

Quorum Requirement = 11

Animal Care & Use Committee
October 21, 2021

Members Present:

[REDACTED]

Members Absent:

[REDACTED]

Guests Present:

**Denise Yee, Research Compliance Staff; **Ms. Diana Talerico Blanco,
Program Manager, Animal Welfare and Biosafety Programs
*In person, **via teleconference

A. Call to Order:

A quorum of members was present when the IACUC meeting was called to order by Chairman Dr. Axel Lehrer, via teleconference at 1:35 PM. The first order of business was the approval of the September 16, 2021 IACUC meeting notes. The committee unanimously voted to approve the meeting notes.

B. New Business:

1. Semiannual Facility Inspections

The committee approved the subcommittee reports for the following facilities:

- Monoclonal Antibody Training Facility and Service Center
- Dolphin Quest
- Waikiki Aquarium
- Aquaculture Technologies of the Marshall Islands (ATMI)

A majority of members voted for approval, disapproval, or abstention. No minority opinions were noted or filed as of this meeting.

2. Semiannual Review of the Program of Humane Care and Use

The committee approved the subcommittee report for the review of the Program of Humane Care and Use.

A majority of members voted for approval, disapproval, or abstention. No minority opinions were noted or filed as of this meeting.

C. Old Business:

1. Follow-up on Goat Death (Kauai Agricultural Research and Education Center)

The PI responded within the timeline given and provided SOPs on how procedures for daily monitoring will be conducted and staff scheduled to ensure animal welfare is not compromised in the future. The IACUC member who is also a veterinarian for CTAHR

will be visiting the site to ensure compliance with SOPs. The committee voted unanimously to approve the SOPs.

2. Follow-up on IACUC Portion of Ethics Complaint

The committee was informed that the IACUC's response to an ethics complaint was forwarded to the PI and he will follow the committee's recommendations for training and documentation of training. The Office of Research Integrity was also provided with the committee's response.

D. Other Business:

1. Veterinary Report

a. Veterinary Inspections (no concerns)

- Dolphin Quest
- Waikiki Aquarium
- KCC Monoclonal Antibody Facility

b. Veterinary Inspection

- ATMI – Marshall Islands – during the inspection on 06 October 2021, it was learned that a 1-2% mortality/day of juvenile fish occurred during the last 6 months. The PI was able to trace the cause to contaminated fish meal from a vendor. An employee had sprayed for flies in the container where the fish meal was stored. Since then, the fish meal has been replaced, stored in better environmental conditions and fish survival rates have increased. The PI was reminded to contact the UH veterinarians when unexplained die-offs occur.

c. Billy Goat Death (UH-Hilo)

On October 08, 2021 a billy goat was found dead at the UHH Farm. It was surmised that the goat may have been shot based on gunshots heard in the area, the pasture location, possible evidence of a bullet hole and sudden death of the goat. A necropsy was not conducted because of decomposition. Other goats in the pasture were fine. Local police were not contacted, but campus security was notified. Private land borders the pasture. There isn't much the facility can do to prevent trespassing in the area which is remote and inaccessible to vehicles.

d. Fish Deaths

A researcher reported on October 21, 2021 a 90% die off of juvenile fish due to a possible inadvertent 4 degree drop in room temperature. It was speculated that the drop in temperature lowers immunity causing susceptibility to mycobacteria. Temperature fluctuations in fish are known to stress fish immune systems. The veterinarians will work with the PI to necropsy the fish and find the cause of the mortalities.

2. Chemicals in Animals

The committee unanimously approved the revised Chemicals in Animals Policy. The Policy revisions to address which biological safety cabinet to use and Tamoxifen and

AOM addendums were vetted by EHSO (JABSOM and Manoa). Other chemicals will be evaluated on a case-by-case basis.

3. TOPAZ Form Changes

The committee was informed that TOPAZ recommends making changes to protocol forms annually. Changes planned for January 2022 so far (1 year anniversary of TOPAZ Elements implementation) include fields for describing firearms and changes to the authorization of individuals submitting protocols on behalf of PIs. Committee members can make suggestions for changes now.

4. 10 Day Response Time

The IBC instituted a policy for PI's to respond in 10 days to committee requests to resolve issues. Failure to respond in 10 days results in having to resubmit protocols anew. The IACUC was asked to consider a similar policy. For the IACUC, this would involve very few PIs. It was decided to forego a policy now in favor of gently prodding PIs to respond in a timely manner.

5. Feed Variance

A researcher requested a variance to use non-medicated feed 90 days past its expiration date. The manufacturer maintains that the nutrient quality is retained if the feed is stored under certain conditions. AVS maintains these conditions in their feed storage room. The committee unanimously voted to approve the variance request.

6 Feral Cat Policy

Current animals on campus policies are vague and don't address feral cats residing in areas where UH vertebrate animal research or teaching/testing is conducted. The issues for the UHH farm where feral cats reside are:

- They lack the manpower to trap and rid the cats in the area
- If resident cats are removed, other cats will move in
- Healthy resident cats could keep feral cats away
- Other feral animals such as pigs, rats and mongoose are not being trapped for removal, however, they are not being purposely fed.

In order to follow the *Guide*, the only option for continuing to feed and allow feral cats on property, is to put them on an animal use protocol and provide them with veterinary care.

More information on the UHH farm feral cats is needed, such as the number of cats, where they are fed and where to keep them. A draft of an SOP for vet care and husbandry can be used to start discussions with UHH Farm administrators.

E. Review of New Protocols, Renewals, and Revisions:

Description of Protocols – Full Approval

97-019-21 [3164], 98-037-23 [3206], 05-016-18 [3454], 06-032-16 [3691], 08-411-14 [3223], 09-682-13 [3708], 11-1108-11 [3452], 11-1194-11 [3207], 13-1761-9 [3232], 16-2400-6 [3144], 17-2521-54 [3451], 17-2702-5 [3464], 18-2753-5 [3453], 18-2794-4 [3595], 18-2944-4 [3684], 20-3460 [3460], and 21-3709 [3709] were granted full approval.

E. Review of New Protocols, Renewals, and Revisions:

97-019-21 [3164] (Annual Renewal) Application Title - *"Field and Management Studies of Endangered Hawaiian Forest Birds"*. **Vertebrate species** – Birds, mice, rats, mongoose, and cats. **Project Description** – Continuation of a long term project that focuses on the restoration of native and endemic forest birds of Maui by understanding their ecology, patterns of demography and factors threatening wild populations. **No discussion.**

98-037-23 [3206] (Annual Renewal) Application Title - *"Maintenance of Fish Stocks for Research"*. **Vertebrate species** – Fish. **Project Description** - Continuation of efforts at the Hawaii Institute of Marine Biology to maintain strain consistency of cultured tilapia. **No discussion.**

05-016-18 [3454] (Annual Renewal) Application Title - *"Dietary Selenium and Asthma"*. **Vertebrate species** – Mice. **Project Description** – Continued study of the dietary effect of selenium on the development of asthma. **No discussion.**

06-032-16 [3691] (Full Renewal) Application Title – *"Role of Cell Mediators in Asbestos-SV40 Carcinogenesis"*. **Vertebrate species** – Mice. **Project Description** – Continuation of a study to develop mouse models for malignant mesothelioma (MM). **Discussion** - IBC registration, HDOA permits and procedures are on hold until certain viruses are allowed to be imported into the State.

08-411-14 [3223] (Amendment) Application Title - *"Mouse Transgenic Mouse Facility"*. **Vertebrate species** – Mice. **Project Description** – Amendment to add animals to a project to develop a mouse transgenic facility to provide mice with genetically altered genotypes to UH faculty for biomedical research purposes. **No discussion.**

09-682-13 [3708] (Full Renewal) Application Title - *"Mouse Model for Mesothelioma Preventive and Therapeutic Studies"*. **Vertebrate species** – Mice. **Project Description** – Continuation of a project that investigates whether blocking certain cell biology pathways prevents the development of mesothelioma and inhibits the tumor growth and invasion. **No discussion.**

11-1108-11 [3452] (Annual Renewal) Application Title - *"Natural Area Reserves Feral Ungulate Management"*. **Vertebrate Species** – Pigs. **Project Description** – Continuation of a project that is a small but vital component of NARS (Natural Area Reserves) management; native habitat restoration. **No discussion.**

11-1194-11 [3207] (Annual Renewal) Application Title - *"Integrating Environmental Modulation, Osmosensitivity and Signaling in a Model Osmoreceptor"*. **Vertebrate species** - Fish. **Project Description** – Continuation of a project that studies how tilapia can adapt to and switch between fresh water (FW) and seawater (SW). **No discussion.**

13-1761-9 [3232] (Annual Renewal) Application Title - *"Linking the Effects of Stocking Density, Forage Environment, and Climatic Conditions to Animal Performance in Tropical Forage Finish Beef Production Systems"*. **Vertebrate species** – Cattle. **Project Description** – Continuation of a project to quantify the effects of grazing behavior on body core temperature and production efficiency of grass finish cattle. **No discussion.**

16-2400-6 [3144] (Annual Renewal) Application Title – *"Waianae Mountains Watershed Partnership"*. **Vertebrate Species** – Goats and pigs. **Project Description** – Continuation of a project to reduce the ungulate population and work with landowners to determine the best management strategies for future ecosystem conservation in the Waianae Mountain Watershed. **No discussion.**

17-2521-54 [3451] (Annual Renewal) Application Title – *"Cold-induced Thermogenesis in Transgenic Mice"*. **Vertebrate species** – Mice. **Project Description** – Continuation of a project that

E. Review of New Protocols, Renewals, and Revisions:

studies the direct role of selenium, metabolism and selenoproteins in heat generation in mice. The mechanisms that affect heat production may lead to better understanding of obesity. **No discussion**

17-2702-5 [3464] (Annual Renewal) Application Title – *"Food Animal Veterinary Continuing Education"*. **Vertebrate species** – Fish and pigs. **Project Description** – Continuation of a project to conduct a series of continuing education workshops for veterinarians to increase their abilities to provide veterinary services for food animals. **No discussion.**

18-2753-5 [3453] (Amendment) Application Title – *"Ept1 Studies in Mouse Models"*. **Vertebrate species** – Mice. **Project Description** – Amendment for additional mouse strains to a project that investigates the role of the selenoprotein, Ept1, in regulating immune cell function. **No discussion.**

18-2794-4 [3595] (Amendment) Application Title – *"SELENOM in Neuronal Calcium Regulation and Energy Metabolism"*. **Vertebrate species** – Mice. **Project Description** – Amendment to increase the animal numbers on a project that assesses the metabolic effects resulting from genetic deletion of Selenoprotein M, an antioxidant protein that is prevalent in the hypothalamus. Specifically, the contribution of selenoprotein M to hypothalamic redox balance and global energy homeostasis. **No discussion.**

18-2944-4 [3684] (Full Renewal) Application Title – *"The Genomics of Feralisation"*. **Vertebrate species** – Chickens. **Project Description** – Continuation of a study to better understand the genetic, behavioral and ecological diversity of wild and feral chickens. The aim is to test how feral chickens differ from their domestic counterparts (and among ecologically dissimilar habitats) in their genetics, gut microbiomes, sexual traits and endocrinology (hormone levels). **No discussion.**

20-3460-2 [3460] (Annual Renewal) Application Title – *"An Investigation of Anthelmintic Properties of Sheep and Goat Diets Grazing Hawaii Forests and Pastures"*. **Vertebrate species** – Goats and sheep. **Project Description** – Continuation of a project that investigates the anthelmintic properties of forages grazed by sheep and goats in Hawaii forests and rangelands. The goal is to identify key forages with suitable anthelmintic properties that may help reduce the use of commercial anti-parasitic drugs in Hawaii sheep and goat herds. **No discussion.**

21-3709 [3709] (New) Application Title – *"Plant Extinction Prevention Program"*. **Vertebrate species** – Rats, mice and mongoose. **Project Description** - This new project assists with protection and restoration of endangered plants and their habitat through the removal of invasive species and restoration of native ecosystems. **No discussion.**

IACUC Vote – Unanimous vote for 97-019-21 [3164], 98-037-23 [3206], 06-032-16 [3691], 09-682-13 [3708], 11-1108-11 [3452], 11-1194-11 [3207], 13-1761-9 [3232], 16-2400-6 [3144], 17-2521-54 [3451], 18-2753-5 [3453], 18-2794-4 [3595], 18-2944-4 [3684], 20-3460-2 [3460] and 21-3709 [3709] were granted full approval.

- Majority vote for 05-016-18 [3454]. Member M abstained. Member M is the PI for the project.
- Majority vote for 08-411-14 [3223]. Member N abstained. Member N is related to the PI.
- Majority vote for 17-2702-5 [3464]. Member J abstained. Member J is the PI for the project.

Description of Protocols - Not Approved until Additional Information or Clarification is Provided:

21-3706 [3706] was Not Approved until Additional Information or Clarification is Provided.

21-3706 [3706] (New) Application Title – *"Liposomal Adjuvant Formulations"*. **Vertebrate species** – Mice. **Project Description** – This new project evaluates the immunogenicity of various immunostimulatory adjuvant molecule configurations of VesiVax® conjugated to an HIV envelope antigen

E. Review of New Protocols, Renewals, and Revisions:

(HIV-ENV(A244). The VesiVax® system is a vaccine platform technology based on functionalized immunogenic liposome compositions. Target antigens or adjuvants in the form of proteins, peptides or carbohydrates can be attached via conjugation to the surface of the liposomes (conjugatable adjuvant lipid vesicles. **Discussion** – the protocol was not approved because IBC review and approval is pending.

A. Section 12. Regulated Material and Activities. 12.3.1.1. IBC Authorization Number.

- Confirmation of IBC review and approval is required.

IACUC Vote – unanimous vote for nonapproval.

F. Previously Reviewed Protocols and Project Personnel Changes - Approved

Approved protocols – 16-1762-7 [3672], 20-3376-2 [3376], 21-3655 [3655], 21-3674 [3674] and 21-3699 [3699]

Approved Personnel Changes – 06-010-16 [3490], 12-1469-10 [3652], 15-2030-6 [3542] and 20-3041-2 [3041]

Approved protocols (DMR approved) – None

Approved protocols (VVC approved) – 12-1421-10 [3511] and 16-2375-6 [3117]

G. Adjournment: The meeting was adjourned at 3:10 PM.

LEGEND

Approved - research or training/teaching can begin or continue.

Not Approved - research or training/teaching cannot begin until additional information or clarification required by the committee is reviewed and approved by the chairperson.

Deferred - research or training/teaching cannot begin as the protocol has serious defects that require significant justification and review by the full committee.

IACUC Decision on Reviewed Protocols October 21, 2021

Approval	Not Approved	Deferral	Withdrawn	Tabled
17	1	0	0	0