

IACUC MEETING MINUTES - APPROVED

May 2, 2019, 3:30-5:00pm ADM 468

IACUC members present: L Dowdy, K Murphy, J Castaneda, F Dunker, V Vredenburg, Nancy Catena

Guests in attendance: Susan Pelton, Linda Vadura, Leslie Hofherr (Biosafety consultant via teleconference)

Chair Dowdy presided over the meeting and called the meeting to order at 3:36pm

1. ANNOUNCEMENTS

Erik Komoto, Protocol Specialist, has resigned from his position in ORSP/HAP. The position will be posted asap.

2. FEB MEETING MINUTES

Following edits were requested:

Page 1, in announcements section, add after second sentence: "The IACUC thoroughly reviewed the teachable moment and also addressed this issue with the investigator"

Page 2, in first paragraph fourth line, add after along with: "...all appropriate training related to animal care"

With the above edits, the members present unanimously approved the meeting minutes from Feb 22 2019 meeting.

3. TOPICS FOR DISCUSSION

• Reporting to USDA and OLAW guidelines with priority to reporting of reportable events regarding USDA covered species – discussion can be postponed until next meeting.

It is important for the IACUC administrator to be included in this discussion, therefore this issue was postponed until next meeting (tentatively scheduled for Aug 2019)

 Update from Biology dept. regarding reporting structure of Benson, tech in salt water room

Lynne reached out to Laura Burrus who confirmed that Benson is still an emergency hire and he splits his time approximately 50%/50% between the vertebrates and invertebrates in the salt water room. Benson currently reports to Laura, but the plan going forward would be for him to report to the Salt Water Committee (or Committee chair).

 Do we need a more formal approval process for the occ health review by Jordan Rinker (consultant)?

Committee would like to see Dr. Rinker's recommendations/guidance re protocols, but the occ health review/guidance should not hold up the routing of protocols for committee review.

4. Semi-Annual Program Review

The committee conducted a semi-annual program review

5. PROTOCOL REVIEW

 Protocol Modification review: A16-06R2, "Evolution and development of ray finned fishes III," PI: Karen Crow

The Chair posed the following two questions to the committee:

Question #1: Is the committee satisfied with the current mortality rate Question #2: Transgenic work is not currently allowed on campus since we currently do not have a IBC. Is the study being proposed transgenic work?

Question #1:

Julian commented that there has been a definite improvement since Benson has been responsible for the salt water room and it is evident that he is committed to the success of the program. Julian provided a chart of the mortality rate over a 30 day period to committee. Having better water quality has helped, but mortality rate is still higher than 50% and there is still room for improvement. Hypotheses include:

- Resident pathogen?
- Water quality not good enough?
- Importing weak fish?
 Aggression? Too dense (no hiding places when they first came in)

Still a lot of questions left to be answered. Julian is hopeful when we are able to move the fish up to 8th floor animal facility, rate will improve.

Freeland noted that the overall mortality at Cal Academy is 17% (across all species), so they generally aim to do better than that. Moving fish to 8th floor, making sure that the bio filter is prepped, should make things better.

Discussion of water temp: coming from mid-high 50s in southern California; and our tanks are in the 60s. Freeland noted that Cal Academy keeps that 57-58 to match their normal habitat.

It was recommended that the PI conduct a pilot project with temp of 55-58. Also recommended less density with more hiding holes, separate tank so that we can keep water cooler. IACUC will ask Karen to include this in her protocol or SOP.

It was suggested that the PI consider purchasing gobies; perhaps bring in 10% from wild and 90% purchase. Karl noted that purchasing gobies has been suggested in the past and Karen has said it would be more costly than collecting in the wild.

The committee recommended that the focus be on husbandry for now, temperature and bio filters. Committee voted not to approve protocol and will require that the PI conducts a Protocol is not approved; need to do a pilot study first.

ORSP/HAP to communicate to the PI that due to high mortality, the IACUC is requesting that she submit a protocol modification by June 7 to conduct a pilot study. The pilot study will test if adjusting water temperature, reducing the density of fish and/or increasing hiding spots will help to reduce the mortality rate. Based on the outcome of the pilot study, she will then be approved to acquire/collect more fish.

Question #2

Transgenic work is not currently allowed on campus since we currently do not have an IBC

After discussing this issue and consulting with Leslie Hofherr, biosafety specialist, the committee came to the determination, that the work is not transgenic.

6. OTHER BUSINESS

A. EHS Field Safety Update (L Vadura and L Hofherr)

Linda provided an update on the draft plan and Lynne proposed that a sub-committee be formed to review the Animal Contact Occupational Health and Safety Plan (Animal OHSP) draft sent by Linda Vadura to IACUC members on 4/29/2019. Karl, Vance and Julian will serve on this sub-committee and Linda will send out a Doodle to agree on a date.

B. New Protocol template for use

Lynne also proposed that a sub-committee be developed to review the protocol template. Lynne, Julian, Nancy and Neha were asked to serve on this sub-committee.

Other notes:

Next meeting – tentatively set for late August. Neha to send out Doodle poll when she returns to office to set the date asap.

Vance will be on sabbatical next year; Eric Routman will be back. Lynne, Julian and Susan discussed possibly adding alternate IACUC member.

5:11pm meeting adjourned



IACUC MEETING MINUTES - APPROVED

August 28, 2019: 3:30-5:30 PM ADM 468

IACUC Members Present: L. Dowdy, E. Routman, K. Murphy, N. Catena, J. Castaneda

Guests: L. Vadura (EH&S)

ORSP Staff: J. Mankus (ORSP), J. Calder (ORSP)

IACUC members Absent: V. Vredenburg (sabbatical)

Chair Dowdy presided over the meeting and called the meeting to order at 3:35 PM.

1. ANNOUNCEMENTS

Neha Kaul has left her position as IRB Administrator. Susan Pelton covering for now and Jessica Mankus and Josh Calder filling in today as Susan is out of the office.

Coordinator position recently approved and position will be posted shortly. Administrator position approval still in progress. Julian suggested that we review USDA and OLAW guidelines once a coordinator is hired.

2. MEETING MINUTES

The members present unanimously approved the meeting minutes from May.

3. PROTOCOL REVIEW

Vance Vredenburg A16-01R2

The committee discussed the protocol and identified the following questions for the investigator:

- On page 7, delete the LHRH from the table at the bottom of the page OR explain why it is included in the protocol
- On page 6, Section 4, Procedures Campus Biosafety staff have requested that an SOP be
 included in the protocol (and attached as an appendix) to describe the process for culturing the
 infectious agent, how it will be contained and disposed of as well as what procedures are in

place to minimize the potential cross contamination of other amphibians in the Animal Care Facility.

 Two graduate students are being added to the protocol and it says in the protocol that they will be trained by the PI. If the PI is not available, should/could this be changed to be the lab manager?

Karen Crow A16-06

The committee discussed the protocol and identified the following questions for the investigator:

Cover page

Given that the investigator uses some of the fish in the classroom, the "Classroom Teaching" box should be checked and the course number should be listed.

• Page 1, Section 28, Experimental Design

The Committee requested that a pilot study aiming to determine more optimal housing parameters must be conducted before conducting any other experimental manipulations described in this protocol. In the pilot study, the Committee would like the investigator to test whether a lower temperature (55-58 F, the ambient temperature of water near Catalina Island) will increase survival of the fish. In addition, the Committee would like the investigator to test whether reducing the density of fish and/or increasing hiding spots will help to reduce the mortality rate. The plan for the pilot study should be incorporated into this protocol and should include a justification for the number of animals, conditions or housing, etc. Once the pilot study is completed, the investigator must obtain explicit approval from the OHAP/IACUC/veterinarian to continue with any further research described in this protocol. In other words, consultation with and approval from OHAP, IACUC chair, and the veterinarian is an essential step that must be carried out before any other experimental manipulations on the Catalina Island Goby are performed.

Page 2, Section 3A, Animal Species, Numbers, and Sources, in table

Under the number and pain category columns, the number of adult gobies should be reduced from 450 adults to 150 adults (per year). This number will match what is listed on page 3, and this number matches a more optimal maximum capacity, as determined by the Committee, of the tanks in the saltwater room. In this row on the chart, specify that these are fish to be used once pilot study is completed. Also, the investigator should add section/row to indicate 150 gobies and specify that these are fish specifically for pilot study.

- Page 5-6, Section 3B, Field Collection and Transportation, please make the following changes and/or clarifications:
 - Committee requested that an airstone be used for all transport, not just if greater than one hour. (page 5)
 - The following revision is requested to last sentence on page 5:

Transport densities vary depending on size of individuals being transported (see below for specifics), and upon arrival, acclimatization takes place by floating individuals in plastic bags containing source water (at transport densities) until ambient temperature is achieved, before transferring to destination water at SFSU.

- Language should be inserted regarding acclimation:
 - Any time animals will be introduced to a new aquarium, to best acclimate the animals, the procedure is to slowly add destination water to the source water in the plastic bag, continuing to do this until the bag is at capacity.
- Language should be inserted regarding informing Animal Care Facility Manager of ambient temperature at source:
 - To help improve acclimation to captivity and increase breeding success, water temperature at the source of collection shall be logged and communicated to the Animal Care Facility Manager.
- Language should be inserted stating that the Investigator will submit to the Animal Care Facility Manager (who will then forward it to the IACUC chair) an Animal Collection Request Form <u>at least one week prior</u> to bringing fish into the facility, so that the environment can be prepared properly and to ensure there is enough space in the tanks to bring in additional fish. No animal can be imported without explicit approval from the Animal Care Facility Manager and IACUC chair.
- The protocol states that during field collection, in some cases there may be a holding time of up to 72 hours, before transport to SFSU. Committee asks if there is any way to decrease the time, in order to reduce the stress to the animals.

• Page 11, Section 6, Veterinary Care and Monitoring, question 3

Given that the animals are housed in a satellite facility, which is not under the purview of the Animal Care Facility, the IACUC needs to be assured that the minimum standards of daily care are being adhered to:

- Investigator needs to identify the individual(s) responsible for animal care in the satellite saltwater facility
- It needs to be clearly stated in the protocol that, since the animals will be housed in a satellite facility, the PI will make assurances to the Committee that all fish will be observed and fed at least daily, regardless of the current reporting structure of the staff in the saltwater room.
- The contingency back-up plan for animal feeding and health checks in the event that the
 person responsible for feeding and health checks on a specific day is unable to report to
 work needs to be included in the text of the protocol.

• Page 11, Section 7, Euthanasia

In order to be in compliance with federal guidelines, all euthanasia procedures must follow the American Veterinary Medical Association (AVMA) guidelines:

- Committee needs to see each species listed separately, indicating both the primary means of euthanasia and the secondary physical method to ensure death.
- o Procedure for the euthanasia of zebrafish to rapid chilling (cold shock) needs to be updated as this is the standard procedure for this species. For the rapid chilling method, investigator needs to clearly state that the fish will be submerged in 2-4 C chilled water for at least 10 minutes following the cessation of opercular movement for zebrafish that are 8dpf or older, and that zebrafish between 4-7 dpf will be chilled in water for at least for 20 minutes following the cessation of opercular movement
- Techniques currently listed for juvenile zebrafish are not approved by the AVMA. Instead investigator should update to use MS222 or cold shock (as described above).
- Needs to be stated in protocol that before any euthanized animals are used for further research or in the classroom, the primary and secondary means of euthanasia will have already been completed.

• Page 13, Section 9, Personnel and Qualifications

 Animal care personnel (including any emergency or temporary hires) need to be listed on protocol, and must complete CITI training.

4. OTHER BUSINESS

- Update on seawater facility Karl has the OK from architects and engineers, but still getting estimates on carpentry and plumbing. Equipment has been ordered and should arrive in early November. It will take 2-3 weeks to assemble and estimating a completion date by January (Karl will be on vacation for two weeks in December).
- There was a discussion item on the agenda about whether we should we consider protocols
 for research performed at institutions that do not have an IACUC. Some grad students are
 doing joint research at these institutions. How is SFSU IACUC supposed to sign off on
 protocols for these sites/setups? It was decided that this issue would be added to the
 agenda for the next meeting.

5:20 PM - meeting adjourned.



IACUC MEETING MINUTES - APPROVED

October 23, 2019: 3:30-5:30 PM ADM 468

IACUC Members Present: L. Dowdy, E. Routman, K. Murphy, N. Catena, J. Castaneda

Guests: L. Vadura (EH&S), Leslie Hofherr (consultant, EH&S)

ORSP Staff: S. Pelton

IACUC members Absent: V. Vredenburg (sabbatical)

Chair Dowdy presided over the meeting and called the meeting to order at 3:46 PM.

1. ANNOUNCEMENTS

Susan announced that a coordinator had been hired and would start Nov 18. 2019. The IRB/IACUC Administrator position is in the process of being posted.

2. MEETING MINUTES

The members present unanimously approved the meeting minutes from the meeting in August 28, 2019.

3. SEMI-ANNUAL PROGRAM REVIEW

The committee conducted a semi-annual program review (attached).

4. OTHER BUSINESS

- a. Karl provided an update on seawater facility and move of research animals to 8th floor facility. Facilities have started with electrical work. A minor charge to use unistrut for the frame, so it won't rust. Carpentry is next week and plumbing is waiting on some parts (hose bit). Equipment should be delivered on Nov 1. It is anticipated that the set up will take two weeks; then will fill it with water for one week; and finally fill it with salt water. Start with rock cod and slowly introduce surfperch. Anticipated date that it will be ready is the end of January.
- b. There was a discussion regarding the nitrate issue in 2nd floor salt water facility. Consensus was that the problem is due to not changing enough water; or there is another nitrogenous source that we can't identify. Freeland recommended change 25% (even up to 50%) of the water as needed until issue is resolved. Do water change, then test, and do it again, until issue is resolved. After that, go to twice/week, 15% water changes; test daily and keep committee posted.
- c. Update from Field Safety Subcommittee (Linda, Karl, Julian) Tabled, ran out of time
- d. Should we consider protocols for research performed at institutions without an IACUC Tabled, ran out of time

Meeting adjourned at 5:30 PM.