

Institutional Animal Care and Use Committee

Minutes for October 8, 2021

Call to Order

The Texas A&M University-Corpus Christi Institutional Animal Care and Use Committee (IACUC) met on October 8, 2021, via WebEx. Quorum was confirmed and the meeting was called to order on October 8, 2021, at 1:08 PM with the following members present.

Total Number of Members Present in Voting Capacity: 8

required for quorum: 5

Meeting Attendance

Meeting Chair:

<u>Chair name</u>	<u>Voting Status</u>	<u>Membership</u>	<u>Affiliation</u>	<u>Scientific</u>	<u>Arrive late</u>	<u>Left Early</u>	<u>Teleconference</u>
Felix Omoruyi	Voting	Full	Affiliated	Scientific	N/A	N/A	WebEx

Members Present:

<u>Member name</u>	<u>Voting Status</u>	<u>Membership</u>	<u>Affiliation</u>	<u>Scientific</u>	<u>Arrive late</u>	<u>Left Early</u>	<u>Teleconference</u>
Frauke Seemann	Voting	Vice-chair Full	Affiliated	Scientific	N/A	N/A	WebEx
Eric Christensen	Voting	Full	Affiliated	Non-Scientific	N/A	N/A	WebEx
Roy Coons	Voting	Full	Affiliated	Scientific	N/A	N/A	WebEx
Cecelia Gonzales	Voting	Full	Unaffiliated	Non-Scientific	N/A	N/A	WebEx
Dara Orbach	Voting	Full	Affiliated	Scientific	N/A	N/A	WebEx
Jean Sparks	Voting	Full	Affiliated	Scientific	N/A	N/A	WebEx
Daniel Coffey	Voting	Alternate, Banks	Affiliated	Scientific	N/A	N/A	WebEx
Wei Xu	Voting only for COI	Alternate, Seemann	Affiliated	Scientific	N/A	N/A	WebEx
Angelica Chapa	Non-Voting	Alternate, Sparks/ Omoruyi	Affiliated	Scientific	N/A	N/A	WebEx
Larry Lloyd	Non-Voting	Alternate, Banks	Affiliated	Scientific	N/A	N/A	WebEx
John Scarpa	Non-Voting	Alternate, Seemann	Affiliated	Scientific	N/A	N/A	WebEx

Staff and Guest Present:

<u>Name</u>	<u>Job Title</u>	<u>Teleconference</u>
Rebecca Ballard	Director, Research Compliance	WebEx
Linda Villarreal	Program Manager	WebEx

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I. Conflict of Interest

Members are reminded of their obligation to disclose any conflict of interest related to any of the items on today's agenda. The chair called for any disclosures of conflict of interest. Conflicts were declared and are noted in the minutes on the relevant item.

II. Minutes

Minutes from September 17, 2021, were reviewed. The Chair invited additional comments, questions, and/or concerns. Having none, the motion to approve was made, seconded, and carried.

Vote yes: 8
Vote no: 0
Abstain: 0

Recused: 0
Excused: 0

III. New business

The Committee reviewed new business items.

Autoclave Update: EHS Report

Discussion: Roy Coons reported on the status of boiler certification inspections for autoclaves and workarounds. At this time in Tidal Hall (TH) there are four large autoclaves with external boilers that are locked out by EHS. These are scheduled to be certified by Travelers Insurance and Steris technicians on October 18th.

During this time, tabletop and small autoclaves have been placed or made available in teaching and research labs: one (1) benchtop Tuttnauer is available in TH 202; two (2) 85L Market Forge manual autoclaves are available in TH 251; one (1) Market Forge autoclave (85L) is being installed in TH 226. PI Cammarata will be installing his Market Forge autoclave in TH 210.

Researchers and academic personnel in TH have been able to utilize this workaround, although more time and runs are necessary to complete needed sterilizations and decontaminations. This "may" or "may not" be totally what we want, but it's a working situation in TH. Personnel is looking forward to having the four large autoclaves back in service.

Biosafety Cabinet (BSC) Update: EHS Report

Discussion: Roy Coons reported that all biosafety cabinets and chemical fume hoods have been inspected. No BSC/Hoods associated with protocols failed inspections. The next series of inspections for BSC, Hoods, and Autoclaves have been scheduled for May 2022.

These reports were emailed to IACUC and are included in the IACUC October 8th meeting documents folder.

Autoclave Survey: ORC Update

Discussion: John Scarpa reported on the autoclave survey status. A survey on the autoclave issue was sent out to autoclave users by Heather Webb. A second request has been sent out.

Veterinarian update: ORC Update

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Discussion: Dr. Taylor Yaw, the IACUC DVM, will be leaving IACUC after November 2021. We have been in contact with the Texas State Aquarium veterinarian Dr. Carrie Ullmer. They will be visiting our campus and labs soon. We have also reached out to another area veterinarian as the backup veterinarian.

If these prospective contacts do not join our IACUC then we do not have the necessary members for an IACUC. The IACUC must have a veterinarian on the committee. Let us know if anyone has or knows a local veterinarian.

Dr. Tristan was recommended; he was the former veterinarian who is no longer available. Committee members will follow up with any other veterinarian recommendations.

Inspection update: ORC Update

Discussion: John Scarpa reported on the upcoming lab inspections. They are required to be conducted twice a year, no more than six months apart. Our current inspections are scheduled for December and June. Our next inspections are due in December. We are exploring moving inspections to May and November. This depends on the outcome of our veterinarian search and their availability. Look for a request from IACUC for your availability to participate in the inspections in November. Committee members requested that the inspections be scheduled before final exams.

I. Amendment

IACUC #: 03-19
Protocol Title: Medaka Fish Husbandry
Principal Investigator: Frauke Seemann
Primary Reviewer: Coffey and Omoruyi
Conflict of Interest: Seemann
Species: *Oryzias latipes*
Amendment Type: Other (Addition of mortality rate)
Justification: Currently missing value in the protocol.
Summary: Addition of an acceptable, natural mortality. The mortality should not exceed 10% for adult medaka. This 10% is the set limit for experimental controls by the OECD. It has to be taken into consideration, that larvae mortality may be higher due to the developmental bottleneck.

Open meeting: Seemann presented at 1:17 pm.

The topic of the mortality rate was discussed. Dr. Seemann stated that the mortality rate of 10% is already figured into the numbers of organisms needed in the protocol. Therefore, the number of animals requested in the protocol does not need to be changed.

Close meeting: Seemann exited the meeting at 1:21 pm.

Discussion: A concern regarding the mortality rate and the number of animals was discussed. Dr. Seemann stated that the mortality rate of 10% was already incorporated in the original numbers that were on the approved protocol. The committee questioned that including the new mortality rate would increase the numbers needed on the protocol, but the amendment has no changes to the numbers. If the original numbers are correct then the amendment should clearly state that the 10% mortality rate is incorporated in the original numbers.

The Chair invited additional comments, questions, and/or concerns. Having none, the motion to approve with stipulations was made, seconded, and carried.

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Stipulations include:

1. Clearly state that the 10% mortality rate is incorporated in the original numbers.

Post-meeting: The statement was added as requested.

Vote yes: 7 (Xu for Seemann COI)

Recused: 1 (Seemann)

Vote no: 0

Excused: 0

Abstain: 1

II. Continuing Review

IACUC #: 26-19

Protocol Title: The role of microRNAs in bone development and health

Principal Investigator: Frauke Seemann

Primary Reviewers: Sparks and Gonzales

Conflict of Interest: Seemann

Species: *Oryzias latipes*

Protocol Type: Animal Research Protocol

Summary: The WHO considers osteoporosis the "silent epidemic of the 21st century", rendering 50 million people in the US more susceptible to bone fractures. Bone health is based on the precise balance between bone formation and bone resorption, which is tightly orchestrated through microRNAs (miRs). Deregulation of bone miRs is suspected to be causative for various bone diseases. Therefore, in-depth knowledge of the bone miRs is needed to develop new diagnosis and therapy approaches. Previously, the PI identified a possible connection between the developmental onset of reduced bone mass and the expression of miR-214, -210 and -199a. To confirm the role of miR-214, -201 and -199a in reduced bone mass and experimentally verify their suspected mRNA targets, a mechanistic gain/loss of function study is proposed. Upon injection of the respective miR/miR antagonist, target mRNA levels and bone mass will be monitored in the Japanese ricefish, a model organism for human bone metabolism. The experimental evidence gained will allow to decipher targets and functions of the selected miRs and their use in diagnosis and therapeutic application of bone diseases.

Continuing Review Update: Two out of the three miRNA agonists and antagonists have been tested and changes in bone calcification are currently analyzed from the images taken. The third miRNA experiment is currently underway. Preliminary analyses of the data revealed a reduced bone calcification in response to miR-214 agonist injection throughout the whole period of vertebrate calcification (6dpf to 27dpf).

Adverse Events reported? No

Alternatives to Animal Use? No

Alternatives to Potentially Painful Procedures? No

Not Unnecessarily Duplicative? Yes

CITI Training: missing Gonzalez

OHP enrollment: all verified

Discussion: No adverse events were reported. There were no changes to animal use or alternatives. No potentially painful procedures were reported. The PI is requesting to move the remaining unused animals (approximately 900+) to year three of this project. The request to move the unused animals was considered acceptable by the committee.

All study personnel are up-to-date on OHP enrollment and CITI training.

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The Chair invited additional comments, questions, and/or concerns. Having none, the motion to approve with a review period of one year was made, seconded, and carried.

Vote yes: 8 (Xu for Seemann COI)
Vote no: 0
Abstain: 0

Recused: 1 (Seemann)
Excused: 0

Open meeting: Seemann re-entered the meeting at 1:30 pm.

IACUC #: TAMU-CC-2020-19-19
Protocol Title: Larval Fish Field Sampling in Texas Bays and the Gulf of Mexico
Principal Investigator: Simon Geist
Primary Reviewer: Christensen and Seemann
Conflict of Interest: none
Species: fish (multiple species)
Protocol Type: Animal Research Protocol
Summary: The proposed study will help to fill this knowledge gap of larval distribution and larval environment interactions in the following subprojects:
1) Larval ingress through coastal inlets
2) Larval abundance and distribution in the Gulf of Mexico off Corpus Christi Bay, Texas
3) Response of larval fish to extreme rainfall event flood plume in the northwestern Gulf of Mexico

Continuing Review Update: Sampling of larval fish using plankton nets for the objective "Planktonic larval fin and shellfish ingress and vertical distribution in the Aransas Pass Inlet system" (Amendment from Nov 2020) was the only activity that occurred during the reporting period. Samples were taken at 4 sampling days and a total of 48 net hauls were conducted. Sample processing and analysis are not completed as of today, so numbers of larval fish caught, and identification is not yet available. No new samples were collected for any of the other objectives mentioned in the protocol.

Adverse Events reported? No
Alternatives to Animal Use? No
Alternatives to Potentially Painful Procedures? No
Not Unnecessarily Duplicative? No

CTI Training: all verified

OHP enrollment: all verified

Discussion: No adverse events were reported. There were no changes to animal use or alternatives. No potentially painful procedures were reported. The sample number did not change because there were no samples processed in year 2. Therefore, there is no update to the numbers. They have plenty of fish available for year 3. They will stay within the allowed permit numbers.

Three database searches were added to this protocol. The database search question asks for the keywords used for the database search. The keywords must include the (potentially) painful or distressful procedure(s). Only the word "plankton" was searched. Does this mean that the method of collecting was not painful or distressful? If that is not correct, then a statement needs to be added. There is no other method available for collecting plankton that is less painful or distressful. This was considered acceptable by the committee.

All study personnel are up-to-date on OHP enrollment and CITI training.

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The Chair invited additional comments, questions, and/or concerns. Having none, the motion to approve with a review period of one year was made, seconded, and carried.

Vote yes: 7
Vote no: 0
Abstain: 1

Recused: 0
Excused: 0

III. Other

The next meeting is scheduled for Friday, November 12, 2021, from 1:00 pm to 3:00 pm.

The meeting was adjourned at 1:36 pm.