

UCSF IACUC Full Committee Meeting Minutes

Committee Name: IACUC Full Committee

Committee Type: IACUC

Meeting Date: 08/04/2020

Chair's Report: Voting Members:

[REDACTED]
[REDACTED]
[REDACTED]
Office Staff:
[REDACTED]

• IACUC Chair's Report

A. The Chair noted that the Zoom meeting format was working well, submissions were being reviewed appropriately by DMR and FCR, and conveyed his appreciation to the members for all of their time and efforts in conducting business.

B. Members were provided a copy of the minutes in advance of the meeting for review. It was recommended, and the Committee voted unanimously to approve the July 7, 2020 full committee meeting minutes as written.

Director's Report:

• IACUC Director's Report

A. COVID-19 IACUC Updates

- The program has resumed up to 25% personnel return to campus for research activities, which may be up to 50% total if groups utilize separate shifts.
- Members were thanked for their continued service as designated member reviewers. Their participating is integral to the over review process.
- In-person Training and Procedure Observations have resumed, using recommended PPE when maintaining physical distancing isn't possible. The training group is conducting a portion of the didactic material using Zoom to minimize the amount of time spent in person and have completed dozens of in person sessions to accommodate the over 100 users waiting since March sessions were postponed and new personnel.
- The summer session of IACUC inspections of laboratory areas has been cancelled. We are evaluating options to perform fall semi-annual IACUC inspections, prioritizing locations where animals are housed (LARC and PI-housing) and maintained under researcher care. While no members will be prohibited from participating in any inspections, we will evaluate methods to streamline the inspection team (potentially to a single person for non-USDA species locations) to optimize for social distancing.

B. Members received an update on the resolution of Spring inspection findings. A copy of the EH&S inspection findings updates, all of which are resolved, was distributed to members in advance of the meeting for review. Members will receive periodic updates until the remaining minor IACUC inspection findings are resolved.

C. Updates from the previous meeting (July 21 2020) were provided:

- The IACUC Director summarized the clinical case for animal [REDACTED], including clinical signs, treatment, and subsequent euthanasia, with no physical abnormalities identified on necropsy and a presumptive diagnosis of GI dysbiosis. The remaining 11 animals received at the same time have not experienced diarrhea.
- IACUC Office Hours – IACUC staff summarized the plan for expanding office hours to include sessions with the IACUC member statistician to facilitate experimental design and numbers justifications. We very much appreciate the member's time and effort in making

himself available and supporting the researchers.

Attending Veterinarian
(AV) Report:

- AV Report/LARC Clinical Case Report

A. A LARC veterinarian reviewed a recent adverse event, the details of which were provided to the members in advance of the meeting for review. They discussed the unique species characteristics, housing and handling requirements, and corrective actions taken to prevent a recurrence. The AV and IACUC Director reported the incident to the USDA, which may qualify for an incentive for identifying, reporting, correcting, and preventing non-compliance with the Animal Welfare Act.

B. The AV informed the IACUC of a researcher request to import two naïve animals for use in a chronic study. The members discussed potential psychological and medical concerns. Additional information is needed regarding each animal's health and proposed use (chronic vs. acute study) to make a complete assessment for the request.

EH&S/Occupational
Health Report:

- EH&S/Occ Health Report – N/A

Training and Compliance
Report:

- Training & Compliance Report – N/A

IACUC Member Training
and Information:

- Committee Information and Training

A. Upcoming CE opportunities

- OLAW On-line Training Module: Vertebrate Animals Section (VAS) – The Chair noted that the interactive questions/answers and scenarios presented were valuable tools for learning. <https://olaw.nih.gov/guidance/vertebrate-animal-section.htm>

- August 11, 2020: CRBA Webinar: Best Practices for Rodent Pain Control <https://attendee.gototraining.com/r/926431312554114305>

- August 18, 2020: AALAS Webinar: Institutional and Management Strategies for the Development of a Sustainable Compassion Fatigue Support Program <https://www.aalas.org/store/meeting?productId=10429583>

- September 1, 2020: CRBA Webinar: Applying the Principles of Judicious Antimicrobial Use in a Laboratory Animal Setting <https://attendee.gototraining.com/r/8459783608814509826>

- October 13, 2020: CRBA Webinar: CBRA Webinar– Review of New AVMA Guidelines on Euthanasia Pertaining to Laboratory Animals <https://attendee.gototraining.com/r/2697768735063567361>

- Rescheduled: April 30- May 1, 2021 North American Regional Meeting of the ISAE; Davis, CA <http://animalwelfare.ucdavis.edu/14th-na-isae.html>

Other Business:

- Other Business –

A. The IACUC staff provided a summary of the recent approved policy changes, noting those that were revised and renewed, revised and repurposed as fact sheets on the IACUC website, and decommissioned. Members were provided the revised documents in advance of the meeting for review. There were no concerns with the revisions and plans for repurposing and decommissioning.

Protocols Reviewed

During the review process, the members discussed for each protocol, the rationale for involving animals, the appropriateness of the species, the database searches for alternatives, the steps taken to reduce animal numbers, the measures to relieve pain, discomfort or distress, if needed, the appropriateness and adequacy of anesthesia and analgesia, if applicable, and the number of animals to be used.

USDA Covered Species

Project Number: [REDACTED]

Approval Type: New Approval

Title: Infection of hamsters with SARS-CoV-2

PI: [REDACTED]

Species: Hamster

Primary Reviewer: (1) [REDACTED]

Secondary Reviewer: (1) [REDACTED]

Results: **Revisions Requested**

Revisions General
Requested:

Please fix all typographical errors throughout the protocol. IACUC staff has corrected some on your behalf, but the committee requests that you check each section ensure your spelling and grammar is correct.

Section C. Animals

- The IACUC's biostatistician will reach out to you to discuss your statistical justification, as the committee requests a bit of clarification.
- Page 3: You indicate that you will euthanize animals at 3 time points but you indicate 5 time points in the table and also mention 6 time points in the procedures (added a day 0). Please clarify the number of euthanasia time points and then ensure that this number is consistent throughout the entire protocol. Finally, adjust your numbers accordingly, if necessary.
- Tables 1 and 2 add up to 1080 but you are requesting 1200. You mention that you will replicate some experiments with favorable outcomes. Perhaps that's why you are requesting an additional 120 animals (20 groups of 6 animals)? Please properly justify the extra mice requested.

Section D. Contacts and Personnel

For each person listed (with the exception of those with no animal contact):

- (1) remove all irrelevant mentions of mice, since this is a hamster protocol and
- (2) update each person's training and experience summaries to include hamsters. If nobody has had prior experience with hamsters, then you must indicate in D.2 that you will receive hamster training from LARC and/or IACUC, please.

Section E. Justifications and Alternatives

Page 10: There is a mention of 20% weight loss rather than the standard 15%. But there is no justification for why 20%. Further, on page 15 (Section J, humane endpoints), you checked the box for 15% weight loss as a humane endpoint. Therefore, please reconcile this discrepancy.

Section F. Standard Procedures

Page 12: You have checked off, “retro-orbital blood collection in mice and rats.” Since this protocol pertains to hamsters, please un-check this standard procedure. You may indicate in the protocol (Section G or wherever you mention this type of blood collection), that you will adhere to the recommendations put forth in the aforementioned standard procedure. The IACUC will be happy to provide the appropriate training for this type of blood collection procedure in hamsters.

Section G. Procedures

- Page 12: you mention euthanasia at day 0 but this is not mentioned in tables 1 and 2 in which the first time point is day 2. Please reconcile this discrepancy.
- Page 13, “Vaccine testing” sub-section:
 - o you mention euthanasia at days 0, 2, 5, 7, 14 which again is different from what is listed in the tables in Section C. Reconcile.
 - o Also, you write that, “Six animals in each group will be challenged at 28 days,” but each group has 6 animals so, will all animals will be re-challenged? Clarify.
 - o Similarly, on Page 3 (Section C), you indicate that you will re-challenge after 6 weeks, but here you indicate 28 days (4 weeks). Please clarify and fix these inconsistencies.
 - o And from the writing it seems that the animals will be euthanized the same day as the re-challenge. Is this so? Please fix.
- Page 13: point 9 states that animals will be euthanized at 5 days post-infection, but that’s not necessarily true based on this reviewer’s reading. Please clarify.
- Page 13: mention of cage change: (1) Note that you will be required to change cages every 2 weeks (in accordance with the USDA’s animal welfare regulations). (2) LARC personnel can assist with this, so please re-write the sentence(s) that mention cage change. (3) Your phrasing (“in the event that will require a cage change”), is unclear and vague. Please remove/re-word.

Section I. Agents

The IACUC requires that this section be completely filled out with every agent you will use.

Section J. Adverse Effects

Page 16: You mention 20% weight loss as endpoint (in Section E), but here you answer “yes” (box checked in RIO) for 15% weight loss. Please reconcile.

Project Number: [REDACTED]

Approval Type: New Approval

Title: The Physiology of Radial Units in Corticogenesis (Pilot Study)

PI: [REDACTED]

Species: Ferret

Primary Reviewer: (1) [REDACTED]

Secondary Reviewer: (1) [REDACTED]

Results: **Revisions Requested**

Revisions Requested: -Section C: The Committee strongly recommends scheduling a Zoom meeting with biostatistician [REDACTED] (cc’ed) to discuss minor refinements to your power analysis.
 -Section G: Please incorporate some language, in conjunction with LARC veterinarian [REDACTED]

[REDACTED] on what measures can be implemented by the vendor to ensure the welfare of neonatal kits during transport/transit and prevent hypoglycemia and other health concerns.

Non-USDA Covered Species

UCSF IACUC Subcommittee Meeting Minutes

Committee Name: IACUC SubCommittee/DMR

Committee Type: IACUC

Meeting Date: 08/04/2020

Members Present: IACUC Chair (or Vice Chair):

LARC Attending Veterinarian or Designee:

IACUC Committee Member as Specified:

Chair's Report: Voting Members: [REDACTED]

1. Subcommittee Minutes

• Members were provided a copy of the minutes in advance of the meeting for review. It was recommended, and the Subcommittee voted unanimously to approve the July 7, 2020 Subcommittee meeting minutes as written.

Training and Compliance Report: 2. Training & Compliance Report:

[REDACTED] – Members received an update from the IACUC staff, noting receipt of the funding clarification, and all corrective actions completed. An acknowledgement letter will be sent to the PI.

Other Business: 3. Protocol Review Add-ons: N/A

4. Other Business: N/A

Protocols Reviewed

The following protocols will be reviewed by Designated Member Review process in accordance with the PHS Policy Section IV.B.3.

USDA Covered Species

Project Number: [REDACTED]

Approval Type: Annual Review

Title: Physiologic studies in lamb models of congenital heart disease.

PI: [REDACTED]

Species: Sheep

Results: **Approved**

Project Number: [REDACTED]

Approval Type: Annual Review/Modify

Title: A Placebo-Controlled Study to Evaluate the Efficacy of Local Myocardial Stem Cell Delivery with Bioabsorbable Scaffolds in a Swine Model of Myocardial Infarction.

PI: [REDACTED]

Species: Swine

Results: **Revisions Requested**

Revisions In the progress report, please provide a bit more information on what milestones have been Requested: achieved in the past year

Project Number: [REDACTED]

Approval Type: Annual Review

Title: Physician training in the use of the [REDACTED] system

PI: [REDACTED]

Species: Dog, Swine

Results: **Approved**

Project Number: [REDACTED]

Approval Type: Annual Review

Title: Physician Training in TIPS: Transjugular Intrahepatic and Portosystemic Shunt Procedure

PI: [REDACTED]

Species: Swine

Results: **Approved**

Non-USDA Covered Species

Project Number: [REDACTED]

Approval Type: Modification

Title: In vivo imaging in the mouse using multiphoton microscopy

PI: [REDACTED]

Species: Mouse

Results: **Revisions Requested**

Revisions -For your new procedure (17), there seems to be a discrepancy between the route of Requested: administration described in Section G. (retro-orbital) and Section I. (intra-cranial microinjection). Please explain.

-Please explain how the newly added experiment 17 dovetails with your current objectives.

-Please describe the endpoints for the injection of [REDACTED]; does it mimic a stroke model? What do you mean by "thromboembolic events"? Depending on how far the animals will go, they might qualify as pain category E.

Project Number: [REDACTED]

Approval Type: Annual Review/Modify

Title: Mechanisms of intestinal homeostasis, repair, and signaling

PI: [REDACTED]

Species: Mouse

Results: **Revisions Requested**

Revisions -Regarding the food intake measurement, please replace "single cage", by "animals will be Requested: housed singly in extra enriched cages" and add this study to your researcher care box in Section K. I am cc'ing my colleague [REDACTED] who has been in touch with you, if I recall correctly, at the onset of shelter in place, regarding your pending training requirements for researcher care.

-Please add the new compounds DNBS and CNO to your list of potential adverse effects (Section J.).

Project Number: [REDACTED]

Approval Type: Modification

Title: In Vivo Evaluation of Experimental Anti-Cancer Therapeutics; UCSF Preclinical Therapeutics Core

PI: [REDACTED]

Species: Mouse, Rat

Results: **Approved**

Project Number: [REDACTED]

Approval Type: Modification

Title: Immunity to Infection and Cancer

PI: [REDACTED]

Species: Mouse

Results: **Approved**

Project Number: [REDACTED]

Approval Type: Annual Review

Title: Illuminating the Dark Matter of the Genome

PI: [REDACTED]

Species: Mouse

Results: **Revisions Requested**

Revisions Requested: -In the progress report/unexpected adverse effects section, you state that "a very small percentage of our transgenic dCas9-KRAB mice develop anal lesion". Can you please specify a rough estimate of how many animals were affected ? Did you consult with a veterinarian?
-Also, there is no CSA on file for the use of the controlled substance Buprenorphine. Please contact [REDACTED] from EH&S to guide you through the process.

Project Number: [REDACTED]

Approval Type: Modification

Title: Astrocytic signaling in the cerebral cortex

PI: [REDACTED]

Species: Mouse

Results: **Revisions Requested**

Revisions Requested: -Can you explain whether you will account for controls in your early life stress experiment with n=20?
-Please provide us with a photograph of the cage set-up to illustrate how the wire bottom will be elevated. You can upload it under "documents" in RIO.

Project Number: [REDACTED]

Approval Type: Annual Review

Title: Role of Innate Immune Cells and Pathways in Lung Ischemia Reperfusion (IR) Injury

PI: [REDACTED]

Species: Mouse

Results: **Approved**

Project Number: [REDACTED]

Approval Type: Annual Review/Modify

Title: Analysis of HIV Infection in Humanized Mice

PI: [REDACTED]

Species: Mouse

Results: **Approved**

Project Number: [REDACTED]

Approval Type: Modification

Title: Metabolic imaging of infection using microorganism-specific pathways

PI: [REDACTED]

Species: Mouse, Rat

Results: **Revisions Requested**

Revisions -In Section C, please explain how you went from using 4+4 animals for every tracer to Requested: requesting a total of 15? We understand you are accounting for a % mortality but please describe the attrition rate and provide references if possible.