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

9001 Stockdale Highway, Bakersfield, CA 93311-1099

MINUTES OF MEETING Friday, 08 June 2007 DDH A-108

Members Present:

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

Members Absent:

Robert Horton [ex-officio]

Visitors:

Carol Raupp, Psychology, for renewal of Protocol 05-01 Isabel Sumaya, Psychology, for renewal of Protocols 02-02, 03-02, 04-01, 04-02

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

I. ANNOUNCEMENTS:

- **A.** The Animal Facility was inspected on Friday, 26 January and will next be inspected at the October 2007 meeting.
- **B.** Eugene Couture, a local practicing clinical neuropsychologist, has been nominated to join the IACUC as a community member.

II. PREVIOUS MINUTES:

Germano moved and Filkins seconded, a motion to approve the minutes for the IACUC meeting of 09 October 2006. The motion was approved 7-0.

III. OLD BUSINESS:

A. IACUC policy on "housing of animals" -- may animals overnight elsewhere?

The Chair overviewed a situation in which one of McBride's animals went "missing" from the Animal Colony, but then showed up later. The animal had over-nighted in McBride's lab. Chair noted that any facility holding animals overnight are supposed to be inspected. Chair's recollection is that animals cannot overnight elsewhere. What is IACUC policy on housing of animals? Discussion followed.

[Q = question A = answer C = comment]

C: McBride noted and Filkins verified that Filkins had visited McBride's lab area and did not observe any problems.

Q: Why wasn't the animal returned? **A:** Sometimes it is difficult to return an animal because the lights are out for the 12-hour dark phase maintained in the Animal Facility.

Q: What is the security situation in McBride's lab? Could persons not certified in HCUAS enter? **A:** It is locked, but faculty having that sub-master could enter, as well as custodians. A note could be left to discourage entry if an animal is present.

Q: The Animal Facility is on the emergency preparedness plan. What if there were an emergency and an animal were housed in that lab? **A:** There are no arrangements in place for that.

C: Beadle noted that a comprehensive "Business Contingency Preparedness Plan" to cover a variety of emergency situations will be developed beginning this summer that could have implications for this. A plan dealing with Animal Facility and all animal use at CSUB will be integrated into this plan.

The following policies were adopted by consensus: (a.) Record keeping must be adequate to apprise the Animal Facility Director at all the times of the location of every animal. (b.) Investigators must attempt to return animals to the Animal Colony. If return is during the dark phase of the 12/12 light/dark cycle, then the animals is to be returned [in its living cage] to the ante-room of the Animal Facility. (c.) If the investigator must return the animal to his/her lab overnight, then a notice must be posted on the access door indicating that experimentation is in progress and persons are not to enter.

IV. NEW BUSINESS:

[Questions/answers shown below were part of an overall discussion of the McBride protocols, but have been listed under the relevant protocol for clarity. **Q = question A = answer C = comment**]

A. McBride Protocol Renewals

1. Protocol 98-07 (Todd McBride, Biology) "The Role of Stretch Activated Ion Channels in the Long -Term Adaptation of Striated Muscle to Active Muscle Lengthening"

The investigator summarized. This protocol remains active with a student collecting data. A total of 12 rats were used in this protocol, fewer than anticipated. There were no problems encountered. The same level of activity is anticipated for next year. However an NSF grant proposal has been submitted. If funded, the number of animals used would increase. Questions followed:

Q: This was first submitted "pending" funding by the American Heart Association. Can you please update? **A:** It was funded, the research was conducted, and this yielded two published articles.

Q: Explain how the current protocol is intended to contribute beyond the original protocol. **A:** The procedures involving the animals are the same, but the present studies will examine indices of ion channel activity that are further along in the biochemical events associated with muscle activity. These measurements will involve intra-cellular proteins in response to stretch and blockade of these. So, the basic contribution is the use of new markers.

Q: The protocol specifies single exposures, but also continuing exposures. What is the purpose of repeated exposures? **A:** There are adaptation processes that occur and this procedure is intended to study these. This study involves tissue analyses that are conducted elsewhere because these analyses cannot be conducted on this campus.

2. Protocol 01-01 (Todd McBride, Biology) "Use of Bullfrogs for Nerve Recordings in Lab Courses"

The investigator summarized. This was not used during the authorization period, but will be used next year, anticipating use of 12 frogs. Questions followed:

Q: How many students are involved in the class doing the frog pithing? **A:** Enrollments run from about 14 up to the enrollment limit of 24. There are about six lab stations with two or three students per station, that is, per frog.

Q: How does this lab activity contribute to the education of these students beyond what they would acquire in the normal classroom setting? **A:** This is a routine procedure used in undergraduate physiology courses. It is particularly important for students hoping to pursue graduate studies and possibly careers in physiology.

3. Protocol 01-04 (Todd McBride, Biology) "Measurement of Rat Metabolism"

The investigator summarized. This was not used during the authorization period and probably will not be used next year. There were no questions.

When there were no further questions from the IACUC on the McBride protocols, the investigator was excused and questions and comments were solicited from the visitor, Dr. Raupp. She had the following questions for the investigator, which were posed by the IACUC Chair to the investigator when he had been called back to the meeting and Dr. Raupp had been excused.

Q: When the investigator said there had been "no problems," what does this mean more precisely? **A:** It means that no events occurred that deviated from the protocol, that is, no events that are not described in the protocol. [A discussion commenced about IACUC policy and guidelines for reporting deviations from protocols to the IACUC. This is taken up later under "New Business".]

Q: For the animals that were killed, were there any problems with this procedure? **A:** No, every euthanasia proceeded according to specified procedures.

When there were no further questions, the PI and the visitors were excused and the IACUC deliberated in executive session. There was a motion to approve renewal of protocols 98-07, 01-01, and 01-04: Filkins moved/ Germano seconded. Approved 6-0, with McBride abstaining. These actions were explained to the investigator.

B. Sumaya Protocol Renewals

[Questions/answers shown below were part of an overall discussion of the Sumaya protocols, but have been listed under the relevant protocol for clarity. It was noted that Dr. Sumaya had requested renewal of Protocol 03-02 in her memo to the IACUC and that this protocol was not listed on the meeting agenda. The Chair added this protocol to the agenda for possible renewal. **Q = question A = answer C = comment**]

1. Protocol 03-02 (Isabel Sumaya, Psychology) "Open Field Paradigm in the Light and Dark"

The investigator summarized. The protocol involves the psychobiology course that is taught once/year in the fall quarter. Enrollments are limited to 24 students. During the authorization period 13 rats, re-used from Protocol 04-02, were involved. No changes in the protocol are proposed. Surprisingly, the rats were more active during the light phase as compared to the dark phase of the circadian light/dark cycle. There were no questions.

2. Protocol 02-02 (Isabel Sumaya, Psychology) "Psychology Course 301L: Principles Of Learning Laboratory"

The investigator summarized. The request is to renew this protocol without modification except that it would be shifted to Dr. Matt Leon as the new Pl. The same activities would be involved unless Dr. Leon wants changes, in which case these would be submitted to the IACUC for authorization. During the authorization period 16 rats were used, all of which were re-used from Protocol 06-01.

Q: Are there any changes requested in this protocol? A: Only in the PI.

3. Protocol 04-01 (Isabel Sumaya, Psychology) "Circadian Effects of Melatonin on Extrapyramidal Side Effects in Rats Treated with Typical and Atypical Antipsychotics"

The investigator summarized. She is hoping to finally be able to collect data on timing and dosage effects using this animal model of Parkinson's disease. After this study is completed, the remaining animals in the Animal Facility will be euthanized and the Animal Facility will be closed for the summer. Dr. Sumaya has coordinated with Dr. McBride on this.

Q: A new student may be added to this one. Any other changes? **A:** It is possible that the pilot study could lead to requested modifications, but these would be submitted to the IACUC. We have aging rats that are appropriate for studies of Parkinson's.

Q: What are the oldest rats in the Animal Facility? **A:** About 15 months, which are relatively elderly rats.

Q: What is the purpose of this protocol? **A:** We're building a knowledge base that could help prompt drug companies to develop new drugs for human use. These studies are coordinated with studies using mice to be conducted this summer at Northwestern University.

4. Protocol 04-02 (Isabel Sumaya, Psychology) "The Effects of Caloric Restriction in an Animal Model of Depression in Rats"

The investigator summarized. This protocol, which was not used during the authorization period, led to the Protocol 06-01 Bailey M.A. thesis project. The Bailey thesis is completed, but Dr. Sumaya wishes to renew the present protocol in order to possibly explore effects of additional variables in connection with nutrition and anti-depressant drug effects using an animal model.

When there were no further questions from the IACUC on the Sumaya protocol, the investigator was excused and questions and comments were solicited from the visitor, Dr. Raupp. She had the following questions for the investigator, which were posed by the IACUC Chair to the investigator when she had been called back to the meeting and Dr. Raupp had been excused.

Q: The PI originally said she didn't know if the rats suffer distress in Protocols 04-01 and 04-02. Does she have updated thoughts on this, having collected more data, and considering human data suggesting that similar procedures are stressful for humans? **A:** The procedure involves an innate behavior of rats. The duration of the test is only 6 minutes. The swim test appears to be less stressful as compared to other tests of helplessness in non-humans. On the bar-press procedure of 04-01, very little data have been collected.

Q: The renewal request for Protocol 02-02 is to transfer this protocol to a PI with little or no teaching experience using rats with these procedures. We have no information about his qualifications. Also, enrollments were very low in these labs when it was taught, reducing the benefit/cost ratio of this protocol. Protocol 02-02 should not be renewed. **A:** Dr. Leon has experience with procedures like this for his research and appeared to be very comfortable with these procedures during an orientation by Dr. Sumaya. One factor in the lower enrollments was a scheduling conflict that required canceling sections of P302L. However if the IACUC prefers, Dr. Leon could certainly submit this protocol himself in time to be used in Winter 2008.

When there were no further questions, Sumaya and Raupp were excused and the IACUC deliberated in executive session. There was a motion to renew Protocol 03-02, McBride moved, Kroeger seconded. Approved 7-0. There was a motion to renew Protocol 04-02, McBride moved, Filkins seconded. Approved 7-0. There was a motion to renew Protocol 04-01, Germano moved, McBride seconded. Approved 7-0. There was a motion to renew Protocol 02-02, Germano moved, Filkins seconded. Defeated, 0-7. These actions were explained to the investigator upon her return. The Chair was instructed to communicate the IACUC actions on Protocol 02-02 to Dr. Leon.

C. Raupp Protocol Renewal

1. Protocol 05-01 (Carol Raupp, Psychology) "Longitudinal Naturalistic Observation of a Trap-Neuter-Release [TNR] Feral Cat Colony"

PI explained this is a longitudinal study, dating from April 2005 involving observations and record keeping as the PI visits feeding stations set up on campus for the feral cat population. These are passive observations. In addition, the PI requests authorization to use, for research purposes, notes taken off campus in connection with another feral cat location at which free roaming dogs had attacked the cats in residence and killed a number of them. Questions followed.

Q = question A = answer C = comment

Q: So, you have made observations off campus. Is this indeed within the purview of the CSUB IACUC? **A:** Yes **C:** The IACUC Chair added his opinion that any research activity involving specified animals that is conducted by CSUB faculty falls within IACUC purview, regardless of the location of said research.

Q: The purpose of including the off campus observations is to be able to compare the CSUB and off campus cat colonies? **A:** Yes. The two appear to be different and comparison could be useful.

Q: The basic idea is to examine the effects of environmental variables on a cat colony? **A:** Yes.

Q: The only protocol modification requested is the addition of the data already collected off campus and that is the only request of the IACUC with respect to the off campus cat colony? **A:** Yes.

Q: Do you think the kit foxes are impacted or have been displaced by the presence of the feral cats on campus or the feeding stations for the feral cats? Do the kit foxes prey on the feral cats? **A:** Re predation, the red foxes on campus are the most suspect cat predators because they are so much larger as compared to the other species. The PI attempts to put out only enough food for the cats and not extra, although the kit foxes do patrol and look for food, as they do at other times and locations on the campus. With respect to displacement, it is hard to say, but the feral cat population has been steady for years. A skilled outside wildlife observer has indicated that the kit fox population is healthy. There have been no signs of inter-species disease transmission.

When there were no more questions the PI and Sumaya were excused and the IACUC deliberated in executive session. Following discussion there was a motion to authorize renewal of Protocol 05-01 without authorization of the addition of the off campus modifications to the protocol. The rationale for this action is that the IACUC judged that the off campus activities did not fall within the purview of the IACUC. The usual disclaimer words for Protocol 05-01 will be included in the renewal letter stating that the IACUC "... does not have jurisdiction or authority over, nor does it sanction in any way, the care, management, or existence of the feral cat colony on campus, including any trapping activities." Filkins moved/Troup seconded, 7-0. The action was explained to the investigator upon her return.

D. Other New Business

1. Earlier in this meeting, in discussing protocol renewals, the question came up whether there was an IACUC policy/procedure with respect to reporting deviations from protocols -- something unexpected happening. Following discussion there was a consensus in favor of the following action:

The RERC should check CSUB and federal IACUC regulations to see if deviations from protocols are to be reported and in what fashion. If so, then the IACUC authorization letters should apprise PIs appropriately. If not, then the RERC should implement no changes until the next IACUC meeting. This should be clarified by the RERC and reported back before the next set of letters is sent out.

2. Filkins, the consulting veterinarian, noted that our materials suggested that he was the contact for emergency animal care 24/7, but realistically he is not available perpetually. It was suggested that the language be modified to state that Filkins *or his associates at Bakersfield Veterinarian Hospital* are the emergency contacts. There is 24/7 back-up in place at BVH. This was accepted by consensus.

3. There was a discussion of orientation for new members of IACUC. RERC described the materials that have been provided recently. It was suggested that the most recent report to the Provost be included in these materials. The RERC agreed to put together a suggested clump of materials and run this by the IACUC membership for further input before orientation for the new community member.

V. AREAS OF CONCERN: [none]

VI. NEXT MEETING:

Friday, 05 October, 2007 – meeting room to be announced.

VII. ADJOURNMENT:

There being no further business, the meeting was adjourned at 3:10 PM Germano moved/McBride seconded. 7-0.

Respectfully Submitted,

Steve Suter, Professor of Psychology, Secretary for the IACUC