

Internal Investigation Report

Date: November 18, 2021

To: Ahmed Mahdy, Ph.D., Vice President for Research
Bruce Whitney, Ph.D., Chief Research Compliance Officer

From: Rebecca Ballard, JD, MA, CIP, Director of Research Compliance

RE: Non-compliance report: Failure to conduct semi-annual inspections within 6-month timeframe

The Health Research Extension Act, Animal Welfare Regulations, and PHS Policy require that IACUCs inspect at least once every six months all of the institution's animal facilities (including satellite facilities) using the *Guide* as a basis for evaluation. [PHS Policy IV.B.2 and PHS Policy IV.C.2.d.](#)

This report is regarding the following standard operating deficiency:

Type of Review:	Non-compliance report
Inspection Period:	March 8, 2021 – September 8, 2021
Facility locations:	TWPD location, The Nature Conservancy location, & Tidal Hall 251

This is a report of: Minor non-compliance with Health Research Extension Act, Animal Welfare Regulations, and PHS Policy.

How Issues were Identified

Director and IACUC/IBC Coordinator were drafting the October 1, 2020 – September 30, 2021 OLAW Report due December 1, 2021. When entering the semi-annual facility inspection dates in the annual report it was noticed that the June 16, 2021, inspection report failed to cover all animal locations, notably off-campus and recently added Tidal Hall 251.

Off campus locations: TWPD and The Nature Conservancy

TWPD and The Nature Conservancy locations were closed during COVID. Animal work for the affected protocols were appropriately transferred to on-campus locations via an amendment during this period.

Once facilities were reopened, animal work was re-initiated at off-campus locations. Off-campus locations were inspected on March 8, 2021 (TWPD location) and March 12, 2021 (The Nature Conservancy location). This resulted in on-campus inspection due dates (June 2021) being off cycle with off-campus locations (September 2021).

Due to difficulty in scheduling the veterinarian in June and the due date for off-campus inspections not being until September, the June 16, 2021, inspection focused on the on-campus locations. On June 16, 2021, on-campus locations were inspected within the six-month inspection period. ORC staff responsible for scheduling inspections was instructed to schedule the off-campus locations before September 2021.

ORC staff responsible for scheduling inspections contacted the Principal Investigator for off-campus locations, who indicated animal experiments had ended and there were no animals to inspect. This phone conversation between ORC staff and PI occurred on June 14, 2021. ORC staff interpreted this

information as not having to conduct an IACUC inspection of the off-campus locations. ORC staff was corrected by ORC Director during daily ORC staff meeting that inspections are required even if animals are not present at the time of inspection. ORC staff was instructed to schedule the off-campus locations prior to the due date in September 2021. On November 15, 2021, ORC Director confirmed with ORC staff member responsible for scheduling and managing inspections that an inspection of off-campus locations was not scheduled as instructed and the inspection prior to the September 2021 due date was not conducted.

TWPD and The Nature Conservancy locations were inspected on November 9, 2021. A review of animal care logs verified no animals were present when ORC staff called PI on June 14, 2021. Only a minor finding at the TWPD location (veterinarian contact information was not present) was noted at the November 9, 2021, inspection.

On campus locations: Tidal Hall 251

A new animal lab, Tidal Hall 251, was noted during the preparation of the annual OLAW report. A review of the June 16, 2021, inspection report did not include Tidal Hall 251. The research being carried out in this new animal lab area utilizes a BSL-2 classified bacteria. Protocol TAMU-CC IACUC 2021-04-009 (Assessment of the Innate Immune System Development in Larval Marine Medaka Fish) by Dr. F. Seemann was reviewed and approved at the May 21, 2021, IACUC meeting and approved earlier by IBC (2020-05-001) on April 23, 2021. The first experiment with larvae was performed on June 10, 2021. The first lab inspection by IACUC was performed on November 8, 2021.

There is no Animal Biosafety, Level 2 facility at TAMU-CC, however the IACUC approved the protocol as methods were described to minimize aerosols and heighten personnel restriction that are required for ABSL-2 facilities. The primary changes were that larvae are exposed to bacteria in a multi-well plate that is covered and with no aeration. This minimizes, to virtually zero, the potential for aerosol formation. Bacterial inoculation of water with fish larvae in multi-well plates is performed inside an approved biosafety cabinet in an approved BSL-2 lab. The multi-well plates are kept in a small incubator that is secured with a chain and padlock to restrict access. Larvae in the multi-well plates are examined with the aid of a dissecting microscope that is set up next to the incubator to minimize transport in the lab area. The multi-well plate cover is not removed during viewing of fish larvae. Disposal of multi-well plate with fish (euthanized with MS-222) and bacteria is in approved biohazard containment and autoclaving.

Potential issue of Non-compliance:

1. Off-campus locations: Failure to conduct semi-annual inspections within the six-month time frame.
2. Tidal Hall 251: Failure to inspect facility before research commenced.

Corrective Actions Taken:

Calendar reminders will continue to be utilized to ensure inspections are scheduled within the six-month time frames.

Securing veterinarian attendance has caused difficulty in getting inspections scheduled. IACUC will on-board a new primary veterinarian and two back-up veterinarians to increase coverage for inspection dates.

A full-time IACUC/IBC Coordinator who has served on the TAMU-CC IACUC since 2016 was hired in September 2021. ORC staff responsible for scheduling inspections in June 2021 has been relieved of this responsibility.

A summary of the issues detected by the Director, Office of Research Compliance and corrective actions taken were presented to the Institutional Official on November 18, 2021, and the Institutional Animal Care Committee at the December 10, 2021, meeting.

Committee Findings

The committee reviewed the following documents (attached):

Exhibit 1	June 16, 2021, inspection report
Exhibit 2	November 15, 2021, email from Linda
Exhibit 3	November 9, 2021, inspection report

Based on the above, the committee on December 10, 2021, concludes the event is minor non-compliance.

The following corrective actions taken by ORC Director were approved:

- Reassignment of inspection management to recently hired IACUC/IBC Coordinator.
- Adding additional veterinarians to increase ease in scheduling inspection dates.
- Continued use of IACUC inspection calendar reminders

Timeline to complete corrective actions is January 28, 2022.

Reportable

ORC Director determined this event as reportable. OLAW, Division of Compliance Oversight was contacted on November 18, 2021. The issue was reported over the phone to Jacquelyn Tubbs, DVM, Animal Welfare Program Specialist on November 18, 2021. A summary of this issue was reported as a program deficiency in the October 1, 2020 – September 30, 2021, OLAW annual report submitted December 1, 2021. A written report of the investigation findings will be provided to OLAW, Division of Compliance Oversight on December 13, 2021.

Exhibit 1 - June 2021 inspection report

Dr. Ahmed Mahdy, Vice President
Division for Research and Innovation

Memorandum to:

Dr. Bruce Whitney, Chief Research Compliance Officer
Office of Research Compliance

From:

Institutional Animal Care and Use Committee

Subject:

Semiannual Report of the Program Review and Facility Inspection

Date:

September 17, 2021

This report summarizes the IACUC's results of its most recent program review and facility inspection, as required by the Public Health Service (PHS) Policy on Humane Care and Use of Laboratory Animals (Policy), Section IV.B.1.-3., the *Guide for the Care and Use of Laboratory Animals* (Guide), and the Animal Welfare Act (AWA) regulations, as applicable. Submission of semiannual reports to the Institutional Official is a condition of this institution's Animal Welfare Assurance with the NIH Office of Laboratory Animal Welfare (OLAW).

I. Review of Animal Care and Use Program

The IACUC conducted its semiannual review of the institution's animal care and use program on June 16, 2021, using the *Guide for the Care and Use of Laboratory Animals* (*Guide*), and, as applicable, 9 CFR Chapter I, 2.31. The Animal Care and Use Program was evaluated using several criteria, including:

- Section 1: Animal Care and Use Program
- Section 2: Disaster Planning and Emergency Preparedness
- Section 3: IACUC
- Section 4: IACUC Protocol Review – Special Considerations
- Section 5: IACUC Membership and Functions
- Section 6: IACUC Training
- Section 7: IACUC Records and Reporting Requirements
- Section 8: Veterinary Care
- Section 9: Personnel Qualifications and Training
- Section 10: Occupational Health and Safety of Personnel
- Section 11: Personnel Security
- Section 12: Investigating and Reporting Animal Welfare Concerns

II. Deficiencies in the Institution's Animal Care and Use Program

Animal Care and Use Program Review Date(s):

Select A or B:

☐ A. There were no deficiencies in the program during this reporting period.

☒ B. The following deficiencies have been identified:

III. Changes in the Program

Since the last review, the following changes have occurred in the institution's program for animal care and use (PHS Policy IV.A.1.a.-i.): *[optional]*

Departing member details:

- Judd Curtis left the IACUC on July 11, 2021. He was the scientific representative from Texas A&M University-Corpus Christi Harte Research Institute.
- Paul Silva left the IACUC on July 16, 2021. He was the scientific representative from Texas Parks and Wildlife.

New member details:

- Daniel Coffey joins the IACUC as an alternate for Kesley Banks and Dara Orbach on August 20, 2021. He is the scientific representative from Texas A&M University-Corpus Christi Harte Research Institute.
- Dara Orbach joins the IACUC as a new member. She is the scientific representative from Texas A&M University-Corpus Christi Department of Life Sciences.
- Wei Xu joins the IACUC as an alternate for Jean Sparks. He is the scientific representative from Texas A&M University-Corpus Christi Department of Life Sciences.

Change in member role details:

- Kesley Banks changed from alternate to Judd Curtis to full member. She is the scientific representative from Texas A&M University-Corpus Christi Harte Research Institute.
- Frauke Seemann changed from alternate to full member. She is the scientific representative from Texas A&M University-Corpus Christi Department of Life Sciences.
- John Scarpa changed from full to alternate for Frauke Seemann. He is the scientific representative from Texas A&M University-Corpus Christi Office of Research Compliance.
- Larry Lloyd changed from alternate for John Scarpa and Judd Curtis to alternate for Kesley Banks. He is the scientific representative from Texas A&M University-Corpus Christi Office of Research Compliance.
- Charles Sassine changed from alternate to Paul Silva to alternate for Kesley Banks. He is the scientific representative from Texas Parks and Wildlife.

IV. Description of the Nature and Extent of the Institution's Adherence to the PHS Policy, the *Guide*, and the AWA

Departures from the PHS Policy, the *Guide*, and the AWA.

Select A or B:

- ☒ A. There were no departures during this reporting period.
- ☐ B. The following departures have been reviewed and approved by the IACUC: *[include reason n for each departure]*

V. Inspection of Animal Facilities

TAMU-CC IACUC Labs

On June 16, 2021, the following IACUC members conducted a remote Semi-Annual Inspection of on-campus animals: Jerry Underbrink (AV), Angelica Chapa, Michelle Costa, Michael Garcia, Larry Lloyd, John Scarpa, and Jean Sparks. The on-campus location inspected include:

Location	Species	IACUC #	PI
Tidal Hall 314M	Fish - Flounder and Seatrout	22-18	Geist
Tidal Hall 314M	Fish - Flounder and Seatrout	09-19	Geist
Tidal Hall 114G	Zebrafish	20-18	Xu
Tidal Hall 114G	Fish – Japanese Medaka	03-19	Seemann
Tidal Hall 114G	Fish – Japanese Medaka	23-19	Seemann
Tidal Hall 114G	Fish – Japanese Medaka	26-19	Seemann
Tidal Hall 114G	Fish – Japanese Medaka	2020-10-013	Seemann
Tidal Hall 114G	Marine medaka	2021-04-009	Seemann
NRC 1018	Reptiles – Turtles	2020-09-009	Baxter

Islander Green Team garden	Fish – Japanese Medaka	23-19	Seemann
----------------------------	------------------------	-------	---------

VI. Deficiencies in the Institution's Animal Facility

Animal Facility Inspection Date(s): December 16, 2020

Select A or B:

☐ A. There were no deficiencies in the animal facility during this reporting period.

☒ B. The following deficiencies have been identified:

See attached deficiency table.

VII. Minority Views

Select A or B:

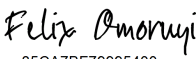
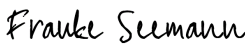


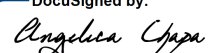
☒ A. No minority views were submitted or expressed.

☐ B. The following minority views were expressed: *[insert minority views here or attach]*


VIII. Status of AAALAC Accreditation *[identify accredited facilities, if applicable]*

TAMU-CC is not AAALAC accredited.

IX. Signatures *[signatures of a majority of the IACUC members required by AWAR (§2.31,c,3), if applicable]*

Names of IACUC Members	Signatures
Felix Omoruyi, Chair	DocuSigned by:  85CA7BF79995400...
Frauke Seemann, Vice-Chair	DocuSigned by:  29E9D3F743DE40C...
Taylor Yaw, DVM, AV	DocuSigned by:  3FBFF404678D4FB...
Kesley Banks	DocuSigned by:  A1B8534B4A2348C...
Angelica Chapa	DocuSigned by:  E2845AF38025421...

Eric Christensen

DocuSigned by:

BAF22AF5D04343A...

Daniel Coffey

DocuSigned by:

117E29D3091A445...

Roy Coons

DocuSigned by:

FC5C2EE5200A4FE...

Nathan Galvan

DocuSigned by:

B26531F6317E462...

Michael Garcia

DocuSigned by:

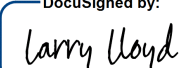
2057063D84994C8...

Cecelia Gonzales

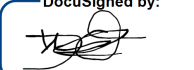
DocuSigned by:

60C6D4E35A7942D...

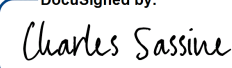
Larry Lloyd

DocuSigned by:

F4F67E364F394FF...

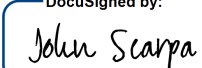
Dara Orbach

DocuSigned by:

8D7133525E774F0...

Charles Sassine

DocuSigned by:

403898A6CBE7433...

John Scarpa

DocuSigned by:

B0924E2D3BBD48B...

Jean Sparks

DocuSigned by:

35488E8E17A0466...

Jerry Underbrink, DVM

Sara Ussery

DocuSigned by:
Sara Ussery
D08054B933C740E...

Wei Xu

I. Semiannual Program Review and Facility Inspection Report

Date: 6/16/2021

Members in Attendance: animals: Jerry Underbrink (AV), Angelica Chapa, Michelle Costa, Michael Garcia, Larry Lloyd, John Scarpa, and Jean Sparks.

Deficiency Category*	✓	Location	Deficiency and Plan for Correction	Responsible Party	Correction Schedule and Interim Status	Date Complete
M		Tidal Hall 314M	<p>The door was not locked. The veterinarian's contact information is not posted. The most recent approval letters should be posted. Water jugs are not clearly labeled on the sides and lids.</p> <p>Corrective action: Make sure the doors are locked. Add the veterinarian's contact information to the outside doors. Post the most recent approval letters. Need to label the lids and sides of the water jugs.</p>	PI, Geist	8/19/2021	8/19/2021
M		Tidal Hall 114G	<p>Log update: -Logs pages need to include the year. -The logs are missing some data. -Suggest logging in military time to avoid confusion of am/pm. -Recommend that the Lab Manager or PI review the data sheets weekly and sign off on each sheet. Do we need the OSHA labels for everything that is poured out of its original container?</p> <p>Per Dr. Underbrink this is a requirement they must follow in his clinic. -EHS, Michael will follow up and report back.</p> <p>Corrective action: Need to update logs -Datasheets need to include the year. -The logs pages are missing data. -Suggest logging the time in military time to avoid the confusion of am/pm.</p>	PI, Xu	8/19/2021	8/19/2021

			<p>-Recommend that the Lab Manager or PI review the data sheets weekly and sign off on each sheet.</p> <p>Need to label the sides and lids of the baking soda container.</p> <p>Dr. Underbrink noted the missing OSHA labels for everything that is not in their original container.</p> <p>-EHS: Michael researched the OSHA label requirements and reported back that they are not required.</p>			
M		Tidal Hall 114G and Islander Green Team garden	<p>Is the mortality rate within the acceptable range of 10%. If this is not in the protocol; an amendment needs to be submitted to add the 10% rate.</p> <p>Corrective action: Check if the mortality rate is within the acceptable range of 10%. If the mortality rate is not listed in the protocol, an amendment needs to be submitted to add the 10% rate range.</p>	PI, Seemann	8/19/2021	8/19/2021
M		NRC 1018	<p>Need to separate the materials in this lab from other researchers</p> <p>Items outstanding from previous inspections:</p> <p>-Need to remove and replace all expired food items.</p> <p>-Need to remove the refrigerator, incubators, and expired feed.</p> <p>Corrective action: Need to separate the materials in this lab from other researchers</p> <p>Items outstanding from previous inspections:</p> <p>-Need to remove and replace all expired food items.</p> <p>-Need to remove the refrigerator, incubators, and expired feed.</p>	PI, Baxter	9/15/2021	9/15/2021

* A = acceptable

M = minor deficiency

S = significant deficiency (is or may be a threat to animal health or safety)

C = change in the program (PHS Policy [IV.A.1.a.-i.](#)) (include in the semiannual report to IO and in the annual report to OLAW)

NA = not applicable

√ Check if repeat deficiency

Exhibit 2 - Nov email from Linda

From: [IACUC](#)
To: [Geist, Simon](#)
Cc: [IACUC](#); [Ballard, Rebecca](#)
Subject: RE: IMMEDIATE ACTION REQUIRED: IACUC Semi-Annual Inspection on Tuesday, June 15, 2021 starting at 1:00 pm.
Date: Monday, November 15, 2021 10:40:28 AM

Hello Dr. Geist,

This email is to confirm the telephone conversation we had regarding the off-campus sites TPWD in Flour Bluff and NCFCP in Port Aransas. There were NO animals or lab activities at these labs sites during the June 16th inspections.

Thank you,
Linda

From: Geist, Simon <Simon.Geist@tamucc.edu>
Sent: Monday, June 14, 2021 4:17 PM
To: IACUC <iacuc@tamucc.edu>; Seemann, Frauke <Frauke.Seemann@tamucc.edu>; Xu, Wei <Wei.Xu@tamucc.edu>
Cc:
Subject: Re: IMMEDIATE ACTION REQUIRED: IACUC Semi-Annual Inspection on Tuesday, June 15, 2021 starting at 1:00 pm.

Hello Linda,

I confirmed with _____ that no experiments were conducted in TH 314M during the period in questio _____ re planned for the next one.
In this case, should I ask _____ if _____ can be in the room at 1 anyways, or can we take it off the inspection?
I will be out in the field tonight into tomorrow afternoon if the weather holds.

Thank you
Simon

Simon Geist, Dr. rer. nat.
+1 361 825 4164
Assistant Professor for Marine Fisheries
Texas A&M University Corpus Christi
Department of Life Sciences
6300 Ocean Drive, TH337
Corpus Christi, Tx, 78412

From: IACUC <iacuc@tamucc.edu>

Sent: Monday, June 14, 2021 3:52 PM

To: Seemann, Frauke <Frauke.Seemann@tamucc.edu>; Xu, Wei <Wei.Xu@tamucc.edu>; Geist, Simon <Simon.Geist@tamucc.edu>

Cc: IACUC <iacuc@tamucc.edu>

Subject: IMMEDIATE ACTION REQUIRED: IACUC Semi-Annual Inspection on Tuesday, June 15, 2021 starting at 1:00 pm.

Subject: IMMEDIATE ACTION REQUIRED: IACUC Semi-Annual Inspection on Tuesday, June 15, 2021 starting at 1:00 pm.

Dear PIs,

We have just confirmed that the remote **lab inspection will occur tomorrow Tuesday, June 15th at 1:00 p.m.**

Two IACUC members will be on-campus during the inspection: Larry Lloyd to provide video feed and EHS Michael Garcia to open the lab. Other members and our vet Dr. Yaw will be attending the lab inspection via Webex.

IMMEDIATE ACTION REQUIRED:::

PIs, please provide a copy of your animal care logs from December 2020 to May 2021. For the following protocols:

- Geist – 22-18 and 09-19 in TH 314M
- Seemann – 03-19; 23-19; 26-19; and 2020-10-013 in TH 114G
- Xu – 20-18 in TH 114G

Send logs to iacuc@tamucc.edu by 11:00 am on June 15th.

If you cannot scan and send the logs, please provide a description of where the IACUC committee members can find your animal care logs.

Apologies for last minute request. Call with questions.

Respectfully

Linda Villarreal

Program Manager

Office of Research Compliance

361-825-3057

Exhibit 3 - November 2021 inspection report

Dr. Ahmed Mahdy, Vice President
Division for Research and Innovation

Memorandum to:

Dr. Bruce Whitney, Chief Research Compliance Officer
Office of Research Compliance

From: Institutional Animal Care and Use Committee

Subject: Semiannual Report of the Program Review and Facility Inspection

Date: November 12, 2021

This report summarizes the IACUC's results of its most recent program review and facility inspection, as required by the Public Health Service (PHS) Policy on Humane Care and Use of Laboratory Animals (Policy), Section IV.B.1.-3., the *Guide for the Care and Use of Laboratory Animals* (Guide), and the Animal Welfare Act (AWA) regulations, as applicable. Submission of semiannual reports to the Institutional Official is a condition of this institution's Animal Welfare Assurance with the NIH Office of Laboratory Animal Welfare (OLAW).

I. Review of Animal Care and Use Program

The IACUC conducted its semiannual review of the institution's animal care and use program on November 12, 2021, using the *Guide for the Care and Use of Laboratory Animals* (*Guide*), and, as applicable, 9 CFR Chapter I, 2.31. The Animal Care and Use Program was evaluated using several criteria, including:

- Section 1: Animal Care and Use Program
- Section 2: Disaster Planning and Emergency Preparedness
- Section 3: IACUC
- Section 4: IACUC Protocol Review – Special Considerations
- Section 5: IACUC Membership and Functions
- Section 6: IACUC Training
- Section 7: IACUC Records and Reporting Requirements
- Section 8: Veterinary Care
- Section 9: Personnel Qualifications and Training
- Section 10: Occupational Health and Safety of Personnel
- Section 11: Personnel Security
- Section 12: Investigating and Reporting Animal Welfare Concerns

II. Deficiencies in the Institution's Animal Care and Use Program

Animal Care and Use Program Review Date(s):

Select A or B:

☐ A. There were no deficiencies in the program during this reporting period.

☒ B. The following deficiencies have been identified:

Semi-annual inspection of off-campus labs was not conducted within six months of last inspection (i.e., last inspected 8 March 2021, next inspection November 9, 2021, which is 8 months). Initial inspection of Tidal Hall 251 was not conducted before research commenced for IACUC 2021-04-009. The study was approved on May 21, 2021, and the first experiment began on June 10, 2021. The lab was not inspected until November 9, 2021.

III. Changes in the Program

Since the last review, the following changes have occurred in the institution's program for animal care and use (PHS Policy IV.A.1.a.-i.): *[optional]*

Departing member details:

- Judd Curtis left the IACUC on July 11, 2021. He was the scientific representative from Texas A&M University-Corpus Christi, Harte Research Institute for Gulf of Mexico Studies.
- Paul Silva left the IACUC on July 16, 2021. He was the scientific representative from Texas Parks and Wildlife Department.

New member details:

- Dara Orbach joined the IACUC as a new member on August 20, 2021. She is the scientific representative from Texas A&M University-Corpus Christi, Department of Life Sciences.
- Daniel Coffey joined the IACUC as an alternate for Kesley Banks and Dara Orbach on August 20, 2021. He is the scientific representative from Texas A&M University-Corpus Christi, Harte Research Institute for Gulf of Mexico Studies.
- Wei Xu joined the IACUC as an alternate for Jean Sparks and Frauke Seemann on September 28, 2021. He is the scientific representative from Texas A&M University-Corpus Christi, Department of Life Sciences.
- Shawn McCracken joined the IACUC as a new member on October 20, 2021. He is the scientific representative from Texas A&M University-Corpus Christi, Department of Life Sciences.

Change in member role details:

- Kesley Banks changed from alternate to Judd Curtis to full member on August 20, 2021. She is the scientific representative from Texas A&M University-Corpus Christi, Harte Research Institute for Gulf of Mexico Studies.
- Frauke Seemann changed from alternate to full member and Vice-Chair on August 20, 2021. She is the scientific representative from Texas A&M University-Corpus Christi, Department of Life Sciences.
- John Scarpa changed from full to alternate for Frauke Seemann on August 20, 2021. He is the scientific representative from Texas A&M University-Corpus Christi, Office of Research Compliance.
- Larry Lloyd changed from alternate for John Scarpa and Judd Curtis to alternate for Kesley Banks. He is the scientific representative from Texas A&M University-Corpus Christi, Office of Research Compliance.
- Charles Sassine changed from alternate to Paul Silva to alternate for Kesley Banks upon Paul Silva's departure and Shawn McCracken upon his appointment to the committee. He is the scientific representative from National Park Service (Padre Island National Seashore).

IV. Description of the Nature and Extent of the Institution's Adherence to the PHS Policy, the *Guide*, and the AWA

Departures from the PHS Policy, the *Guide*, and the AWA.

Select A or B:

- ☒ A. There were no departures during this reporting period.
- ☐ B. The following departures have been reviewed and approved by the IACUC: *[include reason for each departure]*

V. Inspection of Animal Facilities

A. TAMU-CC on-campus labs:

On November 8, 2021, the following IACUC members conducted an in-person and remote Semi-Annual Inspection of on-campus facilities and animals: Dr. Taylor Yaw (veterinarian, remote), Dr. Jean Sparks, Mr. Eric Christensen (remote), Dr. Shawn McCracken (remote), Dr. John Scarpa, Mr. Larry Lloyd, Mr. Michael Garcia, and Dr. Paula Baker (veterinarian onboarding, guest, remote).

The on-campus locations inspected included:

Location	Species	IACUC #	PI
Tidal Hall 314M	Fish - Flounder and Seatrout	09-19	Geist
Tidal Hall 314M	Fish - Flounder and Seatrout	22-18	Geist
Tidal Hall 314M	Fish - Flounder and Seatrout	22-18	Geist
Tidal Hall 114G	Zebrafish	2021-10-032	Xu
Tidal Hall 114G	Fish – Japanese Medaka	03-19	Seemann
Tidal Hall 114G	Fish – Japanese Medaka	23-19	Seemann
Tidal Hall 114G	Fish – Japanese Medaka	26-19	Seemann
Tidal Hall 114G	Fish – Japanese Medaka	2020-10-013	Seemann
Tidal Hall 114G	Marine medaka	2021-08-024	Seemann
Tidal Hall 114G	Marine medaka	2021-04-009	Seemann
Tidal Hall 251	Marine medaka	2021-04-009	Seemann
NRC 1018	Reptiles – Turtles	2020-09-009	Baxter
Islander Green Team garden	Fish – Japanese Medaka	23-19	Seemann

B. Off-campus labs, facilities, & sites

On November 9, 2021, the following IACUC members conducted an in-person and remote Semi-Annual Inspection of off-campus facilities and animals: Dr. Taylor Yaw (veterinarian, remote), Dr. Felix Omoruyi, Dr. Frauke Seemann, Dr. John Scarpa, Mr. Larry Lloyd, and Dr. Shayna Whitaker (veterinarian onboarding, guest, remote).

The off-campus locations inspected included:

Location	Species	IACUC #	PI
TPWD CCA Marine Development Center, 4300 Waldron Road, Corpus Christi, Texas 78418	Southern Flounder Spotted Seatrout	22-18	Geist
The Nature Conservancy Francine Cohn Preserve, 7797 TX-361, Port Aransas, TX 78373	Southern Flounder	2020-10-012	Geist

VI. Deficiencies in the Institution's Animal Facility

Animal Facility Inspection Date(s): November 8 – 9, 2021

Select A or B:

☐ A. There were no deficiencies in the animal facility during this reporting period.

☒ B. The following deficiencies have been identified:

See attached deficiency table.

VII. Minority Views

Select A or B:

☒ A. No minority views were submitted or expressed.

☐ B. The following minority views were expressed: *[insert minority views here or attach]*

VIII. Status of AAALAC Accreditation *[identify accredited facilities, if applicable]*

TAMU-CC is not AAALAC accredited.

IX. Signatures *[signatures of a majority of the IACUC members required by AWAR (§2.31,c,3), if applicable]*

Names of IACUC Members	Signatures
Felix Omoruyi, Chair	
Frauke Seemann, Vice-Chair	
Taylor Yaw, DVM, AV	
Eric Christensen	
Roy Coons	
Cecelia Gonzales	
Jean Sparks	
Kesley Banks	
Angelica Chapa	
Daniel Coffey	
Nathan Galvan	
Michael Garcia	
Larry Lloyd	
Dara Orbach	
Charles Sassine	

John Scarpa

Jerry Underbrink, DVM

Sara Ussery

Shawn McCracken

Wei Xu

III. Semiannual Program Review and Facility Inspection Deficiencies

This table is provided as a format for the IACUC to organize and track information regarding deficiencies and plans and schedules for correction. This is not a substitute for the Semiannual Report to the IO. For more information about the Semiannual Report to the IO and to obtain a sample document, visit [here](#).

Date: November 8, 2021

Members in Attendance: Dr. Taylor Yaw (veterinarian, remote), Dr. Jean Sparks, Mr. Eric Christensen (remote), Dr. Shawn McCracken (remote), Dr. John Scarpa, Mr. Larry Lloyd, Mr. Michael Garcia, and Dr. Paula Baker (veterinarian onboarding, guest, remote).

Deficiency Category*	✓	Location	Deficiency and Plan for Correction	Responsible Party	Correction Schedule and Interim Status	Date Complete
M		Tidal Hall 114 G	Findings: 1) Protocol 26-19 was not present in TH 114G. 2) Unlabeled bag of small fish in freezer (second step of euthanasia) 3) TH 114G was noted as having minor water damage and microbial growth along wall edge that meets with wash station area. Requested Correction Action: 1) Ensure full protocol, amendments, and approval for 26-19 is placed in TH114G lab area. 2) Ensure staff and students are labelling all items (e.g., euthanized fish bags). 3) EH&S submitted WO#106133 on 8Nov2021 to remediate and add backsplash to wash station area	PI, Seemann		

M	Tidal Hall 114G	<p>Findings:</p> <ol style="list-style-type: none"> 1) Protocol was not present (i.e., new protocol versus expired protocol 2-18) 2) Log update: Log pages need to include the year (this was noted in June inspection, too) 3) Missing data in log: There are days when fish are not noted (i.e., no initials) as being fed (e.g., System C, 9 Aug, 16 Aug, 21 Aug.), although water quality parameters are being measured. There is no mention of feeding regime for fish in protocol, which might allow for skipping of feeding. There are days when no water quality or feeding takes place (e.g., System A, B & C, 28 Aug). 4) Expired rotifeast in refrigerator 5) Brine shrimp hatching columns are not labelled with organism 6) TH 114G was noted as having minor water damage and microbial growth along wall edge that meets with wash station area (pics provided). 7) Small amounts of pooled water under zebrafish tanks. 8) Potential unauthorized personnel working on protocol (care of fish). Amendment for deleting and adding personnel submitted 21 Sept 2021 (final approval 19 Oct, i.e., last person, A. Hernandez on 19 Oct). <p>Corrective Actions:</p> <ol style="list-style-type: none"> 1) Ensure full protocol and approval letter for 2021-10-032 is placed in lab area. 2) Datasheets need to include the year. 3) Recommend that the Lab Manager or PI review the data sheets weekly and sign off on each sheet. (This had been recommended at last inspection) 4) Dispose of expired feeds (ck area for other expired items, including chemicals) 5) Label brine shrimp hatching columns with either brine shrimp or Artemia 6) EH&S submitted WO#106133 on 8Nov2021 to remediate and add backsplash to wash station area. 7) Have staff and students watch if more water is accumulating and remind to remove any spilled water or liquids to prevent slip and electrical hazard. 8) Meet with PI to discuss ramifications of unauthorized personnel working on protocol and potential inability to use data for publication, proposals, etc. 	PI, Xu		
---	-----------------	--	--------	--	--

M	Tidal Hall 251	<p>Findings:</p> <p>1) No contact information in case of power failure or other problem in this dry lab area. No animals present. Incubator secured by lock and chain. ABSL-2 area (need signage w/contact info.)</p> <p>Corrective Actions:</p> <p>1) Contact information be placed nearby (suggest above incubator hanging from shelf) in this dry lab area.</p>	PI, Seemann		
M	Tidal Hall 314M	<p>1) Door was not locked (PI noted he unlocked it beforehand for inspection)</p> <p>2) No emergency number written on door</p> <p>3) Protocols were not present, although approved amendments were present.</p> <p>4) Salt bucket opened (no date indicating when opened), water bottles (jugs) not dated</p> <p>5) No animals present; room not used since last inspection in June (environmental chamber empty)</p> <p>Corrective Actions:</p> <p>1) Remind PI that door is kept locked even during inspections</p> <p>2) Add emergency number to information on door</p> <p>3) Ensure full protocol, as well as approval letters, for each protocol is placed in lab area.</p> <p>4) Label water jugs with dates and salt bucket with approximate opening date and if any expiration date</p>	PI, Geist		

M	Islander Green Team Garden (aquaponics)	<p>Findings:</p> <ol style="list-style-type: none"> 1) Emergency contact information (PI/veterinarian...) is not present on fenced area for aquaponic system (system is secured within locked fence area). 2) Protocol was not present (supposed to be in garage) nor data sheets (PI noted these are available on Google Docs). 3) Fish food container (glass jar) was not labelled. 4) Tank covering was loose, which allowed for some fish to be exposed to predation (swimming above chicken wire cover, which was in water). <p>Corrective Actions:</p> <ol style="list-style-type: none"> 1) Add emergency contact information (PI/veterinarian...) to fenced area for aquaponic system. 2) Ensure a copy of the full protocol, amendments, and approval are placed in an area easy to find (garage?), as well as data sheets need to be present of note in log book indicating how to access electronically (i.e., follow-up with obtaining Google Doc information). 3) Label fish food container (glass jar), along with expiration date of food. 4) Add extra holding clips to chicken wire cover to keep it taut and above water level. 	PI, Seemann		
M	Natural Resources Center 1018	<p>Findings:</p> <ol style="list-style-type: none"> 1) No emergency contact or veterinarian information posted on outside door for this protocol (contact info for Dr. Withers posted, but not on this protocol) 2) Difficult to tell where Baxter's experimental area is as it is not labelled (2 members knew, but others questioned where was the demarcation) 3) Full protocol not present, just approval letters 4) No animals present <p>Corrective Actions:</p> <ol style="list-style-type: none"> 1) Post PI's information and veterinarian information on door. 2) Demarcate experimental area better, e.g., tanks labelled with name and species identification (picture with information). 3) Ensure full protocol, amendments, and approval letter for each protocol is placed in lab area. 	PI, Baxter		

- * **A** = acceptable
- M** = minor deficiency
- S** = significant deficiency (is or may be a threat to animal health or safety)
- C** = change in program (PHS Policy [IV.A.1.a.-i.](#)) (include in semiannual report to IO and in annual report to OLAW)
- NA** = not applicable
- ✓ Check if repeat deficiency

III. Semiannual Program Review and Facility Inspection Deficiencies

This table is provided as a format for the IACUC to organize and track information regarding deficiencies and plans and schedules for correction. This is not a substitute for the Semiannual Report to the IO. For more information about the Semiannual Report to the IO and to obtain a sample document, visit [here](#).

Date: November 9, 2021

Members in Attendance: Dr. Taylor Yaw (veterinarian, remote), Dr. Felix Omoruyi, Dr. Frauke Seemann, Dr. John Scarpa, Mr. Larry Lloyd, and Dr. Shayna Whitaker (veterinarian onboarding, guest, remote).

Deficiency Category*	✓	Location	Deficiency and Plan for Correction	Responsible Party	Correction Schedule and Interim Status	Date Complete
M		TPWD CCA Marine Development Center, 4300 Waldron Rd, Corpus Christi	Findings: 1) At TPWD lab area, veterinarian contact information was not present along with PI contact information. Corrective Actions: 1) Post veterinarian information along with PI information on incubator system.	PI, Geist	12/10/2021	

* **A** = acceptable

M = minor deficiency

S = significant deficiency (is or may be a threat to animal health or safety)

C = change in program (PHS Policy [IV.A.1.a.-i.](#)) (include in semiannual report to IO and in annual report to OLAW)

NA = not applicable

✓ Check if repeat deficiency