

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

MINUTES OF MEETING
Friday 17 January 2015
DDH A-108

Members Present:

Scientific Concerns: Steve Suter, Dave Germano
Non-Scientific Concerns: Andrew Troup, Steve Gamboa
Community Issues: Larry Saslaw
Safety and Risk Management: Tim Ridley
Consulting Veterinarian: Mylon Filkins

Members Absent: Todd McBride

Visitors:

IRB/IACUC Administrative Coordinator: Gwen Parnell,
For Protocol 15-01: Omar Samara, Yiannis Ampatzidis, Joshua Ward

The order of events was juggled to accommodate teaching responsibilities. Meeting was called to order by Chair Steve Suter at 1:20 PM, following the Animal Facility inspection.

I. ANNOUNCEMENTS:

- A. Qualtrics for IACUC Protocol Submission.** Chair and Parnell summarized the pros and cons of Qualtrics, which has been used for IRB protocol submission and review since September 2014. Pros – submitters don't need to be trained or log in, it is easy to use, protocol forms have a polished appearance, multiple attachments can be included, and they cannot be edited by users. Cons – it is not a complete document management system so it takes some hands-on participation by Parnell/Suter. It will require some work to get Qualtrics up and running for IACUC. We will probably do this and have it up by June 2015.
- B. Possible New Community Member.** Chair is in communication with a possible new community member who has volunteer experience at CALM.
- C. Animal Program Checklist.** Chair did not include in the meeting packet the current checklist, which is part of the evaluation of the animal program. He will distribute this to members via e-mail, seeking their comments and approval. Related, Chair will inspect all Module I HCUAS exams in Blackboard to see if any animal use liability waivers should have been completed and formally poll pertinent faculty to see if any waivers have been turned over to them.

II. PREVIOUS MINUTES:

Filkins moved and Gamboa seconded a motion to approve the minutes for the IACUC meeting of 03 October 2014. The motion was approved 6-0.

III. OLD BUSINESS: [none]

IV. NEW BUSINESS:

A. Protocol Closures [none]

B. Protocol Renewals [none]

C. Review of New Protocols

Protocol 15-01. [Omar Samara & Yiannis Ampatzidis, Physics & Engineering]. “Low-Cost Bird Control System for Specialty Crops.”

Following introductions, the investigators summarized. This research is for the initial testing and development of a system to reduce the effects of bird pests on specialty fruit crops. This will involve having a chemical irritant, methyl anthranilate [MA], dispersed as a fog from a small drone aircraft, which will also emit an auditory cue and provide a visual cue to promote a learned association by the birds to promote avoidance behavior. The investigators hope to patent this approach to pest control. Questions followed.

[**Q:** Question **A:** Answer **C:** Comment]

Q: Where do you plan to do the research? **A:** This is pending grant proposals that involve specific locations which involve blueberries in California and apples/pears in Washington state.

C: This is going to involve working with the California Department of Fish and Wildlife and the U.S. Fish and Wildlife Service and, possibly the California Department of Agriculture, who will want to know specifics about MA concentrations and will consider issues of protected species, including presence of migrating birds. There could well be a permitting process. Germano volunteered to help provide contact with appropriate personnel. **A:** This is understood.

C: The CSU system and FAA and currently working on oversight and regulation of drone use, which could complicate matters, so you will need to interact with CSB Office of Safety and Risk Management. **A:** Understood.

Q: Are you going to collect data on changes in bird behavior to quantify the expected avoidance behaviors? You could probably do that with an on-board camera. **A:** No, we will focus on the “bottom line,” which is crop yield: are crop yields higher in fields where we deploy our deterrent versus control fields? We might look at behavioral data later on.

Q: You mentioned MA causing pain at one point, but “irritation” at another. Choice of words is important here. **A:** MA does not appear to cause a great deal of discomfort. It is used widely on golf courses.

Q: Talk about the LD50 criterion and the concentrations that you propose to use. **A:** [Answers to this emerged across several questions and are synthesized here.] The LD50 of about 5600 ppm refers to the concentration in the birds’ immediate environment. We will be using a concentration of about 2500 ppm emitted from the drone at a distance above the birds. Thus, the concentration that the birds experience will be far lower. In addition, MA dissipates from the air quickly. It is classified by EPA as “no threat” to birds.

Q: Who will run the drone and from what location? **A:** The drone is run by a human operator via telemetry at a ground station that will be located outside the spray zone.

When there were no more questions, the investigators were asked to leave and the IACUC discussed Protocol 15-01 in executive session.

There was a motion to conditionally approve Protocol 15-01, Filkins moved, Germano seconded, 7-0. The condition was:

For approval all necessary authorizations must be obtained from government entities such as the U.S. and California Fish and Wildlife agencies and the California Department of Agriculture, including all required permits.

D. Semiannual Program Review Checklist [Handled via e-mail distribution among members]

V. AREAS OF CONCERN

A. Use of Controlled Substances in Research. A CSUB committee working on revisions to the CSUB Handbook may suggest a formal CSUB policy on the use of controlled substances ["scheduled drugs"] in research. This may lead to a new committee to oversee such use and will certainly heavily involve the Office of Safety and Risk Management at CSUB. Most use of controlled substances in research at CSUB involves animals, not humans. For example ketamine and barbiturates have been used in anesthesia and euthanasia. The purchase and use of these drugs is in accord with the CSUB DEA license. It does seem that any formal policy would require that the CSUB IACUC at least share information with other elements of the university when considering animal research protocols involving a controlled substance. This should not be an issue as Tim Ridley, Director and Safety and Risk Management, serves on the IACUC. Ridley expects to become involved in whatever develops on this issue and will keep the IACUC informed. If there is a new committee involved in overseeing use of controlled substances, this will add a layer of approval for certain proposals for animal use, but this does not seem avoidable, given the university's understandable interest in protecting itself against unnecessary liability.

VI. MEETING DATES FOR AY 2013-2014

Fall 2014: Friday, 03 October 2014
Winter 2015: Friday, 23 January 2015
Spring 2015: Friday, 17 April 2015
Summer 2015: Wednesday, 10 June 2015

VII. ADJOURNMENT

There being no further business, the meeting was adjourned at 3:09. Ridley moved, Filkins seconded, 7-0.

ANIMAL FACILITY INSPECTION [next inspection is June 2015]

Filkins found that the log was complete and up to date. The outer room had been re-arranged for data collection using the large 8-armed maze involving female rats [Protocol 07-05]. The female rats, being clever and adventuresome, have provided challenges in keeping them confined to their tub cages. Next week 30 male rats will be arriving for Protocol 04-01, which will involve melatonin and antipsychotic drug side-effects in rats. On the spatial learning studies, there appear to be differences

between female and male rats. Sumaya was asked who deals with escaped rats. The students are trained to keep the doors closed and they are also trained on how to handle rats and return them to their cages. Student assistants first do the appropriate Human Care and Use of Animals Subjects tutorial, then get intensive hands-on training by the senior student researchers. Some students who begin are fearful and they leave the lab. The cage locations of the new rats will be rotated to average out the ambient illumination. There is presently no hot water, but a work order has been submitted. There is one elderly rat remaining, whose birthdate is 6-03-12.

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