College academic
Vice Chair	[REDACTED]	College academic and 3Rs Group Representative
Member	[REDACTED]	College academic
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon (NVS)
<i>Ex officio</i> Member & deputizing for [REDACTED]	[REDACTED]	Named Animal Care and Welfare Officer for the site (NACWO) & NIO
Member	[REDACTED]	PhD student representative
In attendance	[REDACTED]	Named Animal Care and Welfare Officer for the site (NACWO)
In attendance Attending as secretary	[REDACTED]	CBS Meeting and Support Administrator and lay member with no responsibilities under ASPA AWERB Administrator and member with no responsibilities under ASPA

Apologies:

Function	Name	Position
Member	[REDACTED]	College Academic
Member	[REDACTED]	Post-doctoral representative
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon (NVS)
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon (NVS)
<i>Ex officio</i> Member	[REDACTED]	Site Manager & Named Information Officer (NIO)
<i>Ex officio</i> Member	[REDACTED]	Named Animal Care and Welfare Officer for the site (NACWO) & NIO

Item**Introduction**

The Chair welcomed the new PhD student representative to her first meeting.

1. Members' declarations of interest in respect of items on the agenda**Points to note**

None identified.

2. Minutes and matters arising**Points to note**

- The minutes of the previous meeting were agreed.
- Updates were given on actions from the previous meeting.

3. Report from Central AWERB**Points to note**

- The approved minutes of the November central AWERB meeting were noted.

4. Review of licence amendment – Incoming Additional Establishment Availability Request –**Points to note**

- An application for an amendment to a project licence was considered.
- The application had been submitted by a PPL holder who currently held a project licence at an external organisation in order to add additional availability at college. Members noted that the licence holder intended to subsequently transfer primary availability to college, once he had completed the ongoing experiments taking place at the current primary Establishment.
- No authority to permit the transfer between Establishments of any animals that had undergone experimental procedures was requested in the amendment.
- The committee was content to approve the request for additional availability at college, subject to the compulsory use of study plans.

Decisions

- The amendment was approved for submission to the Home Office subject to some minor administrative revisions to the application.
- The approval was granted on the basis that:
 - the project licence holder would be required to meet with the NVS and facility manager to discuss the proposed plan of work prior to commencing any studies at college;
 - the licence holder would be required to submit a study plan outlining the experimental procedures to be applied and the monitoring processes and humane endpoints for each study, and that the plan must be approved by the NVS and NACWO prior to each study commencing; any subsequent required variations to the approved plan would also need to be discussed and agreed in advance with the named people;
 - the licence holder would be required to provide CBS, in advance of any work commencing, with information regarding the maximum number of animals to be used at college on each protocol, in order to provide assurance that the permitted number of animals on each protocol would not be exceeded.

Actions

- AWERB Administrator to email summary of committee's feedback to the applicant.

5. **Update on ASRU Change Programme**

Points to note

- The AWERB administrator updated the committee on the key points announced at ASRU's February Quarterly Update to PEL holders on the ASRU Change Programme, which had now been rebranded as the Animals in Science Regulatory Reform Programme.
- The committee noted that ASRU had now concluded that it was necessary for it to prioritize the timing of organisation redesign, in order to improve the quality and consistency of regulatory deliverables, as it was unable to progress the programme as originally outlined last year within its existing organisational design and resources.
- Members were informed that each Establishment and project licence holder would be required to submit a portfolio of evidence, by the end of the year, to outline the systems and processes they operate to ensure they meet all the conditions of their licence.
- The AWERB also noted the new requirements for project licence applications to be accompanied by an assessment report from the AWERB, and for the notifier of each PPL standard condition 18 report and potential non-compliance report to submit a CAPA (correction and preventative action) report.
- Members were particularly dismayed to learn that ASRU anticipated delays to the processing of new project licence applications and that it was now requesting that licence applications should be submitted nine months prior to the required start date.
- Members felt the new temporary timeline announced by ASRU for the submission of project licence applications was unacceptable, particularly given the lack of notice which had not allowed any time for forward planning by applicants or Establishments. Fears were also expressed regarding how long these "temporary" delays were likely to last in practice.
- It was noted that the new timelines effectively shortened the lifetime of a project licence thus increasing the regulatory burden on licence holders, AWERBs and ASRU.
- Members noted that ASRU appeared to be shifting from its previous collaborative regulatory relationship and moving to the type of approach adopted by the HSE.
- The committee was concerned at the continuing failure of ASRU to communicate changes to its operational processes in a timely manner and noted that it was difficult to fully judge the resource implications of some of the announced changes given that the detailed requirements and forms had not yet been circulated to Establishments, despite the fact that the new processes were due to be implemented shortly. Nevertheless, members were concerned about the additional burdens placed on the Establishment and on project licence holders in order to comply with these latest requirements.

6. **CBS updates**

Nothing to report.

7. **A.O.B****Item discussed: AWERB membership update****Points to note**

- The Chair informed members that [REDACTED] had informed him that he would be retiring from college in April and was therefore stepping down from the AWERB with immediate effect. He extended his thanks, and that of the committee to [REDACTED], for his contribution to CBS and the AWERB during his many years of service.
- The Chair also announced that he would also be stepping down from the AWERB following the April meeting, and that [REDACTED] the current Vice Chair had kindly agreed to take on the role of the Chair.

Item discussed: ASRU Inspector assessment of PPL application**Points to note**

- The AWERB administrator updated members regarding the Inspector assessment of a PPL application which the AWERB had approved for submission to ASRU at its December meeting. The Inspector had requested a number of revisions and had included a condition requiring a report to be submitted to ASRU, following initial experiments carried out using hydrodynamic delivery.

Dates of next meetings:

11 th April 2022	10.30-13.00
10 th May 2022	13.30-16.00
13 th June 2022	10.30-13.00
12 th July 2022	13.30-16.00
22 nd August 2022	10.30-13.00

Local Animal Welfare and Ethical Review Body (AWERB) – [REDACTED]

10.30 – 13.00 14 June 2021
Microsoft Teams meeting

Minutes

Present:

Function	Name	Position
Chair	[REDACTED]	College academic
Vice Chair	[REDACTED]	College academic and 3Rs Group Representative
Member	[REDACTED]	College Academic
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon (NVS)
<i>Ex officio</i> Member	[REDACTED]	Site Manager & Named Information Officer
<i>Ex officio</i> Member	[REDACTED]	Named Animal Care and Welfare Officer for the site (NACWO)
Member	[REDACTED]	Post-doctoral representative
In attendance	[REDACTED]	CBS Meeting and Support Administrator
Attending as secretary	[REDACTED]	AWERB Administrator and Named Information Officer

Apologies:

Function	Name	Position
Member	[REDACTED]	College Academic
Member	[REDACTED]	College Academic
Member	[REDACTED]	PhD student representative
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon Service (dNVS)
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon (NVS)
In attendance	[REDACTED]	Home Office Inspector (HOI)
In attendance	[REDACTED]	Home Office Inspector (HOI)

Item**1. Members' declarations of interest in respect of items on the agenda**Points to note

- [REDACTED] declared an interest in Agenda item 3 in view of the fact that she worked in the group whose licence was to be reviewed. She noted that she would recuse herself from the AWERBs discussion and decision making for this item.

2. Minutes and matters arisingPoints to note

- The minutes of the previous meeting were agreed.
- Updates were given on actions from the previous meeting.

3. Retrospective review – [REDACTED]Points to note

- One retrospective review of a project licence that had recently expired was considered.
- [REDACTED] recused herself from the decision making process for this agenda item; she left the meeting prior to discussion of the item, returning only when discussion of this item had concluded.
- A copy of the licence had been circulated to members for information to assist with carrying out the review.
- Members noted that this was a comprehensive and thorough review and that the group had made good progress in achieving the objectives of the programme of work and that several papers had already been published from work that had taken place under the licence.
- The AWERB noted that the group had long standing 3Rs experience and had continued to adopt good practice in this regard including adoption of the use of cell lines for detailed mechanistic studies and the use of data from studies in lower organisms, such as [REDACTED], as a means of deciding whether to pursue a full *in vivo* characterisation in mice
- In light of the increasing number of studies in college proposing to use ageing mice, members agreed that it would be helpful to ask the licence holder how well the monitoring criteria initially established when the licence was granted had worked in practice and whether, for example, it had been necessary to make any significant changes to these during the course of the project. This information would be very helpful in enabling the AWERB and NVS team to be aware of any lessons learnt during the lifetime of the licence in order to be better able to advise licence applicants as to the optimal way to monitor ageing mice going forwards.

Actions

- AWERB Administrator to email summary of committee's feedback to the applicant.

4. Review of retrospective assessment – [REDACTED]Points to note

- A retrospective assessment of a recently expired project licence containing a protocol with a severe severity limit was reviewed.

- Members noted that they had already conducted a retrospective review of this licence when the licence holder's application for a replacement licence had been considered earlier this year. However, in accordance with the legislation, and the guidance provided by ASRU, the project licence holder is also required to submit a retrospective assessment to the Home Office, by the due date, following consideration of the assessment by the AWERB. As no work involving the severe protocol had been undertaken during the course of the licence, the retrospective assessment did not need to be referred to central AWERB for consideration.
- A copy of the licence had been circulated to members for information to assist with carrying out the assessment.
- The AWERB noted that the draft assessment contained information that might easily enable triangulation of the licence holder's identity, and agreed that the licence holder should be advised to reword the relevant sections in order to comply with ASRU's requirements regarding anonymity.

Decisions

- The committee was content to approve the retrospective assessment for submission to the Home Office subject to the inclusion of the revisions requested by the committee.

Actions

- AWERB Administrator to email summary of committee's feedback to the applicant.

5. **Report from Central AWERB**

Points to note

- The approved minutes of the March central AWERB meeting were noted and a verbal update was also provided regarding items of particular interest discussed at the May central AWERB meeting.
- The [REDACTED] facility manager updated members regarding the actions that were currently being taken following the review of breeding that had taken place at the March meeting. Members discussed potential issues linked to the use of A-tune for fating animals and provision of information for completing annual Returns of Procedures, and noted that refresher training for licence holders might be beneficial.
- The AWERB also discussed the actions proposed by cAWERB regarding timelines for licence application preparation and review; these had had been considered at the May central AWERB meeting and members emphasised that it would be important to ensure that the proposed sanctions were clearly communicated to licence holders and then rigorously enforced.

Actions

- The Chair and/or AWERB Administrator should provide feedback to cAWERB members regarding the points raised by [REDACTED] members at the next cAWERB meeting.

6. **Regular report on applications submitted, self-reporting and compliance notices**

Points to note

- The regular report was noted.

7. **CBS updates**

Nothing to report

8. **A.O.B**

Item discussed: Future AWERB meeting format following the lifting of government restrictions

Points to note

- Given the possibility that the current government COVID restrictions would be lifted by the start of the next academic year, the Chair canvassed member preferences with regards to the format of AWERB meetings for the next academic year.
- Members considered the advantages and disadvantages of 'in person' and virtual meetings and agreed that holding meetings on line had not adversely impacted on AWERB's ability to carry out its duties effectively.
- It was noted that one key benefit of virtual meetings was that it enabled members and licence applicants to attend meetings even when other commitments, such as conferences held outside of college, prevented on campus attendance.

Decisions

- Members agreed that most if not all meetings for the next academic year should continue to be held virtually, but that in light of the decision made by the ██████████ and central AWERBs to hold one or two 'in person' meetings a year, members would consider holding one 'in person' meeting at a convenient opportunity during the spring or summer term.

Dates of next meetings:

12 ^h July 2021	10.30-13.00
16 ^h August 2021	10.30-13.00

Local Animal Welfare and Ethical Review Body (AWERB) – [REDACTED]

 11.00 – 13.00 14 July 2022
 Microsoft Teams meeting

Minutes

Present:

Function	Name	Position
Chair	[REDACTED]	College academic
Member	[REDACTED]	College Academic
Member	[REDACTED]	College Academic
Member	[REDACTED]	College Academic
Member	[REDACTED]	College Academic
<i>Ex officio</i> Member	[REDACTED]	Co-Chair 3Rs Advisory Group
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon (NVS)
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon (NVS)
<i>Ex officio</i> Member	[REDACTED]	Named Animal Care and Welfare Officer for the site (NACWO) & NIO
<i>Ex officio</i> Member	[REDACTED]	Named Animal Care and Welfare Officer for the site (NACWO) & NIO
Member	[REDACTED]	PhD student representative
Member and attending as secretary	[REDACTED]	AWERB Administrator and member with no responsibilities under ASPA

Apologies:

Function	Name	Position
Member	[REDACTED]	College Academic
Member	[REDACTED]	CBS Meeting and Support Administrator and lay member with no responsibilities under ASPA
Member	[REDACTED]	3Rs programme manager and 3Rs Group Representative

Item**Introduction**

- The Chair welcomed [REDACTED] to her first meeting.

1. Members' declarations of interest in respect of items on the agenda

None identified.

2. Report from Central AWERB**Points to note**

- The approved minutes of the March central AWERB meeting were noted.
- A verbal update was also provided regarding items of particular interest discussed at the May central AWERB meeting.

3. Regular report on applications submitted, self-reporting and compliance notices**Points to note**

- The regular report was noted.
- The NVS provided members with an update regarding actions taken in response to one condition 18 report.

4. CBS updates**Points to note**

- Members were provided with an update regarding the anticipated opening date of the [REDACTED] and [REDACTED] animal facilities.
- Members were informed that [REDACTED] would be leaving college shortly to take up a post elsewhere and that he was therefore attending his last meeting of the committee. The Chair thanked him for his contribution and wished him well in his new role.

5. Review of licence application – [REDACTED]**Points to note**

- An application for a new project licence was considered.
- The application was to continue a program of work that expired last year.
- The committee was content with the overall programme of work proposed but discussed a number of revisions that the AWERB would require to be implemented in the draft application, prior to approving the application for formal submission to the Home Office.
- The committee carried out a retrospective review of the expired PPL in parallel with consideration of the new application.
- The AWERB was also pleased to note the progress made in developing the translational benefits of the work and that a clinical trial was currently taking place investigating the effects of a first in class [REDACTED] in [REDACTED]

Decisions

- The application was approved for submission to the Home Office, subject to the inclusion of the revisions requested by the committee.
- The revised submission will be approved by Chair's action, following re-review by the NVS, NACWO and one additional scientific member of the committee.
- The mid-term review for this PPL should be set to the mid-point of the licence.

Actions

- AWERB administrator to email summary of committee's feedback and required revisions to the applicant.

6. **Review of licence application –**Points to note

- An application for a new project licence was considered.
- The application was to continue a program of work that was due to expire in November.
- The committee was content with the overall programme of work proposed but discussed a number of revisions that the AWERB would require to be implemented in the draft application, prior to approving the application for formal submission to the Home Office.
- The committee carried out a retrospective review of the expired PPL in parallel with consideration of the new application.
- The AWERB was pleased to note that only very small numbers of mice and rats had been used under the severe severity limit protocol for [REDACTED] and that the licence holder had been able to refine the experimental design in the new application to avoid the need to include a severe protocol for [REDACTED].

Decisions

- The application was approved for submission to the Home Office, subject to the inclusion of the revisions requested by the committee.
- The revised submission will be approved by Chair's action, following prior re-review by the NVS.
- The mid-term review for this PPL should be set to the mid-point of the licence.

Actions

- AWERB administrator to email summary of committee's feedback and required revisions to the applicant.

6. **A.O.B****Item discussed: Pain Management in Zebrafish – Report from a FELASA Working group**Points to note

- The Chair drew members attention to a copy of a recently circulated FELASA draft report on pain management in zebrafish, which had been included for members' information in the supplementary paper pack circulated for the last meeting. The contents of this report had recently been discussed at central AWERB and by members of the [REDACTED] local AWERB.
- Members noted that no work involving zebrafish was currently taking place at the [REDACTED] campus and agreed that it would therefore be appropriate to bring this item back for detailed discussion at the stage that any plans were being made for zebrafish work to recommence at the [REDACTED] campus.

Item discussed: New ASRU Standard Breeding Protocols

Points to note

- The Chair advised members that ASRU had recently revised the wording of the standard breeding protocols for genetically altered rodents and zebrafish. A copy of the revised templates had been included for members' information in the supplementary paper pack circulated for the last meeting.
- The protocols had been updated to include more refined approaches and were formatted according to the new-style ASPeL project licence application.
- The protocols had been revised to address the issue of non-procedural related deaths. In order to prevent standard condition 18 reports being submitted for non-procedural related adverse effects, especially those related to the background strain and not to the genotype, the following wording had been included in the GA animal protocols:
 - Animals are not expected to die because of any authorised genetic alteration. A small number of animals, living beyond the neonatal period (5 days for mice and rats – before which ASRU does not require you to report any mortality), may suddenly and unexpectedly die having shown no preceding clinical signs indicative of impending death. Unless otherwise indicated, such deaths, should they occur, are unlikely to be related to the genotype. However, as per the published ASRU Advice Note on Severity Assessment of GA animals, should the mortality rate (age-matched) of the genetically altered strain rise beyond that present in the background source breeding colony, this will be reported under PPL standard condition 18.
- ASRU had advised that Establishments should ensure that these new standard protocols were used with immediate effect in new project applications that include breeding and maintenance of GA animals and that licence holders should update the GA protocols when project amendments are submitted in ASPeL.
- For new project applications and amendments already submitted, ASRU would include an additional condition with the above wording unless the application is returned with comments in which case applicants will be asked to replace the GA protocols with the new ones.
- For standard condition 18 reports that are submitted for non-procedural related adverse effects, ASRU will return the report with the above wording and indicate that an additional condition will be added to the project application. Project licence holders will be asked to submit a project amendment to enable ASRU to add the additional condition to the project licence therefore preventing unnecessary SC18 reports.

Item discussed: 3Rs advisory group updatePoints to note

- The co-Chair of the 3Rs advisory group informed members that the annual Animal Research Forum was scheduled to take place on the 15th September.
- A number of short talks would be given by members of Imperial's newly established 3Rs PhD Students Network.

Dates of next meetings:22nd August 2022

10.30-13.00

6 th September 2022	10.30-13.00
13 th October 2022	10.30-13.00
17 th November 2022	11.00-13.30
12 th December 2022	13.30-16.00

Imperial College London

Central Animal Welfare and Ethical Review Body (AWERB)

13:30 – 16.30 14 November 2022 (Meeting 2)

MS Teams

Present:

Function	Name	Position
Chair	[REDACTED]	Senior College academic
Vice-chair	[REDACTED]	Lay person
<i>Ex officio</i> Member	[REDACTED]	Establishment Licence Holder
<i>Ex officio</i> Member	[REDACTED]	Director of Bioservices
<i>Ex officio</i> Member	[REDACTED]	Director of Central Biomedical Services (CBS)
<i>Ex officio</i> Member	[REDACTED]	Chair of the Local AWERB – [REDACTED]
<i>Ex officio</i> Member	[REDACTED]	Chair of the Local AWERB – [REDACTED]
<i>Ex officio</i> Member	[REDACTED]	Chair of the 3Rs Advisory Group
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon Service (dNVS)
<i>Ex officio</i> Member	[REDACTED]	Named Animal Care and Welfare Officer (NACWO) & Named Information Officer (NIO)
<i>Ex officio</i> Member	[REDACTED]	Named Training and Competency Officer (NTCO)
Member	[REDACTED]	Senior College academic and biostatistician
Member	[REDACTED]	External Member
Member	[REDACTED]	Lay person & Imperial Communications representative
Member	[REDACTED]	PhD student representing the student community
Member	[REDACTED]	CBS Meeting and Support Administrator and lay member with no responsibilities under ASPA
Member and secretary	[REDACTED]	AWERB Administrator and member with no responsibilities under ASPA

Apologies:

Function	Name	Position
Member	[REDACTED]	External Member
Member	[REDACTED]	External Member
Member	[REDACTED]	Post-doctoral fellow representing the post-doctoral community
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon (NVS)
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon (NVS)

	<u>Item</u>
1.	<p><u>Members' declarations of interests in respect of items on the agenda</u></p> <p>None identified.</p>
2.	<p><u>Minutes and matters arising</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> • The minutes of the last meeting were agreed. • Updates were given on actions from the previous meeting. In particular, the Chair advised members that further to the discussion that had taken place at the last meeting, the minor revisions to the AWERB Terms of Reference had been implemented and a copy of the updated document had been circulated for information in the supplementary paper pack.
3.	<p><u>Review of licence application – [REDACTED]</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> • An application for a new project licence was considered. • The application was to continue a program of work covered by an existing licence due to expire in March 2023. • Prior to detailed consideration of the application, the Chair drew members attention to the pre-circulated report from the Animals in Science Committee Project Licence Review Subgroup on Antibody Project Licences, which had also been sent to the applicant to consider. She also updated members regarding discussions that had taken place regarding the recommendations made in the report at the recent AWERB Hub Network annual meeting. • During discussion of the licence application with the applicant, members were pleased to learn that he had decided, following detailed consideration of the information in the ASC report and discussions with colleagues, to remove the protocol covering the generation of antibodies from his draft application. • The committee was therefore content with the overall programme of work proposed, subject to various revisions requested by the committee. • The committee carried out a retrospective review of the expiring PPL in parallel with consideration of the new application. • The AWERB was pleased to note that the licence holder was using a range of reduction, replacement and refinement strategies in his work. Members noted the group's extensive use of <i>in vitro</i> assays and model cell lines which had led to replacement and reduction benefits. The AWERB was particularly pleased to learn that the group had developed improved variants of luciferase which enabled more sensitive detection of tumours and tumour size changes, thus enabling improved detection of smaller tumours, and that these refinements had been published and the sequences made available for use by the wider scientific community. • Members also noted that the group's work had led to the development of novel and transformative patient therapies, and that the animal component of the work was providing key data enabling work to progress directly to human clinical trials. <p><u>Decisions</u></p> <ul style="list-style-type: none"> • The application was approved for submission to the Home Office, subject to the inclusion of the revisions requested by the committee. • The revised submission will be approved by Chair's action.

	<ul style="list-style-type: none"> The mid-term review for this PPL should be set to the mid-point of the licence. <p><u>Actions</u></p> <ul style="list-style-type: none"> AWERB administrator to email summary of committee's feedback and required revisions to the applicant.
4.	<p><u>Review of licence application and retrospective assessment –</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> An application for a new project licence was considered. The application was to continue a program of work covered by a project licence that had recently expired. The committee was content with the overall programme of work proposed but discussed a number of revisions that the AWERB would require to be implemented in the draft application, prior to approving the application for formal submission to the Home Office. The committee reviewed the retrospective assessment of the expiring PPL in parallel with consideration of the new application. The AWERB was pleased to note that the group were continuing the use of <i>in vitro</i> organotypic slice models for the early screening process for new treatments and that they had developed and published work on a novel <i>in vitro</i> method of and were working to facilitate its use by other groups. <p><u>Decisions</u></p> <ul style="list-style-type: none"> The application was approved for submission to the Home Office, subject to the inclusion of the revisions requested by the committee. The retrospective assessment was approved for submission to the Home Office, subject to the inclusion of the revisions requested by the committee. The revised submission will be approved by Chair's action. The mid-term review for this PPL should be set to the mid-point of the licence. <p><u>Actions</u></p> <ul style="list-style-type: none"> AWERB administrator to email summary of committee's feedback and required revisions to the applicant.
5.	<p><u>Regular report on applications submitted, self-reporting & compliance notices</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> The regular report was noted.
6.	<p><u>Director of CBS operational update</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> The Director of CBS advised members that a new Facility Manager had been appointed. He informed members that an ASRU inspection of the new facility had taken place in October and that the Inspector was content for the facility to be added to the Establishment licence once some minor snagging items had been rectified and environmental validation was completed. An inspection of the new external designated rooms facility at the campus was due to take place shortly, together with a facilities audit of the facility.

	<ul style="list-style-type: none"> A further two meetings of the Compliance and Risk Management group had taken place and good progress had been made in working through the standard conditions of licences and the expectations regarding evidence of compliance laid out in the ASRU audit documentation.
7.	<p><u>3Rs Advisory group update</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> The annual Animal Research Forum has been rescheduled to take place on 24th November. The 3Rs Advisory group were currently considering and mapping out a strategic vision for its activities for the next 10-year period.
8.	<p><u>Communications update</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> UAR's eighth annual Concordat report was due to be published shortly; this would feature an openness case study describing the college's animal research media engagement strategy.
9.	<p><u>Local AWERB – [REDACTED] report</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> The approved minutes of the September local AWERB meeting were received and noted.
10.	<p><u>Local AWERB – [REDACTED] report</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> The approved minutes of the September local AWERB meeting were received and noted.
11.	<p><u>A.O.B</u></p> <p><u>Item discussed: updated ASRU guidance notes for PPL applicants</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> Members were advised that ASRU had now issued Guidance notes for project licence applicants to use when preparing their applications and a copy of these had been included for information in the supplementary papers.

Dates of next meetings:

23 January 2023	13.30-16.30	Virtual
20 March 2023	13.30-16.30	Virtual
16 May 2023	13.30-16.30	Virtual
17 July 2023	13.30-16.30	Virtual

10.00 – 12.30 14 November 2023
MS Teams

Minutes

Present:

Function	Name	Position
Chair	[REDACTED]	College academic
Co Vice-Chair	[REDACTED]	College academic
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon (NVS)
Member	[REDACTED]	College academic Named Animal Care and Welfare Officer (NACWO) for the site & Named Information Officer (NIO)
<i>Ex officio</i> Member	[REDACTED]	3Rs programme manager and 3Rs Group Representative
<i>Ex officio</i> Member	[REDACTED]	CBS Meeting and Support Administrator and lay member with no responsibilities under ASPA
Member	[REDACTED]	
Member and attending as secretary	[REDACTED]	AWERB Administrator and member with no responsibilities under ASPA
In attendance	[REDACTED]	Named Training and Competency Officer (NTCO)

Apologies:

Function	Name	Position
Co Vice-Chair	[REDACTED]	College academic
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon service (dNVS)
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon (NVS)

Item

1. Members' declarations of interest in respect of items on the agenda

None identified.

2. Minutes and matters arising

Points to note

- The minutes of the previous meeting were agreed.
- Updates were given on actions from the previous meeting.

3. Interim Review – [REDACTED]

Points to note

- One interim review of an ongoing project was considered by the committee.
- A copy of the licence had been circulated to members for information to assist with carrying out the review.
- The AWERB noted that this was a clearly written review and that the licence holder had made good progress in achieving some of the objectives set out in the programme of work and that two papers had already been published from the limited work carried out to date.
- Members were pleased to learn that the group was continuing to develop the wax moth *Galleria mellonella* as an alternative model to evaluate the effectiveness of new treatments and to test the attenuation of bacterial mutants and that work was ongoing to develop tools to make this model more useful in microbial studies.

Actions

- AWERB Administrator to email summary of committee's feedback to the licence holder.

4. Interim Review – [REDACTED]

Points to note

- One interim review of an ongoing project was considered by the committee.
- A copy of the licence had been circulated to members for information to assist with carrying out the review.
- The AWERB noted that this was a very thorough and clearly written review and that the licence holder had made good progress in achieving two of the objectives set out in the programme of work.
- Members were pleased to observe that the animal numbers used to date were within the limits originally anticipated and that the reported actual severity limits of the procedures undertaken were less severe than those originally anticipated.
- The committee was pleased to note the group's efforts with regards to 3Rs implementation. In particular, members noted that the group had been developing a [REDACTED] model for studying the impact of small proteins in controlling microbe abundance in the gut as a replacement for animal work.
- The AWERB also noted that the group had developed several strategies to reduce animal numbers and were particularly pleased to learn that the group had used pilot experiments to identify the optimal period for testing post administration and had refined experiments by shortening their duration. The group had also refined the severity of the DSS model through the reduction of the DSS dose, minimising the levels of inflammation and the duration of the experiment.

Actions

- AWERB Administrator to email summary of committee's feedback to the licence holder.

5. **Report from Central AWERB**

Points to note

- The approved minutes of the July Central AWERB meeting were noted.

6. **Regular report on applications submitted, standard condition 18 self-reporting and potential non-compliance reports**

Points to note

- The regular report was noted.

7. **Points to note**

- The 3Rs programme manager provided members with an overview of the purposes underpinning the roll-out of the NC3Rs Institutional 3Rs self-assessment tool and described the process involved in completing the college's submission. A copy of the outcome of the assessment had been circulated to members for information prior to the meeting.
- It was noted that the primary purpose for completing the self-assessment was to enable institutions to collate, track and benchmark their 3Rs activities. Through using the tool, institutions would be able to monitor their 3Rs culture and its development, focus efforts on the most important 3Rs areas, receive advice and suggestions for improvement and feedback regarding successful initiatives from other institutions as well as demonstrating their commitment to the 3Rs. Importantly, the tool also offers users a clear and comprehensive method for assessing 3Rs activities in relation to best practice, together with advice on converting policy into practice.
- The questions within the research institution tool reflected the breadth of possible 3Rs activities and encompassed 6 key areas: Leadership, People, Research and infrastructure, Experimental Design and Reporting, Training, and Publication and Wider dissemination.
- Members were pleased to see that college had received an assessment of good in four of the areas and fair in the remaining two areas.
- The AWERB discussed potential actions that could be considered to further improve the 3Rs culture of care in college and noted the key role of the 3Rs advisory group and the [REDACTED] 3Rs hub in leading developments in this area. Members were delighted to hear that an application by the 3Rs hub for research culture funding from the Research England Enhancing Research Culture funding round 2023-24 had been submitted and approved, following discussion at the September central AWERB meeting.
- Members teaching undergraduate courses noted that they would be extremely interested in utilizing the proposed teaching materials once developed.
- The NTCO advised members that she had recently attended a meeting organised by the RSPCA and that they were in the process of developing some material that might also be useful to include as an additional training resource.

8. **CBS updates**

Points to note

- The [REDACTED] facility manager informed members that two new members of junior staff had been recruited by CBS.
- The refurbishment to the [REDACTED] facility has encountered a minor delay and the anticipated date for practical completion had now moved to April 2024.

9. **A.O.B**

Item discussed: Animal Research Forum

Points to note

- The 3Rs programme manager reminded members that the annual Animal Research Forum was scheduled to take place on the 23rd November, and encouraged all to attend.

Dates of next meetings:

12 th December 2023	13.30-16.30
15 th January 2024	13.30-16.30
12 th February 2024	13.30-16.30
1 st March 2024	10.30-13.30
9 th April 2024	13.30-16.30

Local Animal Welfare and Ethical Review Body (AWERB) – [REDACTED]

10.30 – 12.30 15^h February 2021
Microsoft Teams meeting

Minutes

Present:

Function	Name	Position
Chair	[REDACTED]	College academic
Vice Chair	[REDACTED]	College academic and 3Rs Group Representative
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon (NVS)
<i>Ex officio</i> Member	[REDACTED]	Site Manager & Named Information Officer
<i>Ex officio</i> Member	[REDACTED]	Named Animal Care and Welfare Officer for the site (NACWO)
Member	[REDACTED]	College Academic
Member	[REDACTED]	Post-doctoral representative
Member	[REDACTED]	PhD student representative
In attendance	[REDACTED]	Named Animal Care and Welfare Officer from SK (NACWO)
In attendance	[REDACTED]	CBS Meeting and Support Administrator
Attending as secretary	[REDACTED]	AWERB Administrator and Named Information Officer

Apologies:

Function	Name	Position
Member	[REDACTED]	College Academic
Member	[REDACTED]	College Academic
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon (NVS)
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon Service (dNVS)
In attendance	[REDACTED]	Home Office Inspector (HOI)
In attendance	[REDACTED]	Home Office Inspector (HOI)

Item**1. Members' declarations of interest in respect of items on the agenda**

None identified.

2. Minutes and matters arisingPoints to note

- The minutes of the previous meeting were agreed.
- Updates were given on actions from the previous meeting.

3. Review of licence application amendment – [REDACTED]Points to note

- An application for an amendment to a project licence was considered.
- The application had been submitted by a PPL holder who currently held a project licence at an external organisation in order to add additional availability at college.
- The committee was content to approve the request for additional availability at college, subject to minor administrative clarifications requested by the committee.
- As the applicant's previous project licence that had recently expired had also permitted additional availability at college, the committee also carried out a retrospective review of the expiring PPL in parallel with consideration of the new application.
- The AWERB was pleased to note that the licence holder was using a range of reduction, replacement and refinement strategies in her work. In particular, the AWERB noted the applicant's use of [REDACTED], and the development of [REDACTED].

Decisions

- The application was approved for submission to the Home Office, subject to the inclusion of the minor clarifications requested by the committee.
- The revised submission will be approved by AWERB administrator action.
- The mid-term review for this PPL should be set to the mid-point of the licence.

Actions

- AWERB administrator to email summary of committee's feedback and required revisions to the applicant.

4. Interim review – [REDACTED]Points to note

- One interim review of an ongoing project was considered by the committee.
- A copy of the licence had been circulated to members for information to assist with carrying out the review.
- Members were pleased to observe that this was a clear and comprehensive review. They observed that the group had long standing 3Rs experience and that it was continuing to adopt good practice in this regard, including when appropriate the use of non-protected species as model systems and the use of *in silico* techniques, together with the emphasis on careful experimental design and approaches to minimise variability and the extensive use of *in vitro*

experimental systems.

- Members requested clarification regarding the actual severity figures provided in the review.

Actions

- AWERB Administrator to email summary of committee's feedback to the applicant.

5. **Interim review –** [REDACTED]

Points to note

- One interim review of an ongoing project was considered by the committee.
- A copy of the licence had been circulated to members for information to assist with carrying out the review.
- The AWERB was pleased to note that this was another detailed review and noted the comprehensive and considered evaluation of the actual severity of the procedures that had been undertaken. Members were also pleased to note the systems in place to check and avoid generation of GA lines already available on site or within the UK.
- Members requested clarification regarding the actual severity figures provided in the review.

Actions

- AWERB Administrator to email summary of committee's feedback to the applicant.

6. **Interim review –** [REDACTED]

Points to note

- One interim review of an ongoing project was considered by the committee.
- A copy of the licence had been circulated to members for information to assist with carrying out the review.
- Members were pleased to observe that this was another thorough, well written review.
- Members requested clarification regarding the actual severity figures provided in the review.
- In light of the fact that the work carried out under the licence had now transferred to the [REDACTED] facility, members agreed that the interim review should be passed on to the [REDACTED] local AWERB to consider before any feedback was provided to the PPL holder.

Actions

- AWERB Administrator to schedule this review for consideration by the [REDACTED] local AWERB.

7. **CBS updates**

Points to note

- The NVS observed that the responses provided by project licence holders to the question in the interim review form requesting details of the anaesthetic and perioperative pain relief paradigms used for recovery surgery were not always providing the necessary level of detail required for the NVS to undertake their review.

- Members proposed that the NVS should provide additional clarification regarding the information required that could then be inserted into the interim review form as guidance to assist licence holders in completing this section of the form.
- The NVS also advised the AWERB that the veterinary services team had been asked to give a presentation at the [REDACTED] local AWERB regarding refinements to peri-operative anaesthesia/analgesia; members agreed that it would be helpful for this to also be considered at a future meeting of the [REDACTED] local AWERB.

Actions

- NVS to send the AWERB administrator additional guidance re the information requested in the interim review form regarding anaesthesia and analgesia, in order that the form be revised accordingly.
- AWERB Administrator to schedule a presentation from the veterinary services team regarding refinements to peri-operative anaesthesia/analgesia at a future meeting.

8. A.O.B

None identified.

Dates of next meetings:

22 nd March 2021	10.30-13.00
19 ^h April 2021	10.30-13.00
24 ^h May 2021	10.30-13.00
14 ^h June 2021	10.30-13.00
12 ^h July 2021	10.30-13.00
16 ^h August 2021	10.30-13.00

Minutes

Present:

Function	Name	Position
Chair - present for introductions item only	[REDACTED]	College academic
Co-Vice Chair and chair of meeting for agenda item 1 onwards	[REDACTED]	College academic
Co Vice-Chair	[REDACTED]	College academic
Member	[REDACTED]	College academic
<i>Ex officio</i> Member	[REDACTED]	College academic and 3Rs Group Representative
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon (NVS) Named Animal Care and Welfare Officer (NACWO) for the site & Named Information Officer (NIO)
<i>Ex officio</i> Member	[REDACTED]	
In attendance	[REDACTED]	College academic
Member	[REDACTED]	CBS Meeting and Support Administrator and lay member with no responsibilities under ASPA
Member and attending as secretary	[REDACTED]	AWERB Administrator and member with no responsibilities under ASPA

Apologies:

Function	Name	Position
Member	[REDACTED]	College academic
Member	[REDACTED]	Post-doctoral representative
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon (NVS)

Item:

Introductions and thanks

- [REDACTED] welcomed [REDACTED] to his first meeting and informed members that that he would be attending the February and March meetings of the AWERB as an observer, prior to taking over as the Chair of the [REDACTED] local AWERB at the beginning of April.
- [REDACTED] noted that she wished to thank [REDACTED], on behalf of all members of the committee, for her valuable and long standing contribution to the work of the [REDACTED] local AWERB over her period of membership and particularly during her latter period as Chair of the [REDACTED] local AWERB. She also extended her best wishes to her in her new role as Chair of central AWERB.

1. Members' declarations of interest in respect of items on the agenda

None identified

2. Minutes and matters arising

Points to note

- The minutes of the previous meeting were agreed.
- Updates were given on actions from the previous meeting.

3. Review of licence application - [REDACTED]

Points to note

- An application for a new project licence was considered.
- The licence was to continue a program of work covered by a recently expired licence.
- The committee was content with the programme of work proposed in the application subject to revisions requested by the committee.
- The committee carried out a retrospective review of the expiring PPL in parallel with consideration of the new application.
- Members were pleased to note that the licence holder was continuing to use a range of 3Rs approaches in her work, including the adoption of the use of a more refined "[REDACTED]" CF knockout mouse.
- The AWERB was also pleased to note the progress in developing the translational benefits of the work and that plans were now in place to conduct a first in man clinical trial.

Decisions

- The application was approved for submission to the Home Office, subject to the inclusion of the revisions requested by the committee.
- The revised submission will be approved by Chair's action.
- The mid-term review for this PPL should be set to the mid-point of the licence.

Actions

- AWERB administrator to email summary of committee's feedback and required revisions to the applicant.

4. Review of licence application - [REDACTED]

Points to note

- An application for a new project licence was considered.
- The licence was to continue a program of work covered by a licence that was due to expire shortly.
- The committee was content with the programme of work proposed in the application subject to revisions requested by the committee.

- The committee carried out a retrospective review of the expiring PPL in parallel with consideration of the new application.
- Members were pleased to note that the work carried out under the licence had led to the development of new methods showing promise for clinical diagnostics and these were currently the subject of a funded clinical trial.

Decisions

- The application was approved for submission to the Home Office, subject to the inclusion of the revisions requested by the committee.
- The revised submission will be approved by Chair's action.
- The mid-term review for this PPL should be set to the mid-point of the licence.

Actions

- AWERB administrator to email summary of committee's feedback and required revisions to the applicant.

5. **Report from Central AWERB**

Points to note

- The approved minutes of the November central AWERB meeting were noted. A verbal update was also provided regarding items of particular interest discussed at the January central AWERB meeting.

6. **CBS updates**

None identified

7. **A.O.B**

None identified.

Dates of next meetings:

04 th March 2022	13.30-16.30
07 th April 2022	13.30-16.30
05 th May 2022	13.30-16.30
21 st June 2022	13.30-16.30
19 th July 2022	13.30-16.30
16 th August 2022	13.30-16.30

Central Animal Welfare and Ethical Review Body (AWERB)

14:00 – 17:00 15 March 2021 (Meeting 3)

MS Teams

Present:

Function	Name	Position
Chair	[REDACTED]	Senior College academic
Vice-chair	[REDACTED]	Lay person
<i>Ex officio</i> Member	[REDACTED]	Establishment Licence Holder
<i>Ex officio</i> Member	[REDACTED]	Chair of the Local AWERB – [REDACTED]
<i>Ex officio</i> Member	[REDACTED]	Director of Bioservices
<i>Ex officio</i> Member	[REDACTED]	Chair of the 3Rs Advisory Group
<i>Ex officio</i> Member	[REDACTED]	Director of Central Biomedical Services (CBS)
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon (NVS)
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon service (dNVS)
<i>Ex officio</i> Member	[REDACTED]	Named Training and Competency Officer (NTCO)
<i>Ex officio</i> Member	[REDACTED]	Named Animal Care and Welfare Officer (NACWO)
Member	[REDACTED]	External Member
Member	[REDACTED]	External member
Member	[REDACTED]	Post-doctoral fellow representing the post-doctoral community
Member	[REDACTED]	PhD student representing the student community
Member	[REDACTED]	Lay person & Imperial Communications representative
In attendance	[REDACTED]	Named Animal Care and Welfare Officer (NACWO) and [REDACTED] Facility Manager
In attendance	[REDACTED]	CBS Meeting and Support Administrator
Member and secretary	[REDACTED]	AWERB Administrator & Named Information Officer (NIO)

Apologies:

Function	Name	Position
<i>Ex officio</i> Member	[REDACTED]	Chair of the Local AWERB – [REDACTED]
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon (NVS)
Member	[REDACTED]	Senior College Academic
Member	[REDACTED]	Senior College Academic
Member	[REDACTED]	Lay person
In attendance	[REDACTED]	Home Office Inspector
In attendance	[REDACTED]	Home Office Inspector

	<u>Item</u>
1.	<p><u>Members' declarations of interests in respect of items on the agenda</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> · ■■■ declared an interest in Agenda item 4 by virtue of being the project licence holder for the amendment request under consideration. She noted that she would recuse herself from the AWERB's deliberations and decision making for this agenda item and that the Vice-Chair would take over the Chair for this item.
2.	<p><u>Minutes and matters arising</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> · The minutes of the last meeting were agreed. · Updates were given on actions from the previous meeting.
3.	<p><u>Review of licence application and retrospective assessment - ■■■</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> · An application for a new project licence was considered. · The licence was to continue a program of work covered by an existing PPL due to expire shortly. · The committee was content with the programme of work proposed in the draft application, subject to various revisions requested by the committee. · The committee carried out a retrospective assessment of the expiring PPL in parallel with consideration of the new application. In accordance with the legislation, and the revised guidance recently circulated by ASRU, the project licence holder is required to submit a copy of the assessment to the Home Office, by the due date, following consideration of the assessment by the AWERB. A copy of the licence had been circulated to members for information to assist with carrying out the assessment. · The AWERB was pleased to note that the licence holder was using a range of reduction, replacement and refinement strategies in his work. In particular, members noted the replacement benefits that had arisen from mathematical modelling of the dynamics of ■■■ load in human ■■■ patients and associated use of culture techniques. Members also highlighted the development of a comprehensive comparative transcriptomic resource to enable identification of the most relevant models for investigation of any given pathogenic mechanism, that should allow irrelevant models to be excluded, thus reducing the use of mice. · The committee was also pleased to note that the implementation of point of care testing, on microliter capillary blood samples for lactate and glucose levels, had allowed these to be used as surrogate endpoints in some experiments, thus preceding clinical severity. <p><u>Decisions</u></p> <ul style="list-style-type: none"> · The application was approved for submission to the Home Office, subject to the inclusion of the revisions requested by the committee. · The revised submission will be approved by Chair's action. · The interim review for this PPL should be set to the mid-point of the licence. · The committee was content to approve the retrospective assessment for submission to the Home Office subject to removal of names and other

	<p>personal information.</p> <p><u>Actions</u></p> <ul style="list-style-type: none"> · AWERB Administrator to email summary of committee's feedback and required revisions to the applicant.
4.	<p><u>Review of licence amendment application –</u> [REDACTED]</p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> · An application for an amendment to a project licence was considered. · [REDACTED] recused herself from the decision making process for this agenda item and discussion was led by the Vice Chair; [REDACTED] left the meeting prior to the pre-presentation discussion and again following the PPL holder presentation, returning only when discussion of this item had concluded. · The committee was content with the additional programme of work proposed in the amendment subject to minor revisions requested by the committee. <p><u>Decisions</u></p> <ul style="list-style-type: none"> · The application was approved for submission to the Home Office, subject to the inclusion of the revisions requested by the committee. · The revised submission will be approved by Vice-Chair's action. <p><u>Actions</u></p> <ul style="list-style-type: none"> · AWERB Administrator to email summary of committee's feedback and required revisions to the applicant.
5.	<p><u>Interim Review –</u> [REDACTED]</p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> · One interim review of an ongoing project was considered by the committee. · A copy of the licence had been circulated to members for information to assist with carrying out the review. · Members were pleased to observe that this was a thorough, well written review and noted the comprehensive and considered evaluation of the actual severity of the procedures that had been undertaken. · The AWERB also noted that the group had long standing 3Rs experience and was continuing to adopt good practice in this regard including increased adoption of cell culture approaches where appropriate, and extensive harvesting of tissues and organs. Members were also pleased to note the close and collaborative interactions with the named persons with respect to refinements and post-surgical monitoring. <p><u>Actions</u></p> <ul style="list-style-type: none"> · AWERB Administrator to email summary of committee's feedback to the licence holder.

6.	<p><u>CBS operational update in response to Covid-19</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> · The Director of CBS provided members with a verbal update on CBS' operational response to COVID-19. · He reported that staff that had come in to contact with a positive COVID-19 case were no longer exempt from self-isolation. He explained that previously, staff wearing appropriate levels of PPE had been exempted from the requirement to self-isolate, but updated guidance from PHE now required self-isolation protocols to be followed irrespective of the category of PPE deployed. · He also updated members regarding a noticeable delay in delivery times of certain consumables, likely to be a consequence of the impact of Brexit on shipping and importation procedures, although he was pleased to report that thus far, animal deliveries had not been adversely affected.
7.	<p><u>Review of Breeding Practices</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> · The Chair reminded members that following the discussion that took place during the Review of Breeding Practices agenda item at the last cAWERB meeting, the Director of CBS and the ■ Facility Manager had been asked to draft a set of recommended actions to improve on current practice, for consideration by the AWERB at this meeting. · The Director of CBS provided members with a short introduction regarding the recommended actions that had been circulated to members in the paper pack prior to the meeting, and explained that these had been informed by both ASRU's updated Assessment Framework for considering Efficient Breeding of Genetically Altered Animals and by the ASRU Indicators of good practice and the Indicators of low level concerns relating to breeding (as identified in Appendix A, section 7 of the ASRU Example of Indicators of Low-level Concerns). Copies of both documents had been re-circulated to members in the supplementary paper pack for reference purposes. · The ■ Facility Manager then delivered a presentation reviewing each of the main recommendations and how they addressed the main lines of enquiry in the Assessment framework working practices and the indicators of good practice and low-level concerns. · The recommended actions included: <ul style="list-style-type: none"> ○ Production of a CBS archiving policy and guidance. ○ Production of good practice guidance for breeding. ○ Improved training programmes for CBS staff and for researchers, together with regular competency assessment reviews. ○ Evaluation of potential changes to workflow and procedures to enhance monitoring and improve information exchange. ○ Additional AWERB review and oversight of breeding as part of the PPL application and interim review process, and through a requirement for CBS to provide an annual update report on breeding, to include Establishment wide breeding indicators. · Following the presentation, members held an in depth discussion regarding the helpfulness and feasibility of the draft recommendations, and also considered various evaluation measures that might be deployed to assess the success of their adoption.

	<p><u>Decisions</u></p> <ul style="list-style-type: none"> Central AWERB supported the roll-out of the recommendations in the circulated paper and looked forward to receiving copies of the draft policies and good practice guidance in due course. <p><u>Actions</u></p> <ul style="list-style-type: none"> The Director of CBS to initiate a phased implementation of the agreed CBS actions and to provide regular ongoing progress reports to the AWERB on the rollout of these measures. AWERB Administrator to liaise with Director of CBS and the [REDACTED] facility manager in order to draft supplementary questions for evaluating good breeding practice for inclusion in the AWERB interim and retrospective review form. AWERB Administrator to update Chairs' briefing templates for PPL applications in order to include an assessment of the need for novel GA lines and the measures in place to prevent overbreeding during application review. AWERB Administrator to add an annual update report on breeding to the AWERB scheduling calendar.
8.	<p><u>Regular report on applications submitted, self-reporting & compliance notices</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> The regular report was noted. Members were also advised that a potential non-compliance report was currently being drafted which would be reported to AWERB at a future meeting. Members discussed the underlying trends apparent in the graphical summary of condition 18/ compliance reports and discussed potential contributory factors to these. It was noted that although there was an increase in the number of reports submitted in 2020 with respect to the relative activity levels for the year, the increase followed from a relative increase in reports of unexpected adverse effects, rather than reports of potential non-compliance events. The NVS advised that CBS was actively promoting the use of study plans to researchers; it was noted that their use could enable animal care staff to provide PILs with enhanced support for the monitoring of adverse effects, and might also potentially assist with reducing the incidence of unexpected adverse effects and potential non-compliance reports. <p><u>Actions</u></p> <ul style="list-style-type: none"> AWERB Administrator to include a copy of the CBS study plan in the papers of the next meeting.
9.	<p><u>Local AWERB – [REDACTED] report</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> The approved minutes of the October 2020, December 2020 and January 2021 local AWERB meetings were received and noted.
10.	<p><u>Local AWERB – [REDACTED] report</u></p> <p><u>Points to note</u></p>

	<ul style="list-style-type: none"> · The approved minutes of the November 2020, December 2020 and January 2021 local AWERB meetings were received and noted. · The Chair of the [REDACTED] local AWERB informed members that in some instances, licence applicants that had attended an AWERB meeting to discuss their application with members were not responding to the AWERB feedback in a timely manner. The extended time interval between the date that the application had been originally considered and receipt of the revised version not only made it more challenging and time consuming for AWERB members to review the requested revisions, but also meant that additional revisions beyond those originally requested might by then be necessary, in light of ongoing changes to the ASPeL electronic PPL application form and updated expectations regarding the information required. <p><u>Decisions</u></p> <ul style="list-style-type: none"> · A suitable time limit for receipt of a revised application should be decided by members during discussion of the application at the AWERB meeting and applicants should be informed of this deadline via email when being sent their AWERB meeting feedback. Applicants should also be advised that in cases where this deadline was not met, the AWERB reserved the right to request additional changes, beyond those originally requested, in order to meet any recent internal and Home Office expectations. · Any revised applications returned to the AWERB more than a year from the date the AWERB meeting feedback had been issued to the applicant should be regarded as a new application and would have to be processed accordingly. <p><u>Actions</u></p> <ul style="list-style-type: none"> · AWERB Administrator to update Chairs’ briefing templates for PPL applications to include the setting of a time limit for receipt of revised applications and to ensure that these limits are communicated to applicants.
<p>11.</p>	<p><u>3Rs group update</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> · The Chair of the 3Rs Advisory Group informed members that the new 3Rs college hub had now been established and that the primary aim of the hub was to promote 3Rs principles across the college and influence the college culture of care. The hub would be promoting collaboration and systematic approaches to resource sharing to further this aim and would be asking for community suggestions in due course.
<p>12.</p>	<p><u>Communications update</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> · Members were informed that work on the Annual Research report was progressing well and the intention was that this should be completed by August, to ensure it was published in time to be available at the Annual Research Forum meeting being held in September.
<p>13.</p>	<p><u>A.O.B</u></p> <p><u>Item discussed: London AWERB Hub October 2020 minutes</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> · The minutes of the London AWERB Chairs Hub were received and noted.

Dates of next meetings:

17 May 2021	14.00-17.00	Boardroom, Level 4, Faculty Building, SK
19 July 2021	14.00-17.00	Boardroom, Level 4, Faculty Building, SK

13.30 – 16.00 15^h April 2021
MS Teams

Minutes

Present:

Function	Name	Position
Chair	[REDACTED]	College academic
Member	[REDACTED]	College academic
<i>Ex officio</i> Member	[REDACTED]	3Rs Group Representative
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon Service (dNVS)
<i>Ex officio</i> Member	[REDACTED]	Named Animal Care and Welfare Officer (NACWO) for the site
In attendance	[REDACTED]	CBS Meeting and Support Administrator
Attending as secretary	[REDACTED]	AWERB Administrator & Named Information Officer

Apologies:

Function	Name	Position
Vice-Chair	[REDACTED]	College academic
Member	[REDACTED]	College academic
<i>Ex officio</i> Member	[REDACTED]	College academic and 3Rs Group Representative
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon (NVS)
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon (NVS)
Member	[REDACTED]	Post-doctoral representative
In attendance	[REDACTED]	Home Office Inspector (HOI)
In attendance	[REDACTED]	Home Office Inspector (HOI)

Item

1. **Members' declarations of interest in respect of items on the agenda**

Points to note

- None identified

2. **Minutes and matters arising**

Points to note

- The minutes of the previous meeting were agreed.
- Updates were given on actions from the previous meeting.

3. **Updated Interim review – [REDACTED]**

Points to note

- One updated interim review of an ongoing project was considered by the committee.
- The interim review had been submitted in conjunction with a fast track amendment request and the contents had been updated from the previous version considered by members to reflect the work undertaken since the first version of the interim review had been submitted.
- A copy of the licence had been circulated to members for information to assist with carrying out the review.
- The AWERB was pleased to note that the group had been working constructively with the named persons to monitor and alleviate adverse effects associated with protocol 4.

Actions

- AWERB Administrator to email summary of committee's feedback to the applicant.

4. **Interim review – [REDACTED]**

Points to note

- One interim review of an ongoing project was considered by the committee.
- A copy of the licence had been circulated to members for information to assist with carrying out the review.
- Members were pleased to observe that this was a thorough, well written review and noted the considered evaluation of the actual severity of the procedures that had been undertaken.

5. **Interim review – [REDACTED]**

Points to note

- One interim review of an ongoing project was considered by the committee.
- A copy of the licence had been circulated to members for information to assist with carrying out the review.
- The AWERB was pleased to note the group had implemented refinements to their methods of administering antibiotics, and were keen to encourage other groups to do so where possible.

Actions

- AWERB Administrator to email summary of committee's feedback to the applicant.
- NVS to check on current methods employed for antibiotic administration and promote uptake of more refined methods if required.

6. **Report from Central AWERB**

Points to note

- The approved minutes of the November central AWERB meeting were noted and a verbal update was also provided regarding items of particular interest discussed at the March central AWERB meeting.
- In particular, the Chair highlighted a discussion regarding failure of some licence applicants to respond to AWERB meeting feedback in a timely manner. In order to try to address this issue, it was agreed that in future, a suitable time limit for receipt of a revised application should be decided by members during discussion of the application at the AWERB meeting and applicants should be notified via email when being sent their AWERB meeting feedback. Applicants should also be advised that in cases where this deadline was not met, the AWERB reserved the right to request additional changes, beyond those originally requested, in order to meet any recent internal and Home Office expectations. It was also agreed that any applications that had not completed the AWERB review process within a year of receipt of their feedback should be regarded as a new application and would have to be processed accordingly.

7. Regular report on applications submitted, self-reporting and compliance notices

Points to note

- The regular report was noted.
- Members discussed the underlying trends apparent in the graphical summary of condition 18/ compliance reports. It was noted that although there was an increase in the number of reports submitted in 2020 with respect to the relative activity levels for the year, the increase followed from a relative increase in reports of unexpected adverse effects, rather than reports of potential non-compliance events.
- Members discussed various potential contributory factors that might explain the underlying data trends identified by the graphs and it was noted that the increase in condition 18 reports might potentially reflect greater familiarity and confidence of licence holders regarding the reporting procedures.

8. CBS updates

Item discussed: Study plans

Points to note

- The NVS advised that CBS was actively promoting the use of study plans to researchers; it was noted that their use could enable animal care staff to provide PILs with enhanced support for the monitoring of adverse effects, and might also potentially assist with reducing the incidence of unexpected adverse effects and potential non-compliance reports.
- Members received an update from the Chair regarding recent discussions on the implementation of study plans that had taken place at the Management & Strategy committee.
- Members discussed both the advantages and potential problems associated with a wider rollout of their use and the Chair noted that she would ensure that the various points of view discussed were highlighted when this item was considered at the next central AWERB meeting.

Item discussed: NVS Analgesia presentation

Points to note

- The NVS delivered a presentation highlighting the benefits of multimodal analgesia.
- Members underlined the importance of licence holders holding early discussions with the NVS regarding selection of the most suitable anaesthesia and analgesia regimen for surgical procedures and agreed that it would be very helpful if the table capturing information on anaesthesia and analgesic approaches included in the Interim and

Retrospective review form was also replicated in the AWERB application form.

Actions

- AWERB Administrator to revise the AWERB application form accordingly.

9. A.O.B

None identified.

Dates of next meetings:

11 th May 2021	12.45-15.45
15 th June 2021	13.30-16.30
15 th July 2021	10.30-13.30
12 th August 2021	13.30-16.30

13.30 – 16.30 15 June 2021
MS Teams

Minutes

Present:

Function	Name	Position
Chair	[REDACTED]	College academic
Member	[REDACTED]	College academic
Member	[REDACTED]	College academic
<i>Ex officio</i> Member	[REDACTED]	3Rs Group Representative
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon Service (dNVS)
<i>Ex officio</i> Member	[REDACTED]	Named Animal Care and Welfare Officer (NACWO) for the site
In attendance	[REDACTED]	CBS Meeting and Support Administrator
Attending as secretary	[REDACTED]	AWERB Administrator & Named Information Officer

Apologies:

Function	Name	Position
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon (NVS)
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon (NVS)
<i>Ex officio</i> Member	[REDACTED]	College academic and 3Rs Group Representative
Vice-Chair	[REDACTED]	College academic
Member	[REDACTED]	Post-doctoral representative
In attendance	[REDACTED]	Home Office Inspector (HOI)
In attendance	[REDACTED]	Home Office Inspector (HOI)

Item

1. **Members' declarations of interest in respect of items on the agenda**

None identified

2. **Minutes and matters arising**

Points to note

- The minutes of the previous meeting were agreed.
- Updates were given on actions from the previous meeting.

3. **Review of licence application – [REDACTED]**

Points to note

- An application for a new project licence was considered.
- The licence was to continue a program of work covered by a PPL that had expired recently.
- The committee was content with the programme of work proposed in the application subject to revisions requested by the committee.
- The committee carried out a retrospective review of the expired PPL in parallel with consideration of the new application.
- Members were very pleased to note the considerable efforts and evident success that the group had had in developing replacement and refinements for mosquito blood feeding, and the constructive interactions with the named people in developing the refinements to procedures.
- The AWERB was very pleased to hear about the expected translational impact of the work carried out under the current licence [REDACTED]

Decisions

- The application was approved for submission to the Home Office, subject to the inclusion of the revisions requested by the committee.
- The revised submission will be approved by Chair's action.
- The mid-term review for this PPL should be set to the mid-point of the licence.

Actions

- AWERB administrator to email summary of committee's feedback and required revisions to the applicant.

4. **Review of licence application revisions following AWERB meeting feedback – [REDACTED]**

Points to note

- A revised version of an application that had previously been reviewed by members at the August 2020 meeting was considered. Although members had originally agreed that members would review the revised draft via electronic circulation, the Chair had decided it would be more appropriate to review the draft at AWERB, in light of the length of time it had taken the applicant to re-submit a revised version and the potential need to therefore request additional revisions in order to address more recent internal and Home Office requirements.
- Members considered the revisions made by the applicant in response to the feedback provided to her following the previous meeting and noted that a number of additional revisions would be required before the application could be approved for submission to the Home Office.

Decisions

- The AWERB agreed that the applicant should be advised to consider re-drafting the licence to focus on only those parts of the programme of work which were likely to be deployed during the first two years of the licence, in light of the complex nature of the current draft, if she wished to be able to submit a revised application to ASRU in the near future.
- It was agreed that the revised licence should be reviewed by the NVS, NACWO and Chair, prior to approval by Chair's action.
- In light of the fact that the applicant would be using disease models that had not previously been used by the group, it was agreed that the first interim review for this licence should take place 12 months following the commencement of work carried out under the licence.

Actions

- The AWERB chair to contact the PPL holder regarding potential approached and time frames for licence submission.
- The AWERB administrator to email a summary of the committee's detailed feedback to the applicant should she wish to continue with the full, five year programme of work as currently covered in the draft application.

5. Report from Central AWERB

Points to note

- The approved minutes of the March central AWERB meeting were noted and a verbal update was also provided regarding items of particular interest discussed at the May central AWERB meeting.
- In particular, the Chair updated members regarding a discussion and proposed actions proposed by cAWERB regarding timelines for licence application preparation and review which had been considered at the May central AWERB meeting.

6. Regular report on applications submitted, self-reporting and compliance notices

Points to note

- The regular report was noted.

7. CBS updates

- The [REDACTED] facility manager informed members that a new task request feature had recently been deployed in the A-tune system that would allow users to directly communicate requests to CBS staff.

8. A.O.B

None identified

Dates of next meetings:

15 th July 2021	10.30-13.30
12 th August 2021	13.30-16.30
9 th September 2021	13.30-16.30
12 th October 2021	13.30-16.30
9 th November 2021	13.30-16.30
8 th December 2021	13.30-16.30

10.30 – 13.00 15 July 2021
MS Teams

Minutes

Present:

Function	Name	Position
Chair	[REDACTED]	College academic
Vice-Chair	[REDACTED]	College academic
Member	[REDACTED]	College academic
<i>Ex officio</i> Member	[REDACTED]	College academic and 3Rs Group Representative
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon Service (dNVS)
<i>Ex officio</i> Member	[REDACTED]	Named Animal Care and Welfare Officer (NACWO) for the site
In attendance	[REDACTED]	CBS Meeting and Support Administrator
Attending as secretary	[REDACTED]	AWERB Administrator & Named Information Officer

Apologies:

Function	Name	Position
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon (NVS)
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon (NVS)
Member	[REDACTED]	College academic
Member	[REDACTED]	Post-doctoral representative

Item

1. Members' declarations of interest in respect of items on the agenda

None identified

2. Minutes and matters arising

Points to note

- The minutes of the previous meeting were agreed.
- Updates were given on actions from the previous meeting.

3. Review of licence application – [REDACTED]

Points to note

- An application for a new project licence was considered.
- The licence was to continue a program of work covered by a PPL that was due to expire in September.
- The committee was content with the programme of work proposed in the application subject to the revisions requested by the committee.
- The committee carried out a retrospective review of the expired PPL in parallel with consideration of the new application.

Decisions

- The application was approved for submission to the Home Office, subject to the inclusion of the revisions requested by the committee.
- The revised submission will be approved by Chair's action.
- The mid-term review for this PPL should be set to the mid-point of the licence.

Actions

- AWERB administrator to email summary of committee's feedback and required revisions to the applicant.

4. Interim review – [REDACTED]

Points to note

- One interim review of an ongoing project was considered by the committee.
- A copy of the licence had been circulated to members for information to assist with carrying out the review.
- The AWERB was pleased to note that the work was producing translational benefits in the form of potential new therapies and vaccines for [REDACTED] infections.

Actions

- AWERB Administrator to email summary of committee's feedback to the applicant.

5. Retrospective review – [REDACTED]

Points to note

- One retrospective review of a project licence that had recently been revoked, due to the project licence holder taking up a post abroad, was considered by the committee.
- A copy of the licence had been circulated to members for information to assist with carrying out the review.
- Members observed that this was a thorough, well written review and that the group had made good progress in achieving the objectives of the programme of work.
- The AWERB was pleased to note that the licence holder had used a range of reduction, replacement and refinement strategies in her work. In particular, members noted the development of computational models as an alternative to experimental work, the use of high resolution synchrotron imaging which, due to the higher level detail acquired had

led to a reduction in the numbers of animals needed, and the adoption of the use of a running wheel as a refinement to previous methodology.

6. CBS updates

Points to note

- The NVS informed members that [REDACTED] had recently recruited an additional highly experienced veterinary surgeon; it was anticipated that he would be taking on a full time role at college from the beginning of August.

7. A.O.B

Item discussed: ASRU Change Programme

Points to note

- The Chair provided members with a short update regarding the ASRU Change Programme. Members were asked to note two ASRU documents in the supplementary paper pack which summarised the “Bridging Ways of Working” that had become operational on the 5th July.

Dates of next meetings:

12 th August 2021	13.30-16.30
9 th September 2021	13.30-16.30
12 th October 2021	13.30-16.30
9 th November 2021	13.30-16.30
8 th December 2021	13.30-16.30

Imperial College London

Central Animal Welfare and Ethical Review Body (AWERB)

14:00 – 17:00 15 September (Meeting 1)

MS Teams

Present:

Function	Name	Position
Chair	[REDACTED]	Senior College academic
Vice-chair	[REDACTED]	Lay person
<i>Ex officio</i> Member	[REDACTED]	Establishment Licence Holder
<i>Ex officio</i> Member	[REDACTED]	Chair of the Local AWERB – [REDACTED]
<i>Ex officio</i> Member	[REDACTED]	Chair of the Local AWERB – [REDACTED]
In attendance (deputising for [REDACTED])	[REDACTED]	Chair of the 3Rs Advisory Group
<i>Ex officio</i> Member	[REDACTED]	Director of Central Biomedical Services (CBS)
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon (NVS)
<i>Ex officio</i> Member	[REDACTED]	Named Animal Care and Welfare Officer (NACWO)
<i>Ex officio</i> Member	[REDACTED]	Named Training and Competency Officer (NTCO)
Member	[REDACTED]	PhD student representing the student community
Member	[REDACTED]	Senior College Academic
Member	[REDACTED]	Senior College Academic
Member	[REDACTED]	External Member
Member	[REDACTED]	Post-doctoral fellow representing the post-doctoral community
In attendance	[REDACTED]	CBS Meeting and Support Administrator
Member and secretary	[REDACTED]	AWERB Administrator & Named Information Officer (NIO)

Apologies:

Function	Name	Position
<i>Ex officio</i> Member	[REDACTED]	Director of Bioservices
<i>Ex officio</i> Member	[REDACTED]	Chair of the 3Rs Advisory Group
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon (NVS)
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon (NVS)
Member	[REDACTED]	External member
Member	[REDACTED]	Lay person
Member	[REDACTED]	Lay person & Imperial Communications representative

	<p><u>Item</u></p> <p><u>Introductions</u></p> <ul style="list-style-type: none"> The Chair welcomed [REDACTED], a recently appointed NVS, to his first meeting.
1.	<p><u>Members' declarations of interests in respect of items on the agenda</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> [REDACTED] declared an interest in Agenda item 5 by virtue of being the PPL holder for the interim review under consideration. He noted he would recuse himself from the AWERB's deliberations and decision making for this agenda item.
2.	<p><u>Minutes and matters arising</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> The minutes of the last meeting were agreed. Updates were given on actions from the previous meeting.
3.	<p><u>Interim review – [REDACTED]</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> One interim review of an ongoing project was considered by the committee. A copy of the licence had been circulated to members for information to assist with carrying out the review. The AWERB was pleased to note that the group had made good progress in addressing many of the objectives specified in the programme of work and that several papers had already been published as a result of the work carried out under the licence to date. Members were also pleased to note the ongoing efforts being made with regards to the implementation of the 3Rs, and that the refinements made to surgical techniques and the use of a custom made [REDACTED] had led to a reduction in peri-procedural deaths and a consequent reduction in animal numbers required. The committee noted that it would be helpful if the licence holder could provide more information regarding both the actual harms and the anaesthesia and analgesic approaches used for surgical procedures. <p><u>Actions</u></p> <ul style="list-style-type: none"> AWERB Administrator to email summary of committee's feedback to the licence holder.
4.	<p><u>Interim review – [REDACTED]</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> One interim review of an ongoing project was considered by the committee. A copy of the licence had been circulated to members for information to assist with carrying out the review. The AWERB noted that the progress of the group's work had been severely hampered both by student illness and by the pandemic, and that this had resulted in only one experiment having been carried out to date. Members were pleased to learn that the actual severity observed during that experiment had been less than that originally anticipated (mild versus

	<p>severe) and hoped that this would continue to be the case when the programme of work recommenced.</p> <p><u>Actions</u> AWERB Administrator to email summary of committee’s feedback to the licence holder.</p>
<p>5.</p>	<p><u>Interim review –</u> [REDACTED]</p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> • One interim review of a project licence was reviewed. • MI recused himself from the decision making process for this agenda item; he left the meeting prior to discussion and re-joined only when discussion of this item had concluded. • A copy of the licence had been circulated to members for information to assist with carrying out the assessment. • The AWERB was pleased to note that the group had made good progress with respect to some of the original objectives specified in the programme of work and that several patents had been submitted as a result of the work carried out under the licence to date. • Members were also pleased to note the very low incidence of severe severity associated with the work carried out on protocol 9. • The committee noted the ongoing efforts being made with regards to the implementation of the 3Rs, including the use of historical tissue samples to replace some initial <i>in vivo</i> experiments. Members were also pleased to learn that the group had been able to optimise the genotyping of [REDACTED] repeats to require smaller tissue samples, thus avoiding the need to use tail tipping for genotyping. <p><u>Actions</u></p> <ul style="list-style-type: none"> • AWERB Administrator to email summary of committee’s feedback to the licence holder.
<p>6.</p>	<p><u>Regular report on applications submitted, self-reporting & compliance notices</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> • The regular report was noted.
<p>7.</p>	<p><u>Director of CBS operational update</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> • The Director of CBS provided members with a verbal update. • He advised members that CBS facilities were currently operating using additional precautions as necessary in order to comply with current government and college guidance; these measures were kept under regular review. • CBS had recently conducted a test of its Business Continuity plan focusing on the impact of an outage to A-tune. The lessons learned from this exercise would be incorporated into the plan.

8.	<p><u>Local AWERB – [REDACTED] report</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> The approved minutes of the June 2021 local AWERB meeting were received and noted.
9.	<p><u>Local AWERB – [REDACTED] report</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> The approved minutes of the July 2021 local AWERB meeting were received and noted.
10.	<p><u>Communications update</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> The annual report was now available to download on the college website. The 3Rs and QA Programme Manager had circulated links to this report to the relevant stakeholders. The 3Rs and QA Programme Manager would be circulating further information regarding the Annual Research Forum which was due to take place on Thursday 16th September 2021. All members were encouraged to attend.
11.	<p><u>3Rs group update</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> The Vice Chair of the 3Rs Advisory Group informed the committee that the 3Rs Group were looking at establishing a London wide tissue sharing scheme.
12.	<p><u>Report on the CBS environmental enrichment strategy</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> The Director of CBS provided members with a report on the CBS Environmental Enrichment strategy which was centred on improving animal welfare by optimising good practice in the provision of environmental enrichment and ensuring that enrichment provision was designed to fit in with specific experimental requirements. He outlined the role of the Environmental Enrichment Committee in establishing a programme of enrichment across all sites and critically evaluating the effectiveness of new products. CBS was also keen to engage with researchers over new approaches to enrichment and in ensuring that all animal technologists caring for animals had the necessary time to evaluate enrichment opportunities as a core part of their role. Members discussed the importance of identifying the most appropriate behavioural and other outcome measurements for use as indicators of success in enrichment trials and the need to consider strain dependent variations in outcomes. The potential benefits of trialling the use of infrared camera recording in order to enable assessments of behaviour during the active overnight phase were also raised.
13.	<p><u>A.O.B</u></p>

Item discussed: Membership Update**Points to note**

- The Chair informed members that ■■■, the PhD student representative on cAWERB was attending her final central AWERB meeting as she would be leaving college shortly to take up a post elsewhere. She thanked her for her contribution to central AWERB's work over her period of membership of the committee and wished her well in her new role.
- An advertisement asking for expressions of interest for a new PhD student representative had recently been circulated.
- The Chair reminded members that she had also invited members to contact her with suggestions regarding any areas of scientific expertise that they felt it would be particularly useful for the AWERB to try to cover when recruiting a replacement academic member.

Item discussed: "What does a Culture of Care look like" and "RSPCA's AWERB weeks"**Points to note**

- The Chair drew member's attention to the circulated copy of the lessons learnt from a recent workshop survey on Culture of Care, and to the circulated information and links to the RSPCA's new initiative "AWERB weeks". The topic for the first of these AWERB weeks "Fulfilling the functions and energising the agenda" had been posted online the previous week and the material was included in the supplementary paper pack. She asked members to review this information and to highlight questions or suggestions for discussion at future meetings. It would also be important to consider these documents when conducting the forthcoming review of the AWERB's Terms of Reference.

Item discussed: ASRU Change Programme**Points to note**

- Members were informed that CBS and the AWERB administration team were monitoring the initial operational impact of the ASRU Bridging Ways of Working programme. Steps were being taken to adapt processes as required in response to these changes to working practices and timelines.
- Members of the AWERB would be invited to consider potential operational and strategic implications arising from the ASRU Change Programme when more detailed information was issued by ASRU.

Item discussed: AAALAC re-accreditation site visit**Points to note**

- The Director of CBS advised the committee that a new date has now been agreed for the postponed AAALAC re-accreditation site visit which was now scheduled to take place on the 28th-29th October 2021.
- Invitations for various members of the AWERB to meet the AAALAC inspection team once the details of their itinerary had been finalised.

Dates of next meetings:

15 November 2021 14.00-17.00 Virtual – MS Teams

19 January 2022	14.00-17.00	TBC
16 March 2022	14.00-17.00	TBC
16 May 2022	14.00-17.00	TBC
18 July 2022	14.00-17.00	TBC

Central Animal Welfare and Ethical Review Body (AWERB)

14:00 – 17:00 15 November (Meeting 2)

MS Teams

Present:

Function	Name	Position
Chair	[REDACTED]	Senior College academic
Vice-chair	[REDACTED]	Lay person
<i>Ex officio</i> Member	[REDACTED]	Establishment Licence Holder
<i>Ex officio</i> Member	[REDACTED]	Chair of the Local AWERB – [REDACTED] and [REDACTED]
<i>Ex officio</i> Member	[REDACTED]	Director of Bioservices
<i>Attending for 3Rs Advisory Group</i>	[REDACTED]	3Rs Advisory Group representative
<i>Ex officio</i> Member	[REDACTED]	Director of Central Biomedical Services (CBS)
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon (NVS)
<i>Ex officio</i> Member	[REDACTED]	Named Animal Care and Welfare Officer (NACWO)
<i>Attending for</i> [REDACTED] [REDACTED]	[REDACTED]	NTCO & Training Officer
Member	[REDACTED]	Senior College Academic
Member	[REDACTED]	Lay person & Imperial Communications representative
Member	[REDACTED]	External member
Member	[REDACTED]	External Member
Member	[REDACTED]	Post-doctoral fellow representing the post- doctoral community
In attendance	[REDACTED]	A-tune project manager
In attendance	[REDACTED]	CBS Meeting and Support Administrator
Member and secretary	[REDACTED]	AWERB Administrator & Named Information Officer (NIO)

Apologies:

Function	Name	Position
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon (NVS)
<i>Ex officio</i> Member	[REDACTED]	Named Training and Competency Officer (NTCO)
<i>Ex officio</i> Member	[REDACTED]	Chair of the Local AWERB – [REDACTED]
<i>Ex officio</i> Member	[REDACTED]	Chair of the 3Rs Advisory Group
Member	[REDACTED]	Lay person

	<p><u>Item</u></p> <p><u>Introductions</u></p> <ul style="list-style-type: none"> The Chair welcomed [REDACTED] (deputizing for [REDACTED]) to her first meeting.
1.	<p><u>Members' declarations of interests in respect of items on the agenda</u></p> <p>None identified.</p>
2.	<p><u>Minutes and matters arising</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> The minutes of the last meeting were agreed. Updates were given on actions from the previous meetings.
3.	<p><u>Review of licence application amendment – [REDACTED]</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> An application for an amendment to a project licence was considered. The committee was content with the overall aims and objectives set out in the scientific programme of work proposed in the draft amendment, and the potential benefits likely to accrue from this work. Nevertheless, members had difficulty in assessing the cumulative severity that could potentially arise in some of the disease model protocols and found it difficult to assess the harm-benefits linked to the two severe protocols included in the amendment. Members discussed a number of revisions that the AWERB would require to be implemented in the draft amendment application, and in the accompanying harm-benefit approval form, prior to approving the application for formal submission to the Home Office. <p><u>Decisions</u></p> <ul style="list-style-type: none"> Following discussion, members agreed to support the amendments to the proposed programme of work covered by the moderate (but not the severe limit) protocols, subject to the inclusion of a number of revisions requested by the committee and to the use of pre-study plans, to be agreed with the named persons prior to the commencement of each study. The revised submission will be approved by Chair's action, subject to re-review by a number of committee members. Given the likelihood that the applicant would need to submit multiple amendment requests during the course of this work, members agreed that standard track amendments for protocols with a moderate or lower severity limit could be considered by the appropriate local AWERB. Members agreed that the AWERB required more time to consider the work covered by the severe protocols and the mechanisms that might potentially be put in place to provide the AWERB with the necessary assurances regarding the cumulative severity and harm-benefit assessment for those components of the work. <p><u>Actions</u></p> <ul style="list-style-type: none"> AWERB Administrator to draft a summary of the committee's required revisions and circulate this to members for review prior to sending a copy of the committee's feedback and required revisions to the applicant.

	<ul style="list-style-type: none"> · AWERB Administrator to liaise with the applicant and the Chair regarding potential ways to provide the necessary assurances for the work covered by the severe protocols.
4.	<p><u>Central AWERB PhD representative vacancy</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> · Members considered the expressions of interest that had been received for the PhD student representative vacancy. <p><u>Decisions</u></p> <ul style="list-style-type: none"> · It was agreed that the candidate that had received the highest combined member ranking should be invited to become a member of the central AWERB, subject to satisfactory references. · Members agreed that the second choice candidate should be offered a role at another animal research related college committee, subject to satisfactory references and the agreement of the Chair of a relevant committee. <p><u>Actions</u></p> <ul style="list-style-type: none"> · CBS Meeting and Support Administrator to arrange for the necessary references to be obtained. · Upon receipt of references, Chair to write to the preferred candidate inviting them to join central AWERB. · After appropriate liaison with relevant committee Chairs and receipt of references, the second choice candidate should be notified and offered the opportunity to join another relevant committee (AWERB Administrator and central AWERB Chair).
5.	<p><u>Update on the A-tune roll out and the impact on Management and Operational processes</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> · The A-tune project manager delivered a presentation to the committee on the current status of the A-tune rollout and described a number of improvements that were expected to be applied to the system in the near future. · The committee was pleased to note the progress made to date and looked forward to the successful rollout of the new features; the improvements should provide better monitoring tools for licence holders and CBS staff.
6.	<p><u>Report on AAALAC Programme Site Visit</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> · The Director of CBS updated members on the outcome of the AAALAC accreditation site visit. · The accreditation team would be recommending to the AAALAC Council that full accreditation should continue and had not identified any areas of mandatory findings. · Six commendations had been highlighted by the AAALAC visitors namely; knowledge of CBS staff, openness, facilities, PPE signage, the 3Rs programme and the AWERB. · A number of suggestions for improvements had also been identified and CBS was considering how to proceed in implementing these proposals where applicable. The Chair noted that one of the suggestions for improvement

	<p>included a reference to the recording of AWERB member training and CPD and this would be considered under the subsequent agenda item.</p> <ul style="list-style-type: none"> The Chair congratulated CBS on this achievement and extended the thanks of the AWERB to all those who had worked so hard to enable the continued accreditation status.
7.	<p><u>AWERB Training</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> Members discussed the current training and induction provided to new AWERB members and discussed some of the suggestions put forward in the RSPCA AWERB Week 2 – Induction and Engagement web pages. Members highlighted those aspects of the current provision they had found very helpful and made suggestions regarding some additional items that it would have been helpful to receive. Members also discussed expectations and opportunities for members to undertake CPD and the AWERB administrator reminded members of the methods being used to formally record CPD attendance at national meetings, as agreed at the September 2020 meeting of the central AWERB. <p><u>Actions</u></p> <ul style="list-style-type: none"> Members to contact the Chair with any additional suggestions regarding induction and training provision for members.
8.	<p><u>Regular report on applications submitted, self-reporting & compliance notices</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> The regular report was noted.
9.	<p><u>3Rs group update</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> The 3Rs advisory group representative informed the AWERB that the 3Rs hub website has been constructed and was due to go live in the next few days. The content would include information on relevant courses and funding opportunities. The hub would shortly be circulating a call for 3Rs applications for collaborative projects between researchers and CBS staff, and would be providing a budgetary contribution to support the successful project. The hub initiative had been shortlisted by UAR for its openness award.
10.	<p><u>Communications update</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> Members were informed that UAR would be co-ordinating a social media campaign called “Fish Week” in order to help the public understand how fish are used in research. Several institutions would be participating. The college was planning to share high quality photos from inside our zebrafish facilities. It would also be highlighting recent research involving zebrafish which had contributed to the understanding of how heart valves grow and to the development of nanoprobe for detecting cancer.

11.	<p><u>Local AWERB – [REDACTED] report</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> · The minutes from the August local AWERB meeting were received and noted.
12.	<p><u>Local AWERB – [REDACTED] report</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> · The minutes from the July and September AWERB meetings were received and noted.
13.	<p><u>Director of CBS operational update</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> · A new [REDACTED] Facility manger has been appointed. · One element of the Business continuity plan had recently been tested which had focused on testing the contingency measures to be taken in the event of an A-tune outage. This testing had highlighted several areas for improvement, and various measures had been put in place to address these. · Following from the Review of Breeding Practices undertaken by AWERB earlier in the year, CBS has been working to implement the actions that had been agreed. The archiving, wildtype breeding and tick over colony document and a breeding plan document had been completed. The SOP for breeding had been drafted and reviewed and was almost ready to be issued. New breeding and weaning card were being developed. A phenotyping SOP was also in the process of being drafted. · The NTCO was reviewing a process for training, assessment and re-assessment. · Questions on the management of breeding practices had been included in the most recent version of the interim and retrospective review forms.
14.	<p><u>A.O.B</u></p> <p><u>Item discussed: AWERB Approval mechanisms for transfer of primary availability to, or granting of additional availability at, college for licences already granted by ASRU</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> · Members discussed potential approaches to streamlining the current AWERB review process for the transfer of primary availability to, or the review of incoming additional availability requests, for licences already granted by ASRU. <p><u>Decisions</u></p> <ul style="list-style-type: none"> · The AWERB agreed to adopt a revised, more streamlined and proportionate AWERB review process for some categories of additional availability requests and for the transfer of primary availability to college. · The revised approach agreed by cAWERB will only apply to amendment requests involving already granted project licences (which have therefore already been subject to a harm-benefit assessed by ASRU) and only to cases where the applicant is not seeking to make any other revisions to the granted licence, or to transfer between Establishments any animals that have undergone experimental procedures. · For licences meeting the criteria for processing via the streamlined approach, the project licence holder will be required to submit a copy of the relevant

sections of the granted licence for review by the NVS and NACWO, with those parts of the work that they seek to carry out at college clearly highlighted, together with an amendment processing form listing the protocols that they wish to carry out at college. The reviewers will be asked to review only the parts of the work to be carried out at college and to outline in their reviews any particular issues for the AWERB to consider.

- Following vet and NACWO review, applications will then be considered at a full meeting of the AWERB, but the licence holder will not be asked to attend to give a presentation to members. AWERB members will be asked to consider the licences from a local perspective and to agree if they are content for those components of the work itemised by the applicant to be carried out in college.
- As part of this streamlined approach, the licence holder will be required to meet with the vet and NACWO to discuss their work prior to commencing any work at college and to then submit and agree study plans with the named people, prior to the commencement of each study, in order to ensure that the techniques used and the humane endpoints and monitoring procedures are in accordance with college AWERB policies.
- This lighter touch review process will not apply to any licences that would normally require referral to central AWERB (eg those containing severe protocols, projects of any kind that raise novel or contentious issues or that potentially give rise to serious societal concerns), or those involving issues likely to require more discussion between the AWERB and the project licence holder (such as the use of NMBAs or projects involving the use of a cat 3 facility).

Actions

- The AWERB administrator to implement the streamlined approach for all future amendment requests meeting the criteria agreed above and to amend the current AWERB review process documentation and forms to reflect these decisions.

Item discussed: Membership Update

Points to note

- The Chair informed members that [REDACTED] had informed her that she was no longer able to devote the necessary time to attend cAWERB meetings and that she had indicated that she therefore felt it necessary to step down from her role as an external member of the central AWERB. However, she had indicated that she was content to assist the AWERB by continuing as a member until a suitable replacement member had been identified.
- The Chair noted that she wished to thank [REDACTED] for her valuable and long standing contribution to the work of the college's AWERB over her period of membership.

Actions

- Members to email the Chair with any suggestions of suitable candidates to fill the current member vacancies.

Item discussed: London AWERB Hub October 2020 minutes

Points to note

- The minutes of the London AWERB Chairs' Hub were received and noted.

Dates of next meetings:

19 January 2022	14.00-17.00	TBC
16 March 2022	14.00-17.00	TBC
16 May 2022	14.00-17.00	TBC
18 July 2022	14.00-17.00	TBC

Imperial College London

Local Animal Welfare and Ethical Review Body (AWERB) – [REDACTED]

11.00 – 13.00 15 December 2022
Microsoft Teams meeting



Minutes

Present:

Function	Name	Position
Chair	[REDACTED]	College academic
Member	[REDACTED]	College academic
Member	[REDACTED]	College academic
<i>Ex officio</i> Member	[REDACTED]	Co-Chair 3Rs Advisory Group
Member	[REDACTED]	PhD student representative
<i>Ex officio</i> Member	[REDACTED]	Named Animal Care and Welfare Officer for the site (NACWO) & NIO
<i>Ex officio</i> Member	[REDACTED]	Named Animal Care and Welfare Officer for the site (NACWO)
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon (NVS)
Member	[REDACTED]	CBS Meeting and Support Administrator and lay member with no responsibilities under ASPA
Member and attending as secretary	[REDACTED]	AWERB Administrator and member with no responsibilities under ASPA
In attendance	[REDACTED]	Training Officer & Named Training and Competency Officer (NTCO)

Apologies:

Function	Name	Position
Member	[REDACTED]	College academic
Member	[REDACTED]	College academic
Member	[REDACTED]	College academic
Member	[REDACTED]	3Rs programme manager and 3Rs Group Representative
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon (NVS)

Item**1. Members' declarations of interest in respect of items on the agenda**

None identified.

2. Minutes and matters arisingPoints to note

- The minutes of the previous meeting were approved, and updates were given on actions from the previous meeting.

3. Review of licence application amendment – [REDACTED]Points to note

- An application for an amendment to a project licence was considered.
- The committee was content to approve the request for additional availability at college, subject to the inclusion of some minor revisions requested by the committee.

Decisions

- The application was approved for submission to the Home Office, subject to the inclusion of some minor revisions requested by the committee.
- The revised submission will be approved by Chair's action.

Actions

- AWERB administrator to email summary of committee's feedback and required revisions to the licence holder.

4. Report from Central AWERBPoints to note

- The approved minutes of the September Central AWERB meeting were noted.

5. Regular report on applications submitted, self-reporting and compliance noticesPoints to note

- The regular report was noted.

6. CBS updatesPoints to note

- The [REDACTED] facility manager informed members that the [REDACTED] facility was nearing completion, with a likely handover date of the 19th December. Refurbishment work to the [REDACTED] was likely to lead to noise and vibration and plans were therefore being put in place to move animal holding rooms to areas less likely to be affected by the works programme.
- Remedial works were currently being carried out to the proposed [REDACTED] facility to address items identified during the ASRU inspection that had taken place last month.

7. A.O.B**Item discussed: Membership update**Points to note

- The Chair informed members that the PhD student representative was attending her last local AWERB meeting since she would be leaving college shortly. He thanked her for her contribution to the work of the [REDACTED] local AWERB and wished her well in her new position.

Dates of next meetings:

19 th January 2023	10.30-13.30
13 th February 2023	13.30-16.00
14 th March 2023	13.30-16.00

Imperial College London

Central Animal Welfare and Ethical Review Body (AWERB)

09:30 – 12.30 10 November 2023 (Meeting 2)

MS Teams

Present:

Function	Name	Position
Chair	[REDACTED]	Senior College academic
Vice-chair	[REDACTED]	Lay person
<i>Ex officio</i> Member	[REDACTED]	Establishment Licence Holder
<i>Ex officio</i> Member	[REDACTED]	Chair of the 3Rs Advisory Group
<i>Ex officio</i> Member	[REDACTED]	Chair of the Local AWERB – [REDACTED]
<i>Ex officio</i> Member	[REDACTED]	Director of Central Biomedical Services (CBS)
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon (NVS)
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon service (dNVS)
<i>Deputizing for</i> [REDACTED]	[REDACTED]	Named Animal Care and Welfare Officer (NACWO) & Named Information Officer (NIO)
<i>Ex officio</i> Member	[REDACTED]	Named Training and Competency Officer (NTCO)
		CBS Meeting and Support Administrator and lay member with no responsibilities under ASPA
Member	[REDACTED]	
Member and secretary	[REDACTED]	AWERB Administrator and member with no responsibilities under ASPA

Apologies:

Function	Name	Position
<i>Ex officio</i> Member	[REDACTED]	Director of Bioservices
<i>Ex officio</i> Member	[REDACTED]	Chair of the Local AWERB – [REDACTED]
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon (NVS)
<i>Ex officio</i> Member	[REDACTED]	Named Animal Care and Welfare Officer (NACWO) & Named Information Officer (NIO)
Member	[REDACTED]	Senior College academic and biostatistician
Member	[REDACTED]	PhD student representing the student community
Member	[REDACTED]	Lay person & Imperial Communications representative
Member	[REDACTED]	External Member
Member	[REDACTED]	External Member
Member	[REDACTED]	External Member

	<p><u>Item</u></p> <ul style="list-style-type: none"> The Chair welcomed [REDACTED] (a new member of the [REDACTED]) to her first meeting.
1.	<p><u>Members' declarations of interests in respect of items on the agenda</u></p> <p>None identified.</p>
2.	<p><u>Minutes and matters arising</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> The minutes of the last meeting were agreed. Updates were given on actions from the previous meeting. In particular, members were very pleased to learn that, following discussion at the last meeting, an application by the 3Rs hub for research culture funding from the Research England Enhancing Research Culture funding round 2023-24 had been submitted and granted.
3.	<p><u>Retrospective Assessment – [REDACTED]</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> A retrospective assessment of a recently expired project licence containing a protocol with a severe severity limit was reviewed. In accordance with the legislation, and the guidance provided by ASRU, the project licence holder is required to submit a copy of the assessment to the Home Office, by the due date, following consideration of the assessment by the AWERB. A copy of the licence had been circulated to members for information to assist with carrying out the assessment. The AWERB was pleased to note the scientific progress made during the course of the licence. Members were very pleased to learn that the group had been able to refine the surgical [REDACTED] model to reduce the peri-operative mortality rate and that the use of a [REDACTED] intra-procedurally had helped to treat any potential lethal [REDACTED] occurring during [REDACTED] surgery. As a result of these refinements, the actual severity limits had been less severe than those originally anticipated. It was also noted that as part of their replacement work, the group had been developing <i>in silico</i> models of [REDACTED] and using recordings obtained from patients undergoing invasive electrophysiological procedures. <p><u>Decisions</u></p> <ul style="list-style-type: none"> The committee was content to approve the retrospective assessment for submission to the Home Office, subject to the inclusion of some revisions requested by the committee. <p><u>Actions</u></p> <ul style="list-style-type: none"> AWERB administrator to email summary of committee's feedback to the licence holder.
4.	<p><u>CBS Aseptic Surgery policy</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> The Chair reminded members that following the periodic review of ASRU Examples of Indicators of Low-level Concerns that central AWERB had undertaken at its September 2022 meeting, the Director of CBS had been asked to initiate a review of the CBS policy on aseptic surgery and to report back to central AWERB in due course.

	<ul style="list-style-type: none"> • A copy of the revised policy had been circulated for information in the meeting pack and the NVS gave a short presentation to members, highlighting the key changes that had been adopted in the updated policy. • Members noted that the guidance document was very clear and that the extensive photographs should be very helpful to users when reading through the policy.
5.	<p><u>Discussion item: The Rawle report: role of review and regulatory approvals processes for animal research in supporting implementation of the 3Rs</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> • The Chair advised members that the Rawle report, which had been published in February 2023, had been commissioned by the NC3Rs in order to review current regulatory and review processes aimed at ensuring compliance with 3Rs principles, to identify any variations, gaps in coverage and lessons to be learned and to explore opportunities for effectively promoting adoption of 3Rs advances. It included a number of recommendations for funders, AWERBs and ASRU. • A copy of the report had been circulated to members in the paper pack prior to the meeting. • Members discussed various aspects of the recommendations put forward in the report, particularly focussing on those aimed primarily at AWERBs. • With regards to the recommendations made on replacement, the Chair noted that the AWERB application processing form had been recently amended to include a specific question on searching for alternatives “How have you searched for information on and assessed the suitability of potential non-animal alternatives for undertaking this work? Describe which databases and websites you have used to check for practicable alternative approaches”. An additional guidance section on searching for alternatives had also been included in the AWERB’s PPL application guidance document for applicants. • Members held an in-depth discussion on the topic of AWERB member training and CPD. Items discussed included: <ul style="list-style-type: none"> ○ what type of training should constitute CPD in terms of members’ roles on the AWERB, ○ how much CPD should members be expected to undertake and how this should be recorded and collated, ○ attendance at the college’s experimental design course, ○ reserved time for CPD training at AWERB meetings, ○ how additional CPD for AWERB members might be funded. <p><u>Decisions</u></p> <ul style="list-style-type: none"> • The AWERB should ensure that all project licence applicants followed the recommendation in the Rawle report in setting out what parts of the work had already been funded, by whom, and the start date of the award and its duration. • During project licence review, the AWERB should ensure that applicants have thoroughly addressed the additional question regarding searching for animal alternatives in the AWERB processing form and that they have explained why any non-animal alternatives identified were not suitable. • AWERB discussion items constituting CPD should, in future, be specifically marked as such on the agenda.

	<p><u>Actions</u></p> <ul style="list-style-type: none"> • The Chair, AWERB Administrator and NTCO to consider and agree on the most effective route for the recording of member CPD. • The AWERB administrator to update the Chairs' briefing templates for PPL applications to include the checking of the funding and replacement issues identified above.
6.	<p><u>Terms of Reference</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> • The Chair reminded members that the AWERB Terms of Reference (ToR) had last been reviewed and updated in September 2022, and that it was good practice to periodically review these in order to ensure that they remained fit for purpose, and to assess the processes in place to ensure that the AWERB was continuing to fulfil all areas of responsibility outlined in the ToR. • She drew attention to the AWERB's responsibilities to provide assurance that the necessary systems of control are established and followed at Imperial with regards to animal welfare and compliance with the ASPA (1986) and the AWERB Home Office Guidance, and to keep under review management procedures and protocols, including management systems, for monitoring, reporting and following up on acquisition, welfare and proper use of animals in research at Imperial. She advised that the compliance and risk group had had discussions regarding putting in place additional checks on work being undertaken on other project licence holders' licences and on the transfer of breeding animals between licences. The AWERB agreed with the concerns expressed by the compliance and risk group, and with the proposal that project licence applicants should be required to seek permission from the AWERB to permit other groups to work under their licence (unless this had been clearly set out in the original licence application). • The Chair also drew members' attention to a section in the October 2023 ASRU operational newsletter that outlined ASRU's response to the ASC report on the use of animals in the development and production of antibodies (which had been published in October 2022). A copy of the relevant sections of the newsletter had been circulated to members in the supplementary meeting papers prior to the meeting. She reminded members that a discussion on the ASC's report had been held at the November 2022 central AWERB meeting, and noted that ASRU's response to the report now set out additional guidance on how applicants should structure their licence application, including detailed guidance on their expectations for how the relevant protocol should be set out, and on the requirements for AWERB review. This included requirements for the AWERB to undertake prospective review to consider the legitimacy of each request for antibody production using live animals and an annual retrospective review, via an assessment proforma. • The AWERB also discussed whether it might be appropriate to formalise the expectations for AWERB members, particularly with regards to meeting attendance. Members noted that it was important that department heads and line managers recognised the strategic importance of the AWERB committee to the college, and that the time devoted to AWERB work by staff

members should be appropriately recognised by their departments and captured in their Workload Allocation Model.

Decisions

- Following discussion, members were content that no revisions to the Terms of Reference themselves were currently required.
- The AWERB concurred with the discussions that had taken place at the compliance and risk group regarding the need for additional checks to be put in place regarding work being undertaken on other project licence holders' licences and on the transfer of breeding animals between licences. Members agreed that:
 - The AWERB project licence application processing form should be amended to seek information as to whether the licence application was seeking to permit any additional academic groups, in addition to the licence applicant's own group, to undertake collaborative studies under the licence. AWERB approval would only be granted if appropriate justification and assurances regarding supervision were provided by the licence applicant. Specific authorisation from the AWERB would also be required for the addition of other groups to granted licences, if the text of the granted licence did not already authorise this.
 - Any request to transfer breeding animals from a project licence due to expire within 12 months to another project licence would require AWERB approval. In cases where the reason for the request followed from a failure of the licence holder to progress a replacement licence application in adequate time, any approval, if granted, would be time limited (and normally for no more than a maximum period of 6 months) and granted only to permit the licence holder additional time to put in place their own licence, or other appropriate arrangements as agreed with the AWERB. Any further failure to progress the licence holder's replacement application in a timely manner would result in de-mating of breeding stock.

Actions

- AWERB Administrator to finalise the draft breeding form, and the changes to the AWERB application review form, and to put these into use.
- The AWERB PPL application guidance document and CBS website should then be updated accordingly.
- Chair and AWERB administrator to seek input from college academics with particular expertise in antibody linked work in order to develop a suitable process to fulfil the additional requirements set out in the latest ASRU operational update.
- Chair to take forward ensuring that the importance of members' roles on the AWERB was appropriately recognised in the Workload Allocation Model.
- AWERB administrator to adapt the forms currently used to set out the duties and responsibilities of external and lay members to produce a version tailored for academic and research staff member categories.

7. Periodic review of ASRU Examples of Indicators of Low-level Concerns

Points to note

	<ul style="list-style-type: none"> • The Chair reminded members that central AWERB had previously agreed that it would be good practice to periodically review the example Indicators of Low-level Concerns previously published by ASRU in an advice note. • Members noted that CBS had recently undertaken detailed reviews of two of the indicators in the published advice note (namely breeding and maintenance, and aseptic surgery and analgesia). • Members were advised that the external company that CBS had been using to provide its anonymous reporting of concerns service had closed, and that a new mechanism for anonymous reporting therefore needed to be put in place. • Members noted that it was difficult in some instances for members to assess the indicators without additional information (for example those related to training and record keeping). It was proposed that it could be helpful for members to receive a copy of the current version of the Compliance and Risk group’s tracker for assessment of compliance against ASPA and licence conditions, in order to assist with evaluating these areas. • Members also noted it would be helpful to ensure that an early date was set to replace the previously postponed AWERB visit to the [REDACTED] facility. <p><u>Actions</u></p> <ul style="list-style-type: none"> • CBS Meeting and Support Administrator to arrange a revised date for the AWERB tour of [REDACTED]. • Director of CBS to investigate an alternative anonymous reporting mechanism. • AWERB Chair to liaise with the Secretary of the Compliance and Risk group regarding circulating the latest version of the tracker in the papers of the next AWERB meeting.
<p>8.</p>	<p><u>Central AWERB PhD and Post-doctoral representative vacancies</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> • Members considered the expressions of interest that had been received for the PhD student representative and post-doctoral representative vacancies. <p><u>Decisions</u></p> <ul style="list-style-type: none"> • It was agreed that the candidates that had received the highest combined member ranking for each role should be invited to become members of the central AWERB, subject to satisfactory references. • Members agreed that the second-choice candidates should be offered roles on the relevant local AWERB, subject to satisfactory references and the agreement of the local AWERB Chair. <p><u>Actions</u></p> <ul style="list-style-type: none"> • CBS Meeting and Support Administrator to arrange for the necessary references to be obtained. • Upon receipt of references, Chair to write to the preferred candidate inviting them to join central AWERB. • After appropriate liaison with relevant local AWERB Chair and receipt of references, the second-choice candidates should be notified and offered the opportunity to join local AWERB.
<p>9.</p>	<p><u>Regular report on applications submitted, self-reporting & compliance notices</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> • The regular report was noted.

	<ul style="list-style-type: none"> Members noted that ASRU had recently recommenced responding to standard condition 18 reports, with responses thus far received for several submitted to ASRU during August, but that a large backlog, dating back to mid-February remained outstanding. The Chair advised that she had discussed the likely proportion of potential non-compliance reports submitted for the current year, relative to actual activity, with the AWERB administrator. Although it would not be possible to normalise the data until the final end of year activity measures had been collated, it was unlikely, given the small number of such reports submitted thus far, that there had been any notable increase in the normalised proportion.
10.	<p><u>Local AWERB – [REDACTED] report</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> The approved minutes of the July 2023 local AWERB meeting were received and noted.
11.	<p><u>Local AWERB – [REDACTED] report</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> The approved minutes of the June 2023 local AWERB meeting were received and noted.
12.	<p><u>3Rs Advisory group update</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> The 3Rs Chair reminded the group that this year's Animal Research forum would be taking place on 23rd November and encouraged all to attend. The 3Rs and QA programme manager had obtained funding, via the Research England Enhancing Research Culture funding round 2023-24, to enhance the 3Rs research culture at the college. It was intended to use the funding to create a dedicated website to host resources, teaching material and act as an outreach method.
13.	<p><u>Director of CBS operational update</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> The Director of CBS updated members on the progress of a number of ongoing facility refurbishment projects. CBS had recently successfully filled six trainee technician slots through the use of a specialised recruitment company.
14.	<p><u>Communications update</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> The College would be participating in UAR's Fish in Research social media campaign which would be running from the 20^h -24th November.
15.	<p><u>A.O.B</u></p> <p>None identified.</p>

Dates of next meetings:

16 Jan 2024	13.30-16.30	Virtual
19 March 2024	13.30-16.30	Virtual
21 May 2024	09.30-12.30	Virtual
23 July 2024	13.30-16.30	Virtual

Central Animal Welfare and Ethical Review Body (AWERB)

14:00 – 17:00 16 March 2022 (Meeting 4)

MS Teams

Present:

Function	Name	Position
Chair & Outgoing Chair of the [REDACTED] [REDACTED] Local AWERB	[REDACTED]	Senior College academic
Vice-chair	[REDACTED]	Lay person
Member and outgoing cAWERB Chair	[REDACTED]	Senior College academic
<i>Attending for</i> [REDACTED] [REDACTED]	[REDACTED]	Senior College academic & Deputising for Establishment Licence Holder
<i>Ex officio</i> Member	[REDACTED]	Director of Bioservices
<i>Ex officio</i> Member	[REDACTED]	Chair of the Local AWERB – [REDACTED]
<i>Ex officio</i> Member	[REDACTED]	Chair of the 3Rs Advisory Group
<i>Ex officio</i> Member	[REDACTED]	Director of Central Biomedical Services (CBS)
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon (NVS)
<i>Ex officio</i> Member	[REDACTED]	Named Animal Care and Welfare Officer (NACWO) & Named Information Officer (NIO)
<i>Ex officio</i> Member	[REDACTED]	Named Training and Competency Officer (NTCO)
Member	[REDACTED]	External Member
Member	[REDACTED]	Post-doctoral fellow representing the post- doctoral community
Member	[REDACTED]	PhD student representing the student community
Member	[REDACTED]	Lay person & Imperial Communications representative
In attendance	[REDACTED]	Observer
In attendance	[REDACTED]	3Rs Programme Manager & Named Information Officer (NIO)
Member and secretary	[REDACTED]	AWERB Administrator

Apologies:

Function	Name	Position
<i>Ex officio</i> Member	[REDACTED]	Establishment Licence Holder
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon (NVS)
Member	[REDACTED]	Senior College Academic
Member	[REDACTED]	External member
Member	[REDACTED]	Lay person
In attendance	[REDACTED]	CBS Meeting and Support Administrator

	<p><u>Item</u></p> <ul style="list-style-type: none"> · The Chair welcomed [REDACTED], the [REDACTED], who was deputizing for the ELH, to the meeting. · She also introduced and welcomed [REDACTED] to the meeting. She informed members that [REDACTED] had very kindly agreed to join cAWERB as an external member; she was attending this meeting as an observer, prior to officially taking up her role at the May meeting.
<p>1.</p>	<p><u>Members' declarations of interests in respect of items on the agenda</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> · [REDACTED] declared an interest in Agenda item 3 as her work had been covered by the project licence undergoing retrospective assessment. She noted that she would recuse herself from the AWERB's deliberations and decision making for this agenda item. · [REDACTED] declared an interest in Agenda item 4 as the project licence holder of the licence undergoing retrospective assessment. She noted that she would recuse herself from the AWERB's deliberations and decision making for this agenda item.
<p>2.</p>	<p><u>Minutes and matters arising</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> · The minutes of the last meeting were agreed. · Updates were given on actions from the previous meeting. · The Chair updated members regarding action 318 on the actions log. She informed members that the amendment to the project licence reviewed by members at the November meeting had now been granted by ASRU and that the project licence holder had agreed to a request from the AWERB subgroup to separate out the severe protocols that had been removed from the amendment request into a stand-alone project licence application. She had also agreed to the use of a modified harm-benefit form and mandatory use of study plans in conjunction with pre-study meetings with the named people in order to discuss the harms and training needs, with minutes of those meetings to be reported to the AWERB to enable oversight.
<p>3.</p>	<p><u>Retrospective Assessment - [REDACTED]</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> · A retrospective assessment of a recently expired project licence containing a protocol with a severe severity limit was reviewed. · [REDACTED] recused herself from the discussion and decision making process for this agenda item; she left the meeting prior to the discussion and returned only when discussion and decisions regarding this item had concluded. · In accordance with the legislation, and the guidance provided by ASRU, the project licence holder is required to submit a copy of the assessment to the Home Office, by the due date, following consideration of the assessment by the AWERB. · A copy of the licence had been circulated to members for information to assist with carrying out the assessment.

	<ul style="list-style-type: none"> · The AWERB was pleased to note the scientific progress made during the course of the licence and members were particularly pleased that the group had been able to minimise the harms associated with the work and in particular, those associated with the bariatric surgery protocol. <p><u>Decisions</u></p> <ul style="list-style-type: none"> · The committee was content to approve the retrospective assessment for submission to the Home Office subject to the inclusion of a number of revisions requested by the committee. <p><u>Actions</u></p> <ul style="list-style-type: none"> · AWERB Administrator to email summary of committee's feedback and required revisions to the applicant.
<p>4.</p>	<p><u>Retrospective Assessment and Retrospective Review - [REDACTED]</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> · A retrospective assessment and a retrospective review of a recently expired project licence containing two protocols with a severe severity limit was reviewed. · [REDACTED] recused herself from the discussion and decision making process for this agenda item; she left the meeting prior to the discussion and returned only when discussion and decisions regarding this item had concluded. · In accordance with the legislation, and the guidance provided by ASRU, the project licence holder is required to submit a copy of the retrospective assessment to the Home Office, by the due date, following consideration of the assessment by the AWERB. · A copy of the licence had been circulated to members for information to assist with carrying out the assessment. · The AWERB was pleased to note the scientific progress made during the course of the licence. Members were also pleased to note the range of 3Rs strategies implemented and highlighted the importance of disseminating the improvements to the MRI techniques in order to make other groups aware of this refinement. <p><u>Decisions</u></p> <ul style="list-style-type: none"> · The committee was content to approve the retrospective assessment for submission to the Home Office subject to the inclusion of revisions requested by the committee. <p><u>Actions</u></p> <ul style="list-style-type: none"> · AWERB Administrator to email summary of committee's feedback and required revisions to the applicant.
<p>5.</p>	<p><u>Update on the ASRU Change Programme</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> · The AWERB administrator updated the committee on the key points announced at ASRU's February Quarterly Update to PEL holders on the ASRU Change Programme, which had now been rebranded as the Animals in Science Regulatory Reform Programme. · A copy of the slide set presented by ASRU at the update meeting had also been made available to members in the supplementary paper pack. · The committee noted that ASRU had now concluded that it was necessary for it to prioritize the timing of organisation redesign, in order to improve the

	<p>quality and consistency of regulatory deliverables, as it was unable to progress the programme as originally outlined last year within its existing organisational design and resources.</p> <ul style="list-style-type: none">· Members were informed that each Establishment and project licence holder would be required to submit a portfolio of evidence, by the end of the year, to outline the systems and processes they operate to ensure they meet all the conditions of their licence.· The AWERB also noted the new requirements for project licence applications to be accompanied by an assessment report from the AWERB, and for the notifier of each PPL standard condition 18 report and potential non-compliance report to submit a CAPA (correction and preventative action) report, from the end of April.· Members were particularly dismayed to learn that ASRU anticipated delays to the processing of new project licence applications and that it was now requesting that licence applications should be submitted nine months prior to the required start date.· Members noted that ASRU appeared to be shifting from its previous collaborative regulatory relationship and moving to the type of approach adopted by the HSE.· The committee was concerned at the continuing failure of ASRU to communicate changes to its operational processes in a timely manner and noted that it was difficult to fully judge the resource implications of some of the announced changes given that the detailed requirements and forms had not yet been circulated to Establishments, despite the fact that the new processes were due to be implemented shortly. The AWERB was also very concerned regarding ASRU's own assessment that it did not have adequate and appropriately qualified staffing in place to deliver the regulatory reform processes without impacting on the timelines of its regulatory functions.· Members noted the additional burdens placed on project licence holders to comply with the announced requirements and discussed potential approaches to ensure the submission of high quality portfolios of evidence whilst minimising the burden on project licence holders. However, it was acknowledged that it would not be possible to progress this in the absence of further guidance from ASRU regarding its expectations on the content of the evidence portfolios, so any initiatives on this would take time to implement.· Members felt the new temporary timeline announced by ASRU for the submission of project licence applications was unacceptable, particularly given the lack of notice which had not allowed any time for forward planning by applicants or Establishments. Fears were also expressed regarding how long these "temporary" delays were likely to last in practice.· It was noted that the new timelines effectively shortened the lifetime of a project licence thus increasing the regulatory burden on licence holders, AWERBs and ASRU.· Members expressed concerns regarding the additional administrative burdens placed on the Establishment and noted that additional support might be required in the AWERB administration team and for administering the CAPA process.· The AWERB expressed strong concerns regarding the cumulative impact of these requirements on research competitiveness in the UK. The detrimental
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	<p>impacts on grant holders and particularly on junior researchers were worrying.</p> <ul style="list-style-type: none"> Despite the current lack of guidance about the changes that are likely to be brought in as part of the regulatory reform programme, members noted that the systems and processes put in place by CBS to support its application for AAALAC accreditation meant that robust processes were already in place to provide assurance regarding establishment governance systems; nevertheless, until ASRU provided further guidance regarding its requirements for the Establishment portfolio of evidence, it was not possible to properly assess whether or not additional processes and/or documentation might need to be put in place <p><u>Decisions</u></p> <ul style="list-style-type: none"> Central AWERB will continue to closely monitor information released by ASRU so that appropriate action can be taken wherever needed. <p><u>Actions</u></p> <ul style="list-style-type: none"> █ to brief the ELH regarding the potential implications of the announced changes and the concerns raised by the AWERB.
6.	<p><u>Regular report on applications submitted, self-reporting & compliance notices</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> The regular report was noted. The NVS provided members with an update on relevant actions put in place following post-mortem and pathology findings received after submission of some of the standard condition 18 reports. Members discussed the trends identified in the additional graphs that had been included on the final page of the report and noted that the number of reports submitted in 2021 had reverted towards the historical norm, following the increase documented for 2020.
7.	<p><u>3Rs group update</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> The Chair of the 3Rs advisory group reminded members that there was only a week left for applications to be received for the Provost's Awards for Excellence in Animal Research; he encouraged members to disseminate information regarding the awards within their local networks. The 3Rs Hub had launched a competition to design a college 3Rs logo, that had been promoted by the graduate school to students, as a means of disseminating information about the 3Rs hub; the winning logo would be selected by the 3Rs Advisory group at its next meeting. The 3Rs programme manager was working to set up a 3Rs PhD students' network to foster collaborations and initiatives. Several projects from the first round of the President's PhD scholarships had included a 3Rs remit and the 3Rs Advisory group chair would be contacting the supervisors regarding opportunities offered by the 3Rs hub.
8.	<p><u>Local AWERB – █ report</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> The approved minutes of the January and February local AWERB meetings were received and noted.

9.	<p><u>Local AWERB – [REDACTED] report</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> · The approved minutes of the December 2021 local AWERB meeting were received and noted. · The [REDACTED] local AWERB chair updated members regarding the outcome of the actions that the AWERB had agreed following consideration of a replacement project licence application at its January meeting. As reported to cAWERB at its January meeting, members had decided that the project licence holder should be required to submit a management plan describing the steps he would put in place to ensure that all personal licence holders working under his licence adhered to the controls and limits defined in his project licence prior to approving the submission of the licence application. Following receipt of the management plan, the application had been approved for submission to ASRU; however, the project licence holder and CBS staff had been asked to review its implementation six months following the granting of the replacement licence, and to report back to the AWERB on its effectiveness.
10.	<p><u>Communications update</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> · The college's animal research webpages had recently been updated in order to increase navigability. · The college was in the process of reapplying to Understanding Animal Research for its Leader in Openness status. · The communications team was preparing an article regarding the AAALAC reaccreditation which would be released shortly.
11.	<p><u>Director of CBS operational update</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> · The Director of CBS advised members that the college's AAALAC accreditation had been renewed at the last AAALAC council meeting. · The new [REDACTED] building construction was due for completion in the autumn and the commissioning process for the animal facility would then take place prior to applying for designation of the facility by ASRU. · The Director of CBS announced that a contract had recently been signed with the [REDACTED] to provide temporary housing during facility refurbishment taking place at [REDACTED]. He thanked those involved for their work in processing the project licence amendment requests that had been submitted from [REDACTED] in order to include additional availability at college onto the relevant project licences. · He also informed members that the [REDACTED] site manager would be retiring at the end of April after 19 years in college. [REDACTED] proposed a vote of thanks to [REDACTED] from the AWERB to acknowledge his contribution to college's animal research community over his many years of service.
12.	<p><u>A.O.B</u></p> <p><u>Item discussed: Membership Update</u></p> <p><u>Points to note</u></p>

- The Chair informed members that [REDACTED] would be taking over the role of [REDACTED] local AWERB chair on the 1st April and would thus be joining central AWERB, as an *ex officio* member, at that time.
- The Chair advised members that [REDACTED], the current Chair of the [REDACTED] local AWERB would be stepping down shortly and extended her thanks and that of the committee to him for his contribution.
- She was also pleased to inform members that [REDACTED], the current Vice chair of the [REDACTED] AWERB had kindly agreed to take on the role of Chair of the [REDACTED] AWERB. He would therefore be stepping down from his current role as Chair of the 3Rs advisory group. The Director of Bioservices advised members that she was pleased to announce that [REDACTED], current co-chair of the 3Rs advisory group had kindly agreed to become the Chair of the group, and he would thus also be joining central AWERB, as an *ex officio* member; a new co-chair would be recruited in due course.
- The Chair proposed that the attendance status of [REDACTED], a current central AWERB meeting attendee, should be revised in order to accord him full membership rights.
- The Chair reminded members that [REDACTED] was attending her last meeting as a member, having relinquished the Chairmanship of the AWERB following the last meeting. She formally extended the thanks of the AWERB to her for her leadership and contribution to the college's animal research community and members wished her a long and happy retirement. [REDACTED] informed members that the ELH had asked her to convey his thanks to [REDACTED] for her valuable and long standing contribution and to [REDACTED] for her willingness to take on the role going forwards.

Decisions

- Members agreed that [REDACTED] should henceforth become a full member of the central AWERB (as a lay member in the ASRU membership category "members who do not have any responsibilities under ASPA").

Actions

- AWERB administrator to amend the attendance list accordingly.

Item discussed: Pain Management in Zebrafish – Report from a FELASA Working group

Points to note

- The Chair drew members attention to a copy of a recently circulated FELASA draft report on pain management in zebrafish, which had been included for members' information in the supplementary paper pack. This would be added to the agenda of a future meeting for discussion.

Actions

- AWERB administrator to schedule a discussion of the draft report at a future meeting.

Dates of next meetings:

16 May 2022	14.00-17.00	TBC
18 July 2022	14.00-17.00	TBC

Central Animal Welfare and Ethical Review Body (AWERB)

14:00 – 17.00 16 May 2022 (Meeting 5)

MS Teams

Present:

Function	Name	Position
Chair	[REDACTED]	Senior College academic
<i>Ex officio</i> Member	[REDACTED]	Establishment Licence Holder
<i>Ex officio</i> Member	[REDACTED]	Chair of the Local AWERB – [REDACTED]
<i>Ex officio</i> Member	[REDACTED]	Chair of the Local AWERB – [REDACTED]
<i>Ex officio</i> Member	[REDACTED]	Chair of the 3Rs Advisory Group
<i>Ex officio</i> Member	[REDACTED]	Director of Central Biomedical Services (CBS)
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon (NVS)
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon (NVS)
<i>Ex officio</i> Member	[REDACTED]	Named Animal Care and Welfare Officer (NACWO) & Named Information Officer (NIO)
Member	[REDACTED]	External Member
Member	[REDACTED]	External Member
Member	[REDACTED]	Post-doctoral fellow representing the post-doctoral community
Member	[REDACTED]	PhD student representing the student community
Member	[REDACTED]	Lay person & Imperial Communications representative
In attendance	[REDACTED]	Named Animal Care and Welfare Officer (NACWO)
In attendance	[REDACTED]	Named Animal Care and Welfare Officer (NACWO)
Member	[REDACTED]	CBS Meeting and Support Administrator and lay member with no responsibilities under ASPA
Member and secretary	[REDACTED]	AWERB Administrator and member with no responsibilities under ASPA

Apologies:

Function	Name	Position
Vice-chair	[REDACTED]	Lay person
<i>Ex officio</i> Member	[REDACTED]	Director of Bioservices
<i>Ex officio</i> Member	[REDACTED]	Named Training and Competency Officer (NTCO)
Member	[REDACTED]	Senior College Academic

	<p><u>Item</u></p> <ul style="list-style-type: none"> · The Chair welcomed [REDACTED], the new Chair of the [REDACTED] AWERB to his first central AWERB meeting. She also welcomed [REDACTED] and [REDACTED] to their new membership roles on the committee as Chairs of the [REDACTED] local AWERB and 3Rs advisory group respectively and [REDACTED], who was attending her first meeting in her formal role of external member. · The Chair thanked [REDACTED] and [REDACTED], the lead NACWOs for fish work, for attending the meeting.
1.	<p><u>Members' declarations of interests in respect of items on the agenda</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> · [REDACTED] declared a potential conflict of interest in Agenda item 3 in light of the fact that he was the Deputy Course Director for an MSc course directed by the applicant of the project undergoing review. Members were content that this was not prejudicial to him participating in the decision making for this agenda item.
2.	<p><u>Minutes and matters arising</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> · The minutes of the last meeting were agreed. · Updates were given on actions from the previous meeting.
3.	<p><u>Review of Use of Animals policy project - [REDACTED]</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> · One application for a research project involving animal work to be undertaken abroad, that would fall under the auspices of ASPA if the work were taking place in the UK, was considered. · Members noted that the facility where the proposed project would take place was AAALAC approved, and that the accommodation standards in the facility were in accordance with the accommodation standards specified in the ASRU code of practice. · Members carefully considered a range of issues linked to the proposed work and were content to support the programme of work proposed in the application. <p><u>Actions</u></p> <ul style="list-style-type: none"> · Central AWERB Chair to liaise with the Provost regarding the project and the various issues discussed by AWERB in order to assist the Provost in his decision as to the acceptability of conducting the proposed project abroad. · AWERB Administrator to email summary of committee's feedback to the applicant.
4.	<p><u>Review of licence application amendment - [REDACTED]</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> · An application for an amendment to a recently granted project licence was considered; the licence holder had held additional availability at college on a licence that was due to expire shortly and was now requesting additional availability at college on their recently granted replacement licence.

	<ul style="list-style-type: none"> · No authority to permit the transfer between Establishments of any animals that had undergone experimental procedures was requested in the amendment. · Members were surprised that necrosis of the tail was included as a potential expected adverse effect of venepuncture but understood that this was included in the licence following a request from the NVS at another establishment. · The committee was content with the overall aims and objectives set out in the scientific programme of work proposed in licence, and the potential benefits likely to accrue from this work. · It was therefore content to approve the request for additional availability at college, subject to the compulsory use of study plans. · The Director of CBS advised members regarding resource implications and the additional workload burden that had recently been placed on the named veterinary service and NACWOs following from requirements to check and approve mandatory pre-study plans for work carried out at college by externally based researchers granted additional availability at college. <p><u>Decisions</u></p> <ul style="list-style-type: none"> · The amendment was approved for submission to the Home Office subject to some minor revisions to the application. · The approval was granted on the basis that: <ul style="list-style-type: none"> ○ the licence holder would be required to submit a study plan outlining the experimental procedures to be applied and the monitoring processes and humane endpoints for each study prior to each study commencing; ○ the licence holder would be required to provide CBS, in advance of any work commencing, with information regarding the maximum number of animals to be used at college on each protocol, in order to provide assurance that the permitted number of animals on each protocol would not be exceeded; ○ the licence holder will be required to pilot, where scientifically appropriate and as advised by the NVS, the use of multimodal analgesia during/following surgery; ○ the licence holder will be required to report locally (using a standard condition 18 form) any instance of necrosis of the tail following venepuncture in order to enable an internal review to be carried out and appropriate mitigating steps to avoid recurrence put in place. · The revised submission will be approved by Chair's action. <p><u>Actions</u></p> <ul style="list-style-type: none"> · AWERB Administrator to email summary of committee's feedback to the applicant. · In light of concerns raised by the Director of CBS regarding the resource implications of the checking and approval of mandatory pre-study plans, the Director CBS should meet with the NVS and NACWO to discuss potential revisions to the review process for study plans for external research organisation.
5.	<p><u>Pain Management in Zebrafish - Report from a FELASA Working Group</u></p> <p><u>Points to note</u></p>

	<ul style="list-style-type: none"> · [REDACTED] introduced a recently circulated FELASA draft report on pain management in zebrafish, summarising the key points made in the report. She then led a discussion on some of the key recommendations in the report. · Members discussed the feasibility of introducing skin swabbing or use of gentle agitation/enzyme exposure for genotyping at embryonic larval stages as alternatives to replace fin clipping for obtaining DNA samples. The Chair of the 3Rs advisory group proposed that any group using fin clipping for genotyping be encouraged to apply to the 3Rs hub for funding to pilot the use of alternative methods.
6.	<p><u>Regular report on applications submitted, self-reporting & compliance notices</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> · The regular report was noted.
7.	<p><u>Local AWERB – [REDACTED] report</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> · The approved minutes of the January and March local AWERB meetings were received and noted.
8.	<p><u>Local AWERB – [REDACTED] report</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> · The approved minutes of the March local AWERB meeting were received and noted.
9.	<p><u>Communications update</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> · An article regarding the AAALAC reaccreditation had appeared on the college website. · College had been successful in retaining its Leader in Openness Award originally granted by UAR in 2019. The Communications representative thanked the CBS Communications, QA and 3Rs Programme Manager for the work she had undertaken with regards to this; a news article highlighting the award had appeared on the college website last week.
10.	<p><u>Director of CBS operational update</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> · The Director of CBS advised members that the [REDACTED] had now started working in the [REDACTED] facility. · The [REDACTED] facility at [REDACTED] was due to be finished in October/November 2022, and meetings were now taking place to discuss occupation. · A project initiation document (PIS) for stage 2-4 to provide CL3 facilities at [REDACTED] had been submitted. · Planning was ongoing for the [REDACTED] CL3 schedule 5 expansion (proposed for April 2023-December 2023) and for the [REDACTED] move from [REDACTED] and [REDACTED] to [REDACTED] in summer 2024. · The FFP3 mask fit testing project had completed at [REDACTED] and was now underway at [REDACTED]

11.	<p><u>3Rs group update</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> · The Chair of the 3Rs advisory group advised members that he was very pleased to announce that [REDACTED] had kindly agreed to take on the role of Co-Chair of the 3Rs Advisory group. · He informed members that the annual Animal Research Forum was scheduled to take place on the 15th September. · The first 3Rs Hub sponsored lecture had taken place. · The Hub was taking steps to contact supervisors that had been awarded a President's PhD scholarship that had included a 3Rs remit, in order to advise on opportunities offered by the 3Rs hub. · A small charge had been levied for attending the last one day training course on experimental design and statistics for <i>in vivo</i> scientists in order to free up funding to provide additional courses; despite this, the course had been oversubscribed.
12.	<p><u>A.O.B</u></p> <p><u>Item discussed: Membership Update</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> · The Chair informed members that [REDACTED] had informed her that he was no longer able to devote the necessary time to attend cAWERB meetings and that he had indicated that he therefore felt it necessary to step down from his role as an academic member of central AWERB. The Chair noted that she wished to thank [REDACTED] for his contribution to the work of the college's AWERB over his period of membership. · She asked members to email herself and the AWERB administrator with any suggestions regarding suitable candidates that could be approached to fill the vacant lay and academic member roles. <p><u>Actions</u></p> <ul style="list-style-type: none"> · Members to email the Chair/AWERB administrator with any suggestions of suitable candidates to fill the current member vacancies. <p><u>Item discussed: Animals in Science Regulatory Reform Programme – updated Bridging Ways of Working</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> · The Chair drew members attention to a recently released update to the ASRU Bridging Ways of Working. A copy had been included for members' information in the supplementary paper pack. <p><u>Item discussed: MRC – Sex in experimental design – new requirements</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> · The Chair drew members attention to a copy of the MRC's new guidance and requirements for both sexes to be used as a default in research proposals. A copy of the requirements had been included for members' information in the supplementary paper pack.

Dates of next meetings:

18 July 2022	14.00-17.00	Virtual
26 September 2022	14.00-17.00	Virtual

14 November 2022	13.30-16.30	Virtual
23 January 2023	13.30-16.30	Virtual
20 March 2023	13.30-16.30	Virtual
16 May 2023	13.30-16.30	Virtual
17 July 2023	13.30-16.30	Virtual

Imperial College London

Central Animal Welfare and Ethical Review Body (AWERB)

14:00 – 16.30 16 May 2023 (Meeting 4)

MS Teams

Present:

Function	Name	Position
Chair	[REDACTED]	Senior College academic
Vice-chair	[REDACTED]	Lay person
<i>Ex officio</i> Member	[REDACTED]	Establishment Licence Holder
<i>Ex officio</i> Member	[REDACTED]	Director of Central Biomedical Services (CBS)
<i>Ex officio</i> Member	[REDACTED]	Chair of the Local AWERB – [REDACTED]
<i>Ex officio</i> Member	[REDACTED]	Chair of the 3Rs Advisory Group
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon (NVS)
<i>Deputizing for</i> [REDACTED]	[REDACTED]	Named Animal Care and Welfare Officer (NACWO) & Named Information Officer (NIO)
<i>Ex officio</i> Member	[REDACTED]	Named Training and Competency Officer (NTCO)
Member	[REDACTED]	Senior College academic and biostatistician
Member	[REDACTED]	External Member
Member	[REDACTED]	External Member
Member	[REDACTED]	Post-doctoral fellow representing the post-doctoral community
Member	[REDACTED]	PhD student representing the student community
Member	[REDACTED]	Lay person & Imperial Communications representative
Member	[REDACTED]	CBS Meeting and Support Administrator and lay member with no responsibilities under ASPA
Member and secretary	[REDACTED]	AWERB Administrator and member with no responsibilities under ASPA

Apologies:

Function	Name	Position
<i>Ex officio</i> Member	[REDACTED]	Director of Bioservices
<i>Ex officio</i> Member	[REDACTED]	Chair of the Local AWERB – [REDACTED]
Member	[REDACTED]	External Member
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon Service (dNVS)
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon (NVS)
<i>Ex officio</i> Member	[REDACTED]	Named Animal Care and Welfare Officer (NACWO) & Named Information Officer (NIO)

	<u>Item</u>
1.	<p><u>Members' declarations of interests in respect of items on the agenda</u></p> <p>None identified.</p>
2.	<p><u>Minutes and matters arising</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> • The minutes of the last meeting were agreed. • Updates were given on actions from the previous meeting.
3.	<p><u>Retrospective Assessment – [REDACTED]</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> • A retrospective assessment of a recently expired project licence containing a protocol with a severe severity limit was reviewed. • In accordance with the legislation, and the guidance provided by ASRU, the project licence holder is required to submit a copy of the assessment to the Home Office, by the due date, following consideration of the assessment by the AWERB. • A copy of the licence had been circulated to members for information to assist with carrying out the assessment. • The AWERB was pleased to note the scientific progress made during the course of the licence and that the licence holder had successfully implemented new methods for cell culture experiments that had led to a reduction in the number of <i>in vivo</i> experiments required to meet the objectives of the work. • Members were particularly pleased to observe that the group had not found it necessary to undertake any work under the severe protocol included on the expired licence, and that the licence holder had been able to refine the experimental design to avoid the need to include a severe protocol in their new licence. <p><u>Decisions</u></p> <ul style="list-style-type: none"> • The committee was content to approve the retrospective assessment for submission to the Home Office, subject to the inclusion of some minor revisions requested by the committee. <p><u>Actions</u></p> <ul style="list-style-type: none"> • AWERB administrator to email summary of committee's feedback to the licence holder.
4.	<p><u>Update on Progress of actions following Review of Breeding practices</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> • [REDACTED] provided members with an update on the progress of implementation of the phased rollout of recommended actions that had been previously agreed by central AWERB. • Improvements to the information provided on cage cards had now been implemented, following various updates to the A-tune animal management software. • Near final versions of the breeding SOP, policy document and best practice guidelines for researchers had been developed. • A script based on these documents had been written for the E-learning course and this was currently under production by the college development team.

	<ul style="list-style-type: none"> • A [REDACTED] automated genotyping centre had been set up to allow easy access to reliable offsite genotyping. • Members discussed potential strategies for the roll-out of the E-learning course as part of training and competency assessment for breeding procedures, and the NTCO advised that the current practical assessments for weaning and sexing animals would continue in parallel with completion of the E-learning course. • Following a query from a member, the AWERB also discussed the potential advantages and 3Rs improvements that might follow from moving to a compulsory system of CBS management of breeding colonies, as practiced in some other university Establishments. However, it was noted that this would have resource implications in terms of CBS staffing/funding. <p><u>Actions</u></p> <ul style="list-style-type: none"> • Director of CBS to arrange for copies of the new documents to be sent to the AWERB Administrator for circulation in the paper pack for the next meeting.
<p>5.</p>	<p><u>Regular report on applications submitted, self-reporting & compliance notices</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> • The regular report was noted.
<p>6.</p>	<p><u>3Rs Advisory group update</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> • The Chair of the 3Rs advisory group advised that it was continuing with its regular activities including reviewing applications for the Provost’s Awards for Excellence in Animal Research. • In response to a query, he confirmed that the system for tagging all President’s PhD scholarships with a 3Rs remit was working well. A 3Rs students’ network had been established via the 3Rs hub and a student representative from the hub had been appointed as a member of the 3Rs advisory group.
<p>7.</p>	<p><u>Communications update</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> • The animal research report was being drafted and was due to be available to download from the college website towards the end of August. • A social media campaign entitled ‘Mice in Research’ had taken place in order to mark the 9th anniversary of the Concordat for openness in animal research, and the college’s 3Rs programme manager had co-ordinated an Instagram Stories Takeover on the UAR Instagram page. This had included videos and images featuring college’s research and how animals are cared for in the facilities. • A number of interesting discussions had taken place at the UAR annual Concordat meeting. Topics covered had included addressing openness in times of increased animal activism, and greater openness regarding harms when publishing work involving the use of animals in research. A two-day meeting had been scheduled to take place in May 2024 to celebrate a decade of the Concordat. • Members were advised that the EU commission had validated an animal rights petition after more than a million signatures had been collected, and that the EU parliament would therefore conduct a plenary hearing regarding

	<p>this. The EU commission was also expected to adopt a formal response identifying what action it would propose in response to the petition. Although the main remit of the petition was targeted at banning the testing in animals of ingredients used in cosmetics, the petition also includes an aim to modernise science in the EU and to commit to a legislative proposal plotting a roadmap to phase out all animal testing in the EU before the end of the current legislative term.</p>
<p>8.</p>	<p><u>Director of CBS operational update</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> The Director of CBS updated members regarding a number of facility refurbishment works that were currently underway or due to commence shortly.
<p>9.</p>	<p><u>Local AWERB – [REDACTED] report</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> The approved minutes of the February 2023 local AWERB meeting was received and noted.
<p>10.</p>	<p><u>Local AWERB – [REDACTED] report</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> The approved minutes of the January 2023 local AWERB meeting was received and noted.
<p>11.</p>	<p><u>Review of Use of Animals policy project - [REDACTED]</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> One application for a research project involving animal work to be undertaken abroad, that would fall under the auspices of ASPA if the work were taking place in the UK, was considered. Members noted that the facility where the proposed project would take place was AAALAC accredited, and that the accommodation standards in the facility were in accordance with the accommodation standards specified in the ASRU code of practice. Several representatives from the facility attended the meeting in order to answer questions from members and provided a helpful description of the positive reinforcement protocol used by the facility. Members carefully considered a range of issues linked to the proposed work and noted that it would be helpful to receive additional information regarding some aspects of the experimental design and the basis for the estimation of the number of animals required, and how the blinding of random allocation would be upheld. Provided that satisfactory answers were received to the various points raised, members agreed that the AWERB would be content to support the programme of work proposed in the application, in light of the project's potential to lead to significant long-term benefits through the development of treatments for [REDACTED], a disease that results in considerable morbidity and premature mortality, and currently lacks satisfactory treatment options. <p><u>Actions</u></p> <ul style="list-style-type: none"> AWERB Administrator to email summary of committee's feedback to the applicant. Following circulation of the additional information requested to members, Central AWERB Chair to liaise with the Provost regarding the project and

	the various issues discussed by AWERB in order to assist the Provost in his decision as to the acceptability of conducting the proposed project abroad.
12.	<u>A.O.B</u> None identified.

Dates of next meetings:

17 July 2023	13.30-16.30	Virtual
11 Sept 2023	13.30-16.30	Virtual
10 Nov 2023	09.30-12.30	Virtual
16 Jan 2024	13.30-16.30	Virtual
19 March 2024	13.30-16.30	Virtual
21 May 2024	09.30-12.30	Virtual
23 July 2024	13.30-16.30	Virtual

Local Animal Welfare and Ethical Review Body (AWERB) – [REDACTED]

10.30 – 13.00 16 August 2021
Microsoft Teams meeting

Minutes

Present:

Function	Name	Position
Chair	[REDACTED]	College academic
Member	[REDACTED]	College Academic
Member	[REDACTED]	PhD student representative
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon (NVS) Named Animal Care and Welfare Officer for the site (NACWO)
<i>Ex officio</i> Member	[REDACTED]	Site Manager & Named Information Officer
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon Service (dNVS)
In attendance	[REDACTED]	CBS Meeting and Support Administrator
Attending as secretary	[REDACTED]	AWERB Administrator and Named Information Officer

Apologies:

Function	Name	Position
Vice Chair	[REDACTED]	College academic and 3Rs Group Representative
Member	[REDACTED]	College Academic
Member	[REDACTED]	College Academic
Member	[REDACTED]	Post-doctoral representative
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon Service (dNVS)

Item**Introductions**

- The Chair welcomed [REDACTED] a recently appointed NVS, to his first meeting.

1. Members' declarations of interest in respect of items on the agenda

None identified

2. Minutes and matters arising**Points to note**

- The minutes of the previous meeting were agreed.
- Updates were given on actions from the previous meeting.

3. Review of licence amendment - [REDACTED]**Points to note**

- An application for a new project licence was considered.
- The licence was to continue a program of work covered by a project licence due to expire later in the year.
- The committee was content with the programme of work proposed in the draft application, subject to various minor revisions requested by the committee.
- The committee carried out a retrospective review of the expired PPL in parallel with consideration of the new application.
- The AWERB was pleased to note that the licence holder was using a range of reduction, replacement and refinement strategies in her work. In particular, members noted that the group had developed a number of approaches using human models of [REDACTED] and had also developed a model of [REDACTED] that permitted longitudinal evaluation of [REDACTED]; this approach was now being successfully adopted by other groups elsewhere.

Decisions

- The application was approved for submission to the Home Office, subject to the inclusion of the revisions requested by the committee.
- The revised submission will be approved by Chair's action.
- The mid-term review for this PPL should be set to the mid-point of the licence.

Actions

- AWERB administrator to email summary of committee's feedback and required revisions to the applicant.

4. Response to Interim Review feedback [REDACTED] – Monitoring procedures for Ageing animals**Points to note**

- The AWERB noted that the additional information provided by the project licence holder was very helpful and informative and agreed that it would be very helpful if this information could be shared with college's other AWERBs for information purposes.

Actions

- AWERB administrator to contact the licence holder to thank him for providing this very helpful supplementary report and to request his permission to share the report with college's other AWERBs.

5. **Report from Central AWERB**

Points to note

- The approved minutes of the May central AWERB meeting were noted and a verbal update was also provided regarding items of particular interest discussed at the July central AWERB meeting.

6. **Regular report on applications submitted, self-reporting and compliance notices**

Points to note

- The regular report was noted.

7. **CBS updates**

Points to note

- The Site Manager informed the committee that a replacement facility manager for the [REDACTED] facility had recently been recruited and the successful candidate was expected to commence their appointment before the end of the year.

8. **A.O.B**

Item discussed: Submission of poor quality draft project licence applications for review

Points to note

- The NVS advised members that he was currently in the process of reviewing a replacement project licence application and was concerned that the licence holder's current PPL would expire before the new licence was granted. He noted that the applicant had submitted an incomplete first draft and despite the applicant being provided with advice regarding how to structure his application, the second draft had not taken note of the requirements for new style ASPeL applications and was very difficult to assess, particularly from the scientific perspective.

Decisions

- Following discussion, members agreed that it was not reasonable to expect the NVS to carry out multiple further reviews of this application, and once he had provided comments on the third draft of the application, the licence should proceed for scientific review, once the applicant had revised the draft in response to the NVS's comments.
- Members also agreed that the licence holder should be advised that he should take appropriate steps to ensure that no further long term studies were initiated that could not be completed prior to the end date of his current licence.

Actions

- AWERB administrator to advise licence holder that a replacement licence was unlikely to be granted prior to expiry of his current licence and that he should plan accordingly.

Dates of next meetings:

13 th September 2021	10.30-13.00
11 th October 2021	10.30-13.00
11 th November 2021	13.30-16.00
6 th December 2021	10.30-13.00

13.30 – 15.30 16th August 2022
MS Teams

Minutes

Present:

Function	Name	Position
Chair	[REDACTED]	College academic
Co Vice-Chair	[REDACTED]	College academic
Member	[REDACTED]	College academic
<i>Ex officio</i> Member	[REDACTED]	College academic and 3Rs Group Representative
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon (NVS) Named Animal Care and Welfare Officer (NACWO) for the site & Named Information Officer (NIO)
<i>Ex officio</i> Member	[REDACTED]	
Member	[REDACTED]	Post-doctoral representative CBS Meeting and Support Administrator and lay member with no responsibilities under ASPA
Member	[REDACTED]	
Member and attending as secretary	[REDACTED]	AWERB Administrator and member with no responsibilities under ASPA

Apologies:

Function	Name	Position
Co Vice-Chair	[REDACTED]	College academic
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon (NVS) 3Rs programme manager and 3Rs Group Representative
<i>Ex officio</i> Member	[REDACTED]	
<i>Ex officio</i> Member	[REDACTED]	Co-Chair 3Rs Advisory Group

Item

1. **Members' declarations of interest in respect of items on the agenda**

Points to note

- [REDACTED] declared an interest in Agenda item 3 as the "named alternative contact" for the project licence undergoing consideration. He noted that he would recuse himself from the AWERB's deliberations and decision making for this agenda item

2. **Minutes and matters arising**

Points to note

- The minutes of the previous meeting were agreed.
- Updates were given on actions from the previous meeting.

3. **Review of licence application amendment – [REDACTED]**

Points to note

- An application for an amendment to a project licence was considered.
- [REDACTED] recused himself from the decision making process for this agenda item; he left the meeting prior to the pre-presentation discussion and again following the PPL holder presentation, returning only when discussion of this item had concluded.
- The committee was content with the additional programme of work proposed in the amendment subject to a small number of revisions requested by the committee.

Decisions

- The application was approved for submission to the Home Office, subject to the inclusion of the revisions requested by the committee.
- The revised submission will be approved by Chair's action.

Actions

- AWERB administrator to email summary of committee's feedback and required revisions to the licence holder.

4. **Report from Central AWERB**

Points to note

- The approved minutes of the March central AWERB meeting were noted.
- A verbal update was also provided regarding items of particular interest discussed at the May central AWERB meeting.

5. **Regular report on applications submitted, self-reporting and compliance notices**

Points to note

- The regular report was noted.

6. **Welfare Update Report – [REDACTED]**

Points to note

- The AWERB considered a report on the outcome of a pilot experiment involving [REDACTED].
- This had been submitted by the project licence holder in response to a reporting requirement set by the AWERB when the project licence application had been considered by members prior to submission to ASRU. Given the potential adverse effects associated with this technique, members had requested that the licence holder submit a report, detailing the outcome of the procedures conducted on the first pilot cohort of animals, prior to any subsequent studies involving this model being initiated.

- Members were pleased to note that no unexpected adverse effects had occurred during the study and that the preliminary results obtained during the pilot study indicated that the use of this method was suitable to evoke a [REDACTED].

Decisions

- Members were content for the project licence holder to continue using this methodology in their programme of work.

Actions

- AWERB administrator to email summary of committee's feedback to the licence holder.

7. Interim review – [REDACTED]

Points to note

- One interim review of an ongoing project was considered by the committee.
- A copy of the licence had been circulated to members for information to assist with carrying out the review.
- The AWERB was pleased to note that the reported actual severities were predominantly less severe than those originally anticipated and that the animal numbers used to date were well within the limits originally anticipated.

Actions

- AWERB Administrator to email summary of committee's feedback to the licence holder.

8. Interim review – [REDACTED]

Points to note

- One interim review of an ongoing project was considered by the committee.
- A copy of the licence had been circulated to members for information to assist with carrying out the review.
- The AWERB noted that this was a comprehensive and very well written review and that the group had made good progress in achieving the objectives of the programme of work.
- The committee noted the group's extensive ongoing efforts with regards to 3Rs implementation. Members were very pleased to read about the development and use of [REDACTED] cells grown from progenitors present in human blood samples and how this had replaced the need for the use of animals in some components of the programme of work. The AWERB was particularly pleased that the group had published this methodology in order to help disseminate this to other researchers in the field.
- Members were also interested in the fact that the group had been able to use a much lower dose of LPS than that published in the literature, thus reducing the adverse effects linked to its administration.

Actions

- AWERB Administrator to email summary of committee's feedback to the licence holder.
- Chair of the 3Rs advisory group to contact the licence holder to see if the lower dose LPS approach could be applicable to other researchers using LPS.

9. Interim review – [REDACTED]

Points to note

- One interim review of an ongoing project was considered by the committee.
- A copy of the licence had been circulated to members for information to assist with carrying out the review.

- The AWERB noted that this was a thorough, well written review and that the licence holder had made good progress in achieving some of the objectives set out in the programme of work and that several papers had already been published to date.
- Members observed that other than the breeding of genetically altered zebrafish, the fish programme of work only involved the use of zebrafish larvae at non-sentient stages.
- Members were content to see that the reported actual severity limits were predominantly in line with those originally anticipated but asked that project licence holder be requested to check some information in the table of animal numbers.

Actions

- AWERB Administrator to email summary of committee's feedback to the licence holder.

10. Interim review – [REDACTED]

Points to note

- One interim review of an ongoing project was considered by the committee.
- A copy of the licence had been circulated to members for information to assist with carrying out the review.
- The AWERB noted that this was another thorough, well written review and that the licence holder had made very good progress in achieving a number of the objectives set out in the programme of work and had already published a number of papers arising from the work carried out under the licence.
- Members were pleased to note that the reported actual severity limits were predominantly in line or less severe than those originally anticipated and that the animal numbers used to date were well within the limits originally anticipated.
- The AWERB was particularly pleased to note that the group had been able to reduce the overall severity of the research programme by using only a mild severity protocol for Allergic Airway Inflammation and had avoided the need to use the moderate severity Experimental Autoimmune Encephalitis protocol in order to examine the potential of parasite products to treat inflammatory disorders.

Actions

- AWERB Administrator to email summary of committee's feedback to the licence holder.

11. CBS updates

Points to note

- Members were provided with an update regarding changes to the NVS team and to the NACWO team at [REDACTED]
- Members were also updated regarding a forthcoming inspection by the HSE of the CL3 area.

12. A.O.B

Item discussed: New ASRU Standard Breeding Protocols

Points to note

- The Chair advised members that ASRU had recently revised the wording of the standard breeding protocols for genetically altered rodents and zebrafish. A copy of the revised templates had been included for members' information in the supplementary paper pack circulated for the last meeting.
- The protocols had been updated to include more refined approaches and were formatted according to the new-style ASPeL project licence application.
- The protocols had been revised to address the issue of non-procedural related deaths. In order to prevent standard condition 18 reports being submitted for non-procedural

related adverse effects, especially those related to the background strain and not to the genotype, the following wording had been included in the GA animal protocols:

- Animals are not expected to die because of any authorised genetic alteration. A small number of animals, living beyond the neonatal period (5 days for mice and rats – before which ASRU does not require you to report any mortality), may suddenly and unexpectedly die having shown no preceding clinical signs indicative of impending death. Unless otherwise indicated, such deaths, should they occur, are unlikely to be related to the genotype. However, as per the published ASRU Advice Note on Severity Assessment of GA animals, should the mortality rate (age-matched) of the genetically altered strain rise beyond that present in the background source breeding colony, this will be reported under PPL standard condition 18.
- ASRU had advised that Establishments should ensure that these new standard protocols were used with immediate effect in new project applications that include breeding and maintenance of GA animals and that licence holders should update the GA protocols when project amendments are submitted in ASPeL.
- For new project applications and amendments already submitted, ASRU would include an additional condition with the above wording unless the application is returned with comments in which case applicants will be asked to replace the GA protocols with the new ones.
- For standard condition 18 reports that are submitted for non-procedural related adverse effects, ASRU will return the report with the above wording and indicate that an additional condition will be added to the project application. Project licence holders will be asked to submit a project amendment to enable ASRU to add the additional condition to the project licence therefore preventing unnecessary SC18 reports.

Dates of next meetings:

13 th September 2022	13.30-16.30
18 th October 2022	13.30-16.30
8 th November 2022	13.30-16.30
5 th December 2022	13.30-16.30

Imperial College London

Local Animal Welfare and Ethical Review Body (AWERB) – [REDACTED]

10.30 – 13.00 17 January 2022
Microsoft Teams meeting

Minutes

Present:

Function	Name	Position
Chair	[REDACTED]	College academic
Vice Chair	[REDACTED]	College academic and 3Rs Group Representative
Member	[REDACTED]	College academic
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon (NVS)
<i>Ex officio</i> Member & deputizing for [REDACTED]	[REDACTED]	Named Animal Care and Welfare Officer for the site (NACWO) & NIO
In attendance	[REDACTED]	Named Animal Care and Welfare Officer for the site (NACWO)
In attendance	[REDACTED]	Named Animal Care and Welfare Officer for the site (NACWO)
In attendance	[REDACTED]	Named Animal Care and Welfare Officer for the site (NACWO)
In attendance	[REDACTED]	3Rs Programme Manager
In attendance	[REDACTED]	CBS Meeting and Support Administrator
Attending as secretary	[REDACTED]	AWERB Administrator

Apologies:

Function	Name	Position
Member	[REDACTED]	College Academic
Member	[REDACTED]	Post-doctoral representative
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon (NVS)
<i>Ex officio</i> Member	[REDACTED]	Site Manager & Named Information Officer (NIO)
<i>Ex officio</i> Member	[REDACTED]	Named Animal Care and Welfare Officer for the site (NACWO) & NIO

Item**Introduction**

The Chair welcomed the [REDACTED] facility manager to her first meeting and thanked [REDACTED], [REDACTED], [REDACTED] and [REDACTED] for attending the meeting.

1. Members' declarations of interest in respect of items on the agenda**Points to note**

- [REDACTED] declared an interest in Agenda item 3 by virtue of the fact that she worked in the group whose project licence application was being considered. She noted that she would recuse herself from the AWERB's discussion and decision making for this item.

2. Minutes and matters arising**Points to note**

- The minutes of the previous meeting were agreed.
- Updates were given on actions from the previous meeting.

3. Review of licence application – [REDACTED]**Points to note**

- An application for a new project licence was considered.
- [REDACTED] recused herself from the decision making process for this agenda item; she left the meeting prior to discussion of the item, returning only when discussion of this item had concluded.
- The application was to continue a program of work covered by a PPL that was due to expire in June.
- The committee was content with the programme of work proposed in the draft application, subject to some minor revisions requested by the committee.
- The committee carried out a retrospective review of the expired PPL in parallel with consideration of the new application.
- The AWERB was pleased to note that the licence holder was using a range of reduction, replacement and refinement strategies in his work. In particular, members noted the group's use of *in vitro* mapping studies prior to *in vivo* work, the adoption of [REDACTED] set up for [REDACTED] measurements and the use of video recordings for behavioural studies.

Decisions

- The application was approved for submission to the Home Office, subject to the inclusion of the minor revisions requested by the committee.
- The revised submission will be approved by Chair's action.
- The mid-term review for this PPL should be set to the mid-point of the licence.

Actions

- AWERB Administrator to email summary of committee's feedback and required revisions to the applicant.

4. Review of licence application – [REDACTED]**Points to note**

- An application for a new project licence was considered.

- The application was to continue a program of work that was due to expire shortly.
- The committee was content with the overall programme of work proposed but discussed a number of revisions that the AWERB would require to be implemented in the draft application, prior to approving the application for formal submission to the Home Office.
- The committee carried out a retrospective review of the expired PPL in parallel with consideration of the new application.

Decisions

- The application was approved for submission to the Home Office, subject to the inclusion of the revisions requested by the committee.
- The project licence holder would be required to submit a management plan describing the steps he would put in place to ensure that all personal licence holders working under his licence adhere to the controls and limits defined in his project licence prior to final approval of his licence application.
- The revised submission will be approved by Chair's action following re-review by the NVS.
- The mid-term review for this PPL should be set to the mid-point of the licence.

Actions

- AWERB administrator to email summary of committee's feedback and required revisions to the applicant.

5. Retrospective review – [REDACTED]

Points to note

- One retrospective review of a project licence that had recently expired was considered.
- A copy of the licence had been circulated to members for information to assist with carrying out the review.
- Members noted that this was a comprehensive and thorough review and that the group had made good progress in achieving the objectives of the programme of work and that several papers had been published from work that had taken place under the licence.

Actions

- AWERB Administrator to email summary of committee's feedback to the applicant.

6. Interim review – [REDACTED]

Points to note

- One interim review of an ongoing project was considered by the committee.
- A copy of the licence had been circulated to members for information to assist with carrying out the review.
- The AWERB noted that several papers had already been published as a result of the work carried out under the licence to date and that the actual severity of the procedures undertaken had been in line or less severe than those originally anticipated.

- The AWERB noted that the licence holder was using a range of reduction, replacement and refinement strategies in his work and members were particularly pleased to note the way that the group had worked closely with the veterinary team to refine the outcomes of their surgical techniques.

Actions

- AWERB Administrator to email summary of committee's feedback to the licence holder.

7. **Review of licence application –** [REDACTED]

Points to note

- An application for a new project licence was considered.
- The committee was content with the programme of work proposed in the draft application, subject to a number of revisions requested by the committee.

Decisions

- The application was approved for submission to the Home Office, subject to the inclusion of the revisions requested by the committee.
- The revised submission will be approved by Chair's action.
- The mid-term review for this PPL should be set to the mid-point of the licence.

Actions

- AWERB administrator to email summary of committee's feedback and required revisions to the applicant.

8. **CBS updates**

- Nothing to report.

9. **A.O.B**

Item discussed: AWERB membership update

Points to note

- The Chair informed members that he was pleased to announce that a new PhD student member had been recruited to join the local AWERB and he hoped that she would be able to attend the next meeting of the committee.
- The Chair proposed that revisions should be made to the attendance status of two local AWERB meeting attendees in order to accord them full membership rights.

Decisions

- Members agreed that [REDACTED] and [REDACTED] should henceforth become full members of the local AWERB (in the ASRU membership category "members who do not have any responsibilities under ASPA").

Actions

- AWERB administrator to amend the attendance list accordingly.

Dates of next meetings:

14th February 2022 10.30-13.00

14 th March 2022	10.30-13.00
11 th April 2022	10.30-13.00
12 th May 2022	13.30-16.00
20 th June 2022	10.30-13.00
21 st July 2022	13.30-16.00

Central Animal Welfare and Ethical Review Body (AWERB)

14:00 – 17.00 17 May 2021 (Meeting 4)

MS Teams

Present:

Function	Name	Position
Chair	[REDACTED]	Senior College academic
Vice-chair	[REDACTED]	Lay person
<i>Ex officio</i> Member	[REDACTED]	Establishment Licence Holder
<i>Ex officio</i> Member	[REDACTED]	Chair of the Local AWERB – [REDACTED]
<i>Ex officio</i> Member	[REDACTED]	Director of Bioservices
<i>Ex officio</i> Member	[REDACTED]	Chair of the 3Rs Advisory Group
<i>Ex officio</i> Member	[REDACTED]	Director of Central Biomedical Services (CBS)
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon (NVS)
Member	[REDACTED]	Senior College Academic
<i>Ex officio</i> Member	[REDACTED]	Named Animal Care and Welfare Officer (NACWO)
Member	[REDACTED]	External Member
Member	[REDACTED]	External member
Member	[REDACTED]	Post-doctoral fellow representing the post-doctoral community
Member	[REDACTED]	PhD student representing the student community
Member	[REDACTED]	Lay person & Imperial Communications representative
In attendance	[REDACTED]	CBS Meeting and Support Administrator
Member and secretary	[REDACTED]	AWERB Administrator & Named Information Officer (NIO)

Apologies:

Function	Name	Position
<i>Ex officio</i> Member	[REDACTED]	Chair of the Local AWERB – [REDACTED]
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon service (dNVS)
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon (NVS)
Member	[REDACTED]	Senior College Academic
<i>Ex officio</i> Member	[REDACTED]	Named Training and Competency Officer (NTCO)
Member	[REDACTED]	Lay person
In attendance	[REDACTED]	Home Office Inspector
In attendance	[REDACTED]	Home Office Inspector

	<u>Item</u>
1.	<p><u>Members' declarations of interests in respect of items on the agenda</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> · None identified
2.	<p><u>Minutes and matters arising</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> · The minutes of the last meeting were agreed. · Updates were given on actions from the previous meeting.
3.	<p><u>Review of Harm-Benefit Analysis in the Use of Animals in Research: Summary of ASC Recommendations for AWERBs</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> · The AWERB considered the contents of the recently released Animals in Science Committee "Summary of recommendations for AWERBs" report. It was noted that these summary recommendations were based upon the earlier ASC Review of Harm benefit analysis in the use of animals in research (which had also been circulated to members in the supplementary paper pack for the meeting) and had attempted, in particular, to collate the key points that were particularly important for AWERBs to consider when evaluating project licence applications. · The committee noted that the original ASC Harm benefit review predated the major changes that had been incorporated in the new ASPeL version of the project licence application form; applicants were now expected to provide clearer information regarding some of the issues covered in the report which therefore made it easier for the AWERB and ASRU to address those parts of the harm-benefit analysis. · Members discussed several areas of interest covered by the report and particularly noted the discussion regarding the additional complexities involved in carrying out a harm benefit analysis on service type licences. <p><u>Decisions</u></p> <ul style="list-style-type: none"> · Members agreed that it was important for the AWERBs to bear these recommendations in mind when reviewing licences and that a supplementary point should be added to the Chair's briefing notes to ensure that the AWERB was formally asked at the end of each licence discussion whether members were content that the harms involved in the programme of work were justified in terms of the likely benefits. <p><u>Actions</u></p> <ul style="list-style-type: none"> · The AWERB administrator to update the Chairs' briefing templates for PPL applications to include an additional question regarding harm-benefit.

4.	<p><u>Director of CBS operational update</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> · The Director of CBS provided members with a verbal update. · In particular, he advised members regarding the CBS operational response with regards to COVID-19. All facilities were currently operating using additional precautions as necessary in order to comply with the latest government guidance; these measures were kept under regular review. · He also noted that delays in receiving supplies and some services were still occurring, probably due to the impact of Brexit on shipping and importation procedures. · The A-tune system had now been rolled out to all facilities and training documents for users were available on the CBS website. Additional training could also be arranged by contacting with the A-tune project manager. He advised that additional features would soon be made available to users to help improve accuracy and efficiency. · CBS had recently submitted its updated programme to AAALAC as part of the 3 yearly AAALAC re-accreditation process and a site visit by the AALAC auditing team would take place later in the year. · A review of the external designated rooms policy had been undertaken and Heads of Departments would be notified where room managers were not correctly documenting completion of tasks in accordance with the requirements of the policy. · CBS was progressing a number of measures in response to the actions agreed following the review of GA breeding that had taken place at the last central AWERB meeting. The [REDACTED] facility manager was in the process of developing guidance which would be rolled out as soon as possible.
5.	<p><u>Failure to submit PPL applications in a timely manner</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> · The AWERB was informed that some PPL holders were still not drafting replacement PPL applications in accordance with the timelines advised by the AWERB and the CBS QA Advisory group, despite the roll out of the new reminder system that encouraged project licence holders to apply for replacement licences in good time. This was not only putting undue pressure on the AWERB administration team and reviewers to fast track these late applications through the review process, frequently at the expense of other applications that had been submitted in a timely manner, but was also unfortunately resulting in some project licences expiring before replacement PPLs were granted, leading to a gap in authorities to carry out regulated work and the need to put in place steps to appropriately manage any animals held under the expiring licence. · Members discussed and considered potential solutions to the various issues identified and also discussed associated problems with some applicants failing to respond to reviewer and AWERB meeting feedback in a timely manner, leading to additional delays in the timeline for application submission. · It was noted that the AWERB had already put in place mechanisms to ensure that applicants were informed in good time regarding project licence renewals and the application process and timelines. It had also produced detailed guidance for applicants regarding the way that applications should be drafted

	<p>in order to meet ASRU requirements and this included contact details for the AWERB administrator, NVS team and NACWOs if applicants wished to obtain additional support through face to face meetings. The AWERB had also defined maximum time limits for the return of reviewer comments on submitted draft applications. It was therefore difficult to see what additional measures that college could put in place to further support licence holders with the drafting process.</p> <ul style="list-style-type: none"> · The AWERB also noted that the need to prioritise the 3Rs and animal welfare had meant that CBS had currently had no choice other than to allow licence holders to transfer breeding colonies to other appropriate licences, despite the CBS QA policy decision that project licence holders should not be permitted to do so. <p><u>Decisions</u></p> <ul style="list-style-type: none"> · The AWERB agreed that it was important for college to manage the risks associated with lack of PPL holder engagement with the licence application process. · PPL expiry reminder emails should in future highlight that PPL applicants will be expected to adhere to the timelines specified by college and that late submissions will not be prioritised even in cases where licences are therefore likely to expire prior to a new licence being granted. · In order to mitigate against potential 3Rs consequences that could arise from adopting this approach, the AWERB agreed that CBS will be authorised to take steps, as licences approach their expiry date, to ensure that no further animals can be mated or ordered. This policy will also be highlighted in the reminder emails to licence holders, in order that they fully understand the potential consequences to their work if they fail to submit their applications in good time. Licence holders should also be advised that the CBS QA policy regarding transfer of breeding colonies will also be enforced in cases where applicants have not submitted applications in good time. · Licence applicants should also be advised that they will be expected to respond in a timely manner to reviewer comments (normally no more than 1 month for extensive changes or two weeks for more minor changes) and to the feedback provided to applicants following the AWERB meeting. The AWERB should decide when discussing the application on the appropriate time frame that applicants should be given to respond to the AWERB comments on their application. <p><u>Actions</u></p> <ul style="list-style-type: none"> · The AWERB administrator to prepare a summary of the timelines for PPL submission and review, and for the management of ongoing animal work as discussed during the meeting, and to bring this back to the next meeting for final approval.
6.	<p><u>Regular report on applications submitted, self-reporting & compliance notices</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> · The regular report was noted, and the Director of CBS provided members with a short verbal update regarding reports of potential non-compliance. · Members discussed whether any additional steps could be taken to try to mitigate against recurrence of those types of potential non-compliance that had occurred on more than one occasion, focussing in particular on whether

	<p>any additional processes or systems could be deployed to improve compliance with project licence authorities.</p> <ul style="list-style-type: none"> The AWERB noted the opportunities that the further deployment of A-tune for the management of animal work might afford in providing customised IT alerts. Given the difficulty, cost and time associated with requesting Establishment specific changes to the A-tune software, the Provost proposed that CBS should consider investigating the possibility of a dedicated ICT 'IT champion' who might be able to devise some bespoke local mechanisms based on the data held withing A-tune, if A-tune were unable to provide additional functionality. Members noted the importance of project licence holders being routinely copied in on all communication from CBS staff to personal licence holders regarding welfare matters. <p><u>Actions</u></p> <ul style="list-style-type: none"> Director of CBS to liaise with ICT regarding identifying an 'IT champion' who could assist with advice regarding improving CBS software systems.
<p>7.</p>	<p><u>Communications update</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> In order to mark the 7^h anniversary of the concordat for openness in animal research, UAR had initiated a social media campaign entitled 'mouse week' and had run a campaign to highlight the importance of mice in research. College had participated in this, using its twitter feed to highlight some of the benefits that had arisen from the use of mice in research. An UAR workshop focusing on openness and best practise in animal research was due to take place this week.
<p>8.</p>	<p><u>3Rs group update</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> The Chair of the 3Rs advisory group informed members that the annual Animal Research Forum was scheduled to take place on the 16th September; [REDACTED] would be delivering the keynote lecture. The winners of the various categories of the Provost's Awards for Excellence in Animal Research had now been selected and informed and would be presented with their prizes during the Animal Research Forum. In light of the dedication to animal welfare displayed by all CBS staff during the pandemic, a decision had been made to dedicate the prize for 'Application of the 3Rs, CBS staff' category jointly to all CBS staff to highlight the commitment and dedication that CBS staff had demonstrated during the Covid-19 pandemic and the exceptional circumstances that college had faced over the past year. The 3Rs Hub was in the process of appointing 'initiative leads' to help take forward 3Rs related initiatives in college.

<p>9.</p>	<p><u>Local AWERB – [REDACTED]</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> · The approved minutes of the February 2021 local AWERB meeting were received and noted. · The [REDACTED] local AWERB chair also updated members regarding recent discussions by the AWERB on the potential use of study plans and on a presentation from the veterinary services team on the use of multimodal analgesia.
<p>10.</p>	<p><u>Local AWERB – [REDACTED]</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> · The approved minutes of the February and March 2021 local AWERB meetings were received and noted.
<p>11.</p>	<p><u>AWERB meeting format following the lifting of government restrictions</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> · Given the possibility that the current government COVID restrictions would be lifted by the start of the next academic year, the Chair canvassed member preferences with regards to the format of AWERB meetings for the next academic year. · Members considered the advantages and disadvantages of ‘in person’ and virtual meetings and agreed that holding meetings online had not adversely impacted on AWERB’s ability to carry out its duties effectively. · It was noted that one key benefit of virtual meetings was that it enabled members and licence applicants to attend meetings even when other commitments, such as conferences held outside of college, prevented on campus attendance. <p><u>Decisions</u></p> <ul style="list-style-type: none"> · Members agreed that most, if not all, meetings for the next academic year should continue to be held virtually but that the AWERB would consider holding one ‘in person’ meeting at a convenient opportunity during the spring or summer term.
<p>12.</p>	<p><u>A.O.B</u></p> <p><u>Item discussed: AAALAC re-accreditation</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> · The AAALAC re-accreditation team will visit all CBS facilities in August 2020 as part of the re-accreditation process. · Meetings will be set up with various AWERB members to meet the AAALAC team once their visit itinerary has been finalised.

Dates of next meetings:

19 July 2021	14.00-17.00	Virtual – MS Teams
21 September 2021	14.00-17.00	Virtual – MS Teams
19 January 2022	14.00-17.00	TBC
16 March 2022	14.00-17.00	TBC
16 May 2022	14.00-17.00	TBC
18 July 2022	14.00-17.00	TBC

Imperial College London

Central Animal Welfare and Ethical Review Body (AWERB)

13:30 – 16:30 17 July 2023 (Meeting 5)

MS Teams

Present:

Function	Name	Position
Chair	[REDACTED]	Senior College academic
Vice-chair	[REDACTED]	Lay person
<i>Ex officio</i> Member	[REDACTED]	Establishment Licence Holder
<i>Ex officio</i> Member	[REDACTED]	Director of Bioservices
<i>Ex officio</i> Member	[REDACTED]	Chair of the Local AWERB – [REDACTED]
<i>Ex officio</i> Member	[REDACTED]	Chair of the Local AWERB – [REDACTED]
<i>Ex officio</i> Member	[REDACTED]	Chair of the 3Rs Advisory Group
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon Service (dNVS)
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon (NVS)
<i>Ex officio</i> Member	[REDACTED]	Named Animal Care and Welfare Officer (NACWO) & Named Information Officer (NIO)
<i>Ex officio</i> Member	[REDACTED]	Named Training and Competency Officer (NTCO)
Member	[REDACTED]	Senior College academic and biostatistician
Member	[REDACTED]	External Member
Member	[REDACTED]	External Member
Member	[REDACTED]	Post-doctoral fellow representing the post-doctoral community
Member	[REDACTED]	CBS Meeting and Support Administrator and lay member with no responsibilities under ASPA
Member and secretary	[REDACTED]	AWERB Administrator and member with no responsibilities under ASPA

Apologies:

Function	Name	Position
<i>Ex officio</i> Member	[REDACTED]	Director of Central Biomedical Services (CBS)
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon (NVS)
Member	[REDACTED]	External Member
Member	[REDACTED]	Lay person & Imperial Communications representative
Member	[REDACTED]	PhD student representing the student community

	<u>Item</u>
1.	<p><u>Members' declarations of interests in respect of items on the agenda</u></p> <p>None identified.</p>
2.	<p><u>Minutes and matters arising</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> • The minutes of the last meeting were agreed. • Updates were given on actions from the previous meeting. With respect to the action linked to the Update on progress of actions following the review of breeding practices, the Chair advised members that copies of the recently drafted CBS Transgenic Mouse Breeding Best Practice guidance document and the CBS Breeding Policies document had been circulated for information to members in the supplementary paper pack.
3.	<p><u>Review of licence application – [REDACTED]</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> • An application for a new project licence was considered. • The committee was content with the overall programme of work proposed but discussed a number of revisions that the AWERB would require to be implemented in the draft application, prior to approving the application for formal submission to the Home Office. <p><u>Decisions</u></p> <ul style="list-style-type: none"> • The application was approved for submission to the Home Office, subject to the inclusion of the revisions requested by the committee. • The revised submission will be approved by Chair's action. • The first interim review for this PPL should be set to 12 months after work commences under the licence. <p><u>Actions</u></p> <ul style="list-style-type: none"> • AWERB administrator to email summary of committee's feedback and required revisions to the applicant.
4.	<p><u>Interim review – [REDACTED]</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> • One interim review of a project licence containing a protocol with a severe severity limit was considered by the committee. • A copy of the licence had been circulated to members for information to assist with carrying out the review. • The AWERB noted that the licence holder had made some progress in achieving the objectives set out in the programme of work and was pleased to see that the reported actual severity limits were less severe than those originally anticipated. However, the committee noted several inconsistencies regarding the numbers of animals used in the report and felt that it would be helpful if some additional information could be provided to clarify these, together with a summary of future plans for experiments, given that only a very limited amount of work had taken place to date. • The AWERB was pleased to note that work had been published on the use of [REDACTED] models and that the use of [REDACTED] organoid models was also being evaluated. <p><u>Actions</u></p>

	<ul style="list-style-type: none"> • AWERB administrator to email summary of committee's feedback to the licence holder.
5.	<p><u>Regular report on applications submitted, self-reporting & compliance notices</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> • The regular report was noted.
6.	<p><u>Chair update on the April Animals in Science Committee AWERB Hub Workshop</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> • The Chair provided members with a verbal update on the discussions that had taken place at the last Animals in Science Committee AWERB Hub workshop. In particular, she drew members attention to the NC3Rs two self-assessment tools, one for Institutions and the other for research groups, and how these could be used for both benchmarking and as a tool to collate and track 3Rs activities over time. • The Chair of the 3Rs Advisory Group informed members that the 3Rs programme manager had already completed the Institutional self-assessment tool and proposed that it would be helpful for the information from that assessment to be shared with AWERB. <p><u>Actions</u></p> <ul style="list-style-type: none"> • Chair of the 3Rs advisory group to liaise with the 3Rs programme manager and provide a copy of the Institutional self-assessment for consideration by the AWERB.
7.	<p><u>Communications update</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> • As part of efforts to raise awareness of Imperial's animal research internally, the <i>Imperial People</i> internal communications campaign is featuring people involved in animal research at Imperial. The first animal research-related profile, a CBS animal technician, had been published in June. • The Home Office published its report on the 2022 animal research statistics for Great Britain on 13th July. Imperial worked with Understanding Animal Research on a collaborative press release around these statistics, as one of the ten organisations that carry out the most animal research in the UK (the College was tenth on the list). Imperial also joined other Concordat signatories in taking part in a related social media campaign on the same day.
8.	<p><u>3Rs Advisory group update</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> • The Chair of the 3Rs Advisory Group informed members that the annual Animal Research Forum was expected to take place in November 2023, at the ██████████ Campus. • The prize winners of the Provost's Awards for Excellence in Animal Research had been selected. • The 3Rs Advisory Group had been considering and mapping out a strategic vision for its activities for the next 10-year period. This was due to be discussed at the next meeting of the Governance Board for Animal Research and the Chair of the 3Rs Advisory Group would update the AWERB following those discussions.

<p>9.</p>	<p><u>Local AWERB – [REDACTED] report</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> The approved minutes of the April and May 2023 local AWERB meetings were received and noted.
<p>10.</p>	<p><u>Local AWERB – [REDACTED] report</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> The approved minutes of the April 2023 local AWERB meeting were received and noted.
<p>11.</p>	<p><u>A.O.B</u></p> <p><u>Item discussed: AWERB membership</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> The Chair advised members that [REDACTED], the post-doctoral representative member representing the post-doctoral community on cAWERB, had informed her that she would be leaving college shortly, in order to take up an academic lectureship position elsewhere. The Chair extended her thanks to [REDACTED] for her contribution to the work of the AWERB over her period of membership of the committee. She was particularly pleased to inform members that [REDACTED] was keen to continue her involvement with AWERB and had kindly agreed to join the [REDACTED] local AWERB, as an external member, with effect from the start of the new academic year. The Chair also advised members that [REDACTED] had informed her that he would be finishing his PhD in January and would therefore need to step down as the PhD student representative member at that time. <p><u>Decisions</u></p> <ul style="list-style-type: none"> Information regarding the opportunity for suitably qualified post-doctoral researchers and PhD students to serve as central AWERB members should be circulated to all PPL and PIL holders. Interested candidates should be advised to contact the central AWERB Chair, explaining why they were interested in taking on the role and what they believed they could contribute to the work of the central AWERB. <p><u>Actions</u></p> <ul style="list-style-type: none"> AWERB administrator/CBS Meeting and Support Administrator to arrange for CBS to circulate all PPL and PIL holders regarding these central AWERB vacancies at the start of the autumn term.

Dates of next meetings:

11 Sept 2023	13.30-16.30	Virtual
10 Nov 2023	09.30-12.30	Virtual
16 Jan 2024	13.30-16.30	Virtual
19 March 2024	13.30-16.30	Virtual
21 May 2024	09.30-12.30	Virtual
23 July 2024	13.30-16.30	Virtual

Imperial College London

Local Animal Welfare and Ethical Review Body (AWERB) – [REDACTED]

11.00 – 13.00 17 November 2022
Microsoft Teams meeting

Minutes

Present:

Function	Name	Position
Chair	[REDACTED]	College academic
Member	[REDACTED]	College academic
Member	[REDACTED]	College academic
Member	[REDACTED]	College academic
Member	[REDACTED]	3Rs programme manager and 3Rs Group Representative
Member	[REDACTED]	PhD student representative
<i>Ex officio Member</i>	[REDACTED]	Named Animal Care and Welfare Officer for the site (NACWO) & NIO
<i>Ex officio Member</i>	[REDACTED]	Named Animal Care and Welfare Officer for the site (NACWO)
<i>Ex officio Member</i>	[REDACTED]	Named Veterinary Surgeon (NVS)
<i>Ex officio Member</i>	[REDACTED]	Named Veterinary Surgeon (NVS)
Member	[REDACTED]	CBS Meeting and Support Administrator and lay member with no responsibilities under ASPA
Member and attending as secretary	[REDACTED]	AWERB Administrator and member with no responsibilities under ASPA
In attendance	[REDACTED]	Training Officer & Named Training and Competency Officer (NTCO)
In attendance	[REDACTED]	Named Animal Care and Welfare Officer for the site (NACWO)

Apologies:

Function	Name	Position
Member	[REDACTED]	College academic
Member	[REDACTED]	College academic
<i>Ex officio Member</i>	[REDACTED]	Co-Chair 3Rs Advisory Group

Item**Introductions:**

- The chair welcomed [REDACTED] to her first meeting as the [REDACTED] Facility Manager.

1. Members' declarations of interest in respect of items on the agenda

None identified.

2. Minutes and matters arisingPoints to note

- The minutes of the previous meeting were approved.
- Updates were given on actions from the previous meeting. In particular, with regards to agenda item 3, the Chair advised members that [REDACTED] had produced a detailed report on the review of enrichment provided to singly housed mice held in [REDACTED] cabinets which she and the NVS had undertaken in conjunction with the PPL holder. Members were pleased to be informed that the named people were content that everything possible had already been put in place to refine the welfare experience for these mice.

3. Review of licence application – [REDACTED]Points to note

- An application for a new project licence was considered.
- The application was to continue a program of work that expires in March 2023.
- The committee was content with the overall programme of work proposed but discussed a number of revisions that the AWERB would require to be implemented in the draft application, prior to approving the application for formal submission to the Home Office.
- The committee carried out a retrospective review of the expiring PPL in parallel with consideration of the new application.
- The AWERB was also pleased to note the group's ongoing efforts with regards to 3Rs implementation.

Decisions

- The application was approved for submission to the Home Office, subject to the inclusion of the revisions requested by the committee.
- The revised submission will be approved by Chair's action.
- The mid-term review for this PPL should be set to the mid-point of the licence.

Actions

- AWERB administrator to email summary of committee's feedback and required revisions to the applicant.

4. Review of licence application – [REDACTED]Points to note

- An application for a new project licence was considered.
- The application was to continue a program of work that expires in April 2023.
- The committee was content with the overall programme of work proposed but discussed a number of revisions that the AWERB would require to be implemented in the draft application, prior to approving the application for formal submission to the Home Office.

- The committee carried out a retrospective review of the expiring PPL in parallel with consideration of the new application and noted that this was a comprehensive and high-quality review.
- The AWERB was pleased to read about the group's ongoing efforts with regards to 3Rs implementation. As well as noting the parallel programme of work in [REDACTED], members were particularly interested to learn about the group's development of an *in vitro* [REDACTED] organoid system and the willingness to share the protocols for establishing these.
- Members were pleased to note the thorough responses to the questions in the breeding and maintenance of GA animals annex and were pleased to see the considered approach adopted by the group to monitoring and refining breeding practices and were particularly interested to read about the use of [REDACTED] as a tracking and monitoring system.

Decisions

- The application was approved for submission to the Home Office, subject to the inclusion of the revisions requested by the committee.
- The revised submission will be approved by Chair's action.
- The mid-term review for this PPL should be set to the mid-point of the licence.

Actions

- AWERB administrator to email summary of committee's feedback and required revisions to the applicant.

5. Interim Review - [REDACTED]

Points to note

- One interim review of an ongoing project was considered by the committee.
- A copy of the licence had been circulated to members for information to assist with carrying out the review.
- The AWERB noted that this was a clearly written review and that the licence holder had made good progress in achieving some of the objectives set out in the programme of work, and that two papers had already been published to date.
- Members were pleased to note actual severity limits were generally in line or less severe than those originally anticipated and that the animal numbers used to date were well within the limits originally anticipated. The committee was pleased to see the continuing efforts with regards to 3Rs refinement of procedures and that the group had been able to commence immunotherapy several days earlier than originally intended, thus shortening the overall duration of those experiments.

Actions

- AWERB Administrator to email summary of committee's feedback to the licence holder.

6. CBS updates

Points to note

- The [REDACTED] facility manager informed members that an ASRU inspection of the proposed [REDACTED] facility had just taken place and that the Inspector would be conducting a facility audit of [REDACTED] facility during the remainder of the day.

7. **A.O.B**

Item discussed: ASRU - Guidance Notes for Project Licence Applications

Points to note

- Members were advised that a copy of the Guidance Notes for Project Licence Applications recently issued by ASRU had been included for information in the supplementary papers.

Dates of next meetings:

15 th December 2022	11.00-13.30
19 th January 2023	10.30-13.30
13 th February 2023	13.30-16.00
14 th March 2023	13.30-16.00

Local Animal Welfare and Ethical Review Body (AWERB) – [REDACTED]

10.30 – 12.30 18^h January 2021
Microsoft Teams meeting

Minutes

Present:

Function	Name	Position
Chair	[REDACTED]	College academic
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon (NVS)
<i>Ex officio</i> Member	[REDACTED]	Site Manager & Named Information Officer
<i>Ex officio</i> Member	[REDACTED]	Named Animal Care and Welfare Officer for the site (NACWO)
Member	[REDACTED]	Post-doctoral representative
Member	[REDACTED]	PhD student representative
In attendance	[REDACTED]	Named Animal Care and Welfare Officer for the site (NACWO)
In attendance	[REDACTED]	CBS Meeting and Support Administrator
Attending as secretary	[REDACTED]	AWERB Administrator and Named Information Officer

Apologies:

Function	Name	Position
Vice Chair	[REDACTED]	College academic and 3Rs Group Representative
Member	[REDACTED]	College Academic
Member	[REDACTED]	College Academic
Member	[REDACTED]	College Academic
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon (NVS)
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon Service (dNVS)
In attendance	[REDACTED]	Home Office Inspector (HOI)
In attendance	[REDACTED]	Home Office Inspector (HOI)

Item**1. Members' declarations of interest in respect of items on the agenda**

None identified.

2. Minutes and matters arisingPoints to note

- The minutes of the previous meeting were agreed.
- Updates were given on actions from the previous meeting.

3. Review of licence amendment application –Points to note

- An application for a new project licence was considered.
- The licence was to continue a program of work covered by a licence due to expire in April.
- The committee was content with the programme of work proposed in the application subject to minor revisions requested by the committee.
- The committee carried out a retrospective review of the expiring PPL in parallel with consideration of the new application.
- The AWERB was pleased to note that the licence holder was using a range of reduction, replacement and refinement strategies in her work. In particular, members noted the extensive development and use of *ex vivo* assays and the thorough welfare monitoring regimen that had been adopted to avoid sudden mortality of a strain of mice being bred on a moderate breeding protocol.

Decisions

- The application was approved for submission to the Home Office, subject to the inclusion of the revisions requested by the committee.
- The revised submission will be approved by Chair's action.
- The mid-term review for this PPL should be set to the mid-point of the licence.

Actions

- AWERB administrator to email summary of committee's feedback and required revisions to the applicant.

4. Interim review –Points to note

- One interim review of an ongoing project was considered by the committee.
- A copy of the licence had been circulated to members for information to assist with carrying out the review.
- Members were pleased to observe that this was a thorough, well written review.
- Members requested clarification regarding the actual severity figures provided in the review.

Actions

- AWERB Administrator to email summary of committee's feedback to the applicant.

5. Interim review –

Points to note

- One interim review of an ongoing project was considered by the committee.
- A copy of the licence had been circulated to members for information to assist with carrying out the review.
- The AWERB was pleased to note that although only very limited animal work had been carried out to date, good progress had nonetheless been made towards achieving two of the objectives of the work covered by the project licence. Members were also pleased to note the comprehensive and considered evaluation of the actual severity of the procedures that had been undertaken.

Actions

- AWERB Administrator to email summary of committee's feedback to the applicant.
- NVS to contact the PPL holder to discuss the analgesia protocols described in the review.

6. CBS updates

Nothing to report.

7. A.O.B

None identified.

Dates of next meetings:

15 ^h February 2021	10.30-13.00
22 nd March 2021	10.30-13.00
19 ^h April 2021	10.30-13.00
24 ^h May 2021	10.30-13.00
14 ^h June 2021	10.30-13.00
12 ^h July 2021	10.30-13.00
16 ^h August 2021	10.30-13.00

13.30 – 16.00 18th April 2023
MS Teams

Minutes

Present:

Function	Name	Position
Chair	[REDACTED]	College academic
Member	[REDACTED]	College academic
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon (NVS) Named Animal Care and Welfare Officer (NACWO) for the site & Named Information Officer (NIO)
<i>Ex officio</i> Member	[REDACTED]	3Rs programme manager and 3Rs Group Representative
<i>Ex officio</i> Member	[REDACTED]	CBS Meeting and Support Administrator and lay member with no responsibilities under ASPA
Member	[REDACTED]	
Member and attending as secretary	[REDACTED]	AWERB Administrator and member with no responsibilities under ASPA
In attendance	[REDACTED]	Named Training and Competency Officer (NTCO)

Apologies:

Function	Name	Position
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon (NVS)
Co Vice-Chair	[REDACTED]	College academic
Co Vice-Chair	[REDACTED]	College academic

Item

1. **Members' declarations of interest in respect of items on the agenda**

None identified.

2. **Minutes and matters arising**

Points to note

- The minutes of the previous meeting were agreed.
- Updates were given on actions from the previous meeting.

3. **Review of licence amendment – Incoming Additional Establishment Availability Request**

Points to note

- An application for an amendment to a project licence was considered.
- The application had been submitted by a PPL holder who currently held a project licence at an external organisation in order to add additional availability at college.
- No authority to permit the transfer between Establishments of any animals that had undergone experimental procedures was requested in the amendment.
- The committee was content to approve the request for additional availability at college, subject to the compulsory use of study plans.

Decisions

- The amendment was approved for submission to the Home Office subject to some minor administrative revisions to the application.
- The approval was granted on the basis that:
 - the project licence holder would be required to meet with the NVS and facility managers to discuss the proposed plan of work prior to commencing any studies at college.
 - the licence holder would be required to submit a study plan outlining the experimental procedures to be applied and the monitoring processes and humane endpoints for each study, and initially these plans would need to be reviewed and agreed with the NVS, NACWO and NTCO prior to each study commencing.

Actions

- AWERB administrator to email summary of committee's feedback to the applicant.

4. **Interim review –**

Points to note

- One interim review of an ongoing project was considered by the committee.
- A copy of the licence had been circulated to members for information to assist with carrying out the review.
- The AWERB noted that the licence holder had made good progress in achieving some of the objectives set out in the programme of work and that several papers had already been published from work that had taken place under the licence.
- Members were pleased to observe that the animal numbers used to date were well within the limits originally anticipated and that the reported actual severity limits of the procedures undertaken had been predominantly in line with those originally anticipated.
- The committee was pleased to note the group's ongoing efforts with regards to 3Rs implementation and that the group had been increasing the computational side of the

work undertaken by the laboratory in order to test [REDACTED] parameters prior to their use *in vivo*.

- Members asked for additional information to be provided regarding the refinements that had been made to tail vein injection procedures carried out in conjunction with [REDACTED] application.

Actions

- AWERB Administrator to email summary of committee's feedback to the licence holder.

5. **Report from Central AWERB**

Points to note

- The approved minutes of the November Central AWERB meeting were noted.

6. **Regular report on applications submitted, standard condition 18 self-reporting and potential non-compliance reports**

Points to note

- The regular report was noted.

7. **CBS updates**

Points to note

- The facility manager provided members with an update regarding the facility refurbishment works that were due to commence shortly.

8. **A.O.B**

None identified

Dates of next meetings:

23 rd May 2023	13.30-16.30
20 th June 2023	13.30-16.30
24 th July 2023	13.30-16.30
22 nd August 2023	13.00-16.00

Imperial College London

Central Animal Welfare and Ethical Review Body (AWERB)

14:00 – 17:00 18 July 2022 (Meeting 6)

MS Teams

Present:

Function	Name	Position
Chair	[REDACTED]	Senior College academic
Vice-chair	[REDACTED]	Lay person
<i>Ex officio</i> Member	[REDACTED]	Establishment Licence Holder
<i>Ex officio</i> Member	[REDACTED]	Director of Bioservices
<i>Ex officio</i> Member	[REDACTED]	Chair of the Local AWERB – [REDACTED]
<i>Ex officio</i> Member	[REDACTED]	Chair of the Local AWERB – [REDACTED]
<i>Ex officio</i> Member	[REDACTED]	Chair of the 3Rs Advisory Group
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon (NVS)
<i>Ex officio</i> Member	[REDACTED]	Named Animal Care and Welfare Officer (NACWO) & Named Information Officer (NIO)
<i>Ex officio</i> Member	[REDACTED]	Named Training and Competency Officer (NTCO)
Member	[REDACTED]	External Member
Member	[REDACTED]	CBS Meeting and Support Administrator and lay member with no responsibilities under ASPA
Member and secretary	[REDACTED]	AWERB Administrator and member with no responsibilities under ASPA

Apologies:

Function	Name	Position
<i>Ex officio</i> Member	[REDACTED]	Director of Central Biomedical Services (CBS)
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon (NVS)
Member	[REDACTED]	External Member
Member	[REDACTED]	External Member
Member	[REDACTED]	Lay person & Imperial Communications representative
Member	[REDACTED]	Post-doctoral fellow representing the post-doctoral community
Member	[REDACTED]	PhD student representing the student community

	<p><u>Item</u></p> <ul style="list-style-type: none"> The Chair welcomed ■■■, who had kindly agreed to join cAWERB as an external member, to her first meeting.
1.	<p><u>Members' declarations of interests in respect of items on the agenda</u></p> <p>None identified</p>
2.	<p><u>Minutes and matters arising</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> The minutes of the last meeting were agreed. Updates were given on actions from the previous meeting. In particular, the Chair informed members that, following the discussion at the last meeting regarding the review of study plans for external researchers, the Director of CBS had written to her proposing a revised approach for the oversight of external PPLs and that discussions about this were ongoing.
3.	<p><u>Discussion item regarding a 3Rs Hub proposal to establish a training course on transgenic breeding strategies</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> The Chair of the 3Rs Advisory group advised members that members of the 3Rs Advisory group had been holding preliminary discussions regarding the potential to establish a training course on transgenic breeding strategies, run along similar lines to the existing course on experimental design for <i>in vivo</i> studies, in order to improve breeding efficiency and reduce animal numbers. Members discussed the currently available options for externally provided training courses in this area and the potential advantages to running a tailored course within in college. <p><u>Decisions</u></p> <ul style="list-style-type: none"> Members agreed that it would be helpful if the 3Rs Advisory group could conduct an options analysis, including projected costs, prior to further discussion on this item. <p><u>Actions</u></p> <ul style="list-style-type: none"> Chair of the 3Rs Advisory group to bring this item back to a future meeting once the options analysis had been completed.
4.	<p><u>ASRU Reform Programme: Full System Audit Processes, Evidence of Assessment of compliance against ASPA and licence conditions and Portfolios of Evidence</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> The Chair and the Director of Bioservices led a discussion on the information provided in the circulated documents on ASRU full system audit processes and Evidence of Compliance against ASPA and licence conditions. Members noted that the systems and processes put in place by CBS to support its application for AAALAC accreditation meant that CBS already had many processes and Standard Operating Protocols in place to provide assurance regarding establishment governance systems. Nevertheless, it was possible that additional processes and/or documentation might need to be put in place and the Director of Bioservices had therefore established a Compliance and Risk Management group to

	<p>undertake a review of college's current processes and documentation. The group would evaluate the processes currently in place against the expectations regarding evidence laid out in the ASRU documentation, commencing with the processes to provide assurance of compliance with Establishment licence conditions.</p> <ul style="list-style-type: none"> · The AWERB discussed a potential need to require project and personal licence holders to use standardised templates for some documents (such as contemporaneous records) and for the development of clear guidelines and policies for actions to be taken when potential non-compliance risks were identified. · Members noted the references to AWERB membership and function included in the ASRU documentation, and the Chair advised members that she was pleased to announce that [REDACTED], a biostatistician, had very kindly agreed to join central AWERB as an academic member. · The committee also discussed the likely impact on PPL holders of providing Portfolios of Evidence to document compliance against ASPA and project licence standard conditions. · Members discussed various strategies for optimal engagement with PPL holders on these matters, including refresher training for current PPL holders and induction training for new PPL holders or those transferring to college to familiarise them with local systems. <p><u>Actions</u></p> <ul style="list-style-type: none"> · Chair/AWERB administrator to draft and circulate an email to all project licence holders regarding ASRU periodic audits of Establishments; this should also draw attention to the ASRU guidance on documented evidence of PPL holders' compliance with the conditions of their project licence. · AWERB administrator to schedule a review of the AWERB terms of reference on the agenda of the next meeting. · Members to email the Chair/AWERB administrator with suggestions of suitable candidates to fill current membership vacancies on central and local AWERB.
<p>5.</p>	<p><u>Regular report on applications submitted, self-reporting & compliance notices</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> · The regular report was noted. · The NVS provided members with an update regarding one standard condition 18 report and the subsequent actions put in place following receipt of pathology findings.
<p>6.</p>	<p><u>3Rs Advisory group update</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> · The Chair of the 3Rs advisory group reminded members that the annual Animal Research Forum would be taking place in September and encouraged members to register for the event. · Following from a suggestion made at a recent meeting of the Governance Board for animal research, the 3Rs Advisory group would be undertaking a review of the 3Rs culture in college. This would reflect on the achievements and progress made over the past ten years and consider its strategic vision for the next ten year period. The group would engage with college's animal research user community in building the strategy.

7.	<p><u>Local AWERB – [REDACTED] report</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> · The approved minutes of the April and May local AWERB meetings were received and noted.
8.	<p><u>Local AWERB – [REDACTED] report</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> · The approved minutes of the April and May local AWERB meetings were received and noted.
9.	<p><u>Communications update</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> · The written report was received and noted.
10.	<p><u>Director of CBS operational update</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> · The written report was received and the Director of Bioservices drew attention to some of the key items included in the report.
11.	<p><u>A.O.B</u></p> <p><u>Item discussed: Updated ASRU standard breeding protocols for rodents and for fish</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> · The Chair advised members that ASRU had recently revised the wording of the standard breeding protocols for genetically altered rodents and zebrafish. A copy of the revised templates had been included for members' information in the supplementary paper pack circulated for the meeting. · The protocols had been updated to include more refined approaches and were formatted according to the new-style ASPeL project licence application. · The protocols had also been revised to address the issue of non-procedural related deaths. In order to prevent standard condition 18 reports being submitted for non-procedural related adverse effects, especially those related to the background strain and not to the genotype, the following wording had been included in the GA animal protocols: <ul style="list-style-type: none"> ○ Animals are not expected to die because of any authorised genetic alteration. A small number of animals, living beyond the neonatal period (5 days for mice and rats – before which ASRU does not require you to report any mortality), may suddenly and unexpectedly die having shown no preceding clinical signs indicative of impending death. Unless otherwise indicated, such deaths, should they occur, are unlikely to be related to the genotype. However, as per the published ASRU Advice Note on Severity Assessment of GA animals, should the mortality rate (age-matched) of the genetically altered strain rise beyond that present in the background source breeding colony, this will be reported under PPL standard condition 18. · ASRU had advised that Establishments should ensure that these new standard protocols were used with immediate effect in new project applications that include breeding and maintenance of GA animals and that licence holders should update the GA protocols when project amendments are submitted in ASPeL.

	<ul style="list-style-type: none">· For new project applications and amendments already submitted, ASRU would include an additional condition with the above wording unless the application is returned with comments in which case applicants will be asked to replace the GA protocols with the new ones.· For standard condition 18 reports that are submitted for non-procedural related adverse effects, ASRU will return the report with the above wording and indicate that an additional condition will be added to the project application. Project licence holders will be asked to submit a project amendment to enable ASRU to add the additional condition to the project licence therefore preventing unnecessary SC18 reports.
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Dates of next meetings:

26 September 2022	14.00-17.00	Virtual
14 November 2022	13.30-16.30	Virtual
23 January 2023	13.30-16.30	Virtual
20 March 2023	13.30-16.30	Virtual
16 May 2023	13.30-16.30	Virtual
17 July 2023	13.30-16.30	Virtual

Imperial College London

Local Animal Welfare and Ethical Review Body (AWERB) – HH

13.30 – 15.30 18 July 2023
Microsoft Teams meeting

Minutes

Present:

Function	Name	Position
Chair	[REDACTED]	College academic
Member	[REDACTED]	College academic
Member	[REDACTED]	College academic
Deputizing for [REDACTED]	[REDACTED]	3Rs Advisory Group Representative Named Animal Care and Welfare Officer for the site (NACWO) & NIO
Ex officio Member	[REDACTED]	Named Animal Care and Welfare Officer for the site (NACWO)
Ex officio Member	[REDACTED]	Named Veterinary Surgeon (NVS) CBS Meeting and Support Administrator and lay member with no responsibilities under ASPA
Member	[REDACTED]	AWERB Administrator and member with no responsibilities under ASPA
Member and attending as secretary	[REDACTED]	Named Training and Competency Officer (NTCO)
In attendance	[REDACTED]	Training Officer & Named Training and Competency Officer (NTCO)
In attendance	[REDACTED]	

Apologies:

Function	Name	Position
Member	[REDACTED]	College academic
Ex officio Member	[REDACTED]	Named Veterinary Surgeon (NVS)
Member	[REDACTED]	College academic
Ex officio Member	[REDACTED]	3Rs Advisory Group Representative
Member	[REDACTED]	College academic

Item**1. Members' declarations of interest in respect of items on the agenda**

None identified.

2. Minutes and matters arisingPoints to note

- The minutes of the previous meeting were approved, and updates were given on actions from the previous meeting.

3. Review of licence application amendment –Points to note

- An application for an amendment to a project licence was considered.
- The committee was broadly content with the additional programme of work proposed in the amendment, subject to a small number of revisions requested by the committee.

Decisions

- The application was approved for submission to the Home Office, subject to the inclusion of the revisions requested by the committee.
- The revised submission will be approved by Chair's action.

Actions

- AWERB administrator to email a summary of the committee's feedback to the licence holder.

4. Retrospective Review –Points to note

- A retrospective review of a recently expired project was considered by the committee.
- A copy of the licence had been circulated to members for information to assist with carrying out the review.
- The AWERB noted that this was a clearly written review and that a number of papers had been published from work carried out under the licence.
- Members were pleased to note that the actual severity limits were generally in line or less severe than those originally anticipated.

Actions

- AWERB Administrator to email summary of committee's feedback to the licence holder.

5. Interim Review –Points to note

- One interim review of an ongoing project was considered by the committee.
- A copy of the licence had been circulated to members for information to assist with carrying out the review.
- The AWERB noted that this was another clearly written review and that no animal work had yet taken place since the licence had been granted. Members were extremely pleased to learn that the licence holder had made good progress in achieving one of the objectives set out in the programme of work, and published two papers linked to this, through the use of human

patient blood samples obtained via a new clinical collaboration. The licence holder had successfully developed assays for analysis of [REDACTED] cells that had allowed the investigation of [REDACTED] using this human sample-based replacement approach.

Actions

- AWERB Administrator to email summary of committee's feedback to the licence holder.

6. **CBS updates**

Points to note

- The [REDACTED] facility manager updated members on a number of staffing changes in the unit.
- CBS are working towards replacing the current cagewash system in [REDACTED]. The proposal will see this replaced during the current [REDACTED] refurbishment and will result in a more efficient facility.

7. **A.O.B**

Item discussed: mouse colony in [REDACTED]

Points to note

- The [REDACTED] facility manager advised members that she was concerned that a group were currently housing a number of mice in the facility that were not being used for active breeding, and that the mice were close to reaching an age where they would be less effective breeders. Efforts to contact the PPL holder for an update had been unsuccessful.

Actions

- [REDACTED] facility manager to email the PPL holder asking for an update again, copying in the Chairs of both local AWERBs.

Dates of next meetings:

21 st August 2023	13.30-16.00
18 th Sept 2023	13.30-16.00
16 th October 2023	13.30-16.00
13 th November 2023	13.30-16.00
11 th December 2023	13.30-16.00

Imperial College London

Local Animal Welfare and Ethical Review Body (AWERB) – [REDACTED]

13.30 – 15.30 18 September 2023
Microsoft Teams meeting

Minutes

Present:

Function	Name	Position
Chair	[REDACTED]	College academic
Member	[REDACTED]	College academic
<i>Ex officio</i> Member	[REDACTED]	3Rs Advisory Group Representative
External	[REDACTED]	External member
<i>Ex officio</i> Member	[REDACTED]	Named Animal Care and Welfare Officer for the site (NACWO) & NIO
<i>Ex officio</i> Member	[REDACTED]	Named Animal Care and Welfare Officer for the site (NACWO)
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon service (dNVS)
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon service (dNVS) CBS Meeting and Support Administrator and lay member with no responsibilities under ASPA
Member	[REDACTED]	
Member and attending as secretary	[REDACTED]	AWERB Administrator and member with no responsibilities under ASPA
In attendance	[REDACTED]	Training Officer & Named Training and Competency Officer (NTCO)
In attendance for agenda item 3	[REDACTED]	Named Animal Care and Welfare Officer for the [REDACTED] site (NACWO)

Apologies:

Function	Name	Position
Member	[REDACTED]	College academic
Member	[REDACTED]	College academic
Member	[REDACTED]	College academic
Member	[REDACTED]	College academic
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon (NVS)
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon (NVS)

Item – Introductions and welcome

- The Chair welcomed [REDACTED] and [REDACTED] (a new member of the [REDACTED] [REDACTED]) to their first meeting. He informed members that [REDACTED] had kindly agreed to join the HH AWERB as an external member.
- The Chair thanked [REDACTED], the facility manager at [REDACTED] and who had been involved in reviewing the PPL application being considered under agenda item 3, for attending the meeting.

1. Members' declarations of interest in respect of items on the agenda

None identified.

2. Minutes and matters arisingPoints to note

- The minutes of the previous meeting were approved, and updates were given on actions from the previous meeting.

3. Review of licence application – [REDACTED]Points to note

- An application for a new project licence was considered.
- The committee was content with the programme of work proposed in the draft application, subject to some minor revisions requested by the committee.

Decisions

- The application was approved for submission to the Home Office, subject to the inclusion of the revisions requested by the committee.
- The revised submission will be approved by Chair's action, following prior review by the dNVS [REDACTED].
- The mid-term review for this PPL should be set to the mid-point of the licence.

Actions

- AWERB administrator to email a summary of the committee's feedback and required revisions to the applicant.

4. Review of licence amendment – Incoming PPL transfer request - [REDACTED]Points to note

- An application for an amendment to a project licence was considered.
- The application had been submitted by a PPL holder who currently held a project licence at an external organisation in order to transfer the licence to college.
- All work had already ceased at the current Establishment and no authority to permit the transfer of animals between Establishments was being requested in the amendment.
- The committee was content to approve the request for additional availability at college, subject to the compulsory use of study plans.

Decisions

- The amendment was approved for submission to the Home Office subject to some minor administrative revisions to the application.
- The approval was granted on the basis that:

- the project licence holder would be required to meet with the NVS and facility manager to discuss the proposed plan of work prior to commencing any studies at college.
- the licence holder would be required to submit a study plan outlining the experimental procedures to be applied and the monitoring processes and humane endpoints for each study, and initially these plans would need to be reviewed and agreed with the NVS, NACWO and NTCO prior to each study commencing.

Actions

- AWERB administrator to email summary of committee's feedback to the applicant

5. Updated Interim Review – [REDACTED]

Points to note

- One interim review of an ongoing project was considered by the committee.
- A copy of the licence had been circulated to members for information to assist with carrying out the review.
- The AWERB noted that the licence holder had made good progress in achieving some of the objectives set out in the programme of work, and that three papers had already been published to date from work carried out under the licence, with others in preparation. Members were also pleased to see that the work was having significant impact in the development of new technological improvements to cancer therapy.
- The committee was pleased to note the group's efforts with regards to 3Rs implementation and the ongoing efforts made to replace some animal experiments through the use of *in vitro* investigation, 2D cell culture and 3R organoids prior to initiating *in vivo* studies. Members were also pleased to see that the licence holder was revising the group's experimental design to include both sexes in their ongoing work.
- Members were pleased to observe that the reported actual severity limits were generally in line or less severe than those originally anticipated for protocol 1 and requested similar information be provided for the other protocols. They also advised the PPL holder to carefully review their current experimental plans to assess if an amendment to the licence might be required in order to increase the number of animals allocated to one protocol, in light of the number of animals used to date.

Actions

- AWERB Administrator to email summary of committee's feedback to the licence holder.

6. Interim Review – [REDACTED]

Points to note

- One interim review of an ongoing project was considered by the committee.
- A copy of the licence had been circulated to members for information to assist with carrying out the review.
- The AWERB noted that this was a very thorough and clearly written review and that the licence holder had made good progress in achieving some of the

objectives set out in the programme of work and that a notable number of papers had been published from work carried out to date under the licence.

- Members were pleased to observe that the actual severity limits were generally in line or less severe than those originally anticipated and the continuing efforts of the group with regards to 3Rs implementation. Members were particularly pleased to read about the group's detailed efforts to refine their method of [REDACTED] and its commitment to disseminating this not only internally via the 3Rs advisory group but via publication in a 3Rs oriented journal.
- The AWERB was also pleased to see that the group were adhering to good practice in the breeding and maintenance GA colonies and making extensive efforts to share surplus animals and tissue with other groups.

Actions

- AWERB Administrator to email summary of committee's feedback to the licence holder.

7. **Retrospective Review – [REDACTED]**

Points to note

- A retrospective review of a recently expired project was considered by the committee.
- A copy of the licence had been circulated to members for information to assist with carrying out the review.
- The AWERB noted that this was a clearly written review and that a number of papers had been published from work carried out under the licence.
- Members were pleased to note that the actual severity limits were generally in line or less severe than those originally anticipated.
- The committee noted the group's ongoing efforts with regards to 3Rs implementation and was pleased to read that the group had successfully replaced some components of their animal work with *in vitro* methods and through the use of historical [REDACTED] samples. Members were particularly pleased to learn of the group's success in using an *in vitro* [REDACTED] model to characterise initial cellular response towards different types of nanoparticles.

Actions

- AWERB Administrator to email summary of committee's feedback to the licence holder.

8. **Report from Central AWERB**

Points to note

- The approved minutes of the May Central AWERB meeting were noted and the Chair also provided members with a verbal update on items of interest discussed at the July central AWERB meeting.
- In particular, he drew members attention to the NC3Rs two self-assessment tools, one for Institutions and the other for research groups, and how these could be used for both benchmarking and as a tool to collate and track 3Rs activities over time and members were encouraged to use the tool for research groups to evaluate their own 3Rs activities.

- The 3Rs programme manager had already completed the Institutional self-assessment tool and a copy of this would be shared with members at a future meeting.

9. Regular report on applications submitted, standard condition 18 self-reporting and potential non-compliance reports

Points to note

- The regular report was noted.
- The named people advised members that, further to a potential non-compliance report reported to members at an earlier meeting, the group had been working closely with the named people and using study plans to keep CBS staff updated regarding ongoing work.

10. CBS updates

Points to note

- The [REDACTED] facility manager updated members on the progress of a number of ongoing facility refurbishment projects.

11. A.O.B

Item discussed: CBS Transgenic Mouse Breeding Best practice guidance document and CBS breeding policy document

Points to note

- The Chair advised members that copies of the recently drafted CBS Transgenic Mouse Breeding Best Practice guidance document and the CBS Breeding Policies document had been circulated for information to members in the supplementary paper pack.

Dates of next meetings:

16 th October 2023	13.30-16.00
13 th November 2023	13.30-16.00
11 th December 2023	13.30-16.00

13.30 – 15.30 18th October 2022
MS Teams

Minutes

Present:

Function	Name	Position
Chair	[REDACTED]	College academic
Co Vice-Chair	[REDACTED]	College academic
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon (NVS) Named Animal Care and Welfare Officer (NACWO) for the site & Named Information Officer (NIO)
<i>Ex officio</i> Member	[REDACTED]	
Member	[REDACTED]	College academic
Member	[REDACTED]	Post-doctoral representative CBS Meeting and Support Administrator and lay member with no responsibilities under ASPA
Member	[REDACTED]	
Member and attending as secretary	[REDACTED]	AWERB Administrator and member with no responsibilities under ASPA
In attendance	[REDACTED]	Named Training and Competency Officer (NTCO)

Apologies:

Function	Name	Position
Co Vice-Chair	[REDACTED]	College academic
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon (NVS)
<i>Ex officio</i> Member	[REDACTED]	Co-Chair 3Rs Advisory Group 3Rs programme manager and 3Rs Group Representative
<i>Ex officio</i> Member	[REDACTED]	

Item

1. Members' declarations of interest in respect of items on the agenda

None identified.

2. Minutes and matters arising

Points to note

- The minutes of the previous meeting were agreed.
- Updates were given on actions from the previous meeting. In particular, the AWERB administrator advised members regarding additional conditions imposed on a recently granted licence that included a protocol involving the generation of antisera.

3. Review of licence application – [REDACTED]

Points to note

- An application for a new project licence was considered.
- The application was to continue a program of work that was due to expire in March 2023.
- The committee was content with the overall programme of work proposed but discussed a number of minor revisions that the AWERB would require to be implemented in the draft application, prior to approving the application for formal submission to the Home Office.
- The committee carried out a retrospective review of the expiring PPL in parallel with consideration of the new application.
- Members were pleased to note that the licence holder was continuing to use a range of 3Rs approaches in his work. Members were particularly pleased to note that the group had developed *in vitro* systems to model the interaction between [REDACTED] stem cells and neural stem cells, and that this part of the work was now performed only using those *in vitro* systems.

Decisions

- The application was approved for submission to the Home Office, subject to the inclusion of the revisions requested by the committee.
- The revised submission will be approved by Chair's action.
- The mid-term review for this PPL should be set to the mid-point of the licence.

Actions

- AWERB administrator to email summary of committee's feedback and required revisions to the applicant.

4. Interim review – [REDACTED]

Points to note

- One interim review of an ongoing project was considered by the committee.
- A copy of the licence had been circulated to members for information to assist with carrying out the review.
- The AWERB noted that this was a thorough review and that the licence holder had made good progress in achieving some of the objectives set out in the programme of work.
- Members were pleased to note the efforts made with regards to 3Rs implementation and that the group had been able to replace some *in vivo* experiments through the development of an *ex vivo* model. Members were also pleased to read about the

ongoing efforts made to refine surgical procedures and the refinements made to head stage design and implantation methods.

Actions

- AWERB Administrator to email summary of committee's feedback to the licence holder.

5. Discussion item: Using both sexes in animal experiments

Points to note

- The Chair reminded members that the MRC had recently issued new guidance and requirements for both sexes to be used as a default in research proposals. The NC3Rs and MRC had recently held a joint webinar exploring how to address common challenges when planning, conducting and analysing animal experiments involving both sexes and the presentations published after that webinar had been included for members' information in the paper pack.
- Members discussed the information provided and noted that it would be important that project licence applicants were aware of this guidance when designing their experiments and when filling in the relevant part of their project licence application form.
- Members discussed various strategies for optimal engagement with all members of the animal research community on the importance of considering these issues in their experimental design. The AWERB administrator advised members that the Compliance and Risk group had proposed that CBS should consider sending out regular "newsletter" style updates to users, and that this would be an example of the type of information that could be communicated via this route. She had also been asked to update college's AWERB PPL application guidance to refer to the MRC/NC3Rs guidance, and to consider changes to internal forms. These changes were currently being implemented. The experimental design slide on the AWERB PowerPoint template for applicants would also be updated accordingly.

6. Report from Central AWERB

Points to note

- The approved minutes of the July Central AWERB meeting were noted. The Chair advised members that in order to provide members with additional context to the discussion that had taken place re ASRU audit processes, the supplementary paper pack contained copies of ASRU's guidance documents regarding full system audits.
- A verbal update was also provided regarding items of particular interest discussed at the September Central AWERB meeting.

7. Regular report on applications submitted, self-reporting and compliance notices

Points to note

- The regular report was noted.

8. CBS updates

Points to note

- The SK & SM facility manager informed members that [REDACTED] had been appointed to the role of H2 facility manager at the Hammersmith campus. She would be taking up her new role at the end of the month, and a job advert for a replacement senior technician and NACWO for the South Kensington facility had recently been advertised.

- The HSE inspection of the CL3 areas at [REDACTED] and [REDACTED] had taken place. Although the Inspection had identified a number of actions to be implemented, overall, the HSE had been complimentary about the standards already in place.

9. **A.O.B**

Item discussed: ASRU - Guidance Notes for Project Licence Applications

Points to note

- Members were advised that ASRU had now issued Guidance notes for project licence applicants to use when preparing their applications and a copy of these had been included for information in the supplementary papers.

Dates of next meetings:

8 th November 2022	13.30-16.30
5 th December 2022	13.30-16.30
24 th January 2023	13.30-16.30

13.30 – 16.00 19^h January 2021
MS Teams

Minutes

Present:

Function	Name	Position
Chair	[REDACTED]	College academic
Vice-Chair	[REDACTED]	College academic
Member	[REDACTED]	College academic
<i>Ex officio</i> Member	[REDACTED]	College academic and 3Rs Group Representative
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon Service (dNVS)
<i>Ex officio</i> Member	[REDACTED]	Named Animal Care and Welfare Officer (NACWO) for the site
In attendance	[REDACTED]	CBS Meeting and Support Administrator
Attending as secretary	[REDACTED]	AWERB Administrator & Named Information Officer

Apologies:

Function	Name	Position
Member	[REDACTED]	College academic
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon (NVS)
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon (NVS)
Member	[REDACTED]	Post-doctoral representative
In attendance	[REDACTED]	Home Office Inspector (HOI)
In attendance	[REDACTED]	Home Office Inspector (HOI)

Item

1. **Members' declarations of interest in respect of items on the agenda**

Points to note

- [REDACTED] declared an interest in Agenda item 5 by virtue of being the project licence holder for the interim review under consideration. She noted that she would recuse herself from the AWERB's deliberations and decision making for this agenda item.

2. **Minutes and matters arising**

Points to note

- The minutes of the previous meeting were agreed.
- Updates were given on actions from the previous meeting.

3. **Review of licence amendment application – [REDACTED]**

Points to note

- An application for a new project licence was considered.
- The licence was to continue a program of work covered by a licence due to expire shortly.
- The committee was content with the programme of work proposed in the application subject to revisions requested by the committee.
- The committee carried out a retrospective review of the expiring PPL in parallel with consideration of the new application.

Decisions

- The application was approved for submission to the Home Office, subject to the inclusion of the revisions requested by the committee.
- The revised submission will be approved by Chair's action.
- The mid-term review for this PPL should be set to the mid-point of the licence.

Actions

- AWERB administrator to email summary of committee's feedback and required revisions to the applicant.

4. **Interim review – [REDACTED]**

Points to note

- One interim review of an ongoing project was considered by the committee.
- A copy of the licence had been circulated to members for information to assist with carrying out the review.
- The AWERB was pleased to note that the group had been working constructively with the veterinary services team to refine the anaesthetic and analgesia protocols used.

Actions

- AWERB Administrator to email summary of committee's feedback to the applicant.

5. **Interim review – [REDACTED]**

Points to note

- One interim review of an ongoing project was considered by the committee.
- [REDACTED] recused herself from the decision making process for this agenda item; she left the meeting prior to discussion and re-joined only when discussion of this item had concluded.
- A copy of the licence had been circulated to members for information to assist with carrying out the review.

- The AWERB was pleased to note that this was a thorough and detailed review and that the group had made good progress in achieving the objectives of the programme of work and that several papers had already been published from work that had taken place under the licence .
- Members noted the considered evaluation of the actual severity of the procedures that had been undertaken and were pleased that the actual severity limits observed had been in line or less than those originally anticipated.

6. **CBS updates**

Points to note

- Members were advised that CBS was continuing to permit experimental work to proceed as normal, and had been keeping all CBS users informed regarding updated operational protocols rolled out in response to COVID-19.

7. **A.O.B**

None identified.

Dates of next meetings:

11 th February 2021	13.30-16.30
11 th March 2021	13.30-16.30
15 th April 2021	13.30-16.30
13 th May 2021	10.30-13.30
15 th June 2021	13.30-16.30
15 th July 2021	10.30-13.30
12 th August 2021	13.30-16.30

Central Animal Welfare and Ethical Review Body (AWERB)

14:00 – 17.00 19 January (Meeting 3)

MS Teams

Present:

Function	Name	Position
Chair	[REDACTED]	Senior College academic
Vice-chair	[REDACTED]	Lay person
<i>Ex officio</i> Member	[REDACTED]	Establishment Licence Holder
<i>Ex officio</i> Member	[REDACTED]	Chair of the Local AWERB – [REDACTED]
<i>Ex officio</i> Member	[REDACTED]	Chair of the Local AWERB – [REDACTED]
<i>Ex officio</i> Member	[REDACTED]	Chair of the 3Rs Advisory Group
<i>Ex officio</i> Member	[REDACTED]	Director of Central Biomedical Services (CBS)
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon (NVS)
<i>Ex officio</i> Member	[REDACTED]	Named Animal Care and Welfare Officer (NACWO) & Named Information Officer (NIO)
<i>Ex officio</i> Member	[REDACTED]	Named Training and Competency Officer (NTCO)
Member	[REDACTED]	Lay person & Imperial Communications representative
Member	[REDACTED]	External member
Member	[REDACTED]	External Member
Member	[REDACTED]	Post-doctoral fellow representing the post-doctoral community
Member	[REDACTED]	PhD student representing the student community
In attendance	[REDACTED]	3Rs Programme Manager & Named Information Officer (NIO)
Member and secretary	[REDACTED]	AWERB Administrator

Apologies:

Function	Name	Position
<i>Ex officio</i> Member	[REDACTED]	Director of Bioservices
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon (NVS)
Member	[REDACTED]	Senior College Academic
Member	[REDACTED]	Lay person

	<p><u>Item</u></p> <p><u>Introductions</u></p> <ul style="list-style-type: none"> · The Chair welcomed ██████ to his first meeting.
1.	<p><u>Members' declarations of interests in respect of items on the agenda</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> · ██████ declared an interest in Agenda item 3 as the project licence to be considered was, in part, a replacement for her current project licence that was due to expire shortly. She noted that she would recuse herself from the AWERB's deliberations and decision making for this agenda item and that the Vice-Chair would take over the Chair for this item.
2.	<p><u>Minutes and matters arising</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> · The minutes of the last meeting were agreed. · Updates were given on actions from the previous meetings.
3.	<p><u>Review of licence application – ██████</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> · An application for a new project licence was considered. · ██████ recused herself from the decision making process for this agenda item and discussion was led by the Vice Chair; ██████ left the meeting prior to the pre-presentation discussion and returned only when discussion of this item had concluded. · The committee was content with the overall programme of work proposed but discussed a number of revisions that the AWERB would require to be implemented in the draft application, prior to approving the application for formal submission to the Home Office. <p><u>Decisions</u></p> <ul style="list-style-type: none"> · The application was approved for submission to the Home Office, subject to the inclusion of the revisions requested by the committee. · The revised submission will be approved by Vice-Chair's action, subject to re-review by a number of committee members. · The interim review for this PPL should be set to the mid-point of the licence. · Taking into account the potential severity and mortality linked to this work, the AWERB agreed that it would require the PPL holder to submit a report to the AWERB detailing the outcome of experiments carried out under protocols 7 and 10, prior to the commencement of any work under the linked disease protocols (8 and 11 respectively). Members also agreed that once work commenced under the potentially more severe disease model protocols, the PPL holder would be required to submit similar reports, on completion of the first pilot cohort of animals, and prior to any subsequent studies being initiated. <p><u>Actions</u></p> <ul style="list-style-type: none"> · AWERB Administrator to email summary of committee's feedback and required revisions to the applicant.

4.	<p><u>Review of licence application amendment – [REDACTED]</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> · An application for an amendment to a project licence was considered. · The committee was content with the additional programme of work proposed in the amendment subject to a minor revision requested by the committee. <p><u>Decisions</u></p> <ul style="list-style-type: none"> · The application was approved for submission to the Home Office, subject to the deletion of one sentence in the NTS. · Taking into account the potential severity and mortality linked to this work, the AWERB agreed that it would require the PPL holder to submit a report to the AWERB detailing the outcome of the work undertaken on the first cohort of 12 animals, prior to any subsequent studies being initiated. <p><u>Actions</u></p> <ul style="list-style-type: none"> · AWERB Administrator to email summary of committee's feedback and required revision to the applicant.
5.	<p><u>Interim review – [REDACTED]</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> · One interim review of a project licence was reviewed. · A copy of the licence had been circulated to members for information to assist with carrying out the assessment. · Members were pleased to observe that this was a thorough, well written review and noted the comprehensive and considered evaluation of the actual severity of the procedures that had been undertaken. · The AWERB was pleased to note that the group had made good progress with respect to some of the original objectives specified in the programme of work and that several papers had been published as a result of the work carried out under the licence to date. · The committee noted the ongoing efforts being made with regards to the implementation of the 3Rs and were pleased to learn that the group was in the process of publishing a systematic meta-analysis undertaken on the use of [REDACTED] models in mice. <p><u>Actions</u></p> <ul style="list-style-type: none"> · AWERB Administrator to email summary of committee's feedback to the licence holder.
6.	<p><u>Director of CBS operational update</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> · The Director of CBS informed members that operations were continuing to function as normal and that COVID infections were having a minimal impact on resources. · As part of a review of operational effectiveness, CBS was in the process of introducing a support structure to facilitate the training of all levels of staff across campus; this would enable better resource support to be provided when and where required, increase understanding for individuals of CBS operations and would provide good development opportunities. This would

	include a combination of temporary and permanent short and long term staff moves.
7.	<p><u>Communications update</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> Members were informed that a new Director of Communications had been appointed and was due to start her role in February. The communications team were working with the Office of the Provost and the Security team on the provision of guidance on academic harassment; although this was not specifically focussed on animal research, the guidance might nevertheless be useful for any members of staff subject to harassment due to any research involving animal work. It would, for example, provide advice regarding problems such as social media trolling.
8.	<p><u>Local AWERB – [REDACTED] report</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> The approved minutes of the October and December 2021 local AWERB meetings were received and noted. The [REDACTED] local AWERB Chair advised members that the local AWERB had considered a number of requests for additional availability using the new streamlined review approach agreed at the November central AWERB meeting and that this had worked well; no problems had been identified with the revised approach to date. She also advised the AWERB that she was very pleased to announce that [REDACTED] had agreed to accept an invitation to join the [REDACTED] local AWERB as Chair of the AWERB, and that [REDACTED] had agreed to take on the role of co-Vice Chair.
9.	<p><u>Local AWERB – [REDACTED] report</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> The approved minutes of the October 2021 local AWERB meeting were received and noted. The [REDACTED] local AWERB chair updated members regarding actions that the AWERB had agreed following consideration of a replacement project licence application at its January meeting; members had decided that the project licence holder should be required to submit a management plan describing the steps he would put in place to ensure that all personal licence holders working under his licence adhered to the controls and limits defined in his project licence prior to approving the submission of the licence application.
10.	<p><u>3Rs group update</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> The Chair of the 3Rs advisory group informed the AWERB that funding had been allocated by the 3Rs hub to support a collaborative project between an academic group and CBS staff to refine the methods used to induce myocardial infarction. The next <i>in vivo</i> experimental design course would be partly funded by attendee registration fees, in order to enable more courses to be run during the year.

	<ul style="list-style-type: none">· The 3Rs group was also working with the Imperial College Graduate School to include a specific 3Rs remit in the President's PhD studentships scheme to expand the portfolio of research projects with 3Rs objectives at their core.· The first 3Rs sponsored seminar was due to take place in April, hosted by the Imperial Vaccine Network.
11.	<p><u>A.O.B</u></p> <p><u>Item discussed: Membership Update</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none">· Members were advised that the current and incoming central AWERB chairs were working closely together to ensure continuity during the transition process.

Dates of next meetings:

16 March 2022	14.00-17.00	TBC
16 May 2022	14.00-17.00	TBC
18 July 2022	14.00-17.00	TBC

Imperial College London

Local Animal Welfare and Ethical Review Body (AWERB) – [REDACTED]

13.30 – 16.00 19 February 2024
Microsoft Teams meeting

Minutes

Present:

Function	Name	Position
Chair	[REDACTED]	College academic
Member	[REDACTED]	College academic
Member	[REDACTED]	College academic
Member	[REDACTED]	External member Named Animal Care and Welfare Officer for the site (NACWO) & NIO
<i>Ex officio Member</i>	[REDACTED]	Named Veterinary Surgeon (NVS)
<i>Ex officio Member</i>	[REDACTED]	Named Veterinary Surgeon (NVS)
<i>Ex officio Member</i>	[REDACTED]	PhD student representing the student community
Member	[REDACTED]	Named Animal Care and Welfare Officer for the site (NACWO)
<i>In attendance</i>	[REDACTED]	Animal care technician CBS Meeting and Support Administrator and lay member with no responsibilities under ASPA
<i>Deputizing for</i> [REDACTED]	[REDACTED]	AWERB Administrator and member with no responsibilities under ASPA
Member	[REDACTED]	Training Officer & Named Training and Competency Officer (NTCO)
Member and attending as secretary	[REDACTED]	
In attendance	[REDACTED]	

Apologies:

Function	Name	Position
<i>Ex officio Member</i>	[REDACTED]	Named Animal Care and Welfare Officer for the site (NACWO)
<i>Ex officio Member</i>	[REDACTED]	Named Veterinary Surgeon (NVS)
<i>Ex officio Member</i>	[REDACTED]	3Rs Advisory Group Representative
Member	[REDACTED]	College academic
Member	[REDACTED]	College academic Post-doctoral fellow representing the post-doctoral community
Member	[REDACTED]	

Item: IntroductionsPoints to note

- The Chair welcomed [REDACTED], who was deputizing for [REDACTED], to her first AWERB meeting.

1. Members' declarations of interest in respect of items on the agenda

- Nothing to report.

2. Minutes and matters arisingPoints to note

- The minutes of the previous meeting were approved and updates were given on actions from the previous meeting.

3. Review of licence application - [REDACTED]Points to note

- An application for a new project licence was considered.
- The application was to continue a program of work that had recently expired.
- The AWERB noted that the applicant had incorporated the use of replacement methods within their application and members did not consider that it was possible to replace the entirety of the programme of work with alternative methods.
- Members were content that the overall harm benefit evaluation supported allowing this proposal to proceed.
- Although the committee was content with the overall programme of work proposed, they discussed a number of revisions that the AWERB would require to be implemented in the draft application, prior to approving the application for formal submission to the Home Office.
- The committee carried out a retrospective review of the expired PPL in parallel with consideration of the new application.
- The AWERB was pleased to note that the group had made good progress in addressing the objectives set out in the programme of work, that a number of papers had been published on the work undertaken, and that the animal numbers used were much lower than originally anticipated and that the reported actual severity limits were generally in line or less severe than those originally anticipated. Members were particularly pleased to note that the group's work using inhibitors of [REDACTED] had directly led to clinical trials of these drugs in [REDACTED] disease.
- The committee noted the group's ongoing efforts with regards to 3Rs implementation. It was pleased to note that the group had been developing [REDACTED].

Members were pleased to note the efforts to refine and reduce animal procedures including improvements in intravital imaging to enable more cells to be analysed per view, multiorgan analysis performed on the same animals and sharing of tissues between lab members, and optimisation of post-operative analgesia. The AWERB was very interested to learn about the advantages of the group's newly developed model of [REDACTED] that it had a shortened disease course, was more reproducible permitting smaller group sizes be used for intervention experiments and that it more closely recapitulated important features of human disease.

Decisions

- The application was approved for submission to the Home Office, subject to the inclusion of the revisions requested by the committee.
- The revised submission will be approved by Chair's action.
- The mid-term review for this PPL should be set to the mid-point of the licence.

Actions

- AWERB administrator to email a summary of the committee's feedback and required revisions to the applicant.

4. **Retrospective Review –** [REDACTED]Points to note

- A retrospective review of a recently expired project was considered by the committee.
- A copy of the licence had been circulated to members for information to assist with carrying out the review.
- The AWERB noted that the group's work had achieved its objectives in providing definitive answers regarding certain hypotheses and that these were important in terms of limiting the future use of animals by leading to refinements to the original hypotheses, that the animal numbers used were much lower than originally anticipated and that the reported actual severity limits were in line with those originally anticipated.
- The committee noted the group's efforts with regards to 3Rs implementation. It was pleased to note that they had been using *in vitro* experiments with [REDACTED] prior to investigating therapeutic approaches and using *in silico* methods, including publicly available data, for testing genetic associations with [REDACTED] in order to reduce the number of genes tested. Members were also pleased to note the efforts to reduce animal procedures through multiorgan analysis on the same animals.

Actions

- AWERB Administrator to email summary of committee's feedback to the licence holder.

5. **Interim Review –** [REDACTED]Points to note

- One interim review of an ongoing project was considered by the committee.
- A copy of the licence had been circulated to members for information to assist with carrying out the review.
- The AWERB noted that this was a very thorough and clearly written review and that the licence holder had made good progress in achieving some of the objectives set out in the programme of work with one paper involving *in vivo* animal work published from the work carried out under the licence to date, together with several studies reporting *in vitro* work and a parallel study on [REDACTED] in humans. Members were pleased to see that the animal numbers used were much lower than originally anticipated and that the reported actual severity limits were generally in line or less severe than those originally anticipated.

- The committee was pleased to note the group's continuing efforts with regards to 3Rs implementation and the ongoing efforts made to replace some animal experiments through the use of *in vitro* studies and the increased use of human tissue samples to study the protective natural immune response to [REDACTED], and the intention to undertake an observational study in [REDACTED] to study the factors influencing transmission of [REDACTED] and to collaborate with a group doing human challenge studies in adults.
- Members were also pleased to see that the group were collaborating with computational experts to predict vaccine combinations and adopting a factorial design to test multiple different antigens and that they had also reduced the number of mice used through longitudinal monitoring and the use of [REDACTED]. They were also pleased to note the introduction of enhanced monitoring and provision of [REDACTED] in order to refine vaccination studies.

Actions

- AWERB Administrator to email summary of committee's feedback to the licence holder.
- [REDACTED] facility manager to contact the PPL holder to discuss sharing of routine welfare information and breeding practices.

6. Interim Review – [REDACTED]

Points to note

- One interim review of an ongoing project was considered by the committee.
- A copy of the licence had been circulated to members for information to assist with carrying out the review.
- The AWERB noted that this was a clearly written review and that the licence holder had made good progress in achieving some of the objectives set out in the programme of work and that one publication had been published to date, with another pending publication following submission of a patent application. Members were pleased to note the translational potential following from the work and that the animal numbers used were much lower than originally anticipated.
- The committee was pleased to note the group's continuing efforts with regards to 3Rs implementation and the ongoing efforts made to replace some animal experiments through the use of *in vitro* studies including a bank of slides to test new labels for your compounds by immunohistochemistry.

Actions

- AWERB Administrator to email summary of committee's feedback to the licence holder.
- [REDACTED] facility manager to contact the PPL holder in order to review breeding practices.

7. Report from Central AWERB

Points to note

- The approved minutes of the September and November 2023 Central AWERB meetings were noted.
- In particular, the Chair drew members attention to the discussion that had taken place regarding the findings of the Rawle report. He noted that the report, published in February 2023, had been commissioned by the NC3Rs in

order to review current regulatory and review processes aimed at ensuring compliance with 3Rs principles, to identify any variations, gaps in coverage and lessons to be learned and to explore opportunities for effectively promoting adoption of 3Rs advances. It included a number of recommendations for funders, AWERBs and ASRU.

- With regards to the recommendations made on replacement, central AWERB had noted that the AWERB application processing form had been amended earlier last year to include a specific question on searching for alternatives **“How have you searched for information on and assessed the suitability of potential non-animal alternatives for undertaking this work? Describe which databases and websites you have used to check for practicable alternative approaches”**. An additional guidance section on searching for alternatives had also been included in the AWERB’s PPL application guidance document for applicants.
- Central AWERB had agreed that the AWERBs should ensure, during project licence review, that applicants have thoroughly addressed the additional question regarding searching for animal alternatives in the AWERB processing form and that they have explained why any non-animal alternatives identified were not suitable. PPL applicants and PPL holders should not only be asked by AWERBs how they incorporate replacement models in their research but also how they keep informed of the latest replacement opportunities.
- Central AWERB had also agreed that the AWERBs should ensure that all project licence applicants followed the recommendation in the Rawle report in setting out what parts of the work had already been funded, by whom, and the start date of the award and its duration.
- Central AWERB had also held an in-depth discussion on the topic of AWERB member training and CPD and it had been agreed that a mechanism to record member CPD should be implemented and that AWERB discussion items constituting CPD should, in future, be specifically marked as such on the agenda.

8. **Regular report on applications submitted, standard condition 18 self-reporting and potential non-compliance reports**

Points to note

- The regular report was noted.

9. **CBS Aseptic Surgery policy**

Points to note

- The Chair reminded members that following the periodic review of ASRU Examples of Indicators of Low-level Concerns that central AWERB had undertaken at its September 2022 meeting, the Director of CBS had been asked to initiate a review of the CBS policy on aseptic surgery.
- A copy of the revised policy had been circulated for information in the meeting pack and the NVS gave a short presentation to members, highlighting the key changes that had been adopted in the updated policy.

10. **CBS updates**

Points to note

- Nothing to report

11. **A.O.B**

Item discussed: Guidance for training and CPD under ASPA, published by ASRU in December 2023

Points to note

- Members were advised that ASRU had recently published updated guidance for training and CPD.
- A copy had been circulated for information in the supplementary papers.
- The guidance document was noted.

Item discussed: RSPCA Lay Members' Forum report December 2023

Points to note

- Members were advised that the CBS Meeting and Support Administrator and lay member with no responsibilities under ASPA had attended the RSPCA lay members forum that had taken place in December.
- A copy of the report from the meeting had been circulated in the supplementary papers and was noted.

Dates of next meetings:

4 th March 2024	13.30-16.00
26 th March 2024	13.30-16.00
23 rd April 2024	13.30-16.00

Local Animal Welfare and Ethical Review Body (AWERB) – [REDACTED]

 10.30 – 13.00 19 April 2021
 Microsoft Teams meeting

Minutes

Present:

Function	Name	Position
Chair	[REDACTED]	College academic
Vice Chair	[REDACTED]	College academic and 3Rs Group Representative
Member	[REDACTED]	College Academic
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon Service (dNVS)
<i>Ex officio</i> Member and deputizing for [REDACTED]	[REDACTED]	Named Animal Care and Welfare Officer for the site (NACWO)
Member	[REDACTED]	Post-doctoral representative
Member	[REDACTED]	PhD student representative
In attendance	[REDACTED]	Named Animal Care and Welfare Officer for the site (NACWO)
In attendance	[REDACTED]	Named Animal Care and Welfare Officer for the site (NACWO)
In attendance	[REDACTED]	CBS Meeting and Support Administrator
Attending as secretary	[REDACTED]	AWERB Administrator and Named Information Officer

Apologies:

Function	Name	Position
Member	[REDACTED]	College Academic
Member	[REDACTED]	College Academic
<i>Ex officio</i> Member	[REDACTED]	Site Manager & Named Information Officer
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon (NVS)
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon (NVS)
In attendance	[REDACTED]	Home Office Inspector (HOI)
In attendance	[REDACTED]	Home Office Inspector (HOI)

Item**1. Members' declarations of interest in respect of items on the agenda**

None identified.

2. Minutes and matters arisingPoints to note

- The minutes of the previous meeting were agreed.
- Updates were given on actions from the previous meeting.

3. Interim review – [REDACTED]Points to note

- One interim review of an ongoing project was considered by the committee.
- A copy of the licence had been circulated to members for information to assist with carrying out the review.
- The AWERB was pleased to note that this was a clear and comprehensive review. Members noted that the group had made good progress in achieving some of the objectives of the programme of work despite the disruptions to the group's work following from the relocation of the group from the [REDACTED] [REDACTED] to the [REDACTED] campus, which had then been followed by the subsequent COVID lockdown disruption.
- The committee was also pleased to note that the severity limits observed had, in general, been less than originally anticipated.

Actions

- AWERB Administrator to email summary of committee's feedback to the applicant.

4. Interim review – [REDACTED]Points to note

- One interim review of an ongoing project was considered by the committee.
- A copy of the licence had been circulated to members for information to assist with carrying out the review.
- The AWERB was pleased to note that this was another comprehensive review, that the group had made good progress in achieving the objectives of the programme of work and that several papers had already been published from work that had taken place under the licence .
- The AWERB noted that the group had long standing 3Rs experience and was continuing to adopt good practice in this regard including increased adoption of cell culture screening and *in silico* approaches. Members were also pleased to note the successful impact of deploying environmental enrichment on animal welfare and the collaborative interactions with the named persons with respect to refinements to analgesic approaches and post-surgical monitoring.
- Members requested clarification regarding the actual severity figures provided in the review.

Actions

- AWERB Administrator to email summary of committee's feedback to the applicant.

5. Interim review – [REDACTED]

Points to note

- One interim review of an ongoing project was considered by the committee.
- A copy of the licence had been circulated to members for information to assist with carrying out the review.
- The AWERB was pleased to note that this was another thorough and detailed review and that the group had made good progress in achieving the objectives of the programme of work.
- The AWERB was particularly interested to note the group's development of an *in vitro* [REDACTED] organoid system for studying genes of interest and the fact that they had made extensive use of this as an alternative to using primary tissue in the validation of several newly developed antibodies. Members were keen to ensure that this important development was publicised in light of its 3Rs importance.
- Members requested clarification regarding the actual severity figures provided in the review.

Actions

- AWERB Administrator to email summary of committee's feedback to the applicant.

6. CBS updates

Item discussed: Study plans

Points to note

- Following the discussion at the last meeting regarding the potential advantages of the use of study plans, a copy of the version currently being disseminated by CBS had been circulated in the meeting papers for information.
- Members also received an update from the Chair regarding recent discussions on the implementation of study plans that had taken place at the Management & Strategy committee. Members discussed both the advantages and potential problems associated with a wider rollout of their use and it was agreed that these comments should be highlighted when this item was considered at the next central AWERB meeting.

Item discussed: NVS Analgesia presentation

Points to note

- The NVS delivered a presentation highlighting the benefits of multimodal analgesia.
- Members underlined the importance of licence holders holding early discussions with the NVS regarding selection of the most suitable anaesthesia and analgesia regimen for surgical procedures and agreed with the recommendation made by the [REDACTED] local AWERB that it would be helpful if the table capturing information on anaesthesia and analgesic approaches currently included in the Interim and Retrospective review form was also replicated in the AWERB application form.

Actions

- AWERB Administrator to revise the AWERB application form accordingly.

7. **A.O.B****Item discussed: Failure to submit project licence applications in a timely manner****Points to note**

- The AWERB Administrator advised members that some PPL holders were still not drafting replacement PPL applications in accordance with the timelines advised by the AWERB and the CBS QA Advisory group, despite the roll out of the new reminder system that encouraged project licence holders to apply for replacement licences in good time. Unfortunately, this failure to submit applications for review in a timely manner was likely to result in some current project licences expiring before replacement PPLs were granted, leading to a gap in authorities to carry out regulated work.
- The Chair requested that he be sent more information regarding two licences that were currently giving rise to such concerns, in order that he could write to the project licence holders, on behalf of the AWERB, requesting information as to how they were intending to manage this situation.

Actions

- AWERB administrator and [REDACTED] facility manager to send requested information to the AWERB Chair in order that he could write to the two licence holders.

Dates of next meetings:

24 ^h May 2021	10.30-13.00
14 ^h June 2021	10.30-13.00
12 ^h July 2021	10.30-13.00
16 ^h August 2021	10.30-13.00

Local Animal Welfare and Ethical Review Body (AWERB) – [REDACTED]

13.30 – 15.00 19 June 2023
Microsoft Teams meeting

Minutes

Present:

Function	Name	Position
Chair	[REDACTED]	College academic
Member	[REDACTED]	College academic
Member	[REDACTED]	College academic
<i>Ex officio</i> Member	[REDACTED]	3Rs Advisory Group Representative Named Animal Care and Welfare Officer for the site (NACWO) & NIO
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon (NVS)
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon (NVS) CBS Meeting and Support Administrator and lay member with no responsibilities under ASPA
Member Member and attending as secretary	[REDACTED]	AWERB Administrator and member with no responsibilities under ASPA Named Training and Competency Officer (NTCO)
In attendance	[REDACTED]	Training Officer & Named Training and Competency Officer (NTCO)
In attendance	[REDACTED]	

Apologies:

Function	Name	Position
Member	[REDACTED]	College academic
Member	[REDACTED]	College academic
Member	[REDACTED]	College academic Named Animal Care and Welfare Officer for the site (NACWO)
<i>Ex officio</i> Member	[REDACTED]	

Item**1. Members' declarations of interest in respect of items on the agenda**

None identified.

2. Minutes and matters arisingPoints to note

- The minutes of the previous meeting were approved, and updates were given on actions from the previous meeting.

3. Review of licence application amendment – [REDACTED]Points to note

- An application for an amendment to a project licence was considered. This was a resubmission of the amendment request previously considered by members at the April meeting.
- The NTCO advised members regarding the discussions that had taken place between the licence holder, the Director of CBS and herself in order to address the queries raised by the AWERB regarding training for one of the new techniques included in the amendment. She was pleased to report that a group using this technique at another Establishment had been approached and had kindly agreed to facilitate the necessary training.
- The committee was content that the additional details provided in the revised amendment and revised interim review now provided the necessary level of detail in order to permit a harm-benefit assessment of the additional components of work to be undertaken.

Decisions

- The revised amendment request was approved for submission to the Home Office.
- Given the uncertainty regarding the potential adverse effects that might follow from the use of the therapies in the new models covered by the amendment, the AWERB agreed that in addition to the use of study plans for all studies carried out by the group, the licence holder should be required to provide a report to the AWERB, for each of the new models, once the experimental work on two pilot cohorts of animals had been completed, and prior to any subsequent studies being initiated. Each report should contain information on the outcome of the pilot experiments including details of morbidity, severity and any unexpected adverse effects observed.

Actions

- AWERB administrator to email a summary of the committee's feedback to the licence holder.

4. Interim Review – [REDACTED]Points to note

- One interim review of an ongoing project was considered by the committee.
- A copy of the licence had been circulated to members for information to assist with carrying out the review.
- The AWERB noted that this was a thorough and clearly written review and that the licence holder had made good progress in achieving some of the

objectives set out in the programme of work and were pleased to see that the work was leading to clinically relevant benefits.

- Members were also pleased to observe that the actual severity limits were generally in line or less severe than those originally anticipated and the continuing efforts of the group with regards to 3Rs implementation.

Actions

- AWERB Administrator to email summary of committee's feedback to the licence holder.

5. **Report from Central AWERB**

Points to note

- The approved minutes of the March central AWERB meeting were noted.

6. **Regular report on applications submitted, standard condition 18 self-reporting and potential non-compliance reports**

Points to note

- The regular report was noted.

7. **CBS updates**

Points to note

- The NTCO advised members that she was pleased to report that the college's e-learning team had now accepted the script and content that had been put together for the GA breeding online training course, and that the e-learning team were now creating the training module.

8. **A.O.B**

None identified.

Dates of next meetings:

18 th July 2023	13.30-16.00
21 st August 2023	13.30-16.00
18 th Sept 2023	13.30-16.00
16 th October 2023	13.30-16.00
13 th November 2023	13.30-16.00
11 th December 2023	13.30-16.00

Imperial College London

Central Animal Welfare and Ethical Review Body (AWERB)

14:00 – 17:00 19 July 2021 (Meeting 5)

MS Teams

Present:

Function	Name	Position
Chair	[REDACTED]	Senior College academic
Vice-chair	[REDACTED]	Lay person
<i>Ex officio</i> Member	[REDACTED]	Establishment Licence Holder
<i>Ex officio</i> Member	[REDACTED]	Chair of the Local AWERB – [REDACTED]
<i>Ex officio</i> Member	[REDACTED]	Chair of the Local AWERB – [REDACTED]
<i>Ex officio</i> Member	[REDACTED]	Chair of the 3Rs Advisory Group
<i>Ex officio</i> Member	[REDACTED]	Director of Central Biomedical Services (CBS)
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon (NVS)
<i>Ex officio</i> Member	[REDACTED]	Named Animal Care and Welfare Officer (NACWO)
<i>Ex officio</i> Member	[REDACTED]	Named Training and Competency Officer (NTCO)
Member	[REDACTED]	Senior College Academic
Member	[REDACTED]	Senior College Academic
Member	[REDACTED]	External Member
Member	[REDACTED]	Post-doctoral fellow representing the post-doctoral community
In attendance	[REDACTED]	CBS Meeting and Support Administrator
Member and secretary	[REDACTED]	AWERB Administrator & Named Information Officer (NIO)

Apologies:

Function	Name	Position
<i>Ex officio</i> Member	[REDACTED]	Director of Bioservices
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon (NVS)
Member	[REDACTED]	External member
Member	[REDACTED]	Lay person
Member	[REDACTED]	Lay person & Imperial Communications representative
Member	[REDACTED]	PhD student representing the student community

	<u>Item</u>
1.	<p><u>Members' declarations of interests in respect of items on the agenda</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> • [REDACTED] declared an interest in Agenda item 4 since her work was covered by the project licence undergoing review. She noted that she would recuse herself from the AWERB's deliberations and decision making for this agenda item.
2.	<p><u>Minutes and matters arising</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> • The minutes of the last meeting were agreed, subject to a minor typographical correction to item 12. • Updates were given on actions from the previous meeting. • With regards to action 313, it was agreed that it would be helpful for the Director of CBS to consider and identify the main areas where additional ICT "champion" support would be helpful. <p><u>Actions</u></p> <ul style="list-style-type: none"> • AWERB Administrator to correct item 12.
3.	<p><u>Review of licence application - [REDACTED]</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> • An application for a new project licence was considered. • The licence was to continue a program of work covered by an existing PPL due to expire in October. • The committee was content with the programme of work proposed in the draft application, subject to various revisions requested by the committee. • The committee carried out a retrospective review of the expiring PPL in parallel with consideration of the new application. <p><u>Decisions</u></p> <ul style="list-style-type: none"> • The application was approved for submission to the Home Office, subject to the inclusion of the revisions requested by the committee. • The revised submission will be approved by Chair's action. • The interim review for this PPL should be set to the mid-point of the licence. • Given the likelihood that the applicant would need to submit multiple amendment requests during the course of this work, members agreed that standard track amendments for protocols with a moderate or lower severity limit could be considered by the appropriate local AWERB. <p><u>Actions</u></p> <ul style="list-style-type: none"> • AWERB Administrator to email summary of committee's feedback and required revisions to the applicant.
4.	<p><u>Review of licence application - [REDACTED]</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> • An application for a new project licence was considered. • The licence was to continue a program of work covered by an existing PPL due to expire in October.

	<ul style="list-style-type: none"> • [REDACTED] recused herself from the discussion and decision making process for this agenda item; she was present only for the applicant presentation and question and answer sections of the proceedings and left the meeting for the pre-presentation discussion and for the post-presentation discussion and decision making process, only re-joining the meeting when discussion and decisions regarding this item had concluded. • The committee was content with the overall programme of work proposed but discussed a number of revisions that the AWERB would require to be implemented in the draft application, prior to approving the application for formal submission to the Home Office. • The committee carried out a retrospective review of the expiring PPL in parallel with consideration of the new application. <p><u>Decisions</u></p> <ul style="list-style-type: none"> • The application was approved for submission to the Home Office, subject to the inclusion of the revisions requested by the committee. • The revised submission will be approved by Chair's action, following prior review by several members of the AWERB present at the meeting. • The interim review for this PPL should be set to the mid-point of the licence. • Taking into account the potential for adverse effects associated with new surgical approaches for [REDACTED], a report detailing the outcome of the pilot experiments involving new surgical approaches would be required to be submitted to the AWERB on completion of the first pilot study, and prior to any subsequent studies being initiated, for each new surgical approach. <p><u>Actions</u></p> <ul style="list-style-type: none"> • AWERB Administrator to email summary of committee's feedback and required revisions to the applicant.
5.	<p><u>Review of Retrospective Assessment – [REDACTED]</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> • A retrospective assessment of a recently expired project licence containing a protocol with a severe severity limit was reviewed. • In accordance with the legislation, and the guidance provided by ASRU, the project licence holder is required to submit a copy of the assessment to the Home Office, by the due date, following consideration of the assessment by the AWERB. • A copy of the licence had been circulated to members for information to assist with carrying out the assessment. • The AWERB was pleased to note the scientific progress made during the course of the licence and that the licence holder had been able to successfully address three of the four original objectives of the work. • Members were particularly pleased that the group had been able to minimise the harms associated with the work and that the main model had been adapted to elicit only very localised brain damage avoiding any signs of moderate or severe neurological damage. <p><u>Decisions</u></p> <ul style="list-style-type: none"> • The committee was content to approve the retrospective assessment for submission to the Home Office subject to the inclusion of the revisions requested by the committee. <p><u>Actions</u></p>

	<ul style="list-style-type: none"> • AWERB Administrator to email summary of committee's feedback and required revisions to the licence holder.
6.	<p><u>Failure to submit PPL applications in a timely manner - summary of the timelines for PPL submission and review, and for the management of ongoing animal work</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> • Following the discussions that had taken place at the last meeting, members reviewed a summary document capturing a summary of the timelines for PPL submission and review, and for the management of ongoing animal work as discussed during that meeting. <p><u>Decisions</u></p> <ul style="list-style-type: none"> • The AWERB approved the proposed timelines and actions for management of ongoing animal work summarised in the paper and agreed that information regarding this should be included in the reminder emails sent to project licence holders. <p><u>Actions</u></p> <ul style="list-style-type: none"> • The Chair of the [REDACTED] local AWERB to review and revise the proposed wording in the template reminder emails and AWERB guidance document, prior to the CBS Meeting and Support Administrator sending out updated email notifications to project licence holders whose licences were due to expire over the coming period.
7.	<p><u>ASRU Change Programme</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> • The AWERB administrator updated the committee on the background to ASRU's Change Programme, and key policy and operational changes that were likely to be introduced as a consequence of the Change Programme. • Members also discussed key information contained in two documents recently released by ASRU summarising Bridging Ways of Working and New Contact Methods, following from the introduction of the bridging ways of working that ASRU had adopted with effect from the 5th July. <p><u>Decisions</u></p> <ul style="list-style-type: none"> • Members agreed that the annual review of the AWERB's Terms of Reference should be deferred until a later date, in light of the fact that it was not yet clear whether the changes being adopted by ASRU would necessitate revisions to the ToR. <p><u>Actions</u></p> <ul style="list-style-type: none"> • The AWERB administrator to re-schedule consideration of the TOR to a future meeting, in order to allow time for the potential impact of the measures being introduced by ASRU to become clearer.
8.	<p><u>Regular report on applications submitted, self-reporting & compliance notices</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> • The regular report was noted.

9.	<p><u>Director of CBS operational update</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> • The Director of CBS provided members with a verbal update. • In particular, he advised members regarding the CBS operational response with regards to COVID-19. All facilities were currently operating using additional precautions as necessary in order to comply with the latest government guidance; these measures were kept under regular review. • He also informed members that CBS had now implemented a task request function in A-tune that has moved most task driven processes from paper to electronic format and that this feature was being used to pilot a 3Rs tissue sharing initiative in conjunction with the 3Rs advisory group. • The planned AAALAC re-accreditation site visit in August had had to be postponed due to travel restrictions and it was hoped that a new date would be agreed soon.
10.	<p><u>Local AWERB – [REDACTED] report</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> • The approved minutes of the April and June 2021 local AWERB meetings were received and noted.
11.	<p><u>Communications update</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> • The winners of the Provost’s Awards for Excellence in Animal Research 2021 were announced in June and a news story was published on the Imperial website featuring the winners of the team award. The winners will also feature in the upcoming animal research report. • On 15th July 2021 the Home Office published the annual national animal research statistics for 2020. As in previous years, Understanding Animal Research ran a publicity campaign linked to this release and the College published its own animal research figures on the college website to coincide with this. The communications team provided them with a case study on how animals had been used in medical research at college and participated in a social media campaign organised by UAR on the day of publication of the national statistics.
12.	<p><u>3Rs group update</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> • A NACWO at the [REDACTED] campus had recently been appointed as a 3Rs hub liaison. • A pilot project has been initiated within A-tune to provide users with a contacts database to share surplus animal tissue. It was intended that the pilot would run for a period of 6 months in the first instance, and if successful it would be adopted as a permanent feature. • The experimental design course for <i>in vivo</i> scientists was scheduled to take place, using an on-line interactive seminar format, in September.

<p>13.</p>	<p><u>Local AWERB – [REDACTED] report</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> • The approved minutes of the April and May 2021 local AWERB meeting were received and noted.
<p>14.</p>	<p><u>A.O.B</u></p> <p><u>Item discussed: Membership Update</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> • The Chair informed members that [REDACTED], the PhD student representing the student community on cAWERB, had informed her that she would be leaving college before the start of the next academic year, upon completion of her PhD. • The Chair advised members that [REDACTED] had informed her that he would be stepping down as a member at the end of the academic year and extended her thanks to him for his contribution to the work of the AWERB over his period of membership of the committee. • The Chair noted that prior to recruiting a replacement for [REDACTED], it would be appropriate to consider whether the effectiveness of the AWERB could be enhanced by a recruitment covering an area of scientific expertise not currently covered by the membership. <p><u>Decisions</u></p> <ul style="list-style-type: none"> • Information regarding the opportunity for suitably qualified PhD students to serve as a central AWERB member should be circulated to all PPL and PIL holders. Interested candidates should be advised to contact the central AWERB Chair, explaining why they were interested in taking on the role and what they believed they could contribute to the work of the central AWERB. <p><u>Actions</u></p> <ul style="list-style-type: none"> • AWERB administrator to arrange for CBS to circulate all PPL and PIL holders regarding the central AWERB PhD student vacancy at the start of the autumn term. • Members to email the Chair with any suggestions regarding broadening the areas of scientific expertise covered by the membership. <p><u>Item discussed: NVS recruitment</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> • The NVS informed members that [REDACTED] had recently recruited an additional highly experienced veterinary surgeon; it was anticipated that he would be taking on a full time role at college from the beginning of August.

Dates of next meetings:

21 September 2021	14.00-17.00	Virtual – MS Teams
15 November 2021	14.00-17.00	Virtual – MS Teams
19 January 2022	14.00-17.00	TBC
16 March 2022	14.00-17.00	TBC
16 May 2022	14.00-17.00	TBC
18 July 2022	14.00-17.00	TBC

Imperial College London

Central Animal Welfare and Ethical Review Body (AWERB)

13:30 – 16.30 20 March 2023 (Meeting 3)

MS Teams

Present:

Function	Name	Position
Chair	[REDACTED]	Senior College academic
Vice-chair	[REDACTED]	Lay person
<i>Ex officio</i> Member	[REDACTED]	Establishment Licence Holder
<i>Ex officio</i> Member	[REDACTED]	Director of Central Biomedical Services (CBS)
<i>Ex officio</i> Member	[REDACTED]	Chair of the Local AWERB – [REDACTED]
<i>Ex officio</i> Member	[REDACTED]	Chair of the 3Rs Advisory Group
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon (NVS)
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon (NVS)
<i>Ex officio</i> Member	[REDACTED]	Named Animal Care and Welfare Officer (NACWO) & Named Information Officer (NIO)
<i>Ex officio</i> Member	[REDACTED]	Named Training and Competency Officer (NTCO)
Member	[REDACTED]	Senior College academic and biostatistician
Member	[REDACTED]	External Member
Member	[REDACTED]	External Member
Member	[REDACTED]	External Member
Member	[REDACTED]	Post-doctoral fellow representing the post-doctoral community
Member	[REDACTED]	PhD student representing the student community
Member	[REDACTED]	CBS Meeting and Support Administrator and lay member with no responsibilities under ASPA
Member and secretary	[REDACTED]	AWERB Administrator and member with no responsibilities under ASPA
In attendance	[REDACTED]	Named Animal Care and Welfare Officer (NACWO)

Apologies:

Function	Name	Position
<i>Ex officio</i> Member	[REDACTED]	Director of Bioservices
<i>Ex officio</i> Member	[REDACTED]	Chair of the Local AWERB – [REDACTED]
Member	[REDACTED]	Lay person & Imperial Communications representative
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon Service (dNVS)

	<p><u>Item</u></p> <ul style="list-style-type: none"> The Chair thanked [REDACTED], the NACWO who had reviewed the PPL application being considered under agenda item 3, for attending the meeting.
1.	<p><u>Members' declarations of interests in respect of items on the agenda</u></p> <p>None identified.</p>
2.	<p><u>Minutes and matters arising</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> The minutes of the last meeting were agreed. Updates were given on actions from the previous meeting.
3.	<p><u>Review of licence application and retrospective review – [REDACTED]</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> An application for a new project licence was considered. The application was to continue a program of work covered by an existing licence due to expire in June 2023. The committee was content with the overall programme of work proposed but discussed a number of revisions that the AWERB would require to be implemented in the draft application, prior to approving the application for formal submission to the Home Office. The committee carried out a retrospective review of the expiring PPL in parallel with consideration of the new application. The AWERB was pleased to note the group's efforts with regards to 3Rs implementation and the use of <i>in vitro</i> models of vaccine formulation and antigen expression. <p><u>Decisions</u></p> <ul style="list-style-type: none"> The application was approved for submission to the Home Office, subject to the inclusion of the revisions requested by the committee. The revised submission will be approved by Chair's action. The mid-term review for this PPL should be set to the mid-point of the licence. <p><u>Actions</u></p> <ul style="list-style-type: none"> AWERB administrator to email summary of committee's feedback and required revisions to the applicant.
4.	<p><u>Review of licence application and retrospective review – [REDACTED]</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> An application for a new project licence was considered. The application was to continue a program of work covered by a project licence that was due to expire in August 2023. The committee was content with the overall programme of work proposed but discussed a number of revisions that the AWERB would require to be implemented in the draft application, prior to approving the application for formal submission to the Home Office. The committee reviewed the retrospective review of the expiring PPL in parallel with consideration of the new application. The AWERB was pleased to note that the licence holder was using a range of reduction, replacement and refinement strategies in his work. In particular, members noted the group's use of cell culture screening with high content imaging for assessing the suitability of potential targets to promote

	<p>regenerative growth and the use of <i>in silico</i> predictions to select suitable targets for <i>in vivo</i> testing.</p> <p><u>Decisions</u></p> <ul style="list-style-type: none"> • The application was approved for submission to the Home Office, subject to the inclusion of the revisions requested by the committee. • The revised submission will be approved by Chair's action following a review by the NVS. • The mid-term review for this PPL should be set to the mid-point of the licence. • Considering the potential severity of the work to be undertaken on protocol 7, the AWERB agreed that it would require the PPL holder to use study plans, outlining the experiments to be undertaken, and the monitoring and humane end points to be applied, and to agree these, and the scoring sheets, with the NVS and NACWO prior to commencing any work under this protocol. It would also require the licence holder to submit a report to the AWERB containing information on morbidity, mortality, actual severity, and any other relevant information regarding the outcome of the procedures carried out under this protocol on completion of the first two cohorts of animals, and prior to any subsequent studies being initiated. <p><u>Actions</u></p> <ul style="list-style-type: none"> • AWERB administrator to email summary of committee's feedback and required revisions to the applicant.
5.	<p><u>Review of licence application and retrospective review –</u> ██████████</p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> • An application for a new project licence was considered. • The application was a replacement application for a project licence that was due to expire shortly. • The committee was content with the overall programme of work proposed but discussed a number of revisions that the AWERB would require to be implemented in the draft application, prior to approving the application for formal submission to the Home Office. In particular, given that this application was for a service licence, the AWERB asked for additional information to be included in the application to provide assurance regarding the processes in place to ensure that an appropriate harm-benefit evaluation had been undertaken prior to the acceptance of work by the licence holder. • The committee reviewed the retrospective review of the expiring PPL in parallel with consideration of the new application. • Members were pleased to note that the group had been working with the NVS team to refine their analgesia protocol used for surgical procedures. <p><u>Decisions</u></p> <ul style="list-style-type: none"> • The application was approved for submission to the Home Office, subject to the inclusion of the revisions requested by the committee. • The revised submission will be approved by Chair's action. • The mid-term review for this PPL should be set to the mid-point of the licence. <p><u>Actions</u></p> <ul style="list-style-type: none"> • AWERB administrator to email summary of committee's feedback and required revisions to the applicant.

6.	<p><u>Retrospective Assessment – [REDACTED]</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> • A retrospective assessment of a recently expired project licence containing a protocol with a severe severity limit was reviewed. • In accordance with the legislation, and the guidance provided by ASRU, the project licence holder is required to submit a copy of the assessment to the Home Office, by the due date, following consideration of the assessment by the AWERB. • A copy of the licence had been circulated to members for information to assist with carrying out the assessment. • The AWERB was pleased to note the scientific progress made during the course of the licence. Members were particularly pleased to see that only very small numbers of mice and rats had been used under the severe severity limit protocol for [REDACTED], and that the licence holder had been able to refine the experimental design to avoid the need to include a severe [REDACTED] protocol in their new licence. <p><u>Decisions</u></p> <ul style="list-style-type: none"> • The committee was content to approve the retrospective assessment for submission to the Home Office. <p><u>Actions</u></p> <ul style="list-style-type: none"> • AWERB administrator to email summary of committee's feedback to the licence holder.
7.	<p><u>Regular report on applications submitted, self-reporting & compliance notices</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> • The regular report was noted. • With regards to the condition 18 report incident dated 21st November 2022, the NACWO advised members that all out of hours access requests from PILs were routinely granted where out of hours monitoring was needed; no additional requests had been received from the group prior to the incident occurring.
8.	<p><u>Local AWERB – [REDACTED] report</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> • The approved minutes of the October and December 2022 local AWERB meetings were received and noted.
9.	<p><u>Local AWERB – [REDACTED] report</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> • The approved minutes of the October, November and December 2022 local AWERB meetings were received and noted.
10.	<p><u>3Rs Advisory group update</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> • The annual Animal Research forum had been a success, and the quality of scientific presentations had been very high. • Discussions had been taking place between the Chair of the 3Rs Advisory group and a member of the NVS team regarding the outcome of the Tat-fit NC3Rs CRACK IT challenge to design a palatable form of rodent chow for the administration of tamoxifen. This might offer a more refined method of administering tamoxifen than the first-choice methods currently identified in

	<p>the 3Rs Advisory group's advice document on tamoxifen. The group would be considering making revisions to the guidance document in due course, and it would be helpful for licence applicants to be encouraged to include dietary methods in their list of potential administration routes in order to future proof applications.</p>
11.	<p><u>Communications update</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none">• A news story about the 2022 Animal Research Forum was published on the College's website in December.• In February, Imperial's Twitter account highlighted the work of animal technicians in February, as part of the Institute of Animal Technology's Tech Month. This was a month-long event that draws attention to the important role of animal technicians and technologists in the laboratory.
12.	<p><u>Director of CBS operational update</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none">• The Director of CBS was pleased to announce that the new [REDACTED] facility had now opened.• He updated members regarding a number of facility refurbishment works that were currently underway or due to commence shortly.
13.	<p><u>A.O.B</u></p> <p>None identified.</p>

Dates of next meetings:

16 May 2023	13.30-16.30	Virtual
17 July 2023	13.30-16.30	Virtual

13.30 – 15.00 20th June 2023
MS Teams

Minutes

Present:

Function	Name	Position
Chair	[REDACTED]	College academic
Co Vice-Chair	[REDACTED]	College academic
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon (NVS) Named Animal Care and Welfare Officer (NACWO) for the site & Named Information Officer (NIO)
<i>Ex officio</i> Member	[REDACTED]	3Rs programme manager and 3Rs Group Representative
<i>Ex officio</i> Member	[REDACTED]	CBS Meeting and Support Administrator and lay member with no responsibilities under ASPA
Member	[REDACTED]	
Member and attending as secretary	[REDACTED]	AWERB Administrator and member with no responsibilities under ASPA
In attendance	[REDACTED]	Named Training and Competency Officer (NTCO)

Apologies:

Function	Name	Position
Co Vice-Chair	[REDACTED]	College academic
Member	[REDACTED]	College academic
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon (NVS)

Item

1. **Members' declarations of interest in respect of items on the agenda**

None identified.

2. **Minutes and matters arising**

Points to note

- The minutes of the previous meeting were agreed.
- Updates were given on actions from the previous meeting.

3. **Interim review –**

Points to note

- One interim review of an ongoing project was considered by the committee.
- A copy of the licence had been circulated to members for information to assist with carrying out the review.
- The AWERB noted that this was a high quality, thorough review and that good progress had been made in achieving some of the objectives set out in the programme of work, and that a number of papers had already been published from work that had taken place under the licence. Members were pleased to see that these included methods protocol papers, an important component in achieving reproducibility in research, and in promoting uptake of improved and more refined methodology.
- Members were pleased to observe that the animal numbers used to date were within the limits originally anticipated and that the reported actual severity limits of the procedures undertaken had been generally in line or less severe than those originally anticipated.
- The committee was pleased to note the group's ongoing efforts with regards to 3Rs implementation and that the group had successfully replaced some components of animal work with work using human samples and that they were developing a mathematical model of murine bone marrow for in silico testing.

Actions

- AWERB Administrator to email summary of committee's feedback to the licence holder.
- Named people to conduct a review of the standard condition 18 reports with the project licence holder in order to assess if additional refinements could be identified.

4. **Report from Central AWERB**

Points to note

- The approved minutes of the March Central AWERB meeting were noted.

5. **Regular report on applications submitted, standard condition 18 self-reporting and potential non-compliance reports**

Points to note

- The regular report was noted.

6. **CBS updates**

Points to note

- The facility manager provided members with a staffing update. She also reported that the refurbishment works were currently proceeding to schedule and that no issues of concern had been raised to date.

- The NTCO advised members that she was pleased to report that the college's e-learning team had now accepted the script and content that had been put together for the GA breeding online training course, and that the e-learning team were now creating the training module.

7. **A.O.B**

Item discussed: Interim review update

Points to note

- Members noted that no updated interim review had yet been received in response to AWERB meeting feedback of an interim review carried out at the January meeting.

Actions

- CBS Meeting and Support Administrator to email a final reminder regarding this overdue review.

Dates of next meetings:

24 th July 2023	13.30-16.30
22 nd August 2023	13.00-16.00
08 th September	10.30-13.30
23 rd October 2023	13.30-16.30
14 th November 2023	10.00-13.00
12 th December 2023	13.30-16.30

13.30 – 15.30 21st June 2022
MS Teams

Minutes

Present:

Function	Name	Position
Chair	[REDACTED]	College academic
Co Vice-Chair	[REDACTED]	College academic
Co Vice-Chair	[REDACTED]	College academic
Member	[REDACTED]	College academic College academic and 3Rs Group
<i>Ex officio</i> Member	[REDACTED]	Representative
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon (NVS) Named Animal Care and Welfare Officer
<i>Ex officio</i> Member	[REDACTED]	(NACWO) for the site
Member	[REDACTED]	Post-doctoral representative
Member	[REDACTED]	External Member
Member	[REDACTED]	3Rs programme manager and 3Rs Group Representative CBS Meeting and Support Administrator and lay member with no responsibilities under ASPA
Member	[REDACTED]	AWERB Administrator and member with no responsibilities under ASPA
Member and attending as secretary In attendance (for agenda item 5 only)	[REDACTED]	Zebrafish researcher
In attendance (for agenda item 5 only)	[REDACTED]	Zebrafish researcher

Apologies:

Function	Name	Position
Member	[REDACTED]	Co-Chair 3Rs Advisory Group
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon (NVS) Named Animal Care and Welfare Officer (NACWO) for the site & Named Information Officer (NIO)
<i>Ex officio</i> Member	[REDACTED]	

Item

- The Chair welcomed [REDACTED], a new cAWERB external member to her first [REDACTED] local AWERB and thanked her for attending.

1. **Members' declarations of interest in respect of items on the agenda**

Points to note

- [REDACTED] declared a potential conflict of interest in Agenda item 3 in light of the fact that he was in the department as the applicant for the project licence undergoing review. Members were content that this was not prejudicial to him participating in the decision making for this agenda item.

2. **Minutes and matters arising**

Points to note

- The minutes of the previous meeting were agreed.
- Updates were given on actions from the previous meeting.

3. **Review of licence application – [REDACTED]**

Points to note

- An application for a new project licence was considered.
- The committee was content with the overall programme of work proposed but discussed a number of revisions that the AWERB would require to be implemented in the draft application, prior to approving the application for formal submission to the Home Office.

Decisions

- The application was approved for submission to the Home Office, subject to the inclusion of the revisions requested by the committee.
- The mid-term review for this PPL should be set to the mid-point of the licence.
- The revised submission will be approved by Chair's action.

Actions

- AWERB administrator to email summary of committee's feedback and required revisions to the applicant.

4. **Pain Management in Zebrafish - Report from a FELASA Working Group**

Points to note

- The Chair welcomed two researchers, ([REDACTED] and [REDACTED]), who worked in a group holding a project licence involving the use of zebrafish, to the meeting and thanked them for attending to participate in the discussion of a recent FELASA working group draft report on pain management in zebrafish.
- [REDACTED] provided an overview and summarised the key points made in the report. She then led a discussion on some of the key recommendations in the report.
- Members discussed the feasibility of introducing skin swabbing or use of gentle agitation/enzyme exposure for genotyping at embryonic larval stages as alternatives to replace fin clipping for obtaining DNA samples and advised that the Chair of the 3Rs Advisory group had recently proposed, at the May central AWERB meeting, that any group using fin clipping for genotyping be encouraged to apply to the 3Rs hub for funding to pilot the use of alternative methods.
- Members also noted that, for any cases where the use of fin clipping could not currently be satisfactorily replaced by more refined alternatives, it was important that researchers

reviewed the duration for which analgesia was provided after fin clipping in light of the duration recommended in the report. The NACWO was asked to liaise with relevant users accordingly.

5. Report from Central AWERB

Points to note

- The approved minutes of the March central AWERB meeting were noted.
- A verbal update was also provided regarding items of particular interest discussed at the May central AWERB meeting.

6. Regular report on applications submitted, self-reporting and compliance notices

Points to note

- The regular report was noted.

7. CBS updates

None identified.

8. A.O.B

None identified.

Dates of next meetings:

19 th July 2022	13.30-16.30
16 th August 2022	13.30-16.30
13 th September 2022	13.30-16.30
18 th October 2022	13.30-16.30
8 th November 2022	13.30-16.30
5 th December 2022	13.30-16.30

Local Animal Welfare and Ethical Review Body (AWERB) – [REDACTED]

10.30 – 13.00 22 March 2021
Microsoft Teams meeting

Minutes

Present:

Function	Name	Position
Chair	[REDACTED]	College academic
Vice Chair	[REDACTED]	College academic and 3Rs Group Representative
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon (NVS)
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon Service (dNVS)
<i>Ex officio</i> Member	[REDACTED]	Site Manager & Named Information Officer
<i>Ex officio</i> Member	[REDACTED]	Named Animal Care and Welfare Officer for the site (NACWO)
Member	[REDACTED]	Post-doctoral representative
Member	[REDACTED]	PhD student representative
In attendance	[REDACTED]	Named Animal Care and Welfare Officer for the site (NACWO)
In attendance	[REDACTED]	Named Animal Care and Welfare Officer for the site (NACWO)
Attending as secretary	[REDACTED]	AWERB Administrator and Named Information Officer

Apologies:

Function	Name	Position
Member	[REDACTED]	College Academic
Member	[REDACTED]	College Academic
Member	[REDACTED]	College Academic
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon (NVS)
In attendance	[REDACTED]	Home Office Inspector (HOI)
In attendance	[REDACTED]	Home Office Inspector (HOI)

Item**1. Members' declarations of interest in respect of items on the agenda**

None identified.

2. Minutes and matters arisingPoints to note

- The minutes of the previous meeting were agreed.
- Updates were given on actions from the previous meeting.

3. Review of licence application – [REDACTED]Points to note

- An application for a new project licence was considered.
- Although the licence was to continue a program of work covered by an expiring PPL, it was noted that the previous licence had been held by an alternative project licence holder.
- The committee was content with the programme of work proposed in the draft application, subject to various revisions requested by the committee.
- The committee carried out a retrospective review of the expiring PPL in parallel with the consideration of the new application.
- The AWERB was pleased to note that the licence holder was using a range of reduction, replacement and refinement strategies in his work. Members noted with particular interest ongoing work developing the use of a human [REDACTED] [REDACTED] as a prospective replacement methodology, and looked forward to hearing further details regarding this model in due course.

Decisions

- The application was approved for submission to the Home Office, subject to the inclusion of the revisions requested by the committee.
- The revised submission will be approved by Chair's action following prior consultation with the NVS.
- The mid-term review for this PPL should be set to the mid-point of the licence.

Actions

- AWERB Administrator to email summary of committee's feedback and required revisions to the applicant.

4. Review of licence application – [REDACTED]Points to note

- An application for a new project licence was considered.
- The committee was content with the programme of work proposed in the draft application, subject to some minor revisions requested by the committee.

Decisions

- The application was approved for submission to the Home Office, subject to the inclusion of the minor revisions requested by the committee.
- The revised submission will be approved by Chair's action.
- The mid-term review for this PPL should be set to the mid-point of the licence.

Actions

- AWERB Administrator to email summary of committee's feedback and required revisions to the applicant.

5. Review of licence applicationPoints to note

- An application for a new project licence was considered.
- The committee was content with the overall programme of work proposed but discussed a number of revisions that the AWERB would require to be implemented in the draft application, prior to approving the application for formal submission to the Home Office.

Decisions

- The application was approved for submission to the Home Office, subject to the inclusion of the revisions requested by the committee.
- The revised submission will be approved by Chair's action following prior review by the NVS.
- The mid-term review for this PPL should be set to the mid-point of the licence.

Actions

- AWERB Administrator to email summary of committee's feedback and required revisions to the applicant.

6. Report from Central AWERBPoints to note

- The approved minutes of the November central AWERB meeting were noted and a verbal update was also provided regarding items of particular interest discussed at the March central AWERB meeting.

Actions

- The 3Rs group representative agreed to follow up regarding the use of cloud-based software for tracking body weight and tumour measurements with automated alerting system, in order to assess the potential for wider deployment of this system.

7. Regular report on applications submitted, self-reporting and compliance noticesPoints to note

- The regular report was noted.
- Members discussed the underlying trends apparent in the graphical summary of condition 18/ compliance reports. It was noted that although there was an increase in the number of reports submitted in 2020 with respect to the relative activity levels for the year, the increase followed from a relative increase in reports of unexpected adverse effects, rather than reports of potential non-compliance events.
- Members discussed various potential contributory factors that might explain the underlying data trends identified by the graphs and it was noted that the increase in condition 18 reports might potentially reflect greater familiarity and confidence of licence holders regarding the reporting procedures.
- The Site Manager advised that a potential non-compliance report was currently

being drafted which would be reported to AWERB at a future meeting.

- The NVS advised that CBS was actively promoting the use of study plans to researchers; it was noted that their use could enable animal care staff to provide PILs with enhanced support for the monitoring of adverse effects, and might also potentially assist with reducing the incidence of unexpected adverse effects and potential non-compliance reports.

Actions

- AWERB Administrator to include a copy of the CBS study plan in the papers of the next meeting.

8. **CBS Updates**

Points to note

- The site manager advised that [REDACTED] was in the process of creating a training plan for NACWOs, particularly targeted to new NACWOs, in order to provide training and support on how they should approach the review process for project licence applications and to provide guidance on the new PPL application format.

9. **A.O.B**

None identified.

Dates of next meetings:

19 ^h April 2021	10.30-13.00
24 ^h May 2021	10.30-13.00
14 ^h June 2021	10.30-13.00
12 ^h July 2021	10.30-13.00
16 ^h August 2021	10.30-13.00

Local Animal Welfare and Ethical Review Body (AWERB) – [REDACTED]

13.30 – 16.00 22 May 2023
Microsoft Teams meeting

Minutes

Present:

Function	Name	Position
Chair	[REDACTED]	College academic
Member	[REDACTED]	College academic
<i>Ex officio Member</i>	[REDACTED]	Named Animal Care and Welfare Officer for the site (NACWO) & NIO
<i>Ex officio Member</i>	[REDACTED]	Named Animal Care and Welfare Officer for the site (NACWO)
<i>Ex officio Member</i>	[REDACTED]	Named Veterinary Surgeon (NVS) CBS Meeting and Support Administrator and lay member with no responsibilities under ASPA
Member Member and attending as secretary	[REDACTED]	AWERB Administrator and member with no responsibilities under ASPA
In attendance	[REDACTED]	Training Officer & Named Training and Competency Officer (NTCO)

Apologies:

Function	Name	Position
Member	[REDACTED]	College academic
<i>Ex officio Member</i>	[REDACTED]	3Rs Advisory Group Representative
<i>Ex officio Member</i>	[REDACTED]	Named Veterinary Surgeon (NVS)
Member	[REDACTED]	College academic
Member	[REDACTED]	College academic
Member	[REDACTED]	College academic

Item**1. Members' declarations of interest in respect of items on the agenda**

None identified.

2. Minutes and matters arisingPoints to note

- The minutes of the previous meeting were approved, and updates were given on actions from the previous meeting.

3. Review of licence application –Points to note

- An application for a new project licence was considered.
- The committee was content with the programme of work proposed in the draft application, subject to revisions requested by the committee.

Decisions

- The application was approved for submission to the Home Office, subject to the inclusion of the revisions requested by the committee.
- The revised submission will be approved by Chair's action, following a review by the NVS.
- The mid-term review for this PPL should be set to the mid-point of the licence.
- In light of the novelty of the approach to the work to be carried out in protocol 2 and the potential practical constraints involved, the AWERB agreed that the applicant should be required to provide a report to the AWERB, containing information on the feasibility, outcome and potential adverse effects observed on completion of the work carried on the first two cohorts of animals, and prior to any subsequent studies being initiated.

Actions

- AWERB administrator to email a summary of the committee's feedback and required revisions to the applicant.

4. Interim Review –Points to note

- One interim review of an ongoing project was considered by the committee.
- A copy of the licence had been circulated to members for information to assist with carrying out the review.
- The AWERB noted that this was a thorough and clearly written review and that the licence holder had made good progress in achieving some of the objectives set out in the programme of work, and that a number of papers had already been published to date from work carried out under the licence.
- Members were pleased to observe that the actual severity limits were generally in line or less severe than those originally anticipated.
- The committee was pleased to note the group's efforts with regards to 3Rs implementation and the ongoing efforts made to replace some animal experiments through the use of computational modelling and measurements in [REDACTED]. Members were particularly pleased to hear of the group's engagement and constructive working relationship with CBS staff.

Actions

AWERB Administrator to email summary of committee’s feedback to the licence holder.

5. Interim Review – [REDACTED]

Points to note

- One interim review of an ongoing project was considered by the committee.
- A copy of the licence had been circulated to members for information to assist with carrying out the review.
- The AWERB noted that this was another thorough and clearly written review and that the licence holder had made good progress in achieving some of the objectives set out in the programme of work, and that a number of papers had already been published to date from work carried out under the licence.
- The committee was pleased to note the group’s continuing efforts with regards to 3Rs implementation and the ongoing efforts made to refine procedures and were pleased to read that they had been able to overcome the issue of [REDACTED] in [REDACTED], following dialogue with the NVS team.

Actions

AWERB Administrator to email summary of committee’s feedback to the licence holder.

6. CBS updates

Points to note

- The [REDACTED] facility manager provided members with an update on recent new technician appointments.

7. A.O.B

None identified.

Dates of next meetings:

19 th June 2023	13.30-16.00
18 th July 2023	13.30-16.00
21 st August 2023	13.30-16.00

13.30 – 16.00 24th January 2023
MS Teams

Minutes

Present:

Function	Name	Position
Chair	[REDACTED]	College academic
Co Vice-Chair	[REDACTED]	College academic
Co Vice-Chair	[REDACTED]	College academic
Member	[REDACTED]	College academic
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon (NVS) Named Animal Care and Welfare Officer (NACWO) for the site & Named Information Officer (NIO)
<i>Ex officio</i> Member	[REDACTED]	3Rs programme manager and 3Rs Group Representative
<i>Ex officio</i> Member	[REDACTED]	CBS Meeting and Support Administrator and lay member with no responsibilities under ASPA
Member	[REDACTED]	
Member and attending as secretary	[REDACTED]	AWERB Administrator and member with no responsibilities under ASPA
In attendance	[REDACTED]	Named Training and Competency Officer (NTCO)

Apologies:

Function	Name	Position
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon (NVS)
<i>Ex officio</i> Member	[REDACTED]	Co-Chair 3Rs Advisory Group

Item

1. **Members' declarations of interest in respect of items on the agenda**

None identified.

2. **Minutes and matters arising**

Points to note

- The minutes of the previous meeting were agreed.
- Updates were given on actions from the previous meeting.

3. **Review of licence application –**

Points to note

- An application for a new project licence was considered.
- The committee was content with the overall programme of work proposed but discussed a number of revisions that the AWERB would require to be implemented in the draft application, prior to approving the application for formal submission to the Home Office.

Decisions

- The application was approved for submission to the Home Office, subject to the inclusion of the revisions requested by the committee.
- The revised submission will be approved by Chair's action.
- The mid-term review for this PPL should be set to the mid-point of the licence.

Actions

- AWERB administrator to email summary of committee's feedback and required revisions to the applicant.

4. **Interim review –**

Points to note

- One interim review of an ongoing project was considered by the committee.
- A copy of the licence had been circulated to members for information to assist with carrying out the review.
- The AWERB noted that this was a thorough review and that the licence holder had made good progress in achieving some of the objectives set out in the programme of work.
- Members were pleased to note that the reported actual severity limits were predominantly in line or less severe than those originally anticipated.
- The committee noted the ongoing efforts with regards to 3Rs implementation and encouraged the group to continue their efforts in establishing organoid models as alternatives, despite the lack of success the group had encountered thus far in establishing a viable liver organoid model. In light of the encouraging success that other groups had had in moving to non in vivo blood feeding for mosquito colony maintenance, the AWERB advised the licence holder to seek advice on how to improve on the limited success the group had thus far experienced in moving to non-rodent feeding for colony maintenance. The AWERB would expect to be provided with a detailed update on this aspect during retrospective review of the licence.
- Members observed that the PPL holder should be advised to consider whether an amendment to the licence would be necessary in order to revise the animal numbers allocated to one protocol in the licence.

Actions

- AWERB Administrator to email summary of committee's feedback to the licence holder.

5. Interim review – [REDACTED]

Points to note

- One interim review of an ongoing project was considered by the committee.
- A copy of the licence had been circulated to members for information to assist with carrying out the review.
- The AWERB noted that this was another comprehensive and thorough review and that the licence holder had made good progress in achieving some of the objectives set out in the programme of work.
- Members were pleased to note that the reported actual severity limits were generally less severe than those originally anticipated and that the animal numbers used to date were well within the limits originally anticipated.
- The committee was pleased to note the ongoing efforts with regards to 3Rs implementation and were particularly pleased to read that the group had been able to replace the use of [REDACTED] knockout mice by using [REDACTED] haematopoietic stem cells isolated from human umbilical cord blood, which had had [REDACTED] knocked out using siRNA approaches, which were then cultured *in vitro*.
- Members were disappointed to learn of the difficulties that had been encountered during attempts to refine irradiation methods through the use of acidified water as an alternative to antibiotic administration and agreed that it would be helpful to request additional information regarding this, given that that acidified water was being successfully used by other groups at college.

Actions

- AWERB Administrator to email summary of committee's feedback to the licence holder.

6. Interim review – [REDACTED]

Points to note

- One interim review of an ongoing project was considered by the committee.
- A copy of the licence had been circulated to members for information to assist with carrying out the review.
- The committee observed that it would be helpful if the licence holder could provide more information regarding both the progress made in achieving the objectives of the programme of work and the actual harms that had arisen.
- Members were pleased to observe that the reported actual severity limits were predominantly in line with those originally anticipated and that the animal numbers used to date were well within the limits originally anticipated.
- The AWERB was pleased to note the ongoing efforts being made with regards to 3Rs implementation and that the licence holder had been able to replace some animal experiments using human studies of host-pathogen interactions in cystic fibrosis and lung transplant.

Actions

- AWERB Administrator to email summary of committee's feedback to the licence holder.
- AWERB Administrator to ask the [REDACTED] Facility Manager to contact the PPL holder to discuss GAA breeding.

7. CBS updates

None identified.

8. **A.O.B**

Item discussed: Implementation of 3Rs in pain research

Points to note

- The 3Rs Advisory group representative advised members that she had been approached by the NC3Rs regarding an externally organised targeted workshop regarding implementation of the 3Rs in pain research, and asked members to contact her with the names of any colleagues that they thought might benefit from attending this workshop.

Dates of next meetings:

14 th February 2023	13.30-16.30
13 th March 2023	13.30-16.30
18 th April 2023	13.30-16.30
23 rd May 2023	13.30-16.30
20 th June 2023	13.30-16.30
24 th July 2023	13.30-16.30
22 nd August 2023	13.00-16.00

Imperial College London

Central Animal Welfare and Ethical Review Body (AWERB)

14:00 – 17:00 26 September 2022 (Meeting 1)

MS Teams

Present:

Function	Name	Position
Chair	[REDACTED]	Senior College academic
<i>Ex officio</i> Member	[REDACTED]	Establishment Licence Holder
<i>Ex officio</i> Member	[REDACTED]	Director of Central Biomedical Services (CBS)
<i>Ex officio</i> Member	[REDACTED]	Chair of the Local AWERB – [REDACTED]
<i>Ex officio</i> Member	[REDACTED]	Chair of the 3Rs Advisory Group
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon (NVS)
<i>Ex officio</i> Member	[REDACTED]	Named Animal Care and Welfare Officer (NACWO) & Named Information Officer (NIO)
<i>Ex officio</i> Member	[REDACTED]	Named Training and Competency Officer (NTCO)
Member	[REDACTED]	Senior College academic and biostatistician
Member	[REDACTED]	External Member
Member	[REDACTED]	External Member
Member	[REDACTED]	External Member
Member	[REDACTED]	Post-doctoral fellow representing the post-doctoral community
Member	[REDACTED]	PhD student representing the student community
Member	[REDACTED]	CBS Meeting and Support Administrator and lay member with no responsibilities under ASPA
Member and secretary	[REDACTED]	AWERB Administrator and member with no responsibilities under ASPA
In attendance	[REDACTED]	Named Animal Care and Welfare Officer (NACWO) & Named Information Officer (NIO)

Apologies:

Function	Name	Position
Vice-chair	[REDACTED]	Lay person
<i>Ex officio</i> Member	[REDACTED]	Director of Bioservices
<i>Ex officio</i> Member	[REDACTED]	Chair of the Local AWERB – [REDACTED]
<i>Ex officio</i> Member	[REDACTED]	Named Veterinary Surgeon (NVS)
Member	[REDACTED]	Lay person & Imperial Communications representative

	<p><u>Item</u></p> <ul style="list-style-type: none"> The Chair welcomed ■, who had kindly agreed to join cAWERB as an academic member, to his first meeting.
<p>1.</p>	<p><u>Members' declarations of interests in respect of items on the agenda</u></p> <p>None identified</p>
<p>2.</p>	<p><u>Minutes and matters arising</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> The minutes of the last meeting were agreed. Updates were given on actions from the previous meeting and the Chair reminded members that she would be very grateful if any members with additional suggestions regarding AWERB training or suitable candidates for membership vacancies to contact her and the AWERB administrator regarding these.
<p>3.</p>	<p><u>Update on progress of action following the Review of Breeding Practices</u></p> <ul style="list-style-type: none"> The ■ facility manager provided members with an update on the progress of implementation of the phased rollout of recommended actions that had been previously agreed following discussion at the March 2021 central AWERB meeting. A number of key documents had now been drafted. Once the final versions of all had been approved, the CBS website would be updated with copies of the latest documents. The ■ facility manager had been working with the NTCO to create a new E-learning training program on breeding suitable for use by both ■ researchers and CBS staff. Following the discussion led by the Chair of the 3Rs Advisory group at the last meeting, regarding the option for the 3Rs Hub to provide a training course on transgenic breeding strategies, it had now been agreed that the content of the E-learning course currently under development by the NTCO/■ facility manager should be tailored to incorporate the training material envisaged by the 3Rs Advisory Group. The A-tune project manager had been working with the ■ facility manager to implement improvements to the information provided on cage cards. He had also been working to identify what level of information could be extracted from A-tune, via fully or semi-automated reports, to monitor breeding performance. A recent update to A-tune had provided some of this functionality, but additional changes by the developer would likely be required to facilitate the provision of all the information that the AWERB had been interested in receiving. The A-tune project manager would continue to work with the ■ facility manager to try to find ways of producing some of the requested information. Members noted that the questions in the GA breeding annex that had been added to the interim and retrospective review form were eliciting useful information and had highlighted some areas where greater training of users should lead to improvements in the management of breeding colonies. <p><u>Actions</u></p>

	<ul style="list-style-type: none"> • AWERB Administrator to schedule a further update report to discuss the progress of actions in approximately six months' time.
<p>4.</p>	<p><u>Retrospective Assessment –</u> [REDACTED]</p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> • A retrospective assessment of a recently expired project licence containing a protocol with a severe severity limit was reviewed. • In accordance with the legislation, and the guidance provided by ASRU, the project licence holder is required to submit a copy of the assessment to the Home Office, by the due date, following consideration of the assessment by the AWERB. • A copy of the licence had been circulated to members for information to assist with carrying out the assessment. • The AWERB was pleased to note the scientific progress made during the course of the licence. Members were particularly pleased that the group had been able to develop a new method to genotype larvae, prior to day five, thus reducing the number of fish of an incorrect genotype allowed to develop beyond this stage, and that this technique had been widely disseminated to other zebrafish users. • The [REDACTED] facility manager advised members that CBS were looking into the possibility of adapting the main aquarium system to permit routine breeding of embryos in the main system. <p><u>Decisions</u></p> <ul style="list-style-type: none"> • The committee was content to approve the retrospective assessment for submission to the Home Office subject to the inclusion of a small number of revisions requested by the committee. <p><u>Actions</u></p> <ul style="list-style-type: none"> • AWERB Administrator to email summary of committee's feedback and required revisions to the applicant.
<p>5.</p>	<p><u>Interim Review –</u> [REDACTED]</p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> • One interim review of an ongoing project was considered by the committee. • A copy of the licence had been circulated to members for information to assist with carrying out the review. • Members were pleased to learn that the group had been able to rapidly switch the major focus of their work to exploring the immunology of Covid - 19 following the advent of the pandemic, and that this work had led to the publication of highly relevant and influential findings in this area. • The AWERB was pleased to note that the reported actual severities were predominantly less severe than those originally anticipated but agreed it would be helpful if the licence holder could provide additional information regarding the typical end-to-end scenarios experienced by the animals. <p><u>Actions</u></p> <ul style="list-style-type: none"> • AWERB Administrator to email summary of committee's feedback to the licence holder.

6.	<p><u>Terms of Reference</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> The Chair reminded members that the AWERB Terms of Reference (ToR) had last been reviewed and updated in September 2020, and that it was good practice to periodically review these in order to ensure that they remained fit for purpose, and to assess the processes in place to ensure that the AWERB was continuing to fulfil all areas of responsibility outlined in the ToR. <p><u>Decisions</u></p> <ul style="list-style-type: none"> Following discussion, members were content that no major revisions to the Terms of Reference were currently required, and the ToR were approved, subject to some minor modifications to be implemented by the AWERB administrator. These minor revisions should be approved by Chair's action. <p><u>Actions</u></p> <ul style="list-style-type: none"> AWERB Administrator to revise the Terms of Reference accordingly.
7.	<p><u>Periodic review of ASRU Examples of Indicators of Low-level Concerns</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> The Chair reminded members that central AWERB had previously agreed that it would be good practice to periodically review the example Indicators of Low-level Concerns previously published by ASRU in an advice note. Appendix 1 from the "Identification and management of patterns of low-level concerns at licensed establishments" Advice Note published by ASRU had been pre-circulated as paper 6. Members proposed that it would be timely for CBS to review the effectiveness of the current CBS aseptic surgery policy and to report back to AWERB in due course. Members were asked to contact the Chair and/or the Director of CBS should they feel that it would be helpful to review any other areas outlined in the Indicators of Low-level concerns document. <p><u>Actions</u></p> <ul style="list-style-type: none"> Director of CBS to arrange for CBS to review the current policy on aseptic surgery and to report back to central AWERB in due course.
8.	<p><u>Discussion item: Using both sexes in animal experiments</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> The Chair reminded members that the MRC had recently issued new guidance and requirements for both sexes to be used as a default in research proposals. The NC3Rs and MRC had recently held a joint webinar exploring how to address common challenges when planning, conducting and analysing animal experiments involving both sexes and the presentations published after that webinar had been included for members' information in the paper pack. Members discussed the information provided and noted that it would be important that project licence applicants were aware of this guidance when designing their experiments and when filling in the relevant part of their project licence application form. Members discussed various strategies for optimal engagement with all members of the animal research community on the importance of

	<p>considering these issues in their experimental design. The Chair advised members that the Compliance and Risk group had proposed that CBS should consider sending out regular “newsletter” style updates to users, and that this would be an example of the type of information that could be communicated via this route.</p> <p><u>Actions</u></p> <ul style="list-style-type: none"> • Director of CBS to consider whether this type of information could be publicised via “Hot Topic” type notices within the CBS facilities and in a CBS “newsletter” to users. • AWERB administrator to update the AWERB PPL application guidance to refer to the MRC/NC3Rs guidance, and to consider changes to internal forms.
<p>9.</p>	<p><u>Regular report on applications submitted, self-reporting & compliance notices</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> • Due to the late circulation of this report, it was agreed that comments or queries on this would be considered at the next meeting.
<p>10.</p>	<p><u>Communications update</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> • Members were informed that college was participating in a partnership with Understanding Animal Research to shoot some footage/videos within college’s animal facilities for use on UAR’s social media channels. Filming was due to take place at the [REDACTED] facility in October.
<p>11.</p>	<p><u>Director of CBS operational update</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> • The Director of CBS advised members that the Compliance and Risk Management group had met twice and had commenced evaluating the processes currently in place in college to provide assurance of compliance with licence conditions against the expectations regarding evidence laid out in the ASRU audit documentation. • He advised that the new [REDACTED] facility was scheduled for opening during November 2022, subject to signing off the operational and financial agreement between college and the [REDACTED], and to ASRU approval of the [REDACTED] facility and its addition to the Establishment licence. • The occupational health FFP3 mask fit testing project had now been completed and all CBS facilities were now using FFP3 masks. • The [REDACTED] facility manager would be leaving college at the end of September. The current [REDACTED] facility manager would be transferring to manage the [REDACTED] facility, and a recruitment process was underway to appoint a new manager for [REDACTED].
<p>12.</p>	<p><u>Local AWERB – SK and SM report</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> • The approved minutes of the June and August local AWERB meetings were received and noted.
<p>13.</p>	<p><u>Local AWERB – Hammersmith report</u></p> <p><u>Points to note</u></p>

	<ul style="list-style-type: none"> The approved minutes of the July 12th and July 14th local AWERB meetings were received and noted.
14.	<p><u>3Rs Advisory group update</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> Members were informed that the annual Animal Research Forum, which had originally been due to take place on the 19th of September, had now been rescheduled to take place in November. Members were advised that they would need to complete a new registration form for the rescheduled event.
15.	<p><u>A.O.B</u></p> <p><u>Item discussed: ASRU Operational newsletter</u></p> <p><u>Points to note</u></p> <ul style="list-style-type: none"> The Chair drew members attention to a recently released ASRU Operational newsletter. A copy had been included for members' information in the supplementary paper pack. Members noted that ASRU had decided, following feedback from the regulated community, to postpone the requirement to provide documentation for portfolios of evidence by the end of 2022. Further information and guidance would be developed and shared in early 2023 regarding requirements for portfolios.

Dates of next meetings:

14 November 2022	13.30-16.30	Virtual
23 January 2023	13.30-16.30	Virtual
20 March 2023	13.30-16.30	Virtual
16 May 2023	13.30-16.30	Virtual
17 July 2023	13.30-16.30	Virtual