This slideshow was created to assist University of Texas at Austin researchers in writing and submitting an animal use protocol utilizing eProtocol IACUC.
Create a NEW animal use protocol (AUP)

Enter your unique protocol title

Make sure IACUC is selected

AUP should be selected for animal work done at UT or in the field.

Note: PI eligibility information can be found in IACUC Policy #2.0 Who can be a Principal Investigator?

Info for person completing the form will populate here. Info comes from the UT Directory.

Note: eProtocol will not allow you to submit without all completed training.
In addition to the PI, only those listed in these 3 roles will be able to submit protocol changes and order animals.

Note: UT Policy requires the use of UT email addresses for official university communications.
Click on “Create” to save. Your protocol is now created in the system and will have a unique protocol number assigned.
The draft protocol has been created. Each time you open it to edit, the protocol will open on the personnel page and this menu will be available.

Per UT Austin policy, personnel must list their UT-email address here.

NOTE: PI’s must check “YES” here in order to meet their obligations as a PI.
Species

Click “Add.” A pop-up window will appear.

Choose the species you will be working with by common name.

NOTE: More than 1 species/protocol is allowed UNLESS extensive and/or dissimilar work is being done with each species.

NOTE: If the species you want to work with is not listed, email the IACUC and we will add it for you.
NOTE: Remember to frequently save your work!

Using the text boxes and drop down lists available, indicate the specifics of each species.

Enter the total number of animals you plan to use for each species. All animal numbers must be consistent throughout protocol (i.e. in Species, Rationale, Procedures, etc.). Each animal must be accounted for in the protocol.
Are You Using?

These questions are for teaching protocols only. Select “NO” if your protocol is not for teaching.

Are you collaborating with other institutions/companies? For example: sending/receiving tissues or test agents, personnel coming to UT to assist, etc. Work may require a memorandum of understanding (MOU). Contact ORSC for more information.
Add any biological materials or animal products to be used here. Examples include: Xenografts, tumors, bacteria, etc.

You need IBC approval for biosafety and transgenic work (including use of transgenic animals). IBC approval can be pending at the time of IACUC approval.

Since Texas DPS licenses are no longer relevant, you can leave this field blank.

The Toxic Agents section should be reserved for agents that require special precautions while handling animals that have been exposed to them.
Funding Sources – Sponsored Projects

You will only be able to see funding options for personnel listed on the protocol.

Funding- Sponsored Projects connects to the Office of Sponsored Projects database (RMS) and populates the following information:

NOTE: Remember to attach your full federal grant proposal(s) in the Attachments section!

You will only be able to see funding options for personnel listed on the protocol.
IACUC approval letters state, “This Approval DOES NOT VERIFY congruence with any grant funding source. Please contact the IACUC to request verification of congruence for grant award submissions.”

IACUC staff perform congruency for federal grants and provide a separate “Congruence Confirmation Letter” to the PI. Notify ORSC if you need this letter for a Just-In-Time request.
Funding Sources – Other

If funding does not go through OSP, list the information here. Source and Account Number are required information.

NOTE: The IACUC charges review fees for animal work paid for via a business contract. Fees and information can be found on the "IACUC Dates and Fees" webpage.

NOTE: Agencies of the DOD utilize a two-step approval process. See IACUC Procedure 8.2 or contact ORSC for more information.
Funding Sources – None

If there is no funding at this time (i.e. if you are applying for funding), please provide that information in this section. Remember to update via amendment and/or at the time of annual review.
Rationale

Remember to use language that is understandable to a layperson in 1a and 1b. Imagine you are describing your work to a classroom of high school seniors.

Think of the 3 R’s as you complete this portion of the protocol:
1. Reduction,
2. Refinement,
3. Replacement

Justify your animal numbers in this section. Remember it must be consistent with animal numbers elsewhere in the protocol!
The “Procedure Type” you select will determine what kinds of questions you are asked.

If you are administering a drug under anesthesia, it is best to create 2 procedures:

1. Admin of Drugs/Substances to describe and list the agents and
2. Non-invasive Procedure Under Anesthesia to describe the anesthesia and anesthetists.

Reference the 2 procedures within each description.
### Procedures continued- USDA Pain and Distress Categories

<table>
<thead>
<tr>
<th>Pain/Distress Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>USDA Category B</td>
<td>Animals that will be bred or purchased for breeding, but not used for experiments. This includes breeders, young that cannot be used because of improper genotype or gender, and any other animals that will not have any research procedures performed on them or participate in research studies. Note: If tail snips are necessary for genotyping, this category is not appropriate.</td>
</tr>
<tr>
<td>USDA Category C</td>
<td>Animals that will undergo procedures that involve no or only very brief pain or distress, with no need for or use of pain relieving drugs. Examples include observational studies, most intravenous and parenteral injections of non-irritating agents, most blood collections from peripheral vessels, and the collection of cells and/or tissues from animals after euthanasia has been performed.</td>
</tr>
<tr>
<td>USDA Category D</td>
<td>Animals that will undergo procedures involving potential pain or distress that is relieved by appropriate anesthetics, sedatives, or analgesics. Examples include minor and minor surgery performed under anesthesia (survival or non-survival), tissue or organ collections prior to euthanasia, painful procedures performed under anesthesia (such as retro-orbital blood collection in rodents), prolonged restraint accompanied by tranquilizers or sedatives, and experiments involving infectious or other hazardous materials in animals that have provisions for immediate euthanasia if they become sick to effectively prevent pain and/or suffering. If an endpoint is used that involves significant pain or distress, consideration should be given to putting animals into Category E.</td>
</tr>
<tr>
<td>USDA Category E</td>
<td>Animals that will undergo procedures in which pain or stress is NOT relieved with the use of anesthetics, analgesics, tranquilizers, or by euthanasia. Examples include studies in which animals are allowed to die without intervention (e.g., LD50, mortality as an endpoint), studies that allow endpoints that are painful or stressful, addictive drug withdrawals without treatment, pain research, and noxious stimulation.</td>
</tr>
</tbody>
</table>

Regardless of species used, you must select the pain/distress category for each procedure.

A UT Austin veterinarian must be consulted and an Alternative Literature Search must be conducted for any Category D or E procedures.

Note: This table can be found in all procedures by clicking the “Pain/Distress Category” link in the Procedure Details.
Procedures continued- “Administration of Drugs or Test Substances”

Note: If you use multiple species in your protocol, make sure the correct one is selected.

Make sure this number is in line with animal numbers referenced in other parts of the protocol!

eProtocol will only allow you to put in the maximum number stated under Species.

If you are new and don’t have assigned vivarium space yet, put TBD as the room number but remember to update the protocol when you do have assigned space.
Procedures continued - “Administration of Drugs or Test Substances”

Procedure Description
Details should be provided here, including drug/test substance name, dose, route of administration, and frequency of administration.

Describe when this will occur in relation to other procedures (if applicable).

List any significant effects this procedure may have on the health or behavior of the animals. Describe both expected outcomes and potential complications.

If there are no expected health or behavior complications, then state that.

Describe post procedure monitoring that will be performed.
How often and for how long will animals be monitored? What will be monitored?

What criteria will be used to determine if animals exhibiting clinical or behavioral changes should be euthanized?
Give specifics here.

Mandatory Guidelines
Guidelines for the Social Housing and Environmental Enrichment of Laboratory Rodents and Rabbits

Agents
Click “Add” to select agents from a drop down. If your agent is not in the list, select ‘Other’ to manually input your agent.

Note: these are all required fields.

Mandatory guidelines will appear here.
Procedures continued- “Behavioral Testing”

Full description of the behavioral test and related procedures. How long is each testing period? Is there a plan to gradually acclimate the animals to the apparatus? Is there any potential for distress associated with testing?

Animals will be tested on this type of apparatus because it will induce this type of behavior. The testing time will be x minutes. Prior to testing, animals will be acclimated on the apparatus by following this plan. Animals will not be acclimated on the apparatus because it is being used to induce x behavior. More description about the procedure as needed.

Mandatory Guidelines

Guidelines for the Social Housing and Environmental Enrichment of Laboratory Rodents and Rabbits
Procedures continued- “Breeding and Genotyping”

Note: If you will be performing tail or toe clipping for genotyping, you must agree with the IACUC Guidelines describing this.
Procedures continued- “Surgical Procedure”

You can select from survival or terminal here.

Only those with experience will be approved to train others. The trainer must be listed as a surgeon as well.

You can select personnel listed in Personnel Information as surgeons.
As with surgeons, only those with experience can train.

Be as specific as you can be - % weight loss, hunched position, sunken eyes, dehydrated, etc.
Your post-operative records must match what is stated here!
Any “other” drugs or agents may be listed here. This includes experimental agents.
Procedures continued- “Other”

Note: This procedure type may be used if your procedure does not fall under any of the other categories.

For example, this procedure type may be used for field collections.

Select “Offsite Field Study” if you will be working off UT’s main campus. You can designate “Wild” or “Field” as the procedure location.

For field studies, if you will be working with multiple species, you don’t need to add the same procedure for each. Simply acknowledge that this procedure will be used with all (or some) species on the protocol.

A table of animal use in procedures may be helpful as an attachment if you do this.
Alternative searches are required for each category D and E procedure, regardless of the species used.
As per the United States Department of Agriculture, Animal and Plant Health Inspection Service, Animal Care (USDA/APHIS/AC) Policy 12 (Consideration of Alternatives to Painful/Distressful Procedures), when a database search is provided the narrative must, at a minimum, include:

1. the names of the databases searched;
2. the date the search was performed;
3. the period covered by the search; and
4. the keywords and/or the search strategy used.

Once the search has been performed, the PI should provide the number of hits obtained from the search and describe the search results. In other words, how did the results of the search lead the PI to conclude that there is no alternative to further reduce, replace or refine this potentially painful/distressful procedure?
If you have listed a Category E procedure on your protocol, you will be required to answer this question.
Provide a summary to help reviewers understand the flow of experiments. You may attach a flow chart and/or a breakdown of animal numbers by procedure if that would be helpful. Reviewers may request this if procedure relationships are unclear or hard to understand.

This section is required if you are performing multiple major survival surgeries (USDA definition= any surgical intervention that penetrates and exposes a body cavity or any procedure which produces permanent impairment of physical or physiological functions).
Then click on Husbandry

Note: this list should only contain names under Personnel Information

For example:
- Single housing animals
- Special diets or feeding system
- Food/fluid restricting (also complete table)
- Biohazardous waste produced and how it will be handled and disposed of
- Animal identification methods
- Altered light cycles

If you will use tail or toe clipping, agree to the “Guidelines for Tail and Toe Clipping Rodents” in the Guidelines section or disagree and describe what changes to standard procedures you will implement.

If you will transport animals, agree to the “Guidelines for the Transportation of Animals” in the Guidelines section or disagree and describe what changes to standard procedures you will implement.
**Non-standard Experimental Requirements**

If you will use food/fluid restriction, agree to the “Guidelines for the Use of Food or Fluid Restriction” in the Guidelines section or disagree and describe what changes to standard procedures you will implement.

If you will not implement any of these non-standard experimental requirements, then check the boxes for “none.”

<table>
<thead>
<tr>
<th>Species</th>
<th>Food Restriction</th>
<th>Length of Restriction</th>
<th>Fluid Restriction</th>
<th>Length of Restriction</th>
<th>Reason for Restriction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mus musculus (ARC)</td>
<td>On</td>
<td>16 hours</td>
<td></td>
<td></td>
<td>Reason for restriction</td>
</tr>
</tbody>
</table>

**Restraint of Conscious Animals**

If you will use food/fluid restriction, agree to the “Guidelines for the Use of Food or Fluid Restriction” in the Guidelines section or disagree and describe what changes to standard procedures you will implement.

Note: short restraint for injections or transferring cages does not need to be described in this section.

<table>
<thead>
<tr>
<th>Species</th>
<th>Type of restraint (manual, commercial, both)</th>
<th>Description of training on/accimation to restraint and plan if animals do not adapt</th>
<th>Length of restraint</th>
<th>Observation intervals of restrained animals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mus musculus (ARC)</td>
<td>Manual</td>
<td>Describe training plan for animals that undergo prolonged restraint and state animals that do not acclimate will be removed from the study. If this is not possible due to experimental design, describe that.</td>
<td>x hour(s)</td>
<td>Continuous</td>
</tr>
</tbody>
</table>

**Considerations of alternatives to prolonged restraint and additional description**

Indicate if alternatives to prolonged restraint were considered.
If you will not implement these non-standard experimental requirements, then check the box for “none.”

Here are a few examples of descriptions that should be provided when applicable.

<table>
<thead>
<tr>
<th>Description</th>
<th>Non-Standard Housing Requirements</th>
<th>None</th>
</tr>
</thead>
<tbody>
<tr>
<td>Housing USDA covered species outside the central vivarium (e.g. labs) for 12 hours or non-USDA covered species for 24 hours is considered “satellite housing.” If applicable, state the building/room number, how long the animal will be housed there, and what procedures will take place. Additional approvals are needed for this.</td>
<td>Non-Standard Housing Requirements</td>
<td>None</td>
</tr>
<tr>
<td>Housing USDA covered species outside the central vivarium (e.g. labs) for 12 hours or non-USDA covered species for 24 hours is considered “satellite housing.” If applicable, state the building/room number, how long the animal will be housed there, and what procedures will take place. Additional approvals are needed for this.</td>
<td>Non-Standard Housing Requirements</td>
<td>None</td>
</tr>
</tbody>
</table>
If none of these apply to your work, select “No”.

Current standards for the veterinary care of research animals state that pharmaceutical grade medications should be used for routine medical treatment. If you use non-pharmaceutical grade drugs (including experimental compounds) in your project, you should describe here and ‘disagree’ with the IACUC Guidelines for the Use of Drugs and Chemicals in Animal Research within the protocol form.

Single housing
Will animals be individually housed?
- Yes
- No

If yes, provide a justification for why some or all animals must be singly housed. Include the length of time animals may be singly housed and if they will have visual, auditory, olfactory, or tactile contact with compatible conspecifics. Alternatively, state if you are using a nonsocial species. For mammals, include what environmental enrichment will be provided or justify if it will not be provided.

Non-pharmaceutical grade
Will non-pharmaceutical-grade compounds be used to provide anesthesia, analgesia or clinical treatments (e.g., antibiotics, hormones, anesthetics premedication, etc.)?
- Yes
- No

Will non-pharmaceutical-grade compounds be used to accomplish the scientific aims of the study?
- Yes
- No

If yes to either, list the compounds and explain why they must be used (i.e. pharmaceutical grade is not available, not concentrated enough, has vehicle or incipient ingredients not compatible with study aims, not equivalent to replicate past studies, exorbitantly priced, etc.).

List the compounds here and explain why they must be used. Also describe how purity and sterility are ensured prior to administration (are they sterile filtered, what are they suspended in, how long are they kept).
Euthanasia

Click on Protocol Information

Then click on Euthanasia

You can add the species and then select the primary and secondary euthanasia methods from the drop-down options.

Mandatory Guidelines will pop up depending on what you have selected.

Also see the AVMA’s Guidelines for the Euthanasia of Animals for appropriate euthanasia methods of the species selected.

Delete an entry by selecting the box next to the species and pressing delete.

Once you add the species, the box below will pop up. Select the methods and then press ‘Save.’
Click on Protocol Information

Then click on Attachments

Some examples of documents that should be uploaded into this section when applicable include:

- Full grant application for federal funding
- SOP for toxic agents
- A table describing animal numbers
- Articles that were cited in the Alternative Search (note: citations may be listed in that section OR attached here)
- Wildlife permits
- Pictures of a different behavioral apparatus
These guidelines have been written to assist faculty, staff, and students in performing vertebrate animal procedures in a humane manner and complying with pertinent regulatory requirements. Under some circumstances deviations from these procedures may be indicated but such variances must be approved in advance by the IACUC.

Click on the guideline link and it will pop up. Guidelines can also be found on the IACUC website.
You can agree with, disagree with, or select ‘not applicable’ for guidelines.

If you disagree with a guideline, you must explain what changes to those standard procedures you would like to request for the protocol and why.
In order to submit an animal use proposal (AUP) to the IACUC for review, the Principal Investigator must certify to these statements.

eProtocol will not allow you to submit unless this box is checked.
Check for Completeness

Any outstanding items will be listed in the pop-up “Protocol Form Completeness Report.”

Note: You will be unable to submit the protocol until all incomplete items are complete, including training!

<table>
<thead>
<tr>
<th>Personnel needing Training</th>
<th>ID of Required course</th>
</tr>
</thead>
<tbody>
<tr>
<td>PI name</td>
<td>2192</td>
</tr>
</tbody>
</table>

Please Check either Yes or No for all agents in Are You Using? Section.
Please fill in Procedure Description Section for other.
Please fill in Procedure Description Section for added.
Please fill in Procedure Description Section for other.
Please fill in Procedure Description Section for Title.
Please add at least one Search Data (Justification for Pain/Distress Category 'D' or 'E').
Please fill. Please describe the sequence and timing of the manipulations in Procedure Relationship Section.
Review Mandatory Guideline: Guidelines for the Use of Drugs and Chemicals in Animal Research.
Complete the Certification Section.
Once your protocol is ready for submission, press “Submit Form.” A pop-up will appear:

Note: Again, eProtocol will not allow you to submit if there are unresolved issues.
Press ‘Print View’ if you want to print a copy of your protocol or have a PDF version to search in.

A window will pop up asking which sections you want in the PDF. Check the sections you want, or leave all checked for the full protocol.
Event History

This section will give you a history of the protocol with dates. You can also download approval letters from this section.

Any email correspondence (reminders, etc.) will appear here.
Contact Us with Questions!

Additional information and helpful tips for after approval can be found on our website: https://research.utexas.edu/ors/animal-research/eprotocol-iacuc/

See IACUC review procedures here!: https://research.utexas.edu/ors/animal-research/iacuc-review-procedures/

In you need further clarification or assistance, feel free to contact ORSC. voice: (512) 471-8871 | email: IACUC@austin.utexas.edu