Texas A&M University-Corpus Christi Animal Welfare Assurance for Domestic Institutions

I, Dr. Ahmed Mahdy, Vice President for Research, as named Institutional Official for animal care and use at Texas A&M University-Corpus Christi (TAMU-CC), provide assurance that this Institution will comply with the Public Health Service (PHS) Policy on Humane Care and Use of Laboratory Animals (Policy).

I. Applicability of Assurance

This Assurance applies whenever this Institution conducts the following activities: all research, research training, experimentation, biological testing, teaching and related activities involving live vertebrate animals supported by the PHS, HHS, and/or NSF. This Assurance covers only those facilities and components listed below.

A. The following are branches and components over which this Institution has legal authority, included are those that operate under a different name:

Harte Research Institute (HRI)
College of Science and Engineering
College of Education and Human Development
College of Nursing and Health Sciences
College of Liberal Arts
College of Business
University College
College of Graduate Studies

These components are located on, or in the immediate vicinity of the Institution's main campus.

B. The following are other institution(s), or branches and components of another institution:

None; there are no satellite facilities or other institutions covered by this Assurance.

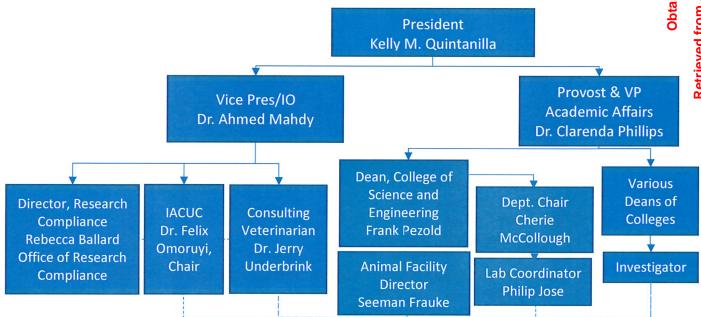
II. Institutional Commitment

- A. This Institution will comply with all applicable provisions of the <u>Animal Welfare Act</u> and other Federal statutes and regulations relating to animals.
- B. This Institution is guided by the "<u>U.S. Government Principles for the Utilization and Care of</u> Vertebrate Animals Used in Testing, Research, and Training."
- C. This Institution acknowledges and accepts responsibility for the care and use of animals involved in activities covered by this Assurance. As partial fulfillment of this responsibility, this Institution will ensure that all individuals involved in the care and use of laboratory animals understand their individual and collective responsibilities for compliance with this Assurance, and other applicable laws and regulations pertaining to animal care and use.

- D. This Institution has established and will maintain a program for activities involving animals according to the *Guide for the Care and Use of Laboratory Animals* (*Guide*).
- E. This Institution agrees to ensure that all performance sites engaged in activities involving live vertebrate animals under consortium (subaward) or subcontract agreements have an Animal Welfare Assurance and that the activities have Institutional Animal Care and Use Committee (IACUC) approval.

III. Institutional Program for Animal Care and Use

A. The lines of authority and responsibility for administering the program and ensuring compliance with the PHS Policy are as follows:



Open lines of communication are maintained between the IACUC and the IO and between the Veterinarian and the IO.

The Vice President for Research (VPR) serves as the Institutional Official (IO).

- 1. The IO is given the administrative and operational authority to commit institutional resources to ensure compliance with the Public Health Service (PHS) Policy on Humane Care and Use of Laboratory Animals, Animal Welfare Regulations (AWR) and other requirements.
- 2. The IACUC reports to the IO.
- 3. The President, as Chief Executive Officer (CEO), has delegated to the Institutional Official the authority to appoint members of the IACUC. In accordance with the Health Research Extension Act of 1985, this delegation of authority is specific and is in writing.

Office of Research Compliance (ORC) serves as the administrative office supporting the IACUC and is tasked with the following in service of this mission:

1. Manages the process to review protocols;

- 2. Supports the IACUC in administrative functions;
- 3. Establish and maintain policies and procedures; and
- 4. Develop and provide educational programs for faculty, staff, and students as needed.

Principal Investigators (PI) and animal care staff:

- 1. Daily animal care is supervised by the Principal Investigator and appointed animal caretakers.
- 2. The Principal Investigator is responsible for coordinating animal care to be provided seven days a week, 365 days per year at facilities housing animals.
- 3. Principal investigators, senior research associates, animal facility staff, graduate and undergraduate students are trained to care for species of animals.
- 4. All appointed animal caretakers are responsible for appropriate animal care.
- 5. The Principal Investigator reports directly to the IACUC in animal care matters.

Animal Facility Management

TAMU-CC has a relatively small vertebrate research program. The animal facility located in Tidal Hall are primarily managed by faculty members using the facilities in coordination with department appointed staff and department chairs.

1. Research Animals

Dr. Frauke Seemann is appointed as the staff responsible for care and maintenance of animals used in research and reports to Dean Pezold, College of the College of Science and Engineering. Dr. Frauke Seemann serves as a member of the IACUC.

2. Teaching and Display Animals

Philip Jose, Lab Coordinator, is appointed as the staff responsible for care and maintenance of animals used for teaching and display and reports to the Cherie McCollough, Chair for the Department of Life Sciences. Philip Jose serves as a member of the IACUC.

- B. The qualifications, authority, and percent of time contributed by the veterinarian(s) who will participate in the program are as follows:
 - 1. Name: Jerry F. Underbrink, DVM

Qualifications

- <u>Degrees</u>: B.S., Veterinary Science, Texas A&M University, 1972; DVM, Texas A&M University, 1974.
- Training or experience in laboratory animal medicine or in the use of the species at the institution:

Dr. Underbrink has served on the IACUC for over 20 years and has extensive experience working with lab animals housed on campus. He is in private practice, working with large and small animals, as well as exotic animals. Dr. Underbrink regularly attends conferences for continuing education credit on the care of all animals in order to maintain his accreditation, such as workshops on the care of snakes and rodents. Please see the attached CV.

Authority. Dr. Underbrink has direct program authority and responsibility for the Institution's animal care and use program including access to all animals. TAMU-CC has empowered the Institutional-appointed Attending Veterinarian (AV) with full authority to provide medical care or euthanasia, at their discretion, to animals on TAMU-CC premises or TAMU-CC owned animals housed off-campus. In urgent circumstances – gross violations of animal welfare standard or immediate threats to welfare and safety of animals or researchers – the Attending Veterinarian has the authority to stop or halt research activities without IACUC committee approval. The AV will promptly forward incidents to the IACUC for further review. Upon receipt of the report, Office of Research Compliance works with IACUC to add to the next available IACUC agenda or convene an ad hoc meeting to discuss.

Access. The AV (or authorized designee) has unrestricted access to all areas where animals are used or housed, including any satellite facilities not directly managed by TAMU-CC.

<u>Time contributed to program</u>: Dr. Underbrink contributes on average approximately six hours per month to the program reviewing protocols and providing consultation on various program related topics. Dr. Underbrink is present at the institution for approximately five hours every six months. One hundred percent of this time is contributed to the animal care and use program.

2. <u>Back-up veterinarian</u>: If Dr. Underbrink is not available, TAMU-CC consults with Margaret S. McTighe, DVM, Attending Veterinarian and Associate Director for Covance Research Products. The practice veterinarian will consult with Dr. Underbrink when necessary.

<u>Degrees</u>: B.S., Agriculture, Auburn University, 1988; DVM, Auburn College of Veterinary Medicine, 1990.

<u>Training or experience in laboratory animal medicine or in the use of the species at the institution</u>: Dr. McTighe is an experienced laboratory animal veterinarian with special interest in nontraditional species. She also has previous experience in serving on an IACUC.

Responsibilities: Provide veterinarian services when the AV is unavailable.

<u>Time contributed to program</u>: As needed.

C. The IACUC at this Institution is properly appointed according to PHS Policy IV.A.3.a. and is qualified through the experience and expertise of its members to oversee the Institution's animal care and use program and facilities. The IACUC consists of at least 5 members, and its membership meets the composition requirements of PHS Policy IV.A.3.b. Attached is a list of the chairperson and members of the IACUC and their names, degrees, profession, titles or specialties, and institutional affiliations.

D. The IACUC will:

1. Review at least once every 6 months the Institution's program for humane care and use of animals, using the *Guide* as a basis for evaluation. The IACUC procedures for conducting semiannual program reviews are as follows:

- a. The IACUC will meet at least once every six months to review the Institutional Program for Humane Care and Use of Animals.
- b. The IACUC uses the Guide and other pertinent resources, e.g., the PHS Policy, the Code of Federal Regulations (Animal Welfare) as a basis for the review.
- c. To facilitate the evaluation, IACUC will use a checklist based on the Sample OLAW Program and Facility Review Checklist from the OLAW website.
- d. The semi-annual program review will include, but is not limited to, a review of the following:
 - i. IACUC membership and functions;
 - ii. IACUC member experience and training;
 - iii. IACUC records and reporting requirements;
 - iv. IACUC Policies, SOPs, Guidelines;
 - v. Husbandry and veterinary care (all aspects);
 - vi. Personnel Qualifications (experience and training);
 - vii. Occupational Health and Safety; and
 - viii. Emergency and Disaster plans.
- e. In addition, the evaluation may also include a review of the Institution's PHS Assurance.
- f. If program deficiencies are noted during the review, the issue will be categorized as significant or minor. A significant deficiency is one that is or may be a threat to the health and safety of animals or personnel. The IACUC will develop a reasonable and specific plan and schedule for correcting each deficiency.
- g. Subcommittees may be used to conduct all or part of the reviews. However, no member may be involuntarily excluded from participating in any portion of the review.
- 2. Inspect at least once every 6 months all of the Institution's animal facilities, including satellite facilities and animal surgical sites, using the *Guide* as a basis for evaluation. The IACUC procedures for conducting semiannual facility inspections are as follows:
 - a. At least once every six months at least two (2) members of the IACUC will inspect all of the institute's animal facilities and animal surgical areas. Examples of areas to be inspected include holding areas, animal care support areas, storage areas, procedure areas, laboratories where animal manipulations are conducted, and equipment used for transporting animals.
 - b. The IACUC uses the Guide and other pertinent resources, e.g., the PHS Policy, the Code of Federal Regulations (Animal Welfare) as a basis for the review.
 - c. To facilitate the evaluation, IACUC will use a checklist based on the Sample OLAW Program and Facility Review Checklist form the OLAW website.
 - d. If program deficiencies are noted during the review, the issue will be categorized as significant or minor. A significant deficiency is one that is or may be a threat to the health and safety of animals or personnel.
 - e. The IACUC will develop a reasonable and specific plan and schedule for correcting each deficiency.
 - f. Subcommittees may be used to conduct all or part of the reviews. However, no member may be involuntarily excluded from participating in any portion of the review.
 - g. For individual facilities that house or involve only non-USDA covered species, the IACUC may, at its discretion, determine the best means of conducting an evaluation of the institution's program and facilities. The IACUC may invite ad hoc consultants to assist in conducting the evaluation. However, the IACUC remains responsible for the evaluation and report.

- 3. Prepare reports of the IACUC evaluations according to PHS Policy IV.B.3. and submit the reports to the Institutional Official. The IACUC procedures for developing reports and submitting them to the Institutional Official are as follows:
 - a. IACUC must prepare a report of its evaluations resulting from the semi-annual inspections. A report is generated from the discussed findings based upon the Sample semiannual report to the Institutional Official.
 - b. Individual IACUC members will convey their observations to the IACUC Chairperson, or his or her designee, who, in turn, will draft the reports using the sample OLAW Semiannual Report to the Institutional Official format form the OLAW website as a model.
 - c. Reports will include:
 - i. A description of the nature and extent of the institution's adherence to the Guide and the PHS Policy;
 - ii. Identification any departures from the provisions of the Guide and the PHS Policy and state the reasons for each departure.
 - 1. The report will state if there are no departures. Approved departures must be approved as part of a protocol, protocol amendment, or other written document, either using Full Committee Review (FCR) or Designated Member Review (DMR) as delineated below in Section III.D.
 - 2. Departures from the provisions of the Guide that are not IACUC approved are considered deficiencies and addressed as such, i.e., the IACUC will develop a reasonable plan and schedule for discontinuing the departure or for having the departure properly reviewed and approved.
 - iii. Inspection findings: Deficiencies will be reported.
 - 1. Deficiencies will be recorded as significant or minor deficiencies.
 - 2. If program or facility deficiencies are noted, the reports will contain a reasonable and specific plan and schedule for correcting each deficiency.
 - 3. Recommendations to the IO regarding any aspect of the research facility's program, facilities or personnel training.
 - iv. If some or all of the institution's facilities are not accredited by AAALAC International, the reports will identify those facilities as such.
 - d. Copies of the draft reports will be reviewed, revised as appropriate, and approved by the Committee.
 - e. The final reports will be signed by a majority of the IACUC members and will include any minority opinions. If there are no minority opinions, the reports will so state.
 - f. The completed reports will be submitted to the Institutional Official within 60 days following the evaluation. However, if during the inspection significant deficiencies are identified, the IACUC Chair will verbally notify the IO as soon as possible.
 - g. Deficiencies will be tracked by the IACUC to ensure that they are appropriately resolved.
- 4. Review concerns involving the care and use of animals at the Institution. The IACUC procedures for reviewing concerns are as follows:
 - a. Any individual may report concerns to the TAMU-CC Office of Research Compliance, the Vice President for Research/IO, the attending veterinarian, the IACUC Chair or to any IACUC member.

- b. Notices are located in the animal facilities and on the IACUC website advising individuals how and where to report animal welfare concerns and stating that any individual who, in good faith, reports an animal welfare concern will be protected against reprisals.
- c. The IACUC Chair must be notified as soon as possible of all concerns or problems involving the care and use of animals. The IO will be notified immediately of all serious concerns or problems.
- d. If necessary, the concern or problem will be immediately addressed by the IACUC Chair to address next steps for appropriate intervention or investigation.
- e. All reported concerns will be brought to the attention of the full Committee.
- f. A detailed record of the concern and investigation including any corrective action already taken will be prepared and reviewed by the IACUC.
- g. Following IACUC review, the IACUC Chair, or his or her designee, will send a letter to the Principal Investigator (PI) outlining the concern and the IACUC's recommendation including further corrective action, if necessary. The letter will require a written response from the Principal Investigator (PI) acknowledging receipt of the letter and confirmation that the concern is being/has been addressed.
- h. All IACUC members will have the opportunity to review the concern and the corrective actions taken, as necessary.
- i. The IACUC will report such actions to the IO. Reports to the IO may be either via meeting minutes, semiannual report of IACUC evaluations, or separate letter.
- j. OLAW will be notified in accordance with reporting requires of the PHS Policy at IV.F.3. Reports to OLAW will be made in writing and through the IO.
- k. Documentation must be maintained on file in the Office of Research Compliance.
- 1. The identity of the whistle blower or individual bringing the concern to the attention of the IACUC will be protected in accordance with the institution's whistle blower policy and any individual who, in good faith, reports an animal welfare concern will be protected against reprisals.
- 5. Make written recommendations to the Institutional Official regarding any aspect of the Institution's animal program, facilities, or personnel training. The procedures for making recommendations to the Institutional Official are as follows:
 - a. Recommendations regarding any aspects of the institution's animal program or facilities are reviewed by the Committee, revised as appropriate, and then submitted to the IO.
 - b. IACUC recommendations are included in the IACUC meeting minutes, a report of the IACUC's evaluations or a separate letter.
- 6. Review and approve, require modifications in (to secure approval), or withhold approval of PHS-supported activities related to the care and use of animals according to PHS Policy IV.C.1-3. The IACUC procedures for protocol review are as follows:

a. Submission

i. All personnel proposing to use a live animal in research, training, education, experimentation, biological testing or for related purposes must submit a completed IACUC Application form (hereafter referred to as protocol) to the Office of Research Compliance (ORC).

ii. Pre-review of submissions is performed by the Director of Research Compliance, Office of Research Compliance IACUC staff, or as needed by other IACUC members.

b. IACUC Approval Criteria

- i. The IACUC will ensure that protocols meet the requirements of the PHS Policy at IV.C.1; the US Government Principles for the Utilization and Care of Vertebrate Animals Used in Testing, Research and Training; The Guide; and ethical principles which govern the use of animals at the institution.
- ii. The IACUC may invite consultants to assist in reviewing complex issues. Consultants may not approve or withhold approval of an activity or vote with the IACUC unless they are also members of the IACUC.
- iii. The IACUC shall follow the Guide unless acceptable justification for a departure is presented. Further, the IACUC shall determine that the protocol conforms to the institution's PHS Assurance and meets the following requirements:
 - 1. Procedures with animals will avoid or minimize discomfort, distress, and pain to the animals, consistent with sound research design.
 - 2. Procedures that may cause more than momentary or slight pain or distress to the animals will be performed with appropriate sedation, analgesia, or anesthesia, unless the procedure is justified for scientific reasons in writing by the investigator.
 - 3. Animals that would otherwise experience severe or chronic pain or distress that cannot be relieved will be painlessly killed at the end of the procedure or, if appropriate, during the procedure.
 - 4. The living conditions of animals will be appropriate for their species and contribute to their health and comfort.
 - 5. The housing, feeding, and nonmedical care of the animals will be directed by a veterinarian or other scientist trained and experienced in the proper care, handling, and use of the species being maintained or studied.
 - 6. Medical care for animals will be available and provided as necessary by a qualified veterinarian.
 - 7. Personnel conducting procedures on the species being maintained or studied will be appropriately qualified and trained in those procedures.
 - 8. Methods of euthanasia used will be consistent with the current American Veterinary Medical Association (AVMA) Guidelines for the Euthanasia of Animals, unless a deviation is justified for scientific reasons in writing by the investigator.

c. Full Committee Review (FCR)

- i. Full committee review of protocols requires a convened meeting of a quorum of the IACUC members. A simple majority of the membership of the IACUC constitutes a quorum and is required in order to convene a meeting for the review of protocols.
- ii. The IACUC usually meets once per month with additional meetings convened as necessary to address extenuating circumstances.
- iii. When the protocol will be reviewed by full committee, the level of review is recorded as full board in the protocol tracker.

- iv. A complete list of protocols scheduled for full IACUC review are distributed via email to all members at least one week prior to the meeting. Specific instructions regarding the review process, due dates, and instructions on how to access the protocols (which are stored on a secure server that all IACUC members have access to) are provided to all members of the IACUC.
- v. Use of telecommunications will be in accordance with NIH Notice NOT-OD-06-052 of March 24th, 2006, entitled Guidance on Use of Telecommunications for IACUC Meetings under the PHS Policy on Humane Care and Use of Laboratory Animals.
 - 1. Generally, a quorum of voting members is convened when required by PHS Policy and written minutes of the meeting are maintained in accord with the PHS Policy, IV.E.1.b
 - 2. Attendance by teleconference will be counted towards a quorum when the IACUC members were provided with and have received all relevant materials for the meeting and if there is opportunity for the voting member to actively dialogue with the other members in attendance.
 - 3. Members attending by teleconference will be counted towards a quorum when the following criteria are met:
 - a. All members are given notice of the meeting.
 - b. Documents normally provided to members during a physically convened meeting are provided to all members in advance of the meeting.
 - c. All members have access to the documents and the technology necessary to fully participate.
 - d. The forum allows for real time verbal interaction equivalent to that occurring in a physically convened meeting (i.e., members can actively and equally participate and there is simultaneous communication).
 - e. If a vote is called for, the vote occurs during the meeting and is taken in a manner that ensures an accurate count of the vote.
- i. The IACUC Chair, or his/her designee, assigns one or two members and the AV (or one of the alternate AVs) to serve as primary reviewers (not to be confused with designated reviewer). The primary reviewers present their finding to other members of the committee at a properly convened IACUC meeting for discussion.
- ii. <u>Conflict of Interest</u>. No member may participate in the IACUC review or approval of a protocol in which the member has a conflicting interest (e.g., is personally involved in the project) except to provide information requested by the IACUC; nor may a member who has a conflicting interest contribute to the constitution of a quorum. At the beginning of each meeting the IACUC Chair reminds investigators to declare any conflicting interest not previously noted.
- iii. When it is determined that consultants or experts will be required to advise the IACUC in its review of a protocol, the protocol shall also be distributed to the consultants or experts prior to the meeting, and if necessary, the consultant may be invited to the Full Committee Meeting. Consultants may not approve or withhold approval of an activity or vote with the IACUC.
- iv. Following review of the protocol, a motion is made, and a vote taken to either: 1) approve, 2) require modification(s) to secure approval, or 3) withhold approval. Each of these actions requires agreement by a majority of those members present at the convened meeting.

- v. <u>Required Modifications Subsequent to FCR</u>. When the IACUC requires modifications (to secure approval), of a protocol, such modifications are reviewed as follows:
 - 1. FCR or DMR following all applicable procedures as delineated in the PHS Policy and elsewhere in Part 111.D.6 of this Assurance.
 - 2. DMR if approved unanimously by all members at the meeting at which the required modifications are developed delineated AND if all IACUC members have agreed in advance in writing that the quorum of members present at a convened meeting may decide by unanimous vote to use DMR subsequent to FCR when modification is needed to secure approval. However, any member of the IACUC may, at any time, request to see the revised protocol and/or request FCR of the protocol.
 - 3. If an IACUC uses DMR, the approval date is the date that the designated member(s) approve the study.
 - 4. Minor modifications of an administrative nature, i.e., typographical or grammatical errors, required signatures, etc. may be confirmed by IACUC administrative/support personnel.

d. Designated Member Review (DMR)

- i. A list of protocols scheduled for DMR is distributed via email to all members with specific instructions regarding the designated review process, instructions on how to access the protocols which are stored on a secure server that all IACUC members have access to and a deadline to call for FCR which is generally 2-5 business days. Affirmation from all IACUC members is not required (silent assent).
- ii. Under extenuating circumstances, the deadline can be reduced by the IACUC Chair/designee to one day with affirmation required from all members regarding their decision whether to call for FCR.
- iii. Office of Research Compliance documents the responses to the call for designated member review via 600.03 Checklist, DMR Review which is saved in the protocol file.
- iv. After five (5) business days has passed with no call for a full board review, the level of review for the individual protocol is set to DMR in the protocol tracker. Then at least one member of the IACUC is assigned by the chair as the designated reviewer (DR) who is qualified to conduct the review.
- v. <u>Conflict of Interest</u>. No member may participate in the IACUC review or approval of a protocol in which the member has a conflicting interest (e.g., is personally involved in the project) except to provide information requested by the IACUC; nor may a member who has a conflicting interest contribute to the constitution of a quorum. Protocols are not assigned to members with a known conflict of interest. If an assigned designated member has a conflict with the protocol assigned, the member contacts ORC prior to review to have the protocol reassigned to another member who does not have a conflict.
- vi. While other IACUC members may provide the DR(s) with comments and/or suggestions for the reviewers' consideration, concurrence to use the DMR method may not be conditioned.

- 1. After all required modifications are made, a final revised protocol, i.e., an identical document with all required modifications included, is submitted to all designated reviewers for review and approval.
- 2. If multiple designated reviewers are used, their decisions must be unanimous; if not, the protocol will be referred for FCR.
- 3. Any member of the IACUC can make the decision to send the protocol for FCR at any time during the set deadline period. If no member of the IACUC refers the protocol to full committee for review at a convened meeting (silent assent), at the end of the set deadline period the assigned IACUC DR has the authority to approve, require modifications in (to secure approval) or request full committee review.
- 4. The DR does not have the authority to withhold approval.
- 5. The IACUC minutes contains notifications of all actions approved by DMR.
- e. There are no alternate procedures by which procedures are reviewed.
- 7. Review and approve, require modifications in (to secure approval), or withhold approval of proposed significant changes regarding the use of animals in ongoing activities according to PHS Policy IV.C. The IACUC procedures for reviewing proposed significant changes in ongoing research projects are as follows:
 - a. Proposed significant changes must be submitted to the IACUC by completing a Request for Change form and revising the approved protocol by incorporating the change. Other than the specific exceptions delineated in OLAW Guidance, Notice NOT-OD-14-126, August 26, 2014 and as delineated below and in IACUC approved policies, review and approval of significant change submissions are reviewed by either FCR or DMR, as described previously in Section 111.D.6. The IACUC utilizes DMR for most changes.
 - b. Determination of what constitutes a significant change is based upon guidance provided by OLAW. Examples of changes considered to be significant include, but are not limited to, changes:
 - i. In the objectives of a study;
 - ii. From non-survival to survival surgery;
 - iii. Resulting in greater discomfort or in a greater degree of invasiveness;
 - iv. In the housing and or use of animals in a location that is not part of the animal program overseen by the IACUC;
 - v. In the species;
 - vi. In Principal Investigator;
 - vii. That impact personnel safety;
 - viii. In anesthetic agent(s) or the use or withholding of analgesics;
 - ix. In the method of euthanasia;
 - x. In the duration, frequency, or number of procedures performed on an animal; or
 - xi. In approximate number of animals used. Changes of less than 10% in the approximate number of animals used of mice of the genus Mus and rats of the genus Rattus that are bred for use in research only may, at the IACUC's discretion, be considered minor (not significant).
 - c. The specific significant changes described below, may be allowed administratively according to IACUC-reviewed and -approved policies in consultation with a veterinarian

authorized by the IACUC, referred to as Administrative Veterinary Verification Consultation (AWC).

- i. Anesthesia, analgesia, sedation, or experimental substances;
- ii. Euthanasia to any method approved in the AVMA Guidelines for the Euthanasia of Animals; and
- iii. Duration, frequency, type or number of procedures performed on an animal.
- d. Review and approval of items above may only be handled administratively in consultation with a TAMU-CC veterinarian who is authorized by the IACUC and as described in an IACUC approved written policy(ies) that is compliant with OLAW Guidance, Notice NOT-OO-14-126, August 26, 2014. Such policies will include specific evaluation criteria, e.g., published drug formularies, AVMA Guidelines for the Euthanasia of Animals, allowable blood draw data/charts, etc. Such policies will also address possible negative impacts on animal welfare.
- e. All such aforementioned written policies related to veterinary verification and consultation and administrative review will be adopted reviewed and approved by formal action of the IACUC.
- f. All authorizations of individuals by the IACUC to handle changes administratively will be specific (by name or position title and change(s) authorized to handle) and in writing.
- g. All such aforementioned policies and authorization of individuals related to administrative review may be approved for a maximum of 36 months only. That is, all such policies expire no later than the three-year anniversary of the IACUC approval.
- h. If the IACUC wishes to continue the procedures/policies and/or authorizations beyond the expiration date, prior to expiration of the policy, the existing or a new policy must be reviewed and adopted by formal action by the IACUC using FCR or DMR.
- i. All changes managed by AWC will be documented in the associated protocol file.
- 8. Notify investigators and the Institution in writing of its decision to approve or withhold approval of those activities related to the care and use of animals, or of modifications required to secure IACUC approval according to PHS Policy IV.C.4. The IACUC procedures to notify investigators and the Institution of its decisions regarding protocol review are as follows:
 - a. The IACUC Chair or his/her designee shall notify the investigator in writing of the IACUC's decision to approve the protocol, require modification in (to secure approval), or withhold approval (disapproval).
 - b. In order to secure approval, the investigator is provided with specified, delineated, detailed written modifications/clarifications required by the IACUC and must revise the IACUC application and/or respond to conditions set by the IACUC.
 - c. The IACUC Chair or his/her designee shall provide the investigator with the reasons, in writing, for the IACUC's decision to withhold approval of a protocol and shall provide an

- opportunity for the investigator to respond and appeal in person, before a fully convened meeting of the IACUC, or in writing.
- d. Applications and proposals that have been approved by the IACUC may be subject to further review by officials of the institution who can overturn an IACUC approval. However, those officials may not approve those sections of an application or proposal related to the care and use of animals if they have not been approved by the IACUC.
- e. The IO receives a copy of the IACUC meeting minutes that records all decisions regarding protocol review and activities.
- 9. Conduct continuing review of each previously approved, ongoing activity covered by PHS Policy at appropriate intervals as determined by the IACUC, including a complete review at least once every 3 years according to PHS Policy IV.C.1.-5. The IACUC procedures for conducting continuing reviews are as follows:
 - a. Post-approval Monitoring (PAM)
 - i. All ongoing activities are monitored continuously by the Office of Research Compliance staff.
 - ii. The Director, Research Compliance, IACUC staff or Environment Health and Safety (EHS) conducts random lab visits and serves as a consultant on laboratory and facility semiannual inspections whenever possible.
 - iii. The Director, Research Compliance, or designee monitors IACUC designated Pilot Studies. Monitoring involves questions about whether the study has begun, status of the pilot study, anticipated completion, etc. Relevant aspects are discussed with the veterinarian(s) and the findings reported to the IACUC for action by DMR or FCR, as necessary.
 - iv. Following initial protocol approval, the Director, Research Compliance, or designee, contacts investigators to monitor progress and address any questions or concerns the investigator may have related to the study.
 - b. Continuing/Periodic Protocol Review
 - i. At the time of initial review and approval, the IACUC will set a continuing review date for each protocol.
 - ii. Investigators are required to apply for Continuing Review in accordance with the continuing review dates set by the IACUC.
 - iii. The IACUC will re-review all protocols no less often than every three years. If the protocol involves USDA regulated species, continuing review will be conducted at least once every 12 months.
 - iv. Protocols are approved for a maximum of 36 months. That is, all protocols expire no later than the three-year anniversary of the initial IACUC review. If activities will continue beyond the expiration date, a new protocol must be submitted, reviewed, and approved as described in Paragraph 111.D.6 above. All applicable requirements (laws, regulations, policies, etc.) in place at the time of the de novo review shall apply.
 - v. Annual and three-year continuing reviews are conducted by either FCR or DMR.

- vi. Reviewers are assigned to review the Continuing Review application which includes a copy of the currently approved updated protocol in accordance with previously described procedures for FCR and DMR in Section 111.D.6.
- vii. Protocols not re-approved by the set continuing review date are designated as "approval expired." Animals are placed on a holding protocol and no animal work is permitted until the protocol is re-approved.
- 10. Be authorized to suspend an activity involving animals according to PHS Policy IV.C.6. The IACUC procedures for suspending an ongoing activity are as follows:
 - a. The IACUC may suspend an activity that it previously approved if it determines that the activity is not being conducted in accordance with applicable provisions of the Animal Welfare Act, the Guide, the institution's Assurance, or IV.C.1.a.-g. of the PHS Policy.
 - b. The IACUC may suspend an activity only after review of the matter at a convened meeting of a quorum of the IACUC and with the suspension vote of a majority of the quorum present.
 - c. The IACUC may suspend the entire protocol or any component of a protocol.
 - d. The IO has authorized the IACUC chair/designee or the AV to immediately halt any activity involving animals if animal welfare is jeopardized or there is evidence of serious non-compliance. Such actions will be promptly reported to the IACUC.
 - e. If the IACUC suspends an activity involving animals, or any other institutional intervention results in the temporary or permanent suspension of an activity due to noncompliance with the Policy, Animal Welfare Act, the Guide, or the institution's Assurance, the IO in consultation with the IACUC shall review the reasons for suspension, take appropriate corrective action, and report that action with a full explanation in writing to OLAW. Preliminary reports may be made verbally. Suspensions shall also be reported to USDA if the activity/species is USDA regulated.
 - f. An IACUC suspension can only be lifted by the full IACUC at a convened meeting.
- E. The risk-based occupational health and safety program for personnel working in laboratory animal facilities and personnel who have frequent contact with animals is as follows:
 - 1. Administration/Management
 - a. Texas A&M University-Corpus Christi Environment Health and Safety (EHS) manages the Occupational Health and Safety Program (OHSP) for personnel involved in the care and/or use of live vertebrates.
 - b. The program is developed, implemented, and monitored through EHS. An EHS representative serves as a full member on the IACUC to ensure open communication and EHS staff works with the IACUC in addressing health and safety issues. Environmental Health & Safety (EHS) responsibilities include:
 - i. Have a representative serve as a member of the IACUC;
 - ii. Develop and manage the Occupational Health Program (OHP);

- iii. Develop disaster planning and emergency preparedness plans for handling animals housed on campus during an evacuation;
- iv. Provides advice on laboratory security to the IACUC research personnel;
- v. Provides advice on sufficient facilities and housing to manage species being acquired;
- vi. Provides advice and support for departments on animal transportation;
- vii. Perform periodic inspections of laboratories in collaboration with IACUC to ensure laboratory standards are rigorously followed;
- viii. Investigate laboratory accidents involving the animals;
- ix. Report to the IACUC problems, violations, and outcome of any laboratory investigation.
- c. Trained health care professionals at the University Health Center at Texas A&M University-Corpus Christi and in the Corpus Christi community are consulted by the program officials as necessary

2. Scope of OHP

- a. All personnel involved in animal care and use or come into contact with animals or animal tissue/fluids are required to enroll in the Occupational Health Program (OHP).
- b. Such personnel are identified in the animal use protocol and enrolled in the Occupational Health Program (OHP).
- c. Enrollment must be verified before access to animals or animal facilities is granted.
- d. Enrollment also requires scheduled periodic evaluations to obtain information regarding any changes in work or health status and to verify the success of OHP in reducing occupational related illness or injury.

3. Health Histories and Evaluations

- a. EHS received a copy of IACUC and IBC protocols received. Individuals not currently enrolled are sent an enrollment invitation email and asked to complete the OHP Enrollment Form. Completed forms are returned to EHS.
- b. EHS also identifies employees by Title Code, Managing Department, Administrative Location, and by Job Duties at the time of hire or title and/or department change. Positions that, through their job duties, work in areas that are reasonable expected to come in contact with Human Blood or Other Potential Infectious Material, Hazardous Materials, Heavy Machinery, Hazardous Noise, Animals, Zoonoses and allergies, or other physically hazardous work environment are considered part of the Occupational Health Program. Training for zoonoses and allergies is available online from EHS at https://safety.tamucc.edu/S/Training/zoonosis.ppsx. All personnel in animal care and use will take this training and documentation of training will be added to their personnel file. These individuals will receive the applicable trainings, vaccinations, and/or personal protective equipment to perform their job duties safely. The Principal Investigator provides training to the research staff based on the specific type of research to be conducted and the hazards it may cause.

- c. TAMU-CC has a masters service agreement with University OH Partners, 406 Tarrow Street Suite B, College Station 77840 to perform reviews of all OHP enrollments and the Risk Assessment section noted in the research protocol.
- d. All personnel involved with animal care and use are sent the OHP enrollment form. The completion of a health history and enrollment in the OHP is mandatory for all personnel involved with animal care and use. Health histories of project personnel are provided in the OHP enrollment form and sent to the OH Partners for a medical evaluation. IACUC approval letters are not issued until all personnel listed have documented completion of the OHP enrollment process.
- e. Personnel are instructed to tell their doctor when they work with animals and become ill.

4. Hazard Identification and Risk Assessment

- a. Based on the procedures described in the protocol, the PI and the IACUC assess hazards related to zoonoses, field work, and animal handling. The IACUC membership includes EHS, who is trained in occupational health assessments, and members from the Institutional Biosafety Committee (IBC).
- b. Risk is assessed for all known hazards and actions are taken proportional to the level of risk. To date the most common risks related to animal work are:
 - i. Hazards related to work in the field by personnel studying wildlife;
 - ii. Zoonoses from wildlife; and
 - iii. Standard hazards of working with laboratory reptiles and rodents.
- c. OHP identifies the safety requirements/procedures for safe animal care within the facilities and are posted on the entry door to the animal room.
- d. Specific procedures detailing the safety aspects for providing animal care are developed between EHS and the Principal Investigator. The protocols are posted on the entry door to the animal room.
- e. The TAMU-CC Institutional Bio-safety Committee (IBC) reviews applications and investigator qualifications for use of bio-hazardous agents, including recombinant DNA, that are introduced into animals. For biological agents, safety guidelines are based on the most recent edition of the CDC/NIH publication, "Biosafety in Microbiological and Biomedical Laboratories," and current NIH Recombinant DNA Guidelines. An EHS representative serves as a full member on the IBC to ensure open communication and EHS staff works with the IBC in addressing health and safety issues.
- f. EHS manages the Radiation Safety Program. The Radiation Safety Officer provides guidelines for the use of radioisotopes in animals and monitors their use. The Chemical and Radiation Safety Office and the Campus Safety Office monitor the use of toxicological hazards. For radiologic hazards a license must be obtained by the Principal Investigator. A permit must be obtained for each person working under the principal investigator. Application forms are obtained from the Radiation Safety Officer.

- g. Treatment of animals with hazardous agents (carcinogens, mutagens, teratogens, etc.) must comply with safety protocols approved by EHS. The protocols are posted on the entry door to the animal room.
- h. All hazardous wastes are identified, handled, tracked, and disposed of according to EHS policy and monitored by EHS.
- i. It is the responsibility of the Principal Investigator (PI) to ensure that recommended practices are followed and that all personnel are informed of the attendant risks and are appropriately trained regarding their handling and use. Procedures are developed between the animal care staff, appropriate safety personnel, biosafety, and the investigator prior to the use of hazardous substances in animals.

5. Procedures in Place to Alleviate Hazards and Minimize Risks

- a. Risks are mitigated through institutional policies, engineering controls, work practices, and personal protective equipment. It is the responsibility of principal investigators to ensure that laboratory staff are informed of and participate in the OHP.
 - i. Doors to rooms used for the study of hazardous materials are kept closed and locked and are appropriately posted with signs. Fume hoods, bio-safety cabinets and protective clothing including gloves, gowns, masks, respirators, N95 masks, eye protection, Tyvek suits, and shoe covers are provided to all personnel as needed. Personnel must dress accordingly to enter animal holding areas.
 - ii. All personnel entering the room must wear proper personal protective equipment (PPE) in accordance with the posted OSP.
 - iii. All staff is trained to wash their hands/dispose of gloves prior to leaving an animal room/work area.
 - iv. Smoking is permitted only in designated outside areas. Eating, drinking, smoking, or personal items such as coats, cosmetics, etc., are prohibited in any animal room.
 - v. Each animal cage is properly identified with a cage card and the hazardous materials used.
- b. The Pl, in collaboration with EHS, properly train all involved parties prior to beginning a study. EHS assists in training staff and clearly identifying these risks (e.g., training and fit testing for personnel using respirators). TAMU-CC IACUC has additional online training requirements including the following annual mandatory courses: (1) CITI Lab Animal Research; (2) CITI Working with Species series; (3) CITI Animal Biosafety; (4) CITI Blood borne Pathogen; (5) CITI Initial Biosafety Training Biosafety/Biosecurity; and (6) CITI NIH Recombinant DNA Guidelines.
- c. The Principal Investigator or instructor is responsible for any hazards created by research, teaching or testing activities. The principal investigator anticipates problems when the protocol is submitted to the IACUC where personnel or animals are involved.
- d. If an accident occurs, appropriate safety personnel are to be notified immediately.
- e. EHS conducts safety audits of the animal care program.

6. Immunizations

- a. All participants will have the following vaccinations documented: Tetanus Prophylaxis, Hepatitis B (as required), Rabies/ Measles (as required).
- 7. Precautions taken during pregnancy, illness or decreased immunocompetence
 - a. Personnel are advised during training that if they are planning to become pregnant, are pregnant, are ill, or have immunocompetence that they should consult a health care professional/physician regarding such conditions and how they may pertain to their work with animals.
- 8. Provisions for personnel not involved in animal care and/or use but nevertheless need to enter areas where animals are housed or used
 - a. All personnel including facilities maintenance are required to enroll in the OHP prior to having access to animal housing or animal use areas.
 - b. In situations where non-university personnel (e.g., visitors, contractors, etc.) must access the animal facilities, they are briefed on appropriate precautions and provided any appropriate PPE before they are permitted in for a limited amount of time. A member of the animal care staff will be available for escort if needed. If there is extensive or prolonged work to be done, the animals are removed from the room(s).
- 9. Availability and procedures for treatment of bites, scratches, illness or injury
 - a. Minor cuts, bites, scratches, and allergies will be treated on site with first aid.
 - b. Serious injuries will be handled in two ways:
 - i. If the injury takes place during normal business hours, the injured person will be transported to the University clinic for treatment by the staff physician or
 - ii. For serious and/ or potentially life-threatening injuries, personnel are directed to call University Police Department at 361-825-4444 (on campus at ext. 4444) or dial 911. University Police is on-duty 7 days/week, 24 hours/day. Or proceed to the nearest Emergency Department, Christus Spohn Hospital Emergency Room or Corpus Christi Medical Center Emergency Room. For boating injuries, personnel are directed to contact the U.S. Coast Guard on VHS-FM 16 (156.8 MHz) or the USCG Corpus Christi Office 361-888-3162.
- 10. Procedures/program for reporting and tracking injuries and illnesses
 - a. If any employee or student suffers an injury (e.g., animal bite) or is exposed to a hazardous biological or chemical agent which is a threat to health and safety, they must report it immediately to their direct supervisor and appropriate emergency medical services.
 - b. Injuries requiring medical attention that occur while caring or using animals are reported to TAMU-CC EHS using a standard injury report form.

- c. A record of reported injuries is maintained in the EHS Office. Tracking of injuries and illnesses is the responsibility of EHS.
- d. Serious injuries resulting from animal care and use must be reported to the IACUC Chair as soon as possible, including copies of injury reports. If deemed necessary, the IACUC may conduct an independent investigation of the incident and recommend appropriate actions or corrections.

11. Other pertinent Information Regarding the OHP

- a. All employees are instructed to immediately report or correct any unsafe or potentially unsafe working condition. There are some risks associated with conducting wildlife research in an offshore and underwater environment. TAMU-CC Dive Control Board reviews risks associated with scientific diving. The Dive Safety Officer is a member of IACUC to ensure open communication between the Dive Control Board and IACUC regarding research risks.
- F. The total gross number of square feet in each animal facility (including each satellite facility), the species of animals housed there and the average daily inventory of animals, by species, in each facility is provided in the attached Part X, Facility and Species Inventory table.
- G. The training or instruction available to scientists, animal technicians, and other personnel involved in animal care, treatment, or use is as follows:

IACUC Members

- 1. IACUC members are provided a copy of the following:
 - a. The PHS Policy for the Humane Care and Use of Laboratory Animals;
 - b. The National Research Council (NRC) Guide for the Care and Use of Laboratory Animals;
 - c. The AVMA Guidelines for Euthanasia; and
 - d. This Assurance.
- 2. All members are required to complete the IACUC Chairs, Members, and Coordinators Basic Course located at the Collaborative Institutional Training Initiative (CITI) website, www.citiprogram.org, initially and at least every three (3) years.
- 3. Members are encouraged to attend ongoing educational offerings through OLAW WebEx and on-site training offered by Texas A&M University System Compliance Officer.
- 4. Documentation: Each IACUC member has a training file that documents completion of training requirements. Member training files are maintained for at least three (3) years and available to OLAW upon request.

Animal Care and Use Personnel

- 1. All personnel performing procedures using animals must be identified in the IACUC protocol.
- 2. A description of each individual's qualifications, experience and/or training in the specific animal species, model, and procedures must be provided for IACUC review.

- 3. Any personnel needing additional protocol-specific training will be identified in the review process and such required training will be a condition of approval of the protocol.
- 4. All persons involved in animal care and use will be required to complete animal research orientation. Training covers the laws and regulations covering laboratory animal care and use with an emphasis on the contents of the NRC Guide and the 3R's. Training includes instruction on research or testing methods that minimize the numbers of animals required to obtain valid results and limit animal pain or distress as well as other requirements delineated in 9 CFR, Part 2, Subpart C, Section 2.32(c). Specifically, as applicable, training and instruction of personnel includes guidance in at least the following areas:
 - a. Humane methods of animal maintenance and experimentation, including:
 - i. The basic needs of each species of animal;
 - ii. Proper handling and care for the various species of animals used by the facility;
 - iii. Proper pre-procedural and post-procedural care of animals; and
 - iv. Aseptic surgical methods and procedures;
 - b. The concept, availability, and use of research or testing methods that limit the use of animals or minimize animal distress;
 - c. Proper use of anesthetics, analgesics, and tranquilizers for any species of animals used by the facility;
 - d. Methods whereby deficiencies in animal care and treatment are reported, including deficiencies in animal care and treatment reported by any employee of the facility. No facility employee, Committee member, or laboratory personnel shall be discriminated against or be subject to any reprisal for reporting violations of any regulation or standards under the Act;
 - e. Utilization of services (e.g., National Agricultural Library, National Library of Medicine) available to provide information:
 - i. On appropriate methods of animal care and use;
 - ii. On alternatives to the use of live animals in research;
 - iii. That could prevent unintended and unnecessary duplication of research involving animals; and
 - iv. Regarding the intent and requirements of the Animal Welfare Act and USDA-APHIS Regulations
- 5. All personnel involved in animal care and use must attend this training initially and then once every three (3) years.
- 6. CITI online training course, "Investigators, Staff and Students, Basic Course" and species-specific courses will be used. Any use of other on-line training modules to fulfill training requirements must be approved by the IACUC.
- 7. Training in experimental methods, i.e., specific animal manipulations and techniques, will be conducted by the Principal Investigator or other qualified personnel, as needed.
- 8. For investigators transferring from other facilities who received similar training, verification of previous training may be accepted. Acceptance of previous training in lieu of the Institution's training is solely at the IACUC's discretion.

Training Documentation

- 1. Attendance rosters are maintained at in-house training sessions.
- 2. CITI certificates are accepted as documentation of CITI on-line training completion.
- 3. Documentation of all training will be maintained by the Institution for at least three (3) years and available to OLAW upon request.

IV. Institutional Program Evaluation and Accreditation

All of this Institution's programs and facilities (including satellite facilities) for activities involving animals have been evaluated by the IACUC within the past 6 months and will be reevaluated by the IACUC at least once every 6 months according to PHS Policy IV.B.1.-2.

Reports have been and will continue to be prepared according to PHS Policy IV.B.3. All IACUC semiannual reports will include a description of the nature and extent of this Institution's adherence to the PHS Policy and the *Guide*. Any departures from the *Guide* will be identified specifically and reasons for each departure will be stated. Reports will distinguish significant deficiencies from minor deficiencies. Where program or facility deficiencies are noted, reports will contain a reasonable and specific plan and schedule for correcting each deficiency. Semiannual reports of the IACUC's evaluations will be submitted to the Institutional Official. Semiannual reports of IACUC evaluations will be maintained by this Institution and made available to the OLAW upon request.

(1) This Institution is Category 2 — not accredited by the <u>Association for Assessment and Accreditation of Laboratory Animal Care International (AAALAC)</u>. As noted above, reports of the IACUC's semiannual evaluations (program reviews and facility inspections) will be made available upon request.

The report of the most recent evaluations (program review and facility inspection) is attached.

V. Recordkeeping Requirements

- A. This Institution will maintain for at least 3 years:
 - 1. A copy of this Assurance and any modifications made to it, as approved by the PHS
 - 2. Minutes of IACUC meetings, including records of attendance, activities of the committee, and committee deliberations
 - 3. Records of applications, proposals, and proposed significant changes in the care and use of animals and whether IACUC approval was granted or withheld
 - 4. Records of semiannual IACUC reports and recommendations (including minority views) as forwarded to the Institutional Official, Dr. Ahmed Mahdy, and
 - 5. Records of accrediting body determinations.
- B. This Institution will maintain records that relate directly to applications, proposals, and proposed changes in ongoing activities reviewed and approved by the IACUC for the duration of the activity and for an additional 3 years after completion of the activity.
- C. All records shall be accessible for inspection and copying by authorized OLAW or other PHS representatives at reasonable times and in a reasonable manner.

VI. Reporting Requirements

- A. The Institutional reporting period is the calendar year (January 1 December 31). The IACUC, through the Institutional Official, will submit an annual report to OLAW by January 31 of each year. The annual report will include:
 - 1. Any change in the accreditation status of the Institution (e.g., if the Institution obtains accreditation by AAALAC or AAALAC accreditation is revoked),
 - 2. Any change in the description of the Institution's program for animal care and use as described in this Assurance,
 - 3. Any change in the IACUC membership,
 - 4. Notification of the dates that the IACUC conducted its semiannual evaluations of the Institution's program and facilities (including satellite facilities) and submitted the evaluations to the Institutional Official, Dr. Ahmed Mahdy, and
 - 5. Any minority views filed by members of the IACUC
- B. The IACUC, through the Institutional Official, will promptly provide OLAW with a full explanation of the circumstances and actions taken with respect to:
 - 1. Any serious or continuing noncompliance with the PHS Policy,
 - 2. Any serious deviations from the provisions of the *Guide*, and
 - 3. Any suspension of an activity by the IACUC.
- C. Reports filed under VI.A. and VI.B. above should include any minority views filed by members of the IACUC.

Institutional Endorsement and PHS Approval VII.

A. Authorized Institutional Official

Name: Dr. Ahmed Mahdy

Title: Vice President for Research and Innovation

Name of Institution: Texas A&M University-Corpus Christi

Address: (street, city, state, country, postal code)

6300 Ocean Drive, Unit 5844 Corpus Christi, Texas 78412-5844

361-825-3881 Phone:

E-mail: Ahmed.Mahdy@tamucc.edu

Acting officially in an authorized capacity on behalf of this Institution and with an understanding of the Institution's responsibilities under this Assurance, I assure the humane care and use of animals as specified above.

Fax:

Signature:

Date: 08/20/2019

Obtained by Rise

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361-825-3920

B. PHS Approving Official (to be completed by OLAW)

Name/Title: Paula Knapp, Animal Welfare Policy Scientist

Office of Laboratory Animal Welfare (OLAW)

D19-01069

National Institutes of Health 6700B Rockledge Drive Suite 2500, MSC 6910

Bethesda, MD USA 20892-7982 (FedEx Zip Code 20817)

Phone: +1 (301) 496-7163 Fax: +1 (301) 451-5672

Digitally signed by Paula E.

Assurance Number:

Paula E. Knapp -S Date: August 21, 2019 Signature: Date: 2019.08.21

Knapp -S 13:13:08 -04'00'

Retrieved from Animal Rese

Expiration Date: August 31, 2023 August 21, 2019 Effective Date:

VIII. Membership of the IACUC

Date: 6/27/2019				
Name of Instituti	on: Texas A&M University –	Corpus Christi		
Assurance Numb	er:			
IACUC Chairpe	erson			
Name*: Felix Om	oruyi			
Title*: Associate	Professor	Degree/Cree	Degree/Credentials*: PhD	
6300 Ocean Drive Corpus Christ, T	X 78412	,		
	noruyi@tamucc.edu			
Phone*: (361) 825	5-2473	Fax*: 361-825-392	0.0	
IACUC Roster				
Name of Member/ Code**	Degree/ Credentials	Position Title***	PHS Policy Membership Requirements****	
John Scarpa	PhD Wildlife and Fisheries Sciences	Associate Professor, Science & Engineering	Scientific	
Philip Jose	MS	Laboratory Coordinator	Scientific	
Jerry Underbrink	DVM	Veterinarian	Veterinarian	
Jean Sparks	PhD Molecular Biology	Associate Professor, Science & Engineering	Scientific	
Alexa Hight	MS Library and Information Science	Library	Non-scientific	
Judd Curtis	PhD Marine Biology	Assistant Research Scientist, Harte Research Institute	Scientific	
Paul Silva	MS Marine Biology; habitat restoration	Texas Department of Wildlife	Scientific	
Roy Coons BS Safety, occupational health, industry hygiene, environmental regulations		Director, Environmental Health and Safety	Scientific	

Cecelia Gonzales	MBA	KEDT (PBS station)	Nonaffiliated; Non-scientific
Frauke Seemann	PhD Aquatic environments, marine biology, zoology, ecology, immunotoxicity, environmental pathobiology, animal facility management	Assistant Professor, Life Sciences	Scientific, Affiliated Alternate to Scarpa, Curtis, Silva
Angelica Chapa	PhD Animal Science, Ruminant Nutrition, Nutritional Physiology	Associate Professor of Biology, Department of Natural Sciences, Del Mar College	Affiliated; Scientific Alternate to Sparks, Omoruyi
Kesley Gibson	MS Marine Biology with emphasis in Ecology of Marine Fishes	Research Assistant, Harte Research Institute	Scientific Alternate to Judd Curtis and John Scarpa
Charles Sassine	BS Wildlife conservation; field research; threatened and endangered wildlife	National Park Service: Padre Island National Seashore	Scientific Alternate to Paul Silva
Nathan Galvan	MS Industrial management, hazardous waste management, laboratory inspections, Safety, occupational health	Environmental Specialist	Scientific Alternate to Roy Coons
Larry Lloyd	MS, marine biology and field data collection	Dive Safety Officer	Scientific Alternate to Judd Curtis and John Scarpa

^{*} This information is mandatory.

**** PHS Policy Membership Requirements:

Veterinarian	veterinarian with training or experience in laboratory animal science and medicine or in the use of the species at the institution, who has direct or delegated program authority and responsibility for activities involving animals at the institution.
Scientist	practicing scientist experienced in research involving animals.
Nonscientist	member whose primary concerns are in a nonscientific area (e.g., ethicist, lawyer, member of the clergy).

^{**} Names of members, other than the chairperson and veterinarian, may be represented by a number or symbol in this submission to OLAW. Sufficient information to determine that all appointees are appropriately qualified must be provided and the identity of each member must be readily ascertainable by the institution and available to authorized OLAW or other PHS representatives upon request.

^{***} List specific position titles for all members, including nonaffiliated (e.g., banker, teacher, volunteer fireman; not "community member" or "retired").

Nonaffiliated

individual who is not affiliated with the institution in any way other than as a member of the IACUC and is not a member of the immediate family of a person who is affiliated with the institution. This member is expected to represent general community interests in the proper care and use of animals and should not be a laboratory animal user. A consulting veterinarian may not be considered nonaffiliated.

IX. Other Key Contacts (optional)

If there are other individuals within the Institution who may be contacted regarding this Assurance, please provide information below.

Contact #1			
Name:	Rebecca Ballard, JD, MA, CIP		
Title:	Director Research Compliance		
Phone:	361-825-2497	E-mail:	rebecca.ballard@tamucc.edu

X. Facility and Species Inventory

Date: 6/27/2019				
Name of Institution:	Name of Institution: Texas A&M University – Corpus Christi			
Assurance Number:				
Laboratory, Unit, or Building*	Gross Square Feet [include service areas]	Species Housed [use common names, e.g., mouse, rat, rhesus, baboon, zebrafish, African clawed frog]	Approximate Average Daily Inventory	
Center for the Sciences Main Foyer	418 sq. ft	Bull snake/Pituophis catenifer	1	
Center for the Sciences 119C	671 sq. ft	Tilapia	819	
Education Center for Mathematics and Science 114	1,160 sq ft	Mice Fresh Water Fish Lizards Non-venomous snake Birds (zebra finches or similar)	20 60 20 5	
Tidal Hall 304	1,891 sq ft	Bearded dragon/Pogona vitticeps Box turtle/Terrapene spp Great Plains rat snake/Pantherophis emoryi Dessert kingsnake/Lampropelits callligaster	2 2 1 1 1	

		Rosy boa/ <i>Lichanura trivirgata</i>	
		Bearded dragon/Pogona vitticeps	2
		Box turtle/ <i>Terrapene spp</i> Great Plains rat snake/ <i>Pantherophis</i>	$\begin{vmatrix} 2 \\ 2 \end{vmatrix}$
Tidal Hall 307	1,450 sq ft	emoryi	1
	1,430 sq 11	Dessert kingsnake/ <i>Lampropelits</i>	1
		calligaster	1
		Rosy boa/ <i>Lichanura trivirgata</i>	1
Tidal Hall 301		Japanese Medaka/Oryzias latipes	
(facility currently	1, 884 sq ft	Japanese Medaka/ Oryzias melastigma	0
under construction)		Zebrafish/Danio rerio	
		Japanese Medaka/Oryzias latipes	460
Tidal Hall 114G	438 sq ft	japanese Medaka/ Oryzias melastigma	660
		Zebrafish/ <i>Danio rerio</i>	1080
Wet Lab at Texas			
Parks and Wildlife			
Department, Perry			
R. Bass facility in	680 sq ft	Spotted seatrout/ <i>Cynoscion nebulosus</i>	3200
Palacios, TX.			
[3864 FM 3280			
Palacios, TX 77465]			

^{*}Institutions may identify animal areas (buildings/rooms) by a number or symbol in this submission to OLAW. However, the name and location must be provided to OLAW upon request.