# INSTITUTIONAL ANIMAL CARE AND USE COMMITTEE (IACUC) CALIFORNIA STATE UNIVERSITY, BAKERSFIELD

9001 Stockdale Highway, Bakersfield, CA 93311-1099

MINUTES OF MEETING Friday 29 January 2010 DDH B-108

# **Members Present:**

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

# **Members Absent:**

Community Issues: Eugene Couture
Non-Scientific Concerns: Stephen Gamboa

# **Visitors:**

Erin Tennant for Protocol 09-01 Susan Hult for Protocol 09-02 Steven Boydston, graduate student visitor

Meeting was called to order by Chair Steve Suter at 1:02 PM.

# I. ANNOUNCEMENTS:

**A.** McBride has submitted a grant proposal to a private agency, which, as a condition of funding will require accreditation. We cannot do this via federal avenues, since CSUB has not had federally-funded animal research, so this must be done by a private accrediting source. The Chair was requested to survey other CSUs on their accreditations.

#### **II. PREVIOUS MINUTES:**

Filkins moved and McBride seconded, a motion to approve the minutes for the IACUC meeting of 02 October 2009. The motion was approved 7-0.

III. OLD BUSINESS: none

# **IV. NEW BUSINESS:**

# A. Modification of Authorized Protocols

 Proposed modification of Protocol 98-07 "The Role of Stretch Activated Ion Channels in the Long Term Adaptation of Striated Muscle to Active Muscle Lengthening" [Todd McBride, Biology]

McBride has submitted a grant proposal to study the same variables involved in Protocol 98-07 in mice. There is a well-developed theoretical context for this and he has a protocol that will work for mice.

# [Q = question A = answer C = comment]

- **Q:** You have the necessary equipment to study mice? **A:** I will modify the rat apparatus used for restraint and for collecting the muscle response data so it will work with mice.
- **Q:** Who will supervise the breeding and monitor the mouse breeding? What type of breeding will be used? The staff at the Animal Facility have expertise only for rats. **A:** I will supervise everything myself. There will be one breeding pair to begin with. Only males will be used in data collection, so that the females would be euthanized.
- **Q:** How many are we talking about being bred and then euthanized? **A:** I'm not concerned about that because FACT is presently buying mice to feed to the raptors. The unwanted female mice will be euthanized and sent to FACT as food for the raptors.
- **Q:** How many animals do you propose to study per year? **A:** This would be 36 48 per year. They will need to be 24 36 weeks of age.
- **Q:** How about housing issues? **A:** The females can be group housed, but the males cannot, unless they are litter mates that have been raised together. Otherwise, they fight and kill each other.
- **Q:** Mice are smellier and need more cleaning. Who will do the additional cleaning? Do you have appropriate cages? **A:** I have a few mouse cages to start with. Note that I shouldn't have to pay Animal Facility usage charges if I take care of the animals myself.
- **C:** The Animal Facility Director noted that specially-filtered cages are needed for mice, and the PI disagreed.
- Q: What is the approximate rate that you would be using mice in your research for data collection?

  A: About 6 per month would be a good approximation.
- Q: How expensive are mice? A: A breeding pair is \$180.
- **C:** Consulting veterinarian noted that mouse breeding would be a big change in the routine at the Animal Facility and involve greater supervision.
- **Q:** How much supervision is this going to involve? **A:** There would be daily supervision, but I would not necessarily be present for birthing.
- **C:** Consulting veterinarian noted possibilities of adopting out mice pups and the problem of cannibalism that should be dealt with. On the breeding, who is monitoring what? The staffing needs to be specified. Will this lead to competition for space in the Animal Facility among protocols? There are issues about training of personnel for dealing with mice. The purpose of the breeding needs to be clearly specified.

When there were no further questions, the PI and visitors were asked to leave and the IACUC deliberated in executive session. There was a motion to conditionally approve the proposed modifications to Protocol 98-07 [Beadle moved, Germano seconded, 6-0] with the following conditions:

1. The general logistics of the breeding and data collection must be spelled out. This involves realistic estimates of the number of mice added to the Animal Facility as a function of time, in relation to the planned use of these animals in the proposed research. It is required that the PI will adjust his schedule in order to synchronize data collection with the outcomes of the

breeding in order to minimize the number of mice that must be euthanized as a result of this protocol.

- 2. The PI must address the changes in the operation of the Animal Facility that would result from approval of this protocol. These considerations include the proportion of space in the Animal Facility to be occupied by mice, the provision of appropriate cages/feeding/watering for the mice, and specifying the cleaning regimen for the mice.
- 3. Related to #1, PI must address sexing, separation, and grouping for housing purposes of the mice, addressing potential issues of possible mortality from aggression and cannibalism.
- 4. There must be at least one additional person trained to supervise the mice. Who supervises? Training of personnel in addition to the PI must be described. PI must provide a supervision plan. Linkage to the events of breeding, lactation, and weaning should be indicated.

When the PI returned, the results were announced. The PI asked if the IACUC would authorize his protocol modification, in the absence of the above conditions, if he were to obtain mice from a local retailer, collect data, and euthanize the mice the same day, in order to begin collection of pilot data. This would involve no breeding and no housing in the Animal Facility.

This proposal was approved 6-0, with the stipulation that the restraint and force measurement apparatus presently used for rats be appropriately modified for mice.

#### B. Renewal of Authorized Protocols

**1.** Proposed renewal of **Protocol 09-01**. "Study of Kangaroo Rat Competition" with Erin Tennant [Biology Student] and David Germano [Faculty Mentor].

Tennant has just presented interim results at a professional conference. Possible behavioral differences between the Tipton and Heermann's species are emerging, for example territoriality. The upcoming year will focus on the exclusion area that has been set up. There will be periodic trapping.

- **Q:** Did you file an Adverse Event Report for the Heermann's kangaroo rat that apparently died trying to remove the radio transmitter? **A:** No, but I will do that. Send the form. These activities, collecting and installing transmitter, are formally permitted.
- **Q:** Have you seen any differences in the food preferences of the two species? **A:** Not really. We are very interested in whether the number of Tipton rats will increase, now that many of the Heermann's kangaroo rats have been removed, or will the general scarcity of Tipton rats turn out to be related to variables other than being out-competed by this species.

When there were no further questions, the PI, faculty mentor, and visitor were asked to leave and the IACUC deliberated in executive session. There was a motion to approve the renewal of Protocol 09-01 [Filkins moved, Troup seconded, 6-0].

2. Proposed renewal of **Protocol 09-02** with modifications. "Habitat Association of Coast Horned Lizard (Phymosoma coronatum) in the San Joaquin Valley" with Susan Hult [Biology Student] and David Germano [Faculty Mentor].

Habits and demographic variables have been mapped out over the previous year. For example, the following have been noted: [a] interesting seasonal variations, [b] circadian phenomena, and [c] soil type preference. She has recently presented some of these at a professional meeting and has also co-authored a note on interesting belly-to-belly mating in these little folks.

The proposed modification is to use radio telemetry, specifically passive integrated transponders, to get better home range data.

- Q: Is there risk of infection, injecting the tag under the skin? How do you deal with that? A: The tag injection includes an antibiotic gel.
- Q: How close does the telemetry let you get to the animals? A: Very close, because the signal strength increases with proximity, so within a few feet.

When there were no further questions, the PI, faculty mentor, and visitor were asked to leave and the IACUC deliberated in executive session. There was a motion to approve the renewal of Protocol 09-02 as modified [McBride moved, Kroeger seconded, 6-0].

# C. Review of New Protocols: [none]

V. AREAS OF CONCERN: none

# **VI. NEXT MEETING:**

Friday, 23 April 2010 in DDH A-108

### VII. ADJOURNMENT:

There being no further business, the meeting was adjourned at 2:45 PM. [Germano moved, McBride seconded, 7-0]

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