GENERAL INFORMATION AND INSTRUCTIONS

**Animal Production/Maintenance Facility**

**Standard Operating Procedures**

**IMPORTANT:**

**Allow a minimum of 4-6 weeks for protocol approval.**

**SUBMIT ORIGINAL WITH ALL SIGNATURES TO:**

**Office of Research Compliance**

**Research and Innovation Center**

**540 Devall Drive, Suite 200**

**Auburn, AL 36832**

**Phone: 334-844-5966**

**Or scan/email to:** **IACUCadmin@auburn.edu**

**IACUC Website:** [**https://cws.auburn.edu/OVPR/pm/compliance/iacuc/home**](https://cws.auburn.edu/OVPR/pm/compliance/iacuc/home)

University policy requires that all research, teaching, production/maintenance, and demonstration activities involving vertebrate animals be approved by the Auburn University Institutional Animal Care and Use Committee (IACUC) prior to initiation of the project. The Auburn University Policies and Procedures for the Care and Use of Live Vertebrate Animals is available from the IACUC website. This policy is in accordance with federal regulations and guidelines.

When submitting the original, the General Information and Instructions and the Additional Information sections should be omitted.

The IACUC meets the first and third Thursdays of each calendar month. Protocols received at least seven days prior to a scheduled meeting date (e.g. by 11:30 a.m. on Thursday of the week prior to a scheduled Thursday p.m. meeting) will be placed on the agenda. Approved protocols will be assigned a PRN (protocol review number). Approved Animal Subjects Review Forms will remain in the official files of the University for not less than three years beyond the completion of the project.

Annual review of all protocols is required. An Annual Review Form will be sent to the Principal Investigator approximately 30 days prior to the Annual Review Due Date.

Animal users are required to become familiar with all guidelines and regulations pertaining to the care and use of animals in research and teaching by visiting the Animal Welfare Information Center (AWIC) on the World Wide Web at <http://www.nal.usda.gov/awic/>.

Complete this form by providing **BOLD TYPED** answers in the text boxes in each item. If an item is not applicable, please indicate NA. The attached REQUIRED Checklist must be completed and included with the original protocol.

**ALL SIGNATURES are required for the protocol to be eligible**

**for placement on the IACUC meeting agenda.**

** Animal Production/Maintenance Facility**

**STANDARD OPERATING PROCEDURES**

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| **UNIT/FACILITY CONTACT:** |  |
| TITLE: |  |
| COLLEGE/SCHOOL: |  |
| DEPARTMENT: |  |
| CAMPUS ADDRESS: |  | CAMPUS PHONE #: |  |
| EMAIL: |  | FAX #: |  |
| **NAME OF UNIT/FACILITY** |  |
| **LOCATION OF UNIT/FACILITY** |  |
| **STARTING DATE:** |  | **EXPIRATION DATE:** |  |
| (Must not be prior to IACUC approval) |  (Must not exceed 3 years) |
| **Is any part of the funding from a U.S. PUBLIC HEALTH SERVICE AGENCY?**  | **Yes** |  |  **No** |  |

**REQUIRED SIGNATURES**

 The information contained on this form provides an accurate description of the animal care and use protocol which will be followed. I agree to abide by governmental regulations and university policies concerning the use of animals. I will allow veterinary oversight to be provided to animals showing evidence of pain or illness. If the information provided for this project concerning animal use should be revised, or procedures changed, I will so notify the committee of those changes in writing, and all proposed changes will not be implemented until full IACUC approval has been granted.

 All individuals performing animal procedures on this protocol are qualified to perform their particular animal related duties through training and/or experience. Training and/or experience must encompass the following: \*biology, handling, and care of the species; aseptic surgical methods and techniques (if applicable); the proper use of anesthetics, analgesics, and tranquilizers (if applicable); and procedures for reporting animal welfare concerns. Furthermore, all individuals working with animals, animal tissues, or animal products on this protocol will be informed of relevant occupational health and safety issues prior to performing their duties.

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| **X** |
| **Unit/Facility Contact Signature Date** |

 Medical care for animals will be available and provided as indicated by a qualified veterinarian. By accepting this responsibility, the veterinarian is providing assurance that any personal interest he/she might have in the project will not conflict with his/her responsibility for the provision of adequate veterinary care for the animals. Furthermore, the veterinarian provides assurance of review and consultation on the proper use of anesthetics and pain relieving medications for any painful procedures.

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|  |  | **X** |
| **Project Veterinarian Name (print or type)** |  | **Project Veterinarian Signature Date** |
|  |  | **X** |
| **Unit Veterinarian Name (print or type)** |  | **Unit Veterinarian Signature Date** |
|  |  | **X** |
| **Departmental Chairperson Name (print or type)** |  | **Departmental Chairperson Signature Date** |
| **X** |  |  |
| **\*IACUC Chair Signature Date** \*IACUC Chair signs the protocol after IACUC approval has been granted |  |  |

**PLEASE TYPE IN BOLD FONT AND COMPLETE THE FOLLOWING FORM IN FULL.**

1.

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| **Animal Common Name** | **Total Used** | **Source1** | **Housing Location2** |
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1If reusing animals from another protocol, please provide protocol number and assurance statement that the animals’ well-being has not been compromised by previous research and that the animals exhibit normal physiologic function. Please state how well-being and normal physiologic function was determined for these animals i.e. physical exam prior to accepting animal for use in protocol

2Please state the housing facility as well as the area (ft2 or m2) allocated per animal in cages, stanchions, floor pens, etc. and the reference used to determine the area i.e. Ag Guide (2010) or Guide (2011)

1. Purpose of unit/facility:

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1. Schedule of production (time line) *Omit if for maintenance only:*

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1. Physical facilities
2. Name and University building number for each building:

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1. General description of each building/room/pond(s)/pastures housing animals:

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1. Maximum animal capacity [by building/room/pond(s)/pastures]:

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1. Animal waste removal by building/room:

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1. Feed storage by building/room/pond:

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1. Feeding program
2. Basis for nutritional standards:

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1. Source(s) of feed:

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1. Identify specific diets and their use:

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1. Method and frequency of feeding, watering:

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1. Describe the water source, treatment or purification process and how it is provided to the animals e.g. bowls, troughs, automatic waterers (state manufacturer/model), nipple waterers, bottles w/sipper tubes, ponds, streams or other natural source, etc.:

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1. Describe methods of water quality control including monitoring for contaminants:

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1. Describe methods and frequency of sanitation for water delivery systems e.g. bowls, automatic waterers, etc.:

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1. Animal management and production procedures. Briefly describe, or list and provide references for, all routine procedures performed on produced and/or maintained animals such as handling, transportation, reproduction techniques, sampling/testing, animal disposal - mortalities, milking, marketing, castration, spaying, etc.:

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1. Animal health
2. Unit/facility veterinarian. For each veterinarian associated with the program (including private practitioners), provide the veterinarian's name(s), list responsibilities, and how the veterinarian is involved in monitoring the care and use of laboratory animals. If employed full time by the institution, note the percentage of time devoted to supporting the animal care and use program of the institution. If employed part-time or as a consultant, note the frequency and duration of visits:

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1. Biosecurity procedures (include control of unwanted animals, i.e. vermin, predators)
2. Describe methods used to monitor for known or unknown infectious agents:

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1. Describe methods used to control, contain, or eliminate infectious agents:

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1. Describe methods used to control unwanted animals, i.e. vermin, predators:

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1. Describe methods to ensure physical security such as perimeter fencing, card key entry, video surveillance, regular security patrols, etc.:

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1. Animal environment (air quality, water quality for aquatic species)

If animals are housed indoors, briefly describe the performance aspects of the ventilation system. Provide method and frequency for assessing, monitoring, and documenting the animal room ventilation rates and pressure gradients (with adjacent areas). Note: current (measured within the last 12 months) detailed (by room) information is to be provided as indicated on the enclosed Heating, Ventilation, and Air Conditioning (HVAC) System Summary appendix:

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For aquatic species only:

Describe overall system design, housing densities, and water treatment, maintenance, and quality assurance that are used to ensure species appropriateness. Please note that facility-specific tank design and parameter monitoring frequencies should be summarized in the Aquatic Systems Summary appendix:

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1. Environmental Enrichment: *(See Bloomsmith et al. Lab Anim. Sci. 41:372-377); also the Ag Guide (2010) has a good discussion on this topic by species in Chapter 4.*
2. Social enrichment: Please describe direct or indirect animal contact (visual, olfactory, auditory) with conspecifics or humans.

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1. Occupational enrichment: Please describe any devices that provide animals with control or challenges (psychological enrichment); enrichment that encourages exercise.

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1. Physical enrichment: Please describe alteration of the size or complexity of the animal’s enclosure which may include objects, substrate or permanent structures (e.g. nestboxes, rocks and hiding places in an aquatic environment).

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1. Sensory enrichment: Please describe visual stimuli (television); auditory stimuli (music, vocalizations); olfactory, tactile, taste stimuli.

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1. Nutritional enrichment: Please describe presentation of varied or novel food types; changing the method of food delivery.

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1. Other types of enrichment: Please describe any other types of enrichment that do not fit the categories above.

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1. No Enrichment: Please justify the decision to provide no environmental enrichment if you have not responded to #7. G. 1-6 above.

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1. Routine vaccination/deworming/insect/parasite treatment programs

List product, route of administration, dosage, pre-slaughter withdrawal (if applicable) and age or production stage when treated in a table:

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1. Disease diagnosis / treatment

Describe 1) the procedure(s) for daily observation of animals for illness or abnormal behavior, 2) the observer’s training for this responsibility, and 3) method for reporting observations (written or verbal). Include a description of the method for ensuring that reported cases are appropriately managed in a timely manner:

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1. Method(s) of euthanasia (Refer to the *AVMA Guidelines for the Euthanasia of Animals: 2020 Edition*):

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1. Storage/disposal of hazardous materials including flammable liquids, corrosive materials, bleaches and other cleaning agents, oxidizers, etc.:

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1. Describe how drugs are stored and monitored. If controlled substances are used describe procedures for inventory and dispensing:

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1. Employee training: *IACUC-required CITI training and Occupational Health & Safety Program (OHSP) Enrollment for all individuals listed in section 10 must be completed prior to protocol approval.*

(Briefly describe training procedures used and attach copies of established training materials. List staff who will be associated with this protocol and training received on animal procedures described in this protocol):

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**NOTE:** Animals being maintained or held on this protocol will be USDA pain category “B”

**Heating, Ventilation and Air Conditioning (HVAC) System Summary**

Summarize the heating, ventilation and air conditioning (HVAC) information for each animal facility, including all satellite facilities, indicating: a) source(s) of air, b) air recirculation rates if other than 100% fresh air, c) air exchange rates, d) relative pressure differentials, e) humidity control, and f) date of most recent measurement/evaluation. Include all animal holding rooms, (including satellite holding rooms), surgical facilities, procedure rooms, and support spaces integral to animal facilities (e.g., cage wash, cage and feed storage areas, necropsy, treatment, etc.). Air exchange rates within animal holding rooms and cage washing facilities are required. Air exchange rates may be important to maintain air quality in other areas; however, measurements may be left at the discretion of the institution. Information may be provided in another format, providing all requested data is included. HVAC information should be provided from assessments obtained within the past 12 months.

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| **Room** **No.** | **Use** | **Air Source****%Fresh/Recirculated** | **Treatment****Filtered/Absorbers, etc.** | **Air****Changes** | **Pressure** | **Humidity Control** | **Date****Assessed** |
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**Aquatic Systems Summary\* – Part I**

Please summarize water management and monitoring information programs for each animal facility, including all satellite facilities/rooms/enclosures. The following key will assist you in completing the form:

1. List location of aquaria, including outdoor enclosures (ponds or outdoor tanks). If indoors, list building and room number. Note that all species housed at the same location and maintained via the same design and monitoring may be listed in the same row.
2. Please indicate if embryonic (E), larval (L), juvenile (J) or Adult (A)
3. Group tanks (ponds, outdoor tanks, multiple aquaria) are arranged as arrays with shared water supply; individual aquaria have exclusive water handling systems.
4. Indicate water type, e.g., fresh, brackish, or marine.
5. Indicate water circulation, e.g., static, re-circulated, constant flow, or some combination of these. If applicable, indicate water exchange frequency and amount (percentage).
6. Provide a key word for filtration employed, e.g., biological, chemical, mechanical, etc. and type (e.g., mechanical-bead filter). A diagram may be provided showing the flow of water, filtration, source of “make-up” water and amount replaced daily.

**Part I**

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| **Location****(1)** | **Species****(2)** | **System Design** |
| **Group / Individual****(3)** | **Water Type** **(4)** |  **Pre-treatment** | **Circulation** **(5)** | **Filtration** **(6)** | **Disinfection****(e.g., UV, ozone)** |
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\*Records of equipment maintenance (filter changes, UV bulb changes, probe changes, calibrations, etc.) should be available for review.

**Aquatic Systems Summary – Part II**

**Part II**

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| **Monitoring*****Indicate in the boxes below the frequency of monitoring and method of control for the following parameters. (1)***  |
| **Location****(from Part I)** | **Temperature** | **Salinity** | **pH** | **NH4** | **NO2** | **NO3** | **Dissolved O2** | **Total Dissolved gases** | **Other. Please List (2):** |
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1. In these columns, please indicate monitoring frequency, e.g. daily, weekly, monthly or other point sampling frequency; continuous/real time, or none, if applicable. Also indicate method of control (heaters versus room HVAC, hand versus auto dosing, etc.).
2. Indicate other parameters and their monitoring frequency, e.g., alkalinity, total hardness, conductivity, chlorine/chloramine, etc.

This information may be provided in another format, provided that all requested data is included.

**REQUIRED CHECKLIST: *MUST be completed by the PI and attached to the original protocol submission.***

**Documentation of all items identified in Items III – IV is required prior to protocol approval.**

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| PI: |  | Department: |  |

**Project Title:**

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| I. Is this protocol a continuation of or similar to a project/ SOP / activity previously approved by the IACUC?  |  | Yes |  | No |
|  If yes, include PRN of previous protocol. | *PRN:* |  |

II. List all individuals (PI, co-PI, Lead Graduate Student, and Other Individuals listed in Question #10) who

 will conduct procedures involving animals on this protocol:

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| --- | --- | --- | --- | --- | --- |
| Project Personnel | CITI | OHS | Project Personnel | CITI | OHS |
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|   | Additional Individuals listed on the next page |

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| --- | --- | --- | --- | --- |
| III. Will wild caught or endangered animals be utilized for this project? |  | Yes |  | No |
|  If yes, are copies of active federal and/or state permits attached? |  | Yes |  | No |
| IV. Will animals used for this protocol be transferred to or from another institution? |  | Yes |  | No |
|  If yes, is a copy of the institution’s IACUC attached? |  | Yes |  | No |

V. Please check all of the following that apply to this project:

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| --- | --- | --- | --- |
|  | Food and/or Fluid Restriction |  | Multiple Survival Surgeries |
|  | Survival Surgery |  | Variation from Exercise/Enrichment  |
|  | Prolonged Physical Restraint |  | Variation from Euthanasia Guidelines |
|  | Variation in Blood Volume Limits |  | ”E” Pain Category |
|  | Unexpected Outcomes |  | Use of Freund’s Complete Adjuvant |
|  | Genetically Modified Animals Used |  | Variation From Housing Guidelines |

Additional space for listing individuals who will conduct procedures involving animals on this protocol:

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| --- | --- | --- | --- | --- | --- |
| Project Personnel | CITI | OHS | Project Personnel | CITI | OHS |
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