

**NATIONAL EYE INSTITUTE  
ANIMAL CARE AND USE COMMITTEE  
MEETING MINUTES**

February 18, 2020 from 1:30 pm – 3:00pm

Redacted by agreement

**Members Present:**

Dr. Cumming, Chair

Redacted by

Redacted by agreement

**Members Absent:**

**Executive Secretary:**

**Deputy Secretary:**

**Guest(s):**

None

**1. OLD BUSINESS**

- The January 21, 2020 NEI ACUC meeting minutes were reviewed and unanimously approved.
- The committee reviewed items of business that were approved since the last NEI-ACUC meeting of 1-21-2020 (*Attachment I*).

**2. NEW BUSINESS**

- Dr. Cumming welcomed and introduced the 2 new members of the committee.

○ Redacted by agreement

○

- Redacted by agreement updated the Committee on the status of social housing:

- Nonhuman Primates: We currently have a total of 14 paired out of 42, for a pairing rate of 33.3%. We continue to re-assess unpaired NHP to generate new pairs.
- Swine: There are 4 pigs paired, and the remaining 11 are single-housed due to research constraints.

- Dr. Cumming presented a proposed draft uniform NEI amendment for rodent users to the committee(*Attachment 2*). The draft amendment included the following:

(b)(5)

The committee briefly reviewed and discussed the draft amendment. It was decided to table the approval of the draft amendment until the next meeting of the committee so a more in-depth discussion of the

(b)(5)

- Redacted by informed the committee about a recent notification that the NIH Office of Laboratory Animal Welfare (OLAW) will be site visiting the NIH programs of Animal Care and Use during the week of March 2- March 6, 2020. The schedule and process will be similar to the one used for the AAALAC International site visit to the NIH. The schedule for site visiting the NEI program and documentation will be forth coming. At this time, it is not anticipated that the site visit team will meet with the entire NEI ACUC.

## 1. ANNOUNCEMENTS

- The next NEI ACUC meeting will be scheduled for January 21, 2020.

## 2. PROTOCOL REVIEW & DISCUSSION

***Please note below:*** “Administrative Recommendations” are highlighted in yellow and the “Clarification Items” are not highlighted. Administrative recommendations have already been made on the draft ASP returned to the PI and highlighted in yellow for their review and approval.

Redacted by agreement renewal, Raber, NEI Centralized Breeding Colony Maintenance (Rodent)

Redacted by agreement led the discussion of this ASP renewal.

- Page 4, Section F, last paragraph, 1<sup>st</sup> line, **INSERT** “chemical” between “without” and “restraint”.
- Page 6, Section I, Acepromazine may be added at 1 mg/kg for longer duration. Reversal with atipamazole, 1-2.5 mg/kg SC or IP. **CLARIFY** what procedure is this for?

The committee unanimously approved a motion to “**Approve**” this ASP renewal following the resolution of the issue identified above.

Redacted by

renewal, **Raber**, Nonhuman Primate Procurement and Holding

*Dr. Cumming led the discussion of this ASP renewal.*

- Page 1, Section B, **CHANGE** the “Stock or Strain” to “Macaca spp.”.

The committee unanimously approved a motion to “**Approve**” this ASP renewal following the resolution of the issue identified above.

(b)(5)

(b)(5)

Redacted by  
agreement

*led the discussion of this ASP renewal.*

(b)(5)

(b)(5)

(b)(5)

The committee unanimously approved a motion to **“Table”** this ASP renewal for revision

and re-review by the Full Committee. A motion to “Approve” a 3-month short-term approval of the ASP as it stands to allow the PI to make the necessary revisions to the ASP renewal was unanimously approved.

(b)(5)

Redacted by  
agreement

*led the discussion of this ASP renewal.*

(b)(5)

The committee unanimously approved a motion to “**Table**” this ASP renewal for revision and re-review by the **DESIGNATED MEMBER REVIEW** process following the **resolution** of the issues identified above. *[The Designated Review Committee members are* Redacted by agreement *and Cumming].*

(b)(5)

Redacted by  
agreement

*led the discussion of this ASP renewal.*

(b)(5)

(b)(5)

The committee unanimously approved a motion to “**Table**” this ASP renewal for revision and re-review by the **DESIGNATED MEMBER REVIEW** process following the resolution of the issues identified above. *[The Designated Review Committee members are*

Redacted by agreement Cumming, and Redacted]

### 3. **AMENDMENTS**

Redacted by agreement Neural Substrates for Visual Perception and Eye Movement:  
Eye tissue collection at end of study

Redacted by agreement led the discussion of this ASP amendment.

The committee unanimously approved a motion to “**Approve**” this ASP amendment as presented.

Redacted by agreement Disease mechanisms and therapies in mouse models of retinal  
degeneration : Pilot study to evaluate safety and protective effect of Dinitrophenol for retinal  
degeneration

*Dr. Cumming led the discussion of this ASP amendment.*

- Page 4, Section K, **REMOVE** DNP from Section K, Hazardous Chemicals or Drugs, because it is not hazardous, yet it’s non-pharmaceutical grade.
- Page 4, Section K, under Hazardous Chemicals or Drugs, Additional Considerations REPLACE the safety language with the following:
  - Preparation
    - Wear pair of gloves, lab coat, and eye protection when preparing the compound.
    - Prepare non-pharmaceutical grade compounds inside a ducted biosafety cabinet (BSC) or a chemical fume hood (CFH) in the laboratory.

The committee unanimously approved a motion to “**Approve**” this ASP amendment following the resolution of the issue identified above.

MINOR AMENDMENTS APPROVED SINCE LAST NEI-ACUC MEETING 1-21-2020						
ASP #	PI	TITLE	TYPE	STATUS	APPROVAL DATE	COMMENTS
Redacted by agreement	Redacted by agreement	DELETE Redacted by agreement	Minor	Approved	2/3/2020	
		ADD Redacted by agreement	Minor	Approved	2/6/2020	
		ADD Redacted by agreement	Minor	Approved	2/7/2020	
		DELETE Redacted by agreement	Minor	Approved	2/18/2020	
ASP AMENDMENTS APPROVED BY DESIGNATED MEMBER REVIEW SINCE LAST NEI-ACUC MEETING 1-21-2020						
ASP #	PI	TITLE	TYPE	STATUS	APPROVAL DATE	COMMENTS
ASP AMENDMENTS APPROVED BY Veterinary Verification & Consultation (VVC) SINCE LAST NEI-ACUC MEETING 1-21-2020						
ASP #	PI	TITLE	TYPE	STATUS	APPROVAL DATE	COMMENTS



**NATIONAL EYE INSTITUTE  
ANIMAL CARE AND USE COMMITTEE  
MEETING MINUTES**

March 17, 2020 from 2:10 pm – 4:30pm

NOTE: this meeting was conducted by Teleconference due to the on-going COVID-19 crisis.

**Members Present:**

Dr. Cumming, Chair	Redacted by agreement
Redacted by agreement	

**Members Absent:**

**Executive Secretary:**

**Deputy Secretary:**

**Guest(s):**

None

**OLD BUSINESS**

- The February 18, 2020 NEI ACUC meeting minutes were reviewed and unanimously approved.
- The committee reviewed items of business that were approved since the last NEI-ACUC meeting of February 18, 2020 (*Attachment 1*).

**NEW BUSINESS**

- Redacted by agreement updated the Committee on the status of social housing:
  - Nonhuman Primates: We currently have a total of 14 paired out of 40, for a pairing rate of 35%. We continue to re-assess unpaired NHP to generate new pairs.
  - Swine: There are 6 pigs paired, and the remaining 6 are single-housed due to research constraints.

- Dr. Cumming presented a proposed draft uniform NEI amendment for rodent users to the committee (*Attachment 2*). The draft amendment included the following:
  - NEI Rodent Tail Biopsy procedure description for **Section F**.
  - NEI Rodent Tail Biopsy USDA pain categorization in **Section H**.
  - In **Section I**, a listing of a potential treatment regime for NEI Rodent Tail Biopsy procedures.
  - In **Section J**, a change in the CO2 flow rate into the euthanasia chamber.

The committee reviewed, discussed and unanimously approved a motion to “Approve” the amendment. Before implementation of the amendment a review of ASPs that involve the Rodent Tail Biopsy procedure, a review will be done to see whether or not the use of isoflurane along with the appropriate safety language is already identified in the particular ASP. If the use of isoflurane along with the appropriate safety language is not found in the individual ASP, it will be added to section K of this amendment template.

- As a follow-up to the February 18, 2020 meeting of the committee, Dr. Raber led a discussion on what pain category to classify ERG procedures. After the discussion the committee agreed to uniformly continue to classify the ERG procedures as a USDA pain categorization of “D” in Section H.
- Dr. Cumming led a discussion of the NIH ARAC guidelines for NEI ACUC voting procedures. This included:
  - Waiver of Voting Rights at Unattended, Fully Convened NEI ACUC Meetings and the use of the Designated Member Review process. The committee unanimously agreed to the guideline and was asked to sign and return the “Waiver of Voting Rights at Unattended, Fully Convened NEI ACUC Meetings” memorandum (*attachment 3*) to Redacted by
  - NEI ACUC members with a conflict of interest can participate in the questions and answers with regards to the ASP or amendment. Member(s) must recuse themselves and leave the room during ACUC deliberation and voting on that action. The committee unanimously agreed to adhering to this guideline.
- Redacted by presented information about the upcoming Scientist Center for Animal Welfare (SCAW) IACUC Training Workshop, Redacted by agreement May 18, 2020 (*attachment 4*).
- Redacted by indicated that further guidance is forth-coming from the NIH Office of Laboratory Animal Welfare (OLAW) with regards to how assured programs can conduct the Semi-annual Program Review and Facility Inspections this Spring given the on-going COVID-19 crisis.
- Dr. Raber provided information to the committee about the following items:
  - As of now the NIH AAALAC site visit is still planned for June 15-19, 2020. Final work is being completed to send the finalized NEI PD to the OACU.
  - The OLAW audit and site visit of the NEI animal care and use program portion of

the NIH animal care and use program during the week of March 2- March 6, 2020 resulted in many kudos. A couple of these were:

- The well-done disaster preparedness plan
- The stellar job the ACUC did in their ASP review process

The NIH will be receiving a letter from OLAW in the next couple of weeks that will have some critical issues the NIH program needs to address in order to continue to maintain their assurance.

- An issue involving a NEI scientist and his laboratory was brought before the committee. The scientist voluntarily stopped all future surgeries because of a high incidence of post-op infections. The scientist welcomed additional oversight, training, and bringing in an outside consultant to help ensure that future surgeries do not have similar problems. This situation will be closely monitored by the veterinarians.

## **ANNOUNCEMENTS**

- The next NEI ACUC meeting will be scheduled for Tuesday, April 21, 2020.

## **PROTOCOL REVIEW & DISCUSSION**

***Please note below:*** “Administrative Recommendations” are highlighted in yellow and the “Clarification Items” are not highlighted. Administrative recommendations have already been made on the draft ASP returned to the PI and highlighted in yellow for their review and approval.

(b)(5)

Redacted by [REDACTED] led the discussion of this ASP renewal.

(b)(5)

(b)(5)

(b)(5)

(b)(5)

The committee unanimously approved a motion to “**Table**” this ASP renewal for revision and re-review by the Full Committee. A motion to “Approve” a 3-month short-term approval of the ASP as it stands to allow the PI to make the necessary revisions to the ASP renewal was unanimously approved.

Redacted by [redacted] renewal, [redacted by agreement] Pre-clinical studies of iPS-derived Ocular tissue transplantation in the Pig

*Dr. Cumming led the discussion of this ASP renewal while [redacted by agreement] stepped down from the committee.*

- Page 4, Section E, 2<sup>nd</sup> paragraph, 2<sup>nd</sup> line, **REPLACE** “as” with “to”.
- Page 4, Section E, **PROVIDE** a justification to accomplish statistically significant or scientifically valid results for using a group size of 12 animals and conditions with 36 animals. Additionally, **ADD** more information or explanation about the animal numbers. Why use 180 pigs in 2 when only 60 pigs are used in 1?
- Page 7, Section F, **ENSURE** spacing between procedures and throughout the document is uniform. Suggest that bolding and underlining the different procedures would help the description read better.
- Page 8, Section F, under Behavioral studies, 8<sup>th</sup> line, **REPLACE** “grated” with “grating”.
- Page 8, Section F, under Behavioral studies, **DESCRIBE** the eye patch that is used to

test one eye at a time.

- Page 11, Section G, under 2, **DESCRIBE** a bit about [Redacted by ] extensive surgical experience in rabbit and swine models and **ADD** how the other surgeons contribute to the use of this model.
- Page 14, Section J, **SPECIFY** how the animals will be anesthetized prior to enucleation (for example: isoflurane by mask? Telazol followed by isoflurane for maintenance?).
- Page 15, Section K, **CLARIFY** will the eye at any time during research be fixed with an aldehyde fixative? **SUBMIT** a HBBF #7533 registration amendment to the IBC (for use of human RPE cells), include this ASP via PI Dashboard, <https://oms.ors.nih.gov/> . (biosafety language will be provided once approved)
- Page 15, Section K, Hazardous Chemicals or Drugs, **REPLACE** the chemical safety language with:
  - All chemicals should be handled with prudent practices by trained personnel who know how to properly prepare, label, and dispose of chemical compounds according to NIH Waste Disposal Guide. Before handling any chemical compound, personnel should read and understand the Safety Data Sheets (SDS) and the NIH Chemical Hygiene Plan (CHP). Keep a copy of the SDS and CHP readily available for review. Isoflurane will be scavenged in a chemical fume hood, downdraft table, anesthesia machine Activated Charcoal Adsorption Filter Capture system, local active exhaust ventilation system, or possible a combination of these methods as approved by the Division of Occupational Health and Safety (DOHS).

Buprenorphine and Fentanyl are suspected reproductive hazards. NIH Department of Occupational Health & Safety (DOHS) and Occupational Medical Service (OMS) is available for counseling women of childbearing age and any personnel who seek additional information about the use of these hazardous compounds. Refer personnel who require counseling or request additional information about the use of the hazardous compounds to OMS and DOHS.

**Fentanyl CDC Recommendations:**

- Always wear nitrile gloves when illicit drugs may be present and change them properly when they become contaminated.
  - Wear respiratory protection if powdered illicit drugs are visible or suspected.
  - Avoid performing tasks or operations that may cause illicit drugs to become airborne. If there is a potential to become airborne or aerosolized use chemical fume hood (CFH) or ducted Biosafety Cabinet (BSC).
  - Do not touch the eyes, nose, or mouth after touching any surface that may be contaminated, even if wearing gloves.
  - Wash hands with soap and water after working in an area that may be contaminated, even if gloves were worn.
- Page 15, Section M, **ADD laser safety language:**
    - The Laser Safety Program issued as NIH Policy Manual chapter 3036 – NIH Laser



Safety Program, <https://policymanual.nih.gov/3036>

The committee unanimously approved a motion to “**Approve**” this ASP renewal following the resolution of the issues identified above.

(b)(5)

Redacted by [REDACTED] stepped back up to the committee to lead the discussion of this ASP renewal.  
Redacted by agreement [REDACTED] also stepped back up to the committee.

(b)(5)

The committee unanimously approved a motion to “**Table**” this ASP renewal for revision and re-review by the **DESIGNATED MEMBER REVIEW** process following the resolution of the issues identified above. *[The Designated Review Committee members are*

Redacted by agreement [REDACTED] and Cumming].

Redacted by [REDACTED] – Request for a “4-month short term approval as the ASP stands” Redacted by [REDACTED]  
Mouse Models of Retinal Degeneration



*Dr. Cumming led the discussion of this request.*

The committee unanimously approved a motion to “**Approve**” a 4-month short-term approval of this ASP “*as it stands*” to allow the PI and laboratory to take the necessary steps to complete in vivo experiments and progress towards the closing of the laboratory.

1. **AMENDMENTS**

(b)(5)

Redacted by agreement led the discussion of this ASP amendment.

(b)(5)

The committee unanimously approved a motion to “**Table**” this ASP amendment for revision and re-review by the **DESIGNATED MEMBER REVIEW** process following the resolution of the issues identified above. [The Designated Review Committee members are Redacted by agreement and Cumming].

(b)(5)

Redacted by agreement led the discussion of this ASP amendment.

(b)(5)

(b)(5)

The committee unanimously approved a motion to “**Table**” this ASP amendment for revision and re-review by the **DESIGNATED MEMBER REVIEW** process following the resolution of the issues identified above. *[The Designated Review Committee members are Redacted by agreement and Cumming].*

(b)(5)

Redacted by led the discussion of this ASP amendment.

(b)(5)

The committee unanimously approved a motion to “**Table**” this ASP amendment for revision and re-review by the **DESIGNATED MEMBER REVIEW** process following the resolution of the issues identified above. *[The Designated Review Committee members are Redacted by agreement and Cumming].*

Redacted by agreement Disease mechanisms and therapies in mouse models of retinal degeneration: Addition of RP2-KO strain

Redacted by agreement led the discussion of this ASP amendment.

- Page 1, Section B, **ADD** a statement that the strain does not require special husbandry.
- Page 2, Section E, **CLARIFY** have you included breeding animals and the generation of animals with unusable genotype in the number of animals requested?

The committee unanimously approved a motion to “**Approve**” this ASP amendment following the resolution of the issues identified above.

MINOR AMENDMENTS APPROVED SINCE LAST NEI-ACUC MEETING 2-18-2020						
ASP #	PI	TITLE	TYPE	STATUS	APPROVAL DATE	COMMENTS
Redacted by agreement	Redacted by agreement	DELETE Redacted by agreement	Minor	Approved	2/24/2020	
		ADD Redacted by agreement	Minor	Approved	2/24/2020	
		ADD	Minor	Approved	2/24/2020	
		DELETE Redacted by agreement	Minor	Approved	2/25/2020	
		DELETE Redacted by agreement	Minor	Approved	2/25/2020	
		ADD Redacted by agreement	Minor	Approved	3/2/2020	
ASP AMENDMENTS APPROVED BY DESIGNATED MEMBER REVIEW SINCE LAST NEI-ACUC MEETING 2-18-2020						
ASP #	PI	TITLE	TYPE	STATUS	APPROVAL DATE	COMMENTS
ASP AMENDMENTS APPROVED BY Veterinary Verification & Consultation (VVC) SINCE LAST NEI-ACUC MEETING 2-18-2020						
ASP #	PI	TITLE	TYPE	STATUS	APPROVAL DATE	COMMENTS

**NATIONAL EYE INSTITUTE  
ANIMAL CARE AND USE COMMITTEE  
MEETING MINUTES**

April 21, 2020 from 1:30 pm – 4:30pm

NOTE: this meeting was conducted by Zoom Teleconference due to the on-going COVID-19 crisis.

**Members Present:**

Dr. Cumming, Chair	Redacted by
Redacted by agreement	

**Members Absent:**

**Executive Secretary:**

**Deputy Secretary:**

**Guest(s):**

**OLD BUSINESS**

- The March 17, 2020 NEI ACUC meeting minutes were reviewed and unanimously approved.
- There were no items of business that were approved since the last NEI-ACUC meeting of March 17, 2020.

**NEW BUSINESS**

- Redacted by agreement updated the Committee on the status of social housing:
  - Nonhuman Primates: We currently have a total of 14 paired out of 40, for a pairing rate of 35%. We continue to re-assess unpaired NHP to generate new pairs.
  - Swine: There are 2 pigs paired, and the remaining 6 are single-housed due to research constraints.
- Dr. Raber presented updated information to the committee with regards to the COVID-19 impacts on the Animal Care and Use program. In part, this included a review of the following documents:
  - Redacted by agreement Staff Reduction Plan (Attachment 1)
  - Redacted by agreement CAF SOP: 49-605 entitled “Redacted by agreement CAF Public Health Emergency Infectious Agent Response Plan” (Attachment 2)

After a robust discussion, the committee unanimously approved a motion to “**Approve**” the documents as presented.

- [Redacted by agreement] presented information to the committee about the 2020 Spring Semi-annual Facility visits and Program Review report. The facility inspections were done in conjunction with the OLAW audit site visit, using both the preparation time period and the specific date of the OLAW audit visit of the NEI Animal Care and Use program which occurred March 4, 2020. In addition to members of the committee ad hoc inspectors were utilized for the facility inspections during this time period (*Attachment 2*). The Supplemental information attachment that was included in this time period's report included specific information about NEI's policy on:
  - **Performance Standards:**  
A description of NEI ACUC-approved performance standards policy.
  - **Veterinary Verification & Consultation:**  
A copy of the NEI ACUC-approved VVC policy.
  - **Animal Adoption:**  
The number of animals adopted from NEI by species (0) and a copy of the NEI ACUC-approved adoption policy.

The committee unanimously approved a motion to **"Approve"** the use of Adhoc inspectors and unanimously approved a motion to **"Approve"** the 2019 Fall Semi-annual report as presented.

- [Redacted by agreement] presented information about the requirement for committee members to sign both the 2020 Spring Semi-annual Program Review report page and the NEI ACUC Designated Member Review process letter that was distributed at last month's meeting. This can be done in one of the following ways:
  - Electronically sign and return the documents via an email attachment.
  - Print out the pages, hand sign the documents and return via an email attachment.
  - Print out the pages, hand sign the documents, take a picture of the document, and return via an email attachment or a text.
- Dr. Raber informed the committee that the NIH AAALAC site visit June 15-19, 2020 has been postponed till Fall 2020.
- Dr. Raber informed the committee about a drive by protest of NIH animal use activities planned by PETA. This protest will also include a drive by protest of the NIH Director's home along with the home of an NIH Investigator.

## **ANNOUNCEMENTS**

- The next NEI ACUC meeting will be scheduled for Tuesday, May 19, 2020.

## **PROTOCOL REVIEW & DISCUSSION**

**Please note below:** "Administrative Recommendations" are highlighted in yellow and the "Clarification Items" are not highlighted. Administrative recommendations have already been made on the draft ASP returned to the PI and highlighted in yellow for their review and approval.

(b)(5)

Redacted by [redacted] led the discussion of this ASP revised renewal.

(b)(5)

(b)(5)

(b)(5)



The committee unanimously approved a motion to “**Table**” this revised ASP renewal for revision and re-review by the Full Committee.

(b)(5)

Redacted by  
personnel

*led the discussion of this ASP renewal.*

(b)(5)

(b)(5)

(b)(5)

(b)(5)

The committee unanimously approved a motion to “**Table**” this ASP renewal for revision and re-review by the **DESIGNATED MEMBER REVIEW** process following the resolution of the issues identified above. *[The Designated Review Committee members are*

Redacted by  
agreement

*and Cumming].*

(b)(5)

Redacted by  
agreement

*led the discussion of this ASP renewal.*

(b)(5)

The committee unanimously approved a motion to “**Table**” this ASP renewal for revision and re-review by the **DESIGNATED MEMBER REVIEW** process following the resolution of the issues identified above. *[The Designated Review Committee members are*

Redacted by agreement

*Cumming, Raber and*

Redacted by  
agreement

Redacted by agreement

– **Request for a “5-month short term approval as the ASP stands”,**

*Dr. Cumming led the discussion of this request.*

The committee unanimously approved a motion to “**Approve**” a 5-month short-term approval of this ASP “*as it stands*” to allow the PI and laboratory to take the necessary steps to complete in vivo experiments and progress towards the closing of the laboratory.

## **AMENDMENTS**

Redacted by agreement Microglia Structure and Function in the Mouse Retina: Change in Principal Investigator

Redacted by agreement *led the discussion of this ASP amendment.*

- **ENSURE** that any registrations in Redacted by agreement name are submitted as new registrations for Redacted by agreement that are applicable for the research.

The committee unanimously approved a motion to “**Approve**” this ASP amendment with the stipulation stated above as presented.

Redacted by agreement Role of Microglia in Ganglion Cell and Photoreceptor Survival in Mice: Change in Principal Investigator

Redacted by agreement *led the discussion of this ASP amendment.*

- **ENSURE** that any registrations in Redacted by agreement name are submitted as new registrations for Redacted by agreement that are applicable for the research.

The committee unanimously approved a motion to “**Approve**” this ASP amendment with the stipulation stated above as presented.

**NATIONAL EYE INSTITUTE  
ANIMAL CARE AND USE COMMITTEE  
MEETING MINUTES**

May 19, 2020 from 1:30 pm – 3:35pm

NOTE: this meeting was conducted by Zoom Teleconference due to the on-going COVID-19 crisis.

**Members Present:**

Dr. Cumming, Chair

Redacted by  
agreement

Redacted by agreement

**Members Absent:**

**Executive Secretary:**

**Deputy Secretary:**

**Guest(s):**

**OLD BUSINESS**

- The April 21, 2020 NEI ACUC meeting minutes were reviewed and unanimously approved.
- There were no items of business that were approved since the last NEI-ACUC meeting of April 21, 2020.

**NEW BUSINESS**

- Redacted by agreement updated the Committee on the status of social housing:
  - Nonhuman Primates: We currently have a total of 14 paired out of 40, for a pairing rate of 35%. We continue to re-assess unpaired NHP to generate new pairs, and we hope to increase this to 16 paired very shortly.
  - Swine: There are 4 pigs single-housed due to research constraints.
- Dr. Raber informed the committee that there are currently no COVID-19 related impacts on the NEI Animal Care and Use program. Additionally, Dr. Raber provided an update about the recent OLAW audit visit to the NIH in early March 2020. There were several kudos for the NEI Animal Care and Use program, and the only concern that the audit visit team had for the NEI was whether the door clearances into the NHP laboratories were adequate. A recent assessment by the NIH Fire Marshall found that there were no code issues involving the door clearances.

**ANNOUNCEMENTS**

- The next NEI ACUC meeting will be scheduled for Tuesday, June 16, 2020.

## PROTOCOL REVIEW & DISCUSSION

**Please note below:** “Administrative Recommendations” are highlighted in yellow and the “Clarification Items” are not highlighted. Administrative recommendations have already been made on the draft ASP returned to the PI and highlighted in yellow for their review and approval.

(b)(5)

Redacted by [redacted] led the discussion of this ASP revised renewal.

(b)(5)



(b)(5)

The committee unanimously approved a motion to “**Table**” this revised ASP renewal for revision

and re-review by the Full Committee. A motion to “**Approve**” a 1-month short-term approval of the ASP as it stands to allow the PI to make the necessary revisions to the ASP renewal was unanimously approved.

(b)(5)

Redacted by  
agreement

*led the discussion of this ASP renewal.*

(b)(5)

(b)(5)

The committee unanimously approved a motion to “**Table**” this ASP renewal for revision and re-review by the Full Committee.

### **AMENDMENTS**

Redacted by agreement

**Mechanisms of experimental autoimmune uveitis (EAU) in mice:**

Effects of microbiome on cytokine responses of “humanized” mice

*Dr. Cumming led the discussion of this ASP amendment.*

- Page 2, Section F, the committee had a robust discussion about whether the excessive immune response caused by the cytokine storm would cause unrelieved distress (like a bad case of the flu) for the mice. The committee unanimously agreed that it would, and that the categorization of animals used under this amendment should be category “E” (unrelieved Pain or Distress).
- Page 3, Section H, **UNCHECK** the No change box, **LIST** animals in Column E, and **PERFORM** a literature search.
- Page 7, **COMPLETE** Column E Explanation Form For Regulated Species.

The committee unanimously approved a motion to “**Approve**” this ASP amendment following the resolution of the issues identified above.

Redacted by agreement

Genomic regulation of immune response in neurodegeneration in mice :

Adding procedure for ONC and IVT

Redacted by agreement

*led the discussion of this ASP amendment.*

- Page 1, Section A, in amendment title, **SPELL OUT** “ONC” and “IVT” in the title.
- Page 2, Section E, **UNCHECK** the No change box, **CLARIFY** that the 200 animals requested will be moved from the animals already approved for this ASP in column C to column D **or STATE** that 200 animals will be added to this ASP.
- Page 2, Section F, 3<sup>rd</sup> paragraph, 2<sup>nd</sup> line, **CLARIFY** the dosages of buprenorphine. The standard (non-SR) dose is 0.05 – 0.1 mg/kg IM or IP every 8-12 hours. The dose of slow-release buprenorphine (SR-Bup) is 0.5 – 1.0 mg/kg, SC, with the caveat that mice do not generally get 72 hours of analgesia, unlike other species; SR-Bup can be reasonably expected to provide 24-48 hours of analgesia. Animals can be monitored for signs of pain or discomfort, and the SR-Bup can be repeated every 24-48 hours. *This information also goes in Section I.*
- Page 2, Section F, 3<sup>rd</sup> paragraph, last line, **ADD** “and animals will be treated in consultation with veterinarians”.
- Page 3, Section H, **LIST** 200 animals in Column D, and **PERFORM** a literature search.
- Page 4, Section I, under Post-operative pain control, **CORRECT** dosages of buprenorphine and SR-Buprenorphine, as described for Section F.

The committee unanimously approved a motion to “**Approve**” this ASP amendment following the resolution of the issues identified above.

**NATIONAL EYE INSTITUTE  
ANIMAL CARE AND USE COMMITTEE  
MEETING MINUTES**

June 16, 2020 from 1:30 pm – 4:05pm

NOTE: this meeting was conducted by Zoom Teleconference due to the on-going COVID-19 crisis.

**Members Present:**

Dr. Cumming, Chair

Redacted by  
agreement

Redacted by agreement

**Members Absent:**

**Executive Secretary:**

**Deputy Secretary:**

**Guest(s):**

**OLD BUSINESS**

- The May 19, 2020 NEI ACUC meeting minutes were reviewed and unanimously approved.
- The items of business that were approved since the last NEI-ACUC meeting of May 19, 2020.

**NEW BUSINESS**

- Redacted by agreement updated the Committee on the status of social housing:
  - Nonhuman Primates: We currently have a total of 14 paired out of 40, for a pairing rate of 35%. We continue to re-assess unpaired NHP to generate new pairs, and we hope to increase this to 16 paired very shortly.
  - Swine: Of the 12 pigs currently housed, 4 are paired and the remaining 8 pigs are single-housed due to research constraints.
- Dr. Raber informed the committee that the program continues to do well addressing the COVID-19 related impacts on the NEI Animal Care and Use program. Additionally, Dr. Raber provided an update about the upcoming start of Group A individuals returning to the work site on June 22, 2020. He commended the work of [redacted] working with [redacted] animal facility management staff in developing guidelines for returning to work there. The [redacted] CAF management staff is working closely with Safety in finishing up returning to work guidance for both the animal facility and building.
- Dr. Raber informed the committee that the AAALAC site visit to the NIH (originally scheduled for this week) has now been re-scheduled for June 2021.

**ANNOUNCEMENTS**

- The next NEI ACUC meeting will be scheduled for Tuesday, July 21, 2020.

## PROTOCOL REVIEW & DISCUSSION

***Please note below:*** “Administrative Recommendations” are highlighted in yellow and the “Clarification Items” are not highlighted. Administrative recommendations have already been made on the draft ASP returned to the PI and highlighted in yellow for their review and approval.

(b)(5)

Redacted by [redacted] led the discussion of this ASP. The Committee had a robust discussion on pain or distress with respect to water control paradigms used in neurobehavioral research, as well as regarding the head implants themselves.

(b)(5)

(b)(5)

The committee unanimously approved a motion to “**Table**” this ASP renewal for revision and re-review by the **DESIGNATED MEMBER REVIEW** process following the resolution of the issues identified above. *[The Designated Review Committee members are*

Redacted by agreement

*Cumming,*

Redacted by agreement

(b)(5)

*Dr. Cumming led the discussion of this ASP renewal while* Redacted by agreement *stepped down from the committee.*

(b)(5)

(b)(5)

The committee unanimously approved a motion to “**Table**” this ASP renewal for revision and re-review by the **DESIGNATED MEMBER REVIEW** process following the resolution of the issues identified above. *[The Designated Review Committee members are*

Redacted by agreement

*Cumming, and*

Redacted by agreement

(b)(5)

Redacted by agreement

*stepped back on to the committee.*

Redacted by agreement

*led the discussion of this ASP revised renewal.*

(b)(5)



(b)(5)

The committee unanimously approved a motion to “**Table**” this ASP renewal for revision and re-review by the **DESIGNATED MEMBER REVIEW** process following the resolution of the issues identified above. *[The Designated Review Committee members are*

Redacted by agreement

*Cumming and*

Redacted by agreement

(b)(5)

Redacted by agreement

*led the discussion of this ASP renewal.*

(b)(5)

(b)(5)

The committee unanimously approved a motion to “**Table**” this ASP renewal for revision and re-review by the **DESIGNATED MEMBER REVIEW** process following the resolution of the issues identified above. *[The Designated Review Committee members are*

Redacted by agreement

Cumming,

Redacted by agreement

Redacted by agreement

In house breeding and tissue collection from neonatal rats

Redacted by

*led the discussion of this ASP renewal.*

- Page 2, Section D, **ADD** a brief summary of progress to date, under the previous ASP.

The committee unanimously approved a motion to “**Approve**” this ASP renewal following the resolution of the issue above.

### **AMENDMENTS**

Redacted by agreement

Functional Study of Genes Associated with Inherited Eye Diseases in Zebrafish: To reflect the NEI ACUC approved animal allotment total more accurately for this ASP and to allow for the continuation of research: Add 5,000 Zebrafish to this ASP  
*Dr. Cumming led the discussion of this ASP amendment.*

The committee unanimously approved a motion to “**Approve**” this ASP amendment.

MINOR AMENDMENTS APPROVED SINCE LAST NEI-ACUC MEETING 5-19-2020							
ASP #	PI	TITLE		TYPE	STATUS	APPROVAL DATE	COMMENTS
Redacted by agreement	Redacted by agreement	DELETE	Redacted by agreement	Minor	Approved	5/22/2020	
		ADD	Redacted by agreement	Minor	Approved	5/27/2020	
ASP AMENDMENTS APPROVED BY DESIGNATED MEMBER REVIEW SINCE LAST NEI-ACUC MEETING 5-19-2020							
ASP #	PI	TITLE		TYPE	STATUS	APPROVAL DATE	COMMENTS
ASP AMENDMENTS APPROVED BY Veterinary Verification & Consultation (VVC) SINCE LAST NEI-ACUC MEETING 5-19-2020							
ASP #	PI	TITLE		TYPE	STATUS	APPROVAL DATE	COMMENTS

**NATIONAL EYE INSTITUTE  
ANIMAL CARE AND USE COMMITTEE  
MEETING MINUTES**

July 21, 2020 from 1:30 pm – 4:55pm

NOTE: This meeting was conducted by Zoom Teleconference due to the on-going COVID-19 crisis.

**Members Present:**

Dr. Cumming, Chair

Redacted by  
agreement

Redacted by agreement

**Members Absent:**

**Executive Secretary:**

**Deputy Secretary:**

**Guest(s):**

**OLD BUSINESS**

- The June 16, 2020 NEI ACUC meeting minutes were reviewed and unanimously approved.
- The items of business that were approved since the last NEI-ACUC meeting of June 16, 2020.

**NEW BUSINESS**

- Redacted by agreement updated the Committee on the status of social housing:
  - Nonhuman Primates: We currently have a total of 18 paired out of 48, for a pairing rate of 37.5%. We continue to re-assess unpaired NHP to generate new pairs, and we hope to increase this to 20 paired very shortly.
  - Swine: Of the 10 pigs currently housed, 4 are paired and the remaining 6 pigs are single-housed due to approved research constraints.
- Dr. Raber informed the committee that the program continues to do well addressing the COVID-19 related impacts on the NEI Animal Care and Use program. Additionally, Dr. Raber provided an update about the start of Group B individuals returning to the work site on July 20, 2020. The Redacted by agreement CAF management staff is working on procedures to bring back full contract staff starting Monday, August 1, 2020.
- Dr. Raber briefed the committee about an experimental pharmaceutical table (*Attachment 1*) being used by another ACUC as part of their ASP submissions to help identify the important attributes of each agent used. The committee reviewed, discussed, and approved adapting the use of the table for the NEI.
- Dr. Raber also briefed the committee about the use of a software application “Teams” that another institute uses to facilitate ASP management and review. The application helps document a reviewer’s comments and serves as a platform enhance committee discussions. The committee reviewed, discussed, and approved a trial run of using the “Teams” software for Committee ASP review.

## ANNOUNCEMENTS

- The next NEI ACUC meeting will be scheduled for Tuesday, August 18, 2020.

## PROTOCOL REVIEW & DISCUSSION

**Please note below:** “Administrative Recommendations” are highlighted in yellow.

Redacted by agreement

**revised renewal,**

Redacted by agreement

Regulation of Cytokine Signaling in the Eyes of Normal & Transgenic Mice

*Dr. Cumming led the discussion of this ASP revised renewal.*

- The NEI ACUC DMR team has approved the revised ASP renewal, however the PI and his co-investigators need a little more time to have their new registration documents electronically signed and submitted for IBC review/approval

The committee unanimously approved a motion to “**Approve**” a 1-month short-term approval of the ASP as it stands effective 7-24-2020 to allow the PI and his co-investigators the necessary time to have their new registration documents electronically signed and submitted for IBC review/approval. Disposition: **Approval.**

(b)(5)

Redacted by

*led the discussion of this ASP renewal.*

(b)(5)

(b)(5)

(b)(5)



(b)(5)

(b)(5)

The committee unanimously approved a motion to “**Table**” this ASP renewal for revision and re-review by the **DESIGNATED MEMBER REVIEW** process. Disposition: Modifications Required to Secure Approval are noted above (Tabled/Routed for *Designated Review (DMR)*, [The DMR sub-committee members are Redacted by agreement Cumming, Redacted by agreement

(b)(5)

Redacted by led the discussion of this ASP renewal.

(b)(5)

(b)(5)

(b)(5)

(b)(5)

(b)(5)

The committee unanimously approved a motion to “**Table**” this ASP renewal for revision and re-review by the **DESIGNATED MEMBER REVIEW** process. Disposition: Modifications Required to Secure Approval are noted above (Tabled/Routed for *Designated Review (DMR)*, [The DMR sub-committee members are Drs. Cumming,

Redacted by agreement

Redacted by agreement

(b)(5)

Dr. Cumming led the discussion of this ASP renewal while

Redacted by agreement

and

Redacted stepped down from the committee.

(b)(5)

The committee unanimously approved a motion to “**Table**” this ASP renewal for revision and re-review by the **DESIGNATED MEMBER REVIEW** process. Disposition: Modifications Required to Secure Approval are noted above (Tabled/Routed for *Designated Review (DMR)*, [The DMR sub-committee members are Redacted by and Cumming ].

Redacted by agreement renewal, Raber, Zebrafish Procurement, Holding, and Breeding

Redacted by led the discussion of this ASP renewal while Redacted by agreement and Dr. Raber continued to be stepped down from the committee, and Redacted by agreement rejoined the committee.

- Page 1, Section A, **ADD** e-mail addresses to listed co-investigators.

The committee unanimously approved a motion to “**Approve**” this ASP renewal. The ACUC Coordinator (Executive Secretary) will verify that the item highlighted above is corrected. Disposition: **Approval**.

## **AMENDMENTS**

(b)(5)

Redacted by led the discussion of this ASP amendment. Redacted by rejoined the committee.

(b)(5)

The committee unanimously approved a motion to “**Table**” this ASP renewal for revision and re-review by the **DESIGNATED MEMBER REVIEW** process. Disposition: Modifications Required to Secure Approval are noted above (Tabled/Routed for *Designated Review (DMR)*, [The DMR sub-committee members are Redacted by Cumming, Redacted by agreement

(b)(5)

Redacted by led the discussion of this ASP amendment.

(b)(5)

The committee unanimously approved a motion to “**Table**” this ASP renewal for revision and re-review by the **DESIGNATED MEMBER REVIEW** process. Disposition: Modifications Required to Secure Approval are noted above (Tabled/Routed for *Designated Review (DMR)*, [The DMR sub-committee members are Redacted by Cumming, Redacted by agreement

Redacted by agreement

Neural Substrates for Visual Perception and Eye Movement:

Addition of video recordings

Redacted by led the discussion of this ASP amendment while Dr. Cumming stepped down from the committee.

- Page 1, Section A, **REPLACE** reference to video recordings in title. Suggest “digital assessments of movement”.
- Page 2, Section F, **REPLACE** “A video camera” with another description of performing digital assessments of movement.

The committee unanimously approved a motion to “**Approve**” this ASP amendment. The ACUC Coordinator (Executive Secretary) will verify that the items highlighted above are corrected. Disposition: **Approval**.

Redacted by agreement

Pre-clinical studies of iPS-derived Ocular Tissue transplantation in the Pig: Immunosuppression regiment for Human Tissue Transplantation Study

Dr. Cumming stepped back onto the committee and led the discussion of this ASP amendment while

Redacted by agreement stepped down from the committee.

- Page 1, Section A, **CHANGE** PI name.

The committee unanimously approved a motion to “**Approve**” this ASP amendment. The ACUC Coordinator (Executive Secretary) will verify that the item highlighted above is corrected. Disposition: **Approval**.

MINOR AMENDMENTS APPROVED SINCE LAST NEI-ACUC MEETING 6-16-2020						
ASP #	PI	TITLE	TYPE	STATUS	APPROVAL DATE	COMMENTS
Redacted by agreement	Redacted by agreement	DELETE Redacted by agreement	Minor	Approved	6/25/2020	
		ADD Redacted by agreement Redacted by agreement	Minor	Approved	7/1/2020	
		DELETE Redacted by agreement				
		DELETE Redacted by agreement	Minor	Approved	7/1/2020	
		ADD Redacted by agreement	Minor	Approved	7/8/2020	
ASP AMENDMENTS APPROVED BY DESIGNATED MEMBER REVIEW SINCE LAST NEI-ACUC MEETING 6-16-2020						
ASP #	PI	TITLE	TYPE	STATUS	APPROVAL DATE	COMMENTS
Redacted by agreement	Redacted by agreement	Neurobiology of the mouse retina – development, physiology, and diseases	Major	Approved	7/13/2020	
		Oculomotor Decision-making Mechanisms in the Primate Brain (2-month short term)	Major	Approved	7/14/2020	
ASP AMENDMENTS APPROVED BY Veterinary Verification & Consultation (VVC) SINCE LAST NEI-ACUC MEETING 6-16-2020						
ASP #	PI	TITLE	TYPE	STATUS	APPROVAL DATE	COMMENTS