INSTITUTIONAL ANIMAL CARE AND USE COMMITTEE (IACUC)
CALIFORNIA STATE UNIVERSITY, BAKERSFIELD
9001 Stockdale Highway, Bakersfield, CA 93311-1099

MINUTES OF MEETING
Friday 24 January 2014
DDH A-108

Members Present:

Scientific Concerns: Todd McBride, Steve Suter, David Germano
Non-Scientific Concerns: Andrew Troup
Community Issues: Debby Kroeger, Larry Saslaw
Safety and Risk Management: Tim Ridley
Consulting Veterinarian: Mylon Filkins

Members Absent:

Non-Scientific Concerns: Steve Gamboa

Visitors:

Protocol 14-01: Amber Stokes, Biology Faculty
Student Observer: Karissa Mooney

Meeting was called to order by Chair Steve Suter at 1:00 PM.

I. ANNOUNCEMENTS:

A. New member, Tim Ridley, Director of Safety and Risk Management, was welcomed to the IACUC. He provided a brief overview of his recent professional work related to food safety.

B. Debbie Kroeger announced that she would be leaving the IACUC at the end of the academic year. She has served on the IACUC since its formation in 1998 and has provided much valuable service including work on many background tasks and document reviews over the years.

II. PREVIOUS MINUTES:

Kroeger moved and Troup seconded a motion to approve the minutes for the IACUC meeting of 12 June 2013. The motion was approved 8-0.

III. OLD BUSINESS:

A. Revised Occupational Health and Safety Plan

Chair summarized. Although this is a “revised plan, it’s really starting from scratch. An effective plan is mandated in our animal program checklist and other docs. The animal program must identify and manage health and safety risks [H&SR] present in animal protocols. The proposed OHSP includes: [a] identifying and managing H&SR present in each protocol – eliciting info about H&SR from PI’s of each protocol, [b] requiring generalized H&SR training for all who

work with animals, to be incorporated into the existing HCUAS tutorials, and [c] screening and education about possible individual health risk factors, via survey instruments on links to be embedded in the HCUAS tutorials. Discussion followed. Some salient elements that emerged when the Committee reviewed H&SR aspects of the active IACUC protocols have been moved here for clarity.

One discussion involved whether field studies, but by implication lab studies, should address H&SR beyond those specifically associated with working with the animals. Examples would be risks of simply being in the field setting, e.g., stepping on a rattlesnake, or dealing with hazardous chemicals or handling syringes and scalpels in the lab. The gist of this discussion was that members believed that PI's are competent to deal with these and presently do so. Requiring PI's to compile a comprehensive list of H&SR for a protocol is not advisable. However, there was a consensus that strengthening documentation would be wise in order to enhance the credibility of the OHSP and reduce the legal liability of the university.

It was agreed that questions #23 and #24 of the IACUC Protocol and Protocol Review Form be modified as follows:

> #23: "Describe the health and safety risks to personnel associated with the activities covered by this protocol.
>
> #24: Describe the steps that will be taken to minimize the above possible health and safety risks to personnel.

In addition it was agreed that a statement affirming PI responsibility for H&SR identification and management be added to the IACUC Protocol. The following statement appears to capture the OHSP elements that PI's on the Committee argued were already in place.

> "As PI, I affirm that I am responsible for the health and safety of personnel during activities covered by this protocol. I have practical knowledge of this field and/or laboratory situation. I will assess the experience of personnel, provide necessary information and training, and provide appropriate supervision to ensure that personnel follow procedures to minimize threats to their health and safety."

A second line of discussion was about how to provide necessary information to a person who reports a potential health risk factor in order for his/her decision whether to interact with animals is adequately "informed", without being excessively burdensome. Specifically this dealt with how to implement an option in which a person who indicates a risk factor on the screening that everyone completes, could go ahead and choose to work with animals without having been examined and cleared by a physician.

The consensus was that a person indicating a risk factor should: [a] be referred to additional educational information about that risk factor and [b] be advised to see a physician. The person could then choose to proceed to work with animals without advice of a physician or complete the confidential health history questionnaire and seek physician advice. This information would be made available to the PI, who may wish to advise the person not to work with animals although the PI should *not* advise anyone to work with animals who has a potential risk factor. Additionally, it was agreed that the IACUC should obtain legal advice on the appropriateness of the specific wording of the person's waiver of physician advice in terms of protecting the university against liability.

It was recognized that details remain to be worked out, e.g.: [a] specific content of the HS&R training in HCUAS modules, [b] wording of the screener and confidential health history questionnaire, and [c] how the information about the HS&R choices of personnel is stored.

There was a motion to accept and implement the proposed OHSP with the revisions and provisos indicated above. Germano moved, Saslaw seconded, 8-0.

IV. NEW BUSINESS:

A. Protocol Closures [none]

B. Protocol Renewals [none]

C. Review of New Protocols

Protocol 14-01. [Amber Stokes, Biology]. "Tetrodotoxin (TTX) in Terrestrial Systems: The Biogeographical Distribution, Ecology, and Physiology of TTX-Bearing Organisms."

The PI summarized. This study focuses on the levels of the neurotoxin, tetrodotoxin [TTX], among several geographically disparate species of newt and their main predator, the garter snake. The level of TTX in newts and resistance to TTX in snakes is a coevolutionary phenomenon. The study involves both field capture and lab work. Discussion followed:

[**Q** = question, **A** = answer, **C** = comment]

Q: Where will you be obtaining the skin sample from the newts? **A:** On the dorsal surface, which tends to contain higher levels of TTX and is representative of the whole body.

Q: Much bleeding when the sample is taken? **A:** No.

Q: Who will be doing this procedure? **A:** The PI, but she will also train her research students to do so.

Q: How will you monitor anesthesia [Finquel] level and avoid overdose? **A:** The PI will be present. Absorption of Finquel through the skin is a slow process. Therefore, it is not hard to monitor for loss of reflexes which indicates anesthesia, while ensuring the continuing presence of vital signs.

Q: What will you do with the leftover Finquel. **A:** It will be reused some, and then eventually discarded.

C: The old Finquel needs to go into a waste container, not down the drain.

Q: Where will you keep the Finquel? **A:** It will be kept clearly labeled in diluted form in a refrigerator.

Q: How about security and safety of the TTX and Finquel? **A:** The refrigerator will be padlocked. The powdered TTX is dangerous, but it will be diluted in liquid upon arrival and stored that way for safety.

Q: Where will you capture your newts? **A:** The captures will be in California. PI's capture permit is being converted from student to PI status. The renewal is pending. The Oregon newts will be from a research pond.

Q: How will the Oregon newts get to Bakersfield? **A:** The PI go pick them up and drive them down in her vehicle.

Q: How about the snakes? **A:** The snakes will come from the same geographical areas as the newts.

C: You'll need to firm up the details on the newt species to be studied because at least one is probably protected from trapping. **A:** Will do.

Q: Have you worked out details on acquisition, use, storage, and disposal of the two chemicals with Tim? **A:** Somewhat and there will be continued interactions on the details.

Q: The animals will be housed in your lab? **A:** Yes.

C: The IACUC is required to inspect any facility that houses animals overnight, so we will need to do that when your housing is set up.

C: The PI has a SOP that will be used to train students for animal handling, but there was a consensus that the IACUC doesn't need to see that.

Q: How many newts will you have at one time? **A:** Not quite clear on the space required or available yet, but probably on the order of 20 to 40.

Q: How long will individual animals be in the lab? **A:** Not more than about one year.

Q: The animals will be euthanized at the end of the research? **A:** Yes, they cannot be returned to the wild. It's possible that they could be used in other studies or transferred to museums.

Q: The protocol indicates the Bakersfield Veterinary Hospital would be consulted in newt and snake health emergencies. Is that expertise in place? **A:** Filkins indicated yes.

Q: The purpose of the powdered TTX isn't clear in the protocol – testing snake resistance to TTX? If so isn't in the Method section. **A:** That will happen at Utah State using an apparatus to observe snake motility. At the CSUB lab we will just be looking at the natural levels of TTX in the garter snakes.

Q: So do you really need to have snakes in the CSUB lab? **A:** Perhaps not. It's possible that those measurements could be done in the field, which might simplify the permitting.

Q: When do you hope to start? **A:** This summer or fall would be good, but the weather has not been cooperating.

Q: How many animals will you collect? **A:** That will probably be limited by the permit.

Q: What do the numbers mean that you've listed in the table? **A:** Those are maximum numbers.

Q: Are there any other possible uses of the newts? **A:** Possibly, genetic analyses.

Q: How would you deal with an electrical outage, given that newts need to be cooled. **A:** They would be fine for a couple of hours. Longer would involve putting them in coolers. The most important thing is keeping them moist.

C: We'll need to know the names of your research assistants so we can verify that they have the HCUAS certification and you know that you need to do the HCUAS to have the protocol authorized.

C: The IACUC will need to do something formally with Utah State, since this is a collaborative protocol involving both institutions.

When there were no more questions, the PI was invited to depart and the members deliberated in executive session. There was a motion to conditionally approve Protocol 14-01. Germano moved, Filkins seconded, 8-0. The PI returned and was informed of the results. The conditions were:

- PI will dispose of chemicals in a waste container and add this to the protocol.
- Make decisions about species to be collected and revise protocol accordingly if needed.
- Coordinate details of chemical acquisition, use, storage, and disposition with Safety and Risk Management and add specifics to protocol.
- Clarify intended use of purchased TTX in protocol and specify that garter snake resistance is to be tested at Utah State.
- If PI wants to have the option to get snake tissue samples in the field and not house snakes in the CSUB lab, add this to the protocol.
- Add to the protocol that PI understands that RA's must be HCUAS-certified and will provide IACUC with their names so that certification can be verified before they interact with animals under the protocol.
- PI must obtain certification on HCUAS Module I and the euthanasia module before protocol is authorized.
- CSUB IACUC must note collaboration with Utah State in this protocol and the previous authorization of a similar protocol by Utah State.

D. Semiannual Program Review Checklist

The Program Review Checklist for January 2014 was acclaimed to be good without a motion.

E. Health and Safety in Open Protocols

PI's McBride [98-07, 01-01, 01-05], Germano [13-01], Raupp [05-01], and Sumaya [03-02, 04-01, 04-02, 07-05] had submitted responses to questions #23 and #24 of the IACUC Protocol. Most of the discussion has been moved to IIIA [above].

During this discussion the specific location [GRaSP vs Safety & Risk Management] of the DEA license was questioned. It was noted that health and safety info needed to be added to the HCUAS surgery module.

V. AREAS OF CONCERN: [none]

VI. MEETING DATES FOR AY 2013-2014

Fall 2013: Friday, 04 October 2013
Winter 2014: Friday, 24 January 2014
Spring 2014: Friday, 18 April 2014
Summer 2014: Wednesday, 11 June 2014

VII. ADJOURNMENT:

There being no further business, the meeting was adjourned at 2:58. McBride moved, Filkins seconded, 8-0.

Inspection of the Animal Facility followed.

ANIMAL FACILITY INSPECTION [Friday 25 January 2014]

The log was complete and up to date, as was the call out list. The box containing emergency supplies was in place. There were about 20 animals, all rats, in the colony. The high/low fat diet and enrichment studies continue with results showing that enrichment protects against effects of high fat diet on memory even in elderly rats. Female rats will be added to the colony soon as part of that research. Normal mortality in rats begins to appear around 14 - 18 months. The recommended exit sign above the inside of the H-100 door into the H hallway, to indicate the direct egress path, has been installed, but it is not self-illuminated. Sumaya noted that the cages are cleaned weekly by her student assistants, some on Wednesday and the rest on Friday. The Animal Facility has a new freezer; thus bodies of animals that expire on the weekend can be stored prior to donation to FACT, rather than going home to Sumaya's kitchen. Members noted the shabby condition of the ceiling tiles in the prep room and suggested a heads up to Facilities Management.

Respectfully Submitted, ***Steve Suter, Professor of Psychology, Secretary for the IACUC***