IACUC Protocol Form

### IACUC Office Use Only

Protocol ID:       Approval Date:

Expirations: Year 1:       Year 2:       **Year 3 (Final):**

**Submission Timing**

The IACUC review and approval process typically takes 6-8 weeks; however, complex protocols may take longer.

Allow adequate time for IACUC review and approval. Protocol activities cannot begin until IACUC approval is secured.

**Submission Documents**

1. IACUC Protocol and applicable supplements
2. Additional documentsthat *may be required* include:

Funding documents, collaborative agreements, standard operating procedures (SOPs), emergency plans, training verification, etc.

**Submit to the IACUC office:** iacuc@oregonstate.edu

**Questions? Comments? Concerns?**

Email iacuc@oregonstate.edu or call 541-737-2762

Review/approval may be required from additional committees/offices/units prior to release of IACUC approval. Proposals may also benefit from consulting other groups.

For your convenience, common OSU partners are listed below:

|  |
| --- |
| [**Safety (EH&S)**](http://oregonstate.edu/ehs/safety-committees)  [**Research Integrity**](http://research.oregonstate.edu/ori)[**Research Office**](http://research.oregonstate.edu/) **Other Units** |
| Biosafety/IBC | HRPP/IRB | [LARC](http://research.oregonstate.edu/larc) | [Occupational Health](http://occupationalhealth.oregonstate.edu/) |
| Chemical Safety     | Conflict of Interest | OCCD (MTAs) | [OSU Libraries](http://osulibrary.oregonstate.edu/) |
| Radiation Safety      | Scientific Diving | OSRAA (awards) | [Audit Services](http://leadership.oregonstate.edu/audit) & [Reporting Hotline](https://secure.ethicspoint.com/domain/media/en/gui/41096/index.html) |
|      | Small Boat Safety |  | [Risk Management](http://risk.oregonstate.edu/) |
|  | International/Export Control |  | [Business Centers](http://hr.oregonstate.edu/my-business-center) |
|  | USI (drone use) |  | [Emergency Management](http://emergency.oregonstate.edu/) |

Proposals may benefit from review of materials related to animal care and use oversight entities.

For your convenience, the main IACUC references and oversight entities are listed below:

|  |  |  |  |
| --- | --- | --- | --- |
| **Primary References** | **AAALAC accreditation** | **PHS/OLAW (**NIH, NSF**)** |  **USDA-APHIS-AC** |
| [The Guide](https://grants.nih.gov/grants/olaw/Guide-for-the-Care-and-Use-of-Laboratory-Animals.pdf) (2011) | [AAALAC FAQs](https://www.aaalac.org/accreditation/faq_landing.cfm) | [OLAW website index](https://grants.nih.gov/grants/olaw/olaw.htm) | [Animal Welfare Act & Regs](https://www.aphis.usda.gov/animal_welfare/downloads/AC_BlueBook_AWA_FINAL_2017_508comp.pdf) |
| [The Ag Guide](https://asas.org/docs/default-source/default-document-library/ag_guide_3rded.pdf?sfvrsn=4) (2010) | [AAALAC Position Statements](https://www.aaalac.org/accreditation/positionstatements.cfm) | [OLAW FAQs](https://grants.nih.gov/grants/olaw/faqs.htm) | [Animal Care Inspection Guide](https://www.aphis.usda.gov/animal_welfare/downloads/Animal-Care-Inspection-Guide.pdf) |
| [AVMA Euthanasia](https://www.aaalac.org/accreditation/RefResources/euthanasia_2013.pdf) (2013) | [Specialty References list](https://www.aaalac.org/accreditation/resources.cfm) | [PHS Policy](https://grants.nih.gov/grants/olaw/references/phspolicylabanimals.pdf) | [Animal Care Policy Manual](https://www.aphis.usda.gov/animal_welfare/downloads/Animal%20Care%20Policy%20Manual.pdf) |
| **Secondary References**      | [US Govt. Principles I-IX](https://grants.nih.gov/grants/olaw/references/phspol.htm#USGovPrinciples) |  |
| [Wild Mammals in Research & Education (ASM 2016)](https://www.aaalac.org/accreditation/RefResources/SS_WildAnimals.pdf) | [VAS Worksheet (2017)](https://grants.nih.gov/grants/olaw/VASchecklist.pdf) |  |
| [Care and Use of Fish (CCAC 2005)](https://www.aaalac.org/accreditation/RefResources/CCAC_Fish_Guidelines_English.pdf) | [How to Write a Research Proposal Involving Animals](https://www.niaid.nih.gov/grants-contracts/research-vertebrate-animals) |
| [Care and Welfare of Cephalopods (FELASA 2015)](https://www.aaalac.org/accreditation/RefResources/Cephalopod_Guidelines.pdf) | [What Investigators Need to Know About Animal Use](https://grants.nih.gov/grants/olaw/InvestigatorsNeed2Know.pdf) |
| [Use of Wild Birds in Research (OC 2010)](https://www.aaalac.org/accreditation/RefResources/SS_WildBirds.pdf) | [Occupational Health Safety-Research Animals (1997)](https://www.aaalac.org/accreditation/RefResources/OHS_Care_And_Use.pdf) |
|  | [Guidelines for Biosafety Laboratory Competency (2011)](https://www.aaalac.org/accreditation/RefResources/guide_for_biosaf_comp.pdf) |

# Administrative Information

## PI Assurance

### Principal Investigator

Name:

Email:

Phone:

Home Department:

### PI Assurance Statement to OSU

1. I accept and assure compliance with all federal, state, accreditation, institutional, and IACUC standards and procedures (laws, regulations, standards, policies, guides, and procedures) that apply to our animal care and use program and to this work.
2. I have provided scientific justification for this proposed use of animals, and certify that these animals will not be used to unnecessarily duplicate previously reported information.
3. I have reviewed scientific literature related to potential pain or distress that these animals may experience. For this project and these animals, I have considered incorporation of methods and procedures that could increase animal well-being, reduce numbers of animals, and refine any procedures or activities which may cause more than momentary pain or distress.
4. I ensure that each participant on this protocol is provided with the training, assistance, and oversight to ensure the well-being of these animals and compliance with this protocol as approved.
5. I ensure that all protocol participants have completed the Animal Exposure Program (AEP) requirements, and are knowledgeable about the IACUC and related animal regulations, policies, and standards.
6. I will obtain approval from the IACUC before initiating any changes to this project.
7. Any unanticipated pain or distress, morbidity, or mortality will be reported promptly to the Attending Veterinarian and the IACUC.
8. I will keep appropriate records and documents, and they will be available for review upon request.
9. I certify that the information contained in this submission is complete and accurate to the best of my knowledge.

**Principal Investigator signature**       **Date**

[ ]  I will submit my signature via an email statement from my work email address.

*You may state in your email submission that your email can serve as your signature, if you submit your completed form from your work address.*

## Title, Funding, & Agreements

### Protocol Title

|  |
| --- |
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*If this is a teaching Protocol, include* ***both*** *the course ID and name below, and attach the syllabus.*

If this submission is a **renewal** of an expiring Protocol, enter that Protocol # here:

### Table: Project Funding

Use the table below to list **funding sources** (both internal and Cayuse/external) associated with this project:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Funding Source | Cayuse #[or N/A] | Index #[or N/A] | Subaward [Y/N] | AwardPI Name | Award Title  |
|         |            |       |           |       |             |
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### Additional Protocol Access

Protocols can be accessed by the PI, Protocol participants, the Facility PI/Director, LARC veterinary staff, and IACUC Chair, committee members, and staff. In addition, internal and external oversight representatives and authorities may access Protocols and related records.

Do you want to identify additional people who should have access to the Protocol, such as administrative or managerial staff? Yes [ ]  No [ ]

If **Yes**, provide additional contact details:

|  |
| --- |
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### Confidential/Proprietary Information

Do you want to identify areas of the Protocol that should stay confidential for proprietary reasons?

Yes [ ]  No [ ]

If **Yes**, submit an additional copy of the Protocol and highlight the areas associated with confidential and/or proprietary statements. Note that the unauthorized release of confidential IACUC information by members is prohibited by law (AWA [§ 2157](https://www.animallaw.info/statute/us-awa-animal-welfare-act#2157). Release of trade secrets).

### External Collaboration [ ]  Not applicable

Includes animal work performed by subawardees, contractors, consultants, or at facilities not included in OSU IACUC inspections.

Will this project involve:

1. **Facilities** not inspected by the OSU IACUC? Yes [ ]  No [ ]
2. **People** who are not employees or students of OSU? Yes [ ]  No [ ]
3. **Funding sources** not associated with the Office of Sponsored Research & Award Administration (OSRAA) or not available in Cayuse? Yes [ ]  No [ ]

If **Yes**, submit copies of relevant Agreements, Contracts, Subcontracts, Memorandums of Understanding (MOUs), etc., and summarize the collaboration below:

|  |
| --- |
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# Animal Care and Use Protocol

## Project Objectives and Justification

### Project Type *(check all that apply)*

[ ]  Wildlife [ ]  Teaching [ ]  Clinical Trial [ ]  Production/Nutrition [ ]  Breeding/Maint.

[ ]  Behavioral [ ]  Basic Science [ ]  Biomedical [ ]  Other

### Project Objectives & Rationale

Briefly summarize the **purpose** and **rationale** of the animal work described in this Protocol.

Use language appropriate for nonscientist readers.

* Research/Teaching activities*:*

*What questions underlie this animal work, and what will be accomplished in the next 3 years?*

* Herd/Flock/Stock, Breeding, other activities*:*

*What is the rationale for maintaining these animals, and how will they be used over the next 3 years?*

**Purpose and Rationale:**

|  |
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###

### Project benefits for animals, humans, environment, science, society

Explain the significance and/or benefit of this work to animals, humans, science, and/or society:

|  |
| --- |
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### Justification for use of live animals and proposed species/breed/strain

# Explain your scientific rationale for:

# Proposed use of live animals: [*Why is live animal use necessary to achieve project goals?*]

|  |
| --- |
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# Proposed use of species/breed/strain: [*Why is this type of animal necessary to achieve project goals?*]

|  |
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### Duplication of animal use

Does this proposal duplicate other completed animal work? Yes [ ]  No [ ]

If **Yes**, provide a justification:

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| --- |
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## Veterinary Care, Animal Sources, Facilities/Locations

### Veterinary Care

[ ]  I confirm that the [OSU Attending Veterinarian](http://oregonstate.edu/dept/larc/contacts) **will be contacted promptly** about all **unexpected animal health** events.

Will LARC veterinarians provide veterinary and emergency care? Yes [ ]  No [ ]

Will CVM services (clinics, RVP) provide veterinary and emergency care? Yes [ ]  No [ ]

Will other designated veterinarian(s) provide veterinary and emergency care? Yes [ ]  No [ ]

Additional information:

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### Animal Sources

Choose all that apply:

[ ]  **Wildlife**

[ ]  **Transfe**r from my previous Protocol

[ ]  **Transfe**r from **another** Protocol

[ ]  **AnRS** facilities

[ ]  **CVM** facilities

[ ]  **Private/Client - owned**

[ ]  Animal **Donation**

[ ]  Animal **Vendor**

[ ]  Animal **Import**

[ ]  **Breeding** on Protocol

Additional Information:

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### Transportation

Will this project include animal transport? Yes [ ]  No [ ]

Transportation of animals must conform to all institutional guidelines/policies and federal regulations.

A summary of regulations and best practices is available in [Guidelines for the Humane Transportation of Research Animals](http://www.nap.edu/catalog/11557/guidelines-for-the-humane-transportation-of-research-animals) (2006), and AAALAC has a Transportation FAQ [here](http://www.aaalac.org/accreditation/faq_landing.cfm#Transport).

Will the LARC Transportation Guideline be used for transporting rodents on campus? Yes [ ]  No [ ]

**If No**, provide a description or SOP of the animal transport methods, containers, and vehicles that will be used:

|  |
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### Will Animals be Housed or Confined for more than 12 hours?

Yes [ ]  No [ ]

If “No”, skip to the next Section.

### Animal Housing and Procedure Locations

Animal facilities must be appropriate for the species and activities proposed, and approved prior to use.

OSU core/shared facilities:

[ ]  **LARC**-managed facility (LARC, LPSC, ALS, RAIL vivarium areas)

[ ]   **Aquatic** facility (AAHL, SARL, OHRC, HMSC)

[ ]  **AnRS farm** facility

[ ]  **OSU Animal Research Station**

[ ]   **CVM-VTH** facility

Satellite Animal Areas:

[ ]  **PI-managed** Satellite Animal Area (complete **Supplement C: Satellite Animal Areas**)

[ ]  **Field site(s)**

[ ]  Non-OSU **– institution** or **business** (requires an agreement – *contact the IACUC office*)

[ ]  Non-OSU – **personal property** (complete **Supplement E:** **Owner Consent Form**)

Additional Information:

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### Table: Animal Care and Use Facilities

* Note whether the facility is used for **Housing** (**H**), **Procedures** (**P**), or **both** (**H, P**).
* Indicate **Housing (H)** when animals will stay at a facility **overnight** or for more than **12 hours**
* For procedures/housing locations not described by a building/room, please describe the area/site.

|  |  |  |  |
| --- | --- | --- | --- |
| **Facility/Site Name**  | **Species** | **H/P** | **Room/Building or Description of Location** |
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## Animal Numbers and Pain/Distress Categories

**Pain/Distress Category Definitions**

*See the* [*IACUC Pain & Distress Policy and Guide*](http://research.oregonstate.edu/sites/research.oregonstate.edu/files/iacuc/pain_distress_policyguide.docx) *for more information.*

### Table: Animal Species, Numbers and Pain/Distress Category

|  |  |  |  |
| --- | --- | --- | --- |
| **Species** | **C, D, or E**[enter one pain category per row] | **Expected Number of****Animals Used per year** | **3-Year Numbers****Sum** |
| **Year 1** | **Year 2** | **Year 3** |
|       |       |       |       |       |       |
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Additional information:

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### Table: Genetic modifications & phenotypic consequences

[ ]  Not applicable

List animals with genetic modifications below, adding rows as necessary:

|  |  |  |
| --- | --- | --- |
| **Species** | **Genetic Strain/ Modification**  | **Strain characteristics/phenotypes + any special care or monitoring required** |
|           |       |       |
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### Animal Numbers Justification

Describe your methods to determine the appropriate numbers of animals for this project.

More than one justification may be applicable.

1. **Statistical Justification** – describe statistical methods and results used to justify the number of animals proposed:

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1. **Non-statistical Justification** – describe non-statistical methods used to justify the number of animals proposed:

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1. **Animal numbers adjustment(s)** and description for potential study complications, breeding animal replacements, etc.:

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| --- |
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1. Will any animals be **re-used** from year to year? Yes [ ]  No [ ]

If **Yes**: Explain how individual animals and their use will be monitored over time:

|  |
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## Project Design, & List of Events

### Project Design

**Briefly describe** the project/study design used for this proposal. Depending on the scope of the project, this may include description of:

* Description of animal groups, individuals, populations, etc. used in activities
* Sampling methods
* Outcomes measured
* Repetition of courses, studies, activities, procedures over next 3 years
* Project Endpoints
* Keeping records of animal use

**Project Design:**

|  |
| --- |
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### List of Sequential Events

*What will happen with the animal(s) and when?*

Provide a sequential timeline of animal use over the next 3 years (or until project completion if earlier).

You may include diagrams or flowcharts to provide this type of information.

Reviewers should be able to follow a given animal or group through the proposed activities, from beginning to end.

| **Species/ Group** | **Sequential list of live animal events** |  **Timeline/ Schedule** |
| --- | --- | --- |
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Additional Information:

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## Animal Procedure Descriptions

### Table: Procedure Descriptions, SOPs [ ]  Not applicable

**Describe procedures** that are **not described in detail elsewhere** in this protocol.

**List associated SOPs**/procedure documents below, **and provide** them to the IACUC with this protocol submission.

If procedures are detailed elsewhere in this document then they do **not** need to be described again here.

|  |  |
| --- | --- |
| **Species** | **Procedure Details or SOP Title** |
|         |       |
|       |       |
|       |       |

### Table: Administration of Drugs/Compounds/Biologics [ ]  Not applicable

Enter all **study/project** drugsadministered to animals in the table below.

Enter known **clinical** drugs to be administered, such as those for euthanasia, anesthesia, analgesia, etc.

See below for additional definitions.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Drugs/Compounds** | **P/NP** | **S / O** | **Species** | **Dose Range** | **Route** | **Schedule** |
|       |       |       |       |       |       |       |
|       |       |       |       |       |       |       |
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Additional Information:

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* **P/NP:** Note whether substances are **pharmaceutical grade** (**P**) or **non-pharmaceutical grade** (**NP**)

*See the OLAW definition of non-pharmaceutical grade substances* [*here*](http://grants.nih.gov/grants/olaw/faqs.htm#662)*.*

* **S/O:** Note whether additional [safety approval](http://research.oregonstate.edu/ori) or oversight is required:

Chem Safety (CS), Biosafety (B), Rad Safety, [DEA](http://www.deadiversion.usdoj.gov/) drugs, [FDA-CVM](http://www.fda.gov/AnimalVeterinary/default.htm) (INADs, cell-based products, exempt), etc.

### Table: Collection of blood, fluids, tissues [ ]  Not applicable

Summarize all live animal sample collections here:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Species** | **Sample Type** | **Sample site (anatomy)** | **Sample volume**  | **Sample #s** | **Collection****Schedule** |
|       |       |       |       |       |       |
|       |       |       |       |       |       |
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Additional Information:

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## Disposition and Euthanasia

### Animal Disposition

Check all that apply:

[ ]  Euthanasia

[ ]  Transfer to another Protocol or PI

[ ]  Release back to habitat (wildlife, per permit)

[ ]  Transport to another facility

[ ]  Transport to another institution

[ ]  Enter food chain/sell at auction

[ ]  Animals remain with owner

[ ]  Placement Program use

Additional information:

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### Table: Euthanasia

Oversight entities have approved the **AVMA** [**Guidelines for the Euthanasia of Animals (2013)**](http://issuu.com/aaalac/docs/euthanasia?e=6575905/2804213) for animal care and use programs. *The linked document includes AAALAC’s preface, with clarifications and exceptions.*

Describe both the primary & secondary/confirmation method(s) used during this project.

Note whether the methods are **Acceptable (A)** or **Conditionally Acceptable (CA),** per AVMA Guidelines.

|  |  |  |  |
| --- | --- | --- | --- |
| **Species** | **Primary method(s)** | **AVMA: A or CA**  | **Secondary method(s) &** **Confirmation of Death** |
|         |          |       |       |
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Additional Information:

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**Note:** Livestock that is either (1) administered research compounds or (2) [treated clinically with extralabel drugs](https://www.avma.org/KB/Resources/Reference/Pages/AMDUCA2.aspx) cannot enter the food chain, unless conditions of [FSIS 9 CFR 309.17](https://www.law.cornell.edu/cfr/text/9/309.17) are met and all appropriate written approvals are available.

### Carcass Disposal

Check all that apply:

Yes [ ]  No [ ]  Will AnRS/Farm units arrange for carcass disposal?

Yes [ ]  No [ ]  Will LARC arrange for carcass disposal?

Yes [ ]  No [ ]  Is another method used for carcass disposal?

If **Yes**, please describe:

|  |
| --- |
|       |

If carcasses are stored prior to processing or disposal, please describe the building/room and equipment used.

|  |
| --- |
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## Potential Adverse Consequences and Exceptions

### Exceptions to Laws, Regulations, Policies, Standards, Guidelines

The IACUC must review and approve exemptions from policies and standards of care every six months during program review. Potential exemptions are included below, but this is not an exhaustive list.

**Housing & Husbandry – Exceptions to:**

[ ]  [Social Housing](http://www.aaalac.org/accreditation/positionstatements.cfm#social): Husbandry (e.g. separation of breeding animals)

[ ]  [Social Housing](http://www.aaalac.org/accreditation/positionstatements.cfm#social): Experimental (e.g. metabolic caging)

[ ]  Cage Change Standards

[ ]  Standard Housing Space & Density

[ ]  Standard Environmental Conditions (e.g. temperature, light cycle, etc.)

[ ]  [Environmental Enrichment](http://oregonstate.edu/dept/larc//sites/default/files/environmental_enrichment_4.2014.pdf)

[ ]  Food and/or Water Standards (excludes standard pre-anesthetic fasting)

[ ]  Daily Monitoring

[ ]  Applicable Facility Standards

[ ]  Other:

**Procedures & Techniques**

[ ] Administer [Non-Pharmaceutical Grade](http://research.oregonstate.edu/files/iacuc/non-pharmaceutical_compound_use.pdf) Compounds

[ ]  Use [Expired Pharmaceuticals, Biologics, or Supplies](http://research.oregonstate.edu/files/iacuc/use_of_expired_materials_0.pdf)

[ ]  Use [Prolonged Restraint or Immobilization](http://research.oregonstate.edu/files/iacuc/physical_restraint_policy_guide.pdf)

[ ]  [Restrict or Regulate Food or Fluid Intake](http://research.oregonstate.edu/files/iacuc/food_and_fluid_restrictions.pdf) for Study Purposes

[ ]  Euthanasia Performed Using Methods Other Than Acceptable, Per [AVMA Guidelines](http://issuu.com/aaalac/docs/euthanasia?e=6575905/2804213).

[ ]  Other:

**Proposed exception(s) require** **scientific justification**.

1. **Rationale** for the exception
2. A **description** of
3. **Deviations** from applicable sections in the [Guide](http://grants.nih.gov/grants/olaw/guide-for-the-care-and-use-of-laboratory-animals.pdf), [Ag Guide](http://www.fass.org/docs/agguide3rd/Ag_Guide_3rd_ed.pdf), [AWA/AWARs](https://www.aphis.usda.gov/animal_welfare/downloads/Animal%20Care%20Blue%20Book%20-%202013%20-%20FINAL.pdf), AAALAC-approved [Resources](http://www.aaalac.org/accreditation/resources.cfm), IACUC or LARC Policy, or other applicable reference
4. **Animals** affected
5. **Time period** that applies to a given animal or group

**Exception Proposal(s)**: [ ]  Not applicable

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### Potential Adverse Consequences for Animals

1. Describe potential **adverse consequences** for the animals in this project:

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1. Describe potential **sources** of adverse consequences:

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1. Estimate the **number** (#) or **percent** (%) of animals that might be expected to experience potential adverse consequences:

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[ ]  Ensure that these numbers correspond with numbers in the [Animal Numbers & Pain Category Table](#_Table:_Animal_Species,).

### Avoidance of Adverse Consequences

Describe how potential adverse consequences will be **prevented, monitored,** and/or **mitigated**.

* Plans to **monitor** animals and **carry out** timely and appropriate actions
* **Endpoints** (humane and project) for these animals
1. Methods used to monitor animals and identify adverse consequences for animals on this project:

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1. Methods used to monitor animals and execute required actions to minimize potential pain/distress:

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1. Describe both the humane endpoints and project endpoints for these animals:

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### Pain Category Justifications

**Category C** [ ]  Not applicable

[ ]  Assure that Category C animals are expected to experience only mild and momentary pain, distress, or discomfort as a result of this work.

**Note:** Special consideration is given to the cumulative effect of repeated minor procedures.

**Category D** **Justification** [ ]  Not applicable

Why are Category D procedures needed for this work?

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Summarize measures used to prevent, minimize, and relieve pain/distress:

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**Category E Justification** [ ]  Not applicable

Explain the need to use procedures that require withholding of prompt relief of expected pain and distress.

Why can’t other procedures and measures be used to prevent expected pain and distress of animals?

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**Death as an Endpoint Justification** [ ]  Not applicable

Death of animal(s) is the intended experimental outcome, and pre-emptive euthanasia to prevent or relieve suffering is purposefully withheld. Provide compelling scientific justification for proposing death (without pre-emptive euthanasia) as an experimental endpoint:

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## Replacement, Reduction, Refinement,

For each section below, provide a summary of potential alternatives. If potential alternatives would adversely affect this project, please note:

### Replacement

Describe potential methods that are being or could be used to **replace part or all of this live animal work** (computer modeling, *in vitro* testing, etc.):

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### Reduction

Describe potential methods that are being or could be used to **reduce the number of animals for this project** (study design considerations, statistical analyses, etc.):

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### Refinement

Describe potential methods that are being or could be used to **improve well-being** and/or **reduce harm** for these animals (early interventions, advances in procedures & techniques, providing optimal housing & environments, etc.):

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**A literature search** is **required** whenprocedures or outcomes are likely to result in animal pain or distress -- Pain/Distress Categories **D & E** -- and recommended for all proposals.

A **reasonable and good faith effort** must be made to determine whether scientific literature currently offers

additional information that could:

* improve the wellbeing of the animals described above,
* reduce the number of animals used,
* demonstrate other models or methods for answering questions, or
* indicate that studies have already performed with these animals and duplication is not necessary.

**Suggested Keyword Categories:**

species

strain or breed

age groups

procedures

techniques

specialized equipment

drug/compound names

anesthetic names

anatomy sites

study design descriptors

disease models

pathology terms

adverse outcomes

Use key words **specific** to the animals, techniques, procedures, housing, etc., described in this protocol.

Focus on words that are associated with potential pain or distress for these animals, and look for potential methods to improve animal well-being.

Avoid key words based on scientific basis of the study, as these are generally too broad for the requirements of this particular search. More information is available on the [OSU Libraries site for IACUC literature searches.](http://guides.library.oregonstate.edu/c.php?g=286267&p=1906190)

Search at least **2 relevant databases**. A few examples are listed below:

* [PubMed](http://www.ncbi.nlm.nih.gov/pmc/)/Medline
* [AGRICOLA](https://www.ebscohost.com/academic/agricola)
* [ASFA](http://proquest.libguides.com/asfa) (Aquatic Sciences & Fisheries)
* [AWIC](http://awic.nal.usda.gov/) (Animal Welfare Information Center)
* [Web of Science](http://apps.webofknowledge.com/WOS_GeneralSearch_input.do?product=WOS&search_mode=GeneralSearch&SID=4ACiDOUJhIu9abf6lsI&preferencesSaved=)

### Table: Literature Search [ ]  Not required

|  |  |  |  |
| --- | --- | --- | --- |
| **Database** | **Search Date** | **Year Range** | **Keywords / Search Strategy** |
|           |       |       |       |
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Additional Information:

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## Participants – Experience & Training

### IACUC Participant Tables

All those who work with animals must first become knowledgeable in the fundamental principles of animal care & use, and related oversight requirements. Participants must also develop the necessary knowledge and techniques to work with the species and project elements described in this protocol. *[Where is this requirement described?](https://www.nap.edu/read/12910/chapter/3%22%20%5Cl%20%2215)*

**As PI**, I will ensure the safety and welfare of all animals and participants involved in this work.

      Participants will be provided with appropriate Protocol-specific education, training, and oversight

      Participants currently meet the role requirements and skill sets marked below

      Training records for each participant will be maintained and updated

Each IACUC participant must complete the three (3) prerequisites below:

**IACUC and Animal Regulations Training**

1. [Working with the IACUC](https://www.citiprogram.org/) ([CITI](https://about.citiprogram.org/en/homepage/))

**Animal Exposure Program (AEP) clearance** – initial enrollment and/or active status

1. EH&S: [Animal Handler Safety Training](http://oregonstate.edu/ehs/bio/animal-handler)
2. OCM: [Animal Exposure and Health Review](http://occupationalhealth.oregonstate.edu/animal-exposure)

For the **Animal Procedure Categories** below, indicate the level of participant expertise using the following abbreviations:

**[blank]**: a non-response indicates that the participant will not perform these procedures

**1** = **novice** - training not complete for this technique, performs **under supervision**

**2** = **intermediate** - skill set acceptable to perform this technique **independently**

**3** = **proficient** - expertise developed in this technique - able to **assist and train others**

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| **Principal Investigator (PI)** | **Additional Roles (***check all that apply***)** |
| Name:     Email:      Phone:     Home Department:     [ ]  OSU Employee[ ]  OSU Student[ ]  Non-employee[ ]  Other (*specify below*) | [ ]  Grant/Award PI[ ]  Course Instructor[ ]  Daily Animal Health Reporter [ ]  Facility/Lab Manager[ ]  Trainer-Animal Welfare, Handling, Procedures[ ]  Trainer-Project Hazards & Safety Plans[ ]  Subject Matter Expert (SME) (*specify below*)[ ]  Other Role (*specify below*) |
| *Additional Information*: |
|       |
| **Species listed on Protocol** |
|  Knowledge and experience level for all species listed on this protocolIf current level is variable between species on this protocol, summarize differences below:      |
| **Animal Procedure Categories (***click all that apply***)**  |
|  Animal Care & Husbandry Capture (*field studies*) Handling & Restraint Identification/Marking/Tagging Breeding Transport Behavioral Testing Administration of Substances Blood/Fluid/Tissue Collection |  Animal Monitoring for Distress/Pain/Endpoints Analgesia/Anesthesia/Chemical Restraint Minor Surgery Major Surgery Surgical Support Recovery Support Euthanasia Other (*specify below*)      |

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| --- | --- |
| **Participant** | **Roles (***check all that apply***)** |
| Name:     Email:      Phone:     Department:     [ ]  OSU Employee[ ]  OSU Student/Grad/Post-Doc[ ]  Non-employee[ ]  Other (*specify below*) | [ ]  Co-PI [ ]  Course Instructor[ ]  IACUC Contact[ ]  Daily Animal Health Reporter [ ]  Facility/Lab Manager[ ]  Trainer-Animal Welfare, Handling, Procedures[ ]  Trainer-Project Hazards; Safety & Emergency Plans[ ]  Subject Matter Expert (SME) (*specify below*)[ ]  Other Role (*specify below*) |
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| Name:     Email:      Phone:     Department:     [ ]  OSU Employee[ ]  OSU Student/Grad/Post-Doc[ ]  Non-employee[ ]  Other (*specify below*) | [ ]  Co-PI [ ]  Course Instructor[ ]  IACUC Contact[ ]  Daily Animal Health Reporter [ ]  Facility/Lab Manager[ ]  Trainer-Animal Welfare, Handling, Procedures[ ]  Trainer-Project Hazards; Safety & Emergency Plans[ ]  Subject Matter Expert (SME) (*specify below*)[ ]  Other Role (*specify below*) |
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| Name:     Email:      Phone:     Department:     [ ]  OSU Employee[ ]  OSU Student/Grad/Post-Doc[ ]  Non-employee[ ]  Other (*specify below*) | [ ]  Co-PI [ ]  Course Instructor[ ]  IACUC Contact[ ]  Daily Animal Health Reporter [ ]  Facility/Lab Manager[ ]  Trainer-Animal Welfare, Handling, Procedures[ ]  Trainer-Project Hazards; Safety & Emergency Plans[ ]  Subject Matter Expert (SME) (*specify below*)[ ]  Other Role (*specify below*) |
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### OSU Safety and Compliance Committees

Projects may require review/approval from additional OSU [Safety](http://oregonstate.edu/ehs/safety-committees) or [Research Integrity](http://research.oregonstate.edu/ori) Committees prior to IACUC approval. For your convenience, common partner committees are listed below:

|  |
| --- |
| [**Safety (EH&S) Committees**](http://oregonstate.edu/ehs/safety-committees)[**Research Integrity Committees**](http://research.oregonstate.edu/ori) |
| IBC | HRPP/IRB |
| Chemical Safety     | Conflict of Interest |
| Radiation Safety      | International/Export Control |
| Scientific Diving     | USI (drone use) |
| Scientific Boating |  |

# Supplemental Section(s)

Submit this form with applicable supplements. **[ ]** Not applicable

* Supplement A: Field Studies
* Supplement B: Anesthesia, Monitoring, and Surgery
* Supplement C: PI-managed Satellite Animal Areas
* Supplement D: Breeding
* Supplement E: Owner Consent Form