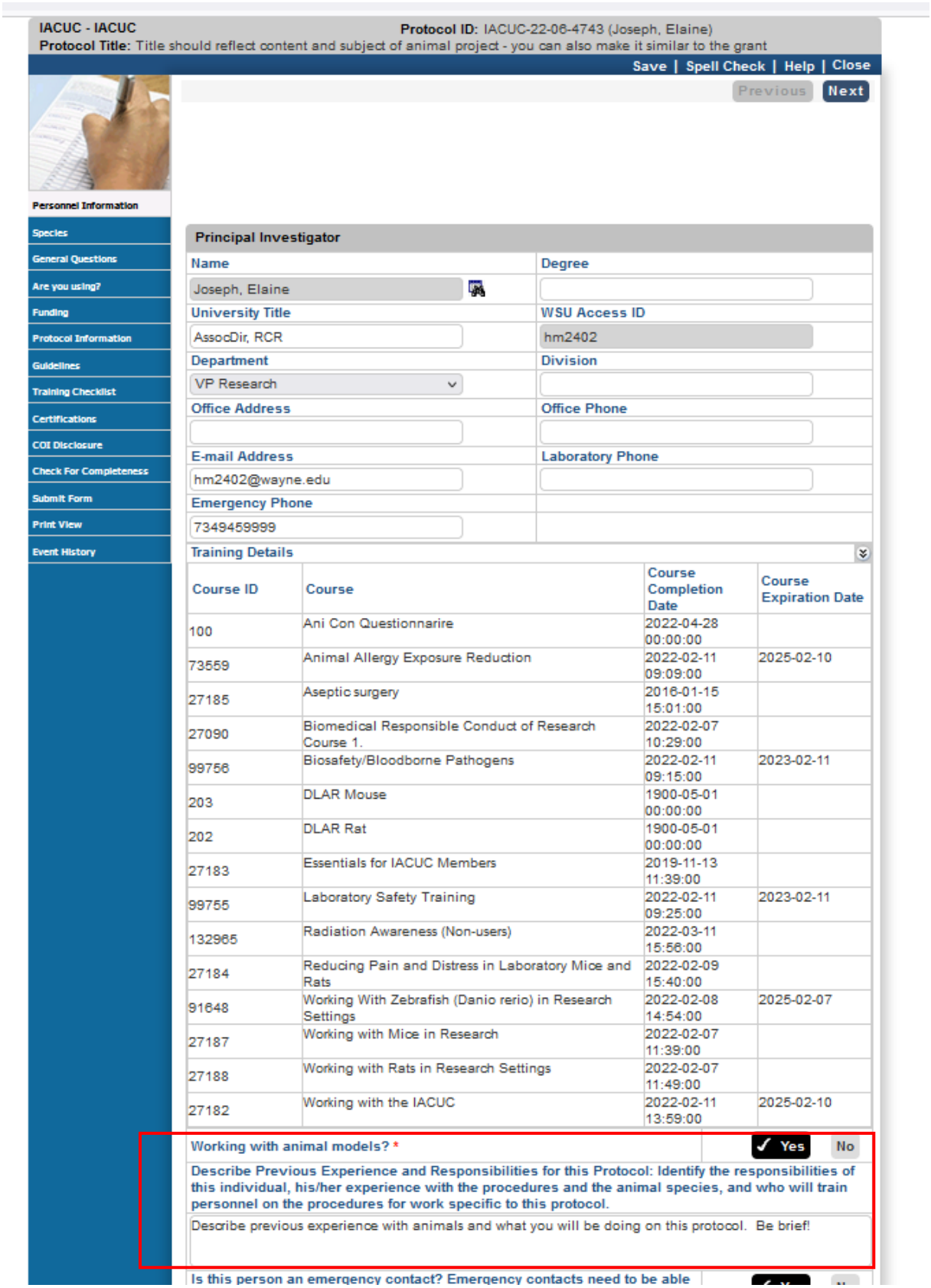
ePROTOCOL IACUC SAMPLE PROTOCOL

What follows is an example of types of answers in a “Sample Protocol”. They are meant as examples and may not apply to all protocols.



IACUC - IACUC **Protocol ID:** IACUC-22-06-4743 (Joseph, Elaine)
Protocol Title: Title should reflect content and subject of animal project - you can also make it similar to the grant

Save | Spell Check | Help | Close

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Personnel Information
Species
General Questions
Are you using?
Funding
Protocol Information
Guidelines
Training Checklist
Certifications
COI Disclosure
Check For Completeness
Submit Form
Print View
Event History

Principal Investigator

Name	Degree
Joseph, Elaine	
University Title	**WSU Access ID**
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Department	**Division**
VP Research	
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Training Details

Course ID	Course	Course Completion Date	Course Expiration Date
100	Ani Con Questionnarire	2022-04-28 00:00:00	
73559	Animal Allergy Exposure Reduction	2022-02-11 09:09:00	2025-02-10
27185	Aseptic surgery	2016-01-15 15:01:00	
27090	Biomedical Responsible Conduct of Research Course 1.	2022-02-07 10:29:00	
99756	Biosafety/Bloodborne Pathogens	2022-02-11 09:15:00	2023-02-11
203	DLAR Mouse	1900-05-01 00:00:00	
202	DLAR Rat	1900-05-01 00:00:00	
27183	Essentials for IACUC Members	2019-11-13 11:39:00	
99755	Laboratory Safety Training	2022-02-11 09:25:00	2023-02-11
132965	Radiation Awareness (Non-users)	2022-03-11 15:56:00	
27184	Reducing Pain and Distress in Laboratory Mice and Rats	2022-02-09 15:40:00	
91648	Working With Zebrafish (Danio rerio) in Research Settings	2022-02-08 14:54:00	2025-02-07
27187	Working with Mice in Research	2022-02-07 11:39:00	
27188	Working with Rats in Research Settings	2022-02-07 11:49:00	
27182	Working with the IACUC	2022-02-11 13:59:00	2025-02-10

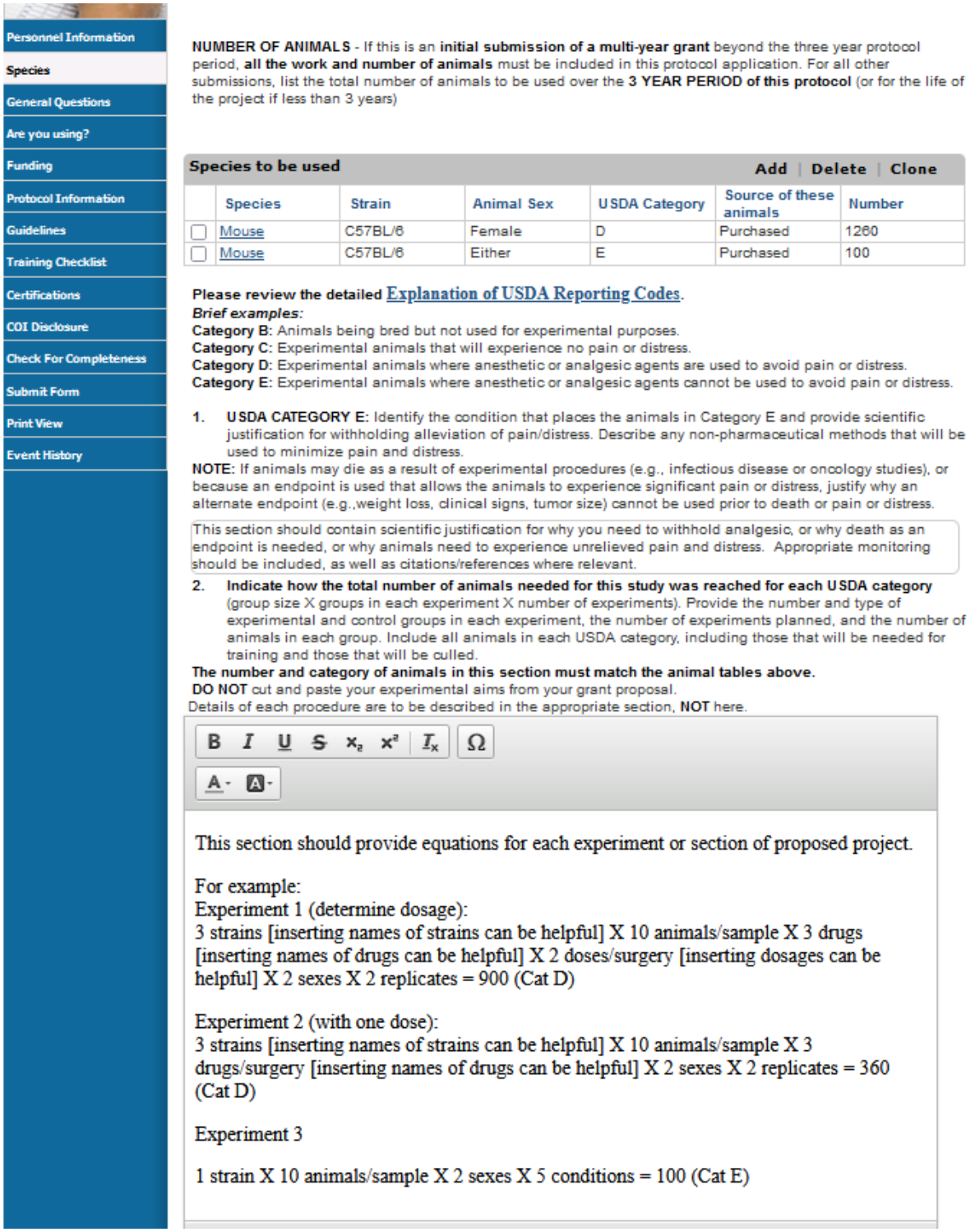
Working with animal models? * ✓ Yes No

Describe Previous Experience and Responsibilities for this Protocol: Identify the responsibilities of this individual, his/her experience with the procedures and the animal species, and who will train personnel on the procedures for work specific to this protocol.

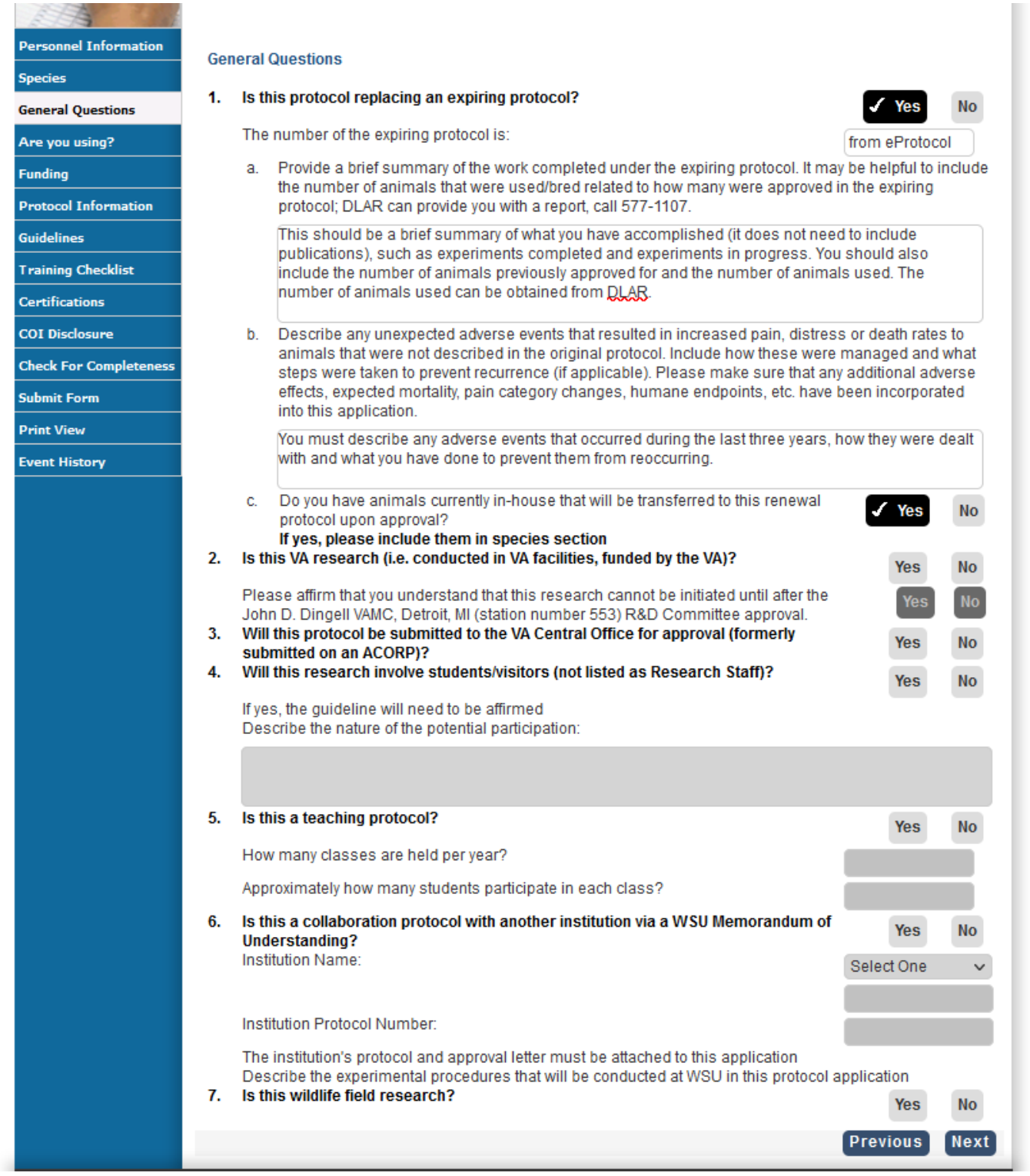
Describe previous experience with animals and what you will be doing on this protocol. Be brief!

Is this person an emergency contact? Emergency contacts need to be able

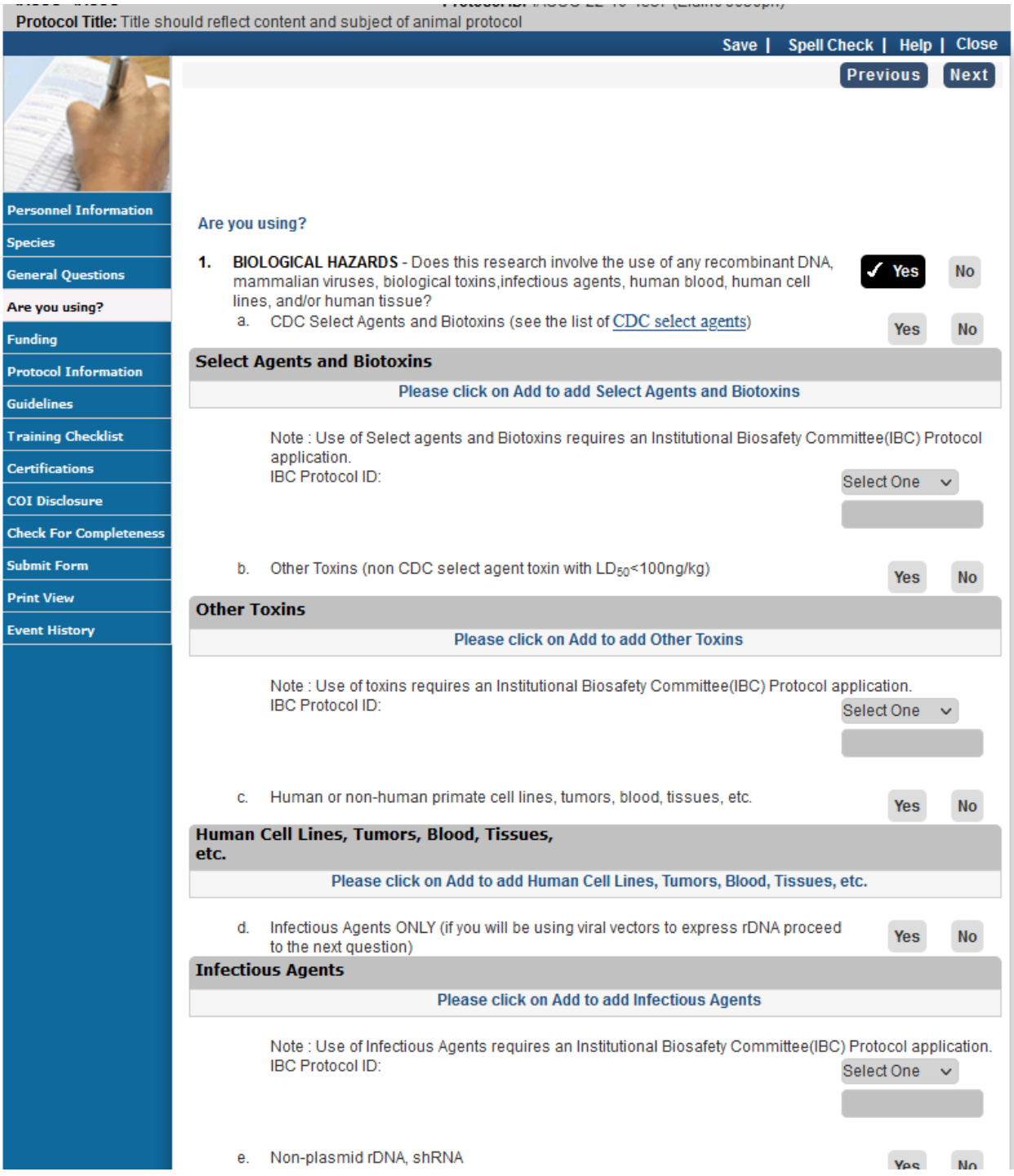
For the Species to be Used, select each species, strain, sex, USDA Category, Source, and type in the number of animals to be used. Be sure to include any animals transferred from expiring protocols and animal animals bred in house. Categorize animals under the highest pain/distress category for all procedures they will undergo. For example, if a mouse will undergo 2 category C procedures, a category D procedure and a category E procedure, the mice should be listed as USDA category E. The total(s) in the table should match the total(s) in Question 2.



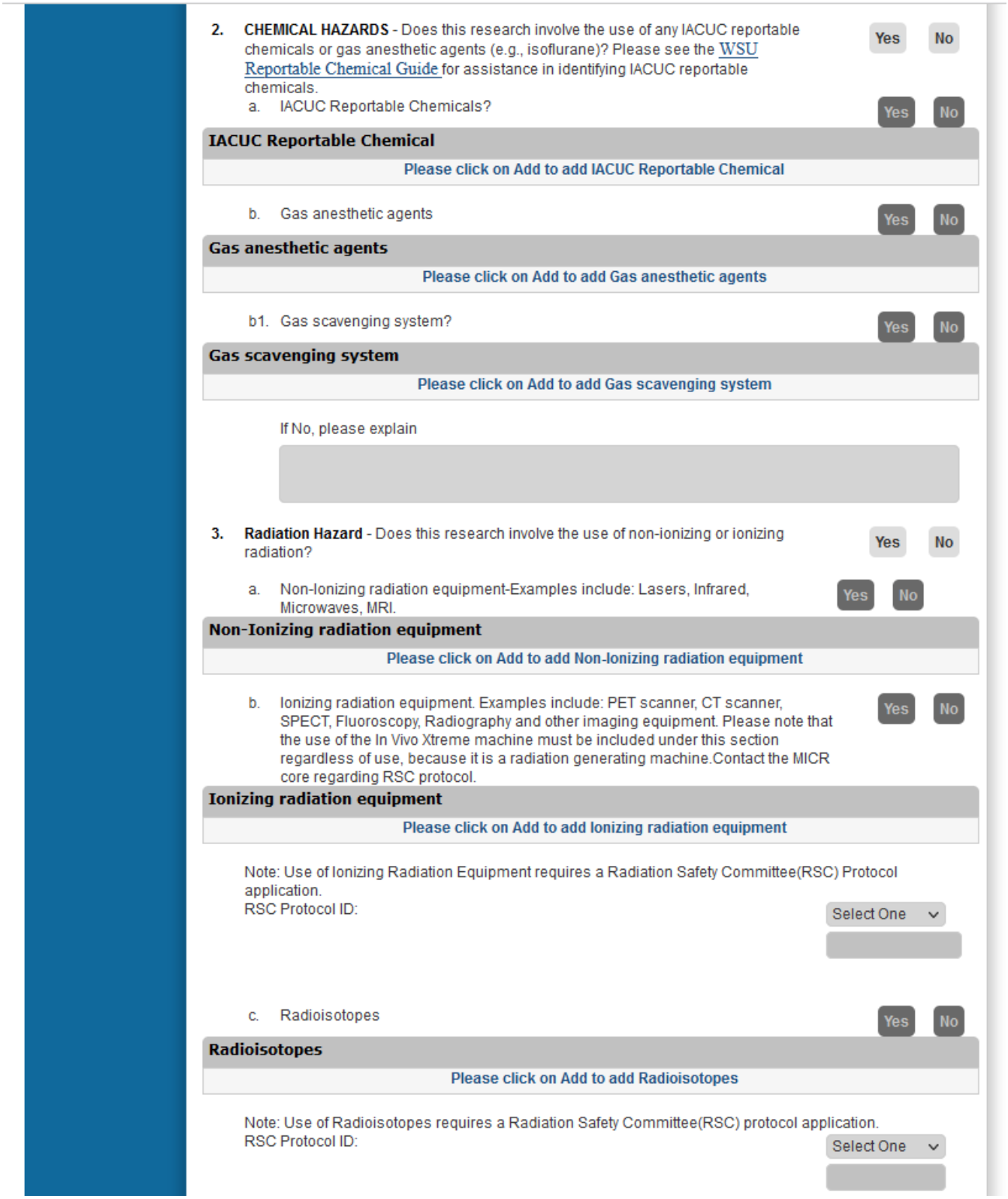
General Questions – see example below for renewal protocols



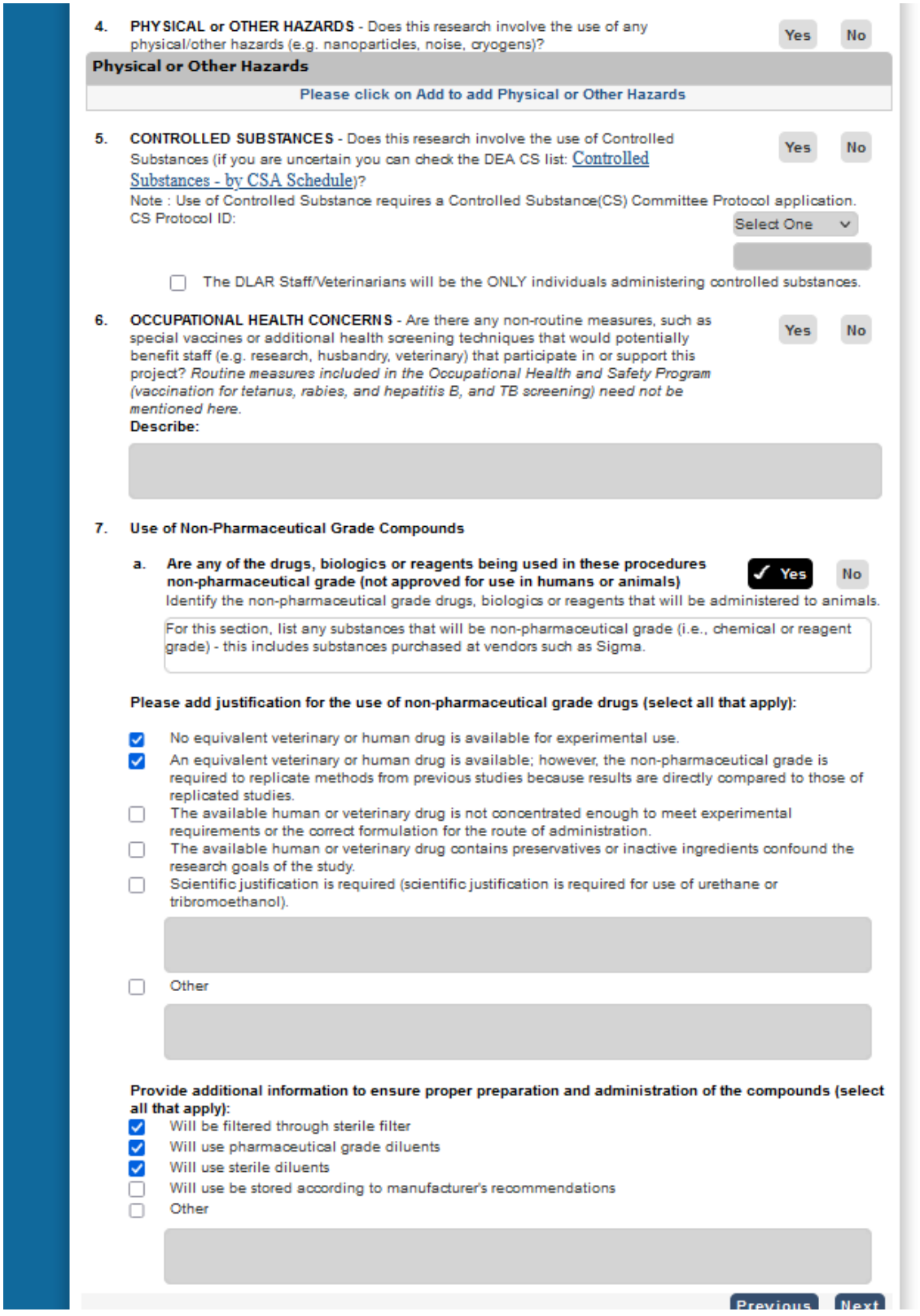
Are You Using Section: If you are using any biological hazards (biological toxins, human cells/blood/tissues, viruses, bacteria, etc.) select use to Question 1. Add the agent below under the appropriate section.



Are You Using Section, cont: If you are using any chemical hazards (i.e., gas anesthesia, chemical drugs that may be hazardous to humans or animals), please list them below in Question 2. If you are not sure if they are hazardous, list them anyway. If you are using radiation hazards (i.e., PET or CT scanners, fluoroscopes, radiography, etc.), list them in Question 3.



Are You Using Section, cont: If you are using Physical hazards (i.e., noise, heat, cold, etc), please add it below. If you are using Controlled Substances (i.e., Ketamine, Ethiqa XR, Buprenorphine, Morphine, etc.), you must have a WSU CS Protocol ID to link to your protocol. The only controlled substance DLAR will administer is Ethiqa XR or buprenorphine. For non-pharmaceutical grade compounds/drugs, see policy and information below.



4. **PHYSICAL or OTHER HAZARDS** - Does this research involve the use of any physical/other hazards (e.g. nanoparticles, noise, cryogens)? Yes No

Physical or Other Hazards

Please click on Add to add Physical or Other Hazards

5. **CONTROLLED SUBSTANCES** - Does this research involve the use of Controlled Substances (if you are uncertain you can check the DEA CS list: Controlled Substances - by CSA Schedule)? Yes No

Note : Use of Controlled Substance requires a Controlled Substance(CS) Committee Protocol application.

CS Protocol ID: Select One

☐ The DLAR Staff/Veterinarians will be the ONLY individuals administering controlled substances.

6. **OCCUPATIONAL HEALTH CONCERNS** - Are there any non-routine measures, such as special vaccines or additional health screening techniques that would potentially benefit staff (e.g. research, husbandry, veterinary) that participate in or support this project? *Routine measures included in the Occupational Health and Safety Program (vaccination for tetanus, rabies, and hepatitis B, and TB screening) need not be mentioned here.* Yes No

Describe:

7. **Use of Non-Pharmaceutical Grade Compounds**

a. **Are any of the drugs, biologics or reagents being used in these procedures non-pharmaceutical grade (not approved for use in humans or animals)** ✓ Yes No

Identify the non-pharmaceutical grade drugs, biologics or reagents that will be administered to animals.

For this section, list any substances that will be non-pharmaceutical grade (i.e., chemical or reagent grade) - this includes substances purchased at vendors such as Sigma.

Please add justification for the use of non-pharmaceutical grade drugs (select all that apply):

- ☑ No equivalent veterinary or human drug is available for experimental use.
- ☑ An equivalent veterinary or human drug is available; however, the non-pharmaceutical grade is required to replicate methods from previous studies because results are directly compared to those of replicated studies.
- ☐ The available human or veterinary drug is not concentrated enough to meet experimental requirements or the correct formulation for the route of administration.
- ☐ The available human or veterinary drug contains preservatives or inactive ingredients confound the research goals of the study.
- ☐ Scientific justification is required (scientific justification is required for use of urethane or tribromoethanol).
- ☐ Other

Provide additional information to ensure proper preparation and administration of the compounds (select all that apply):

- ☑ Will be filtered through sterile filter
- ☑ Will use pharmaceutical grade diluents
- ☑ Will use sterile diluents
- ☐ Will use be stored according to manufacturer's recommendations
- ☐ Other

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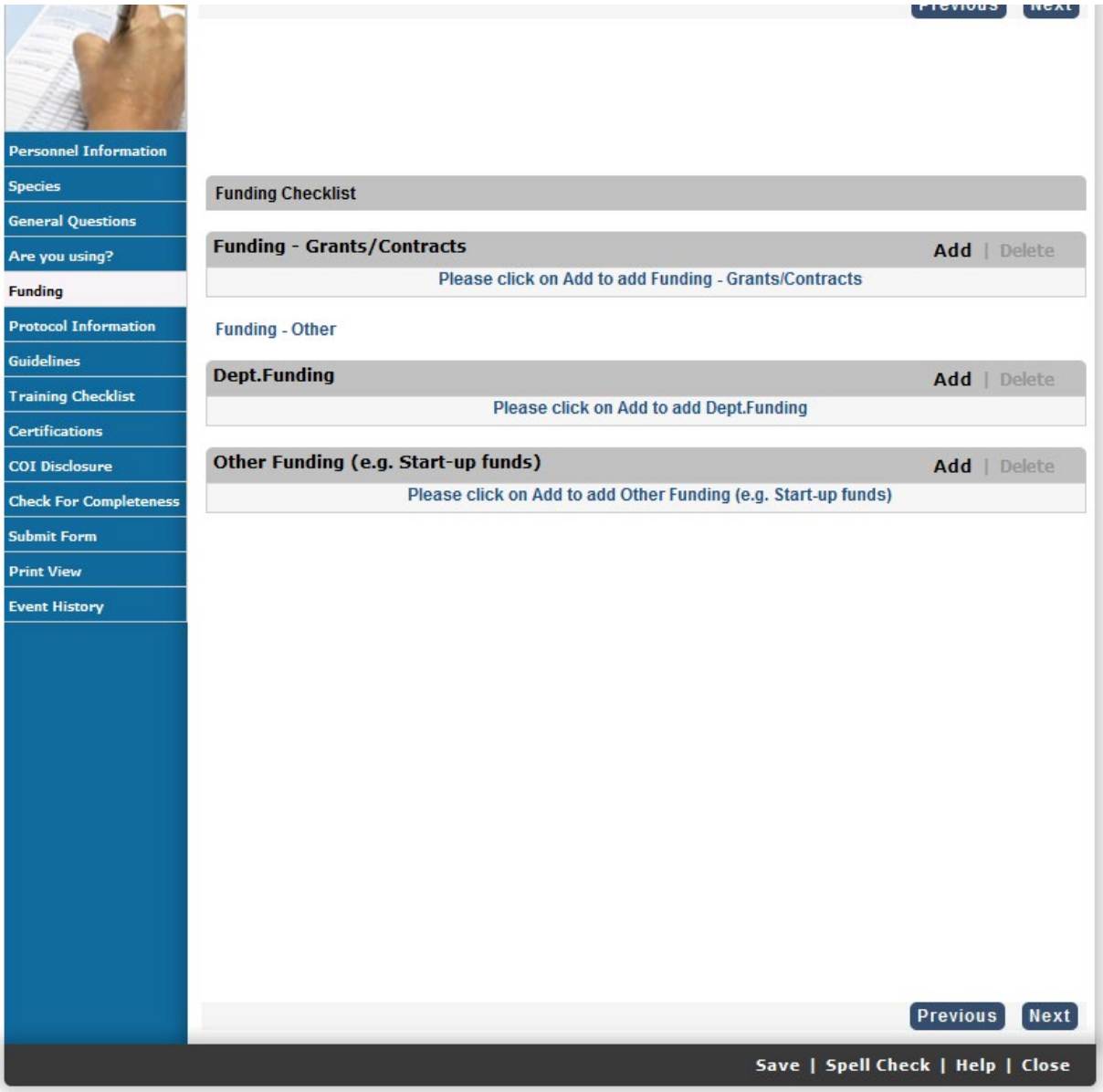
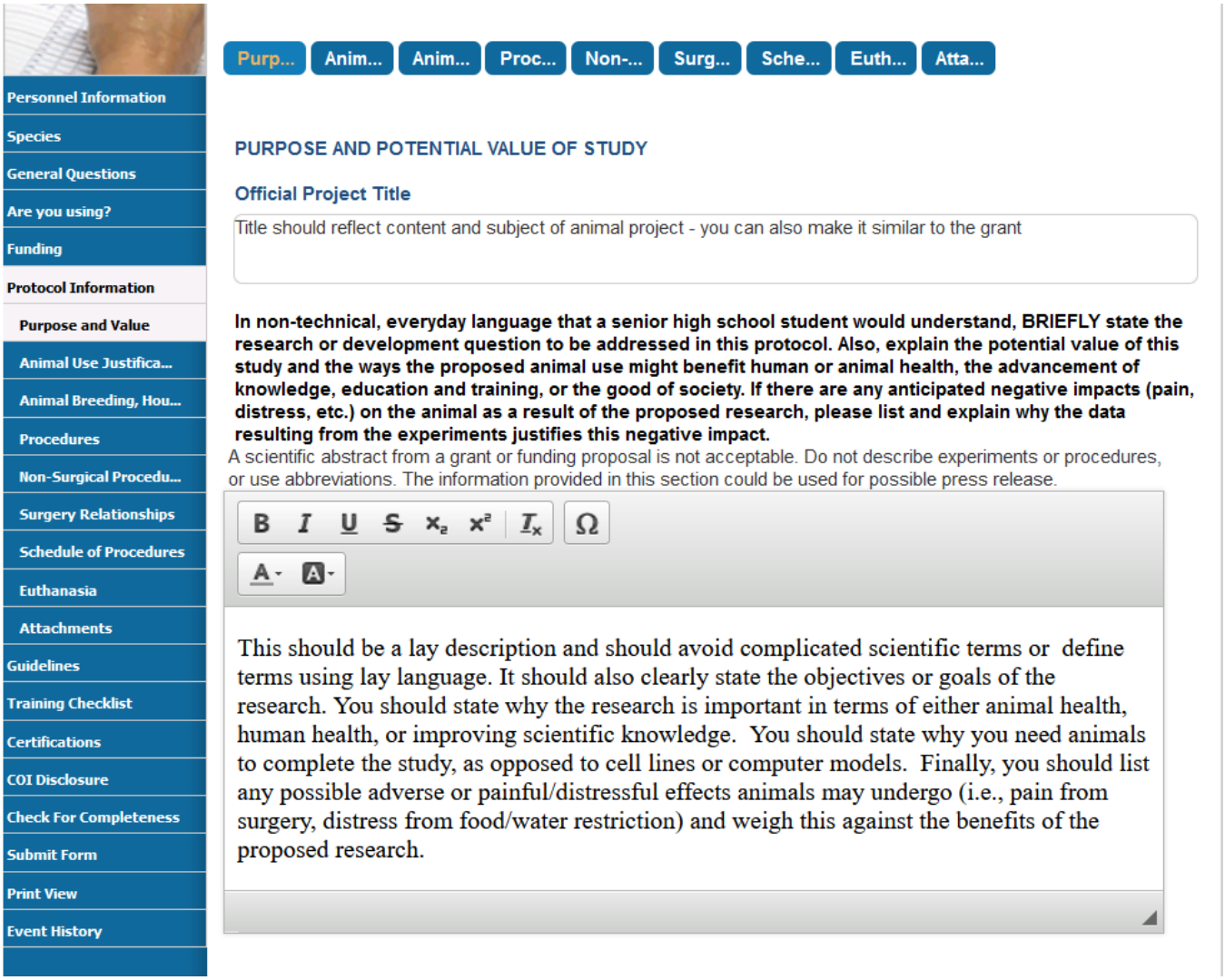
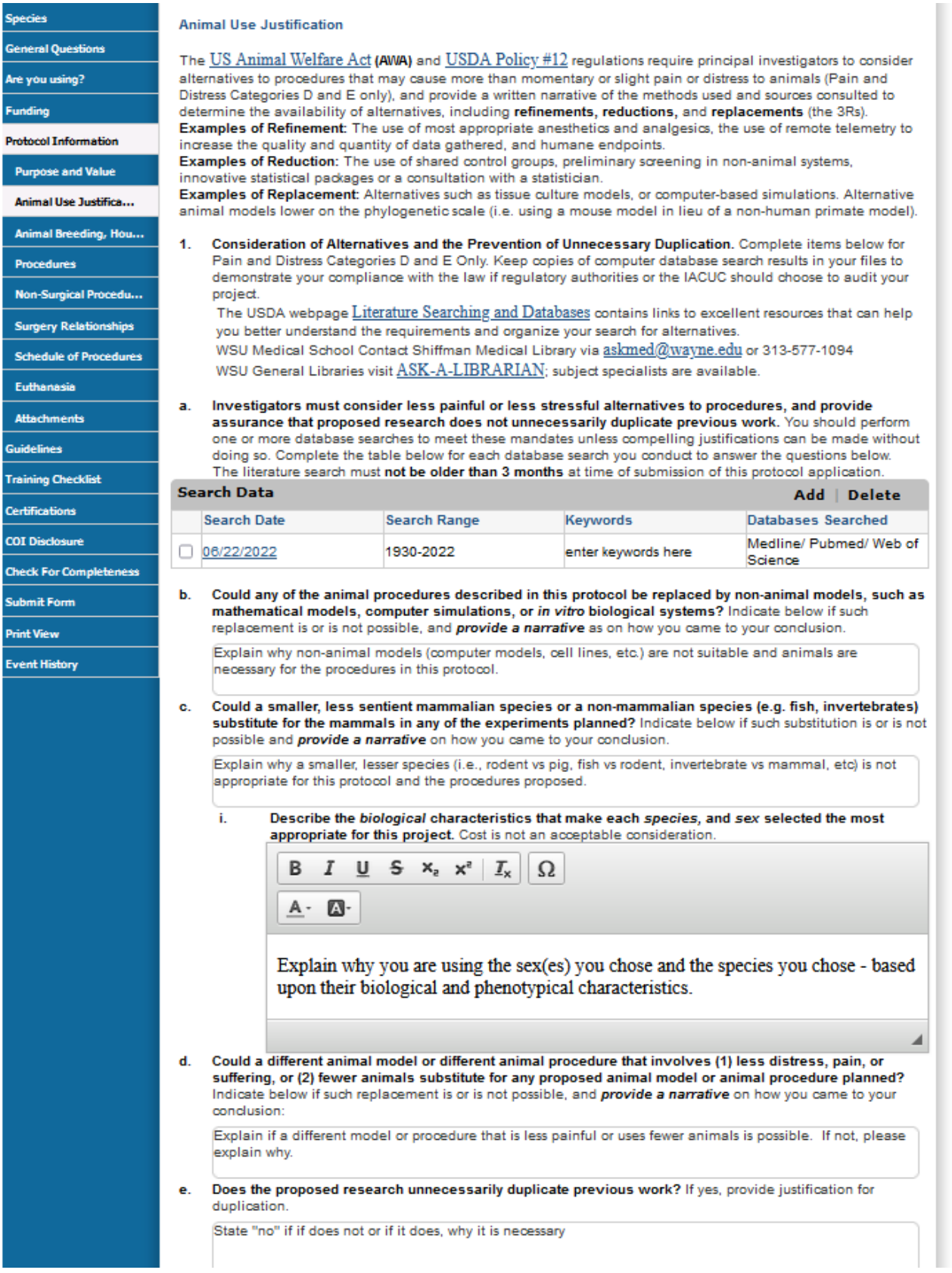
For the Funding Page, add <u>all</u> funding sources for this protocol. This includes internal and external funding sources.



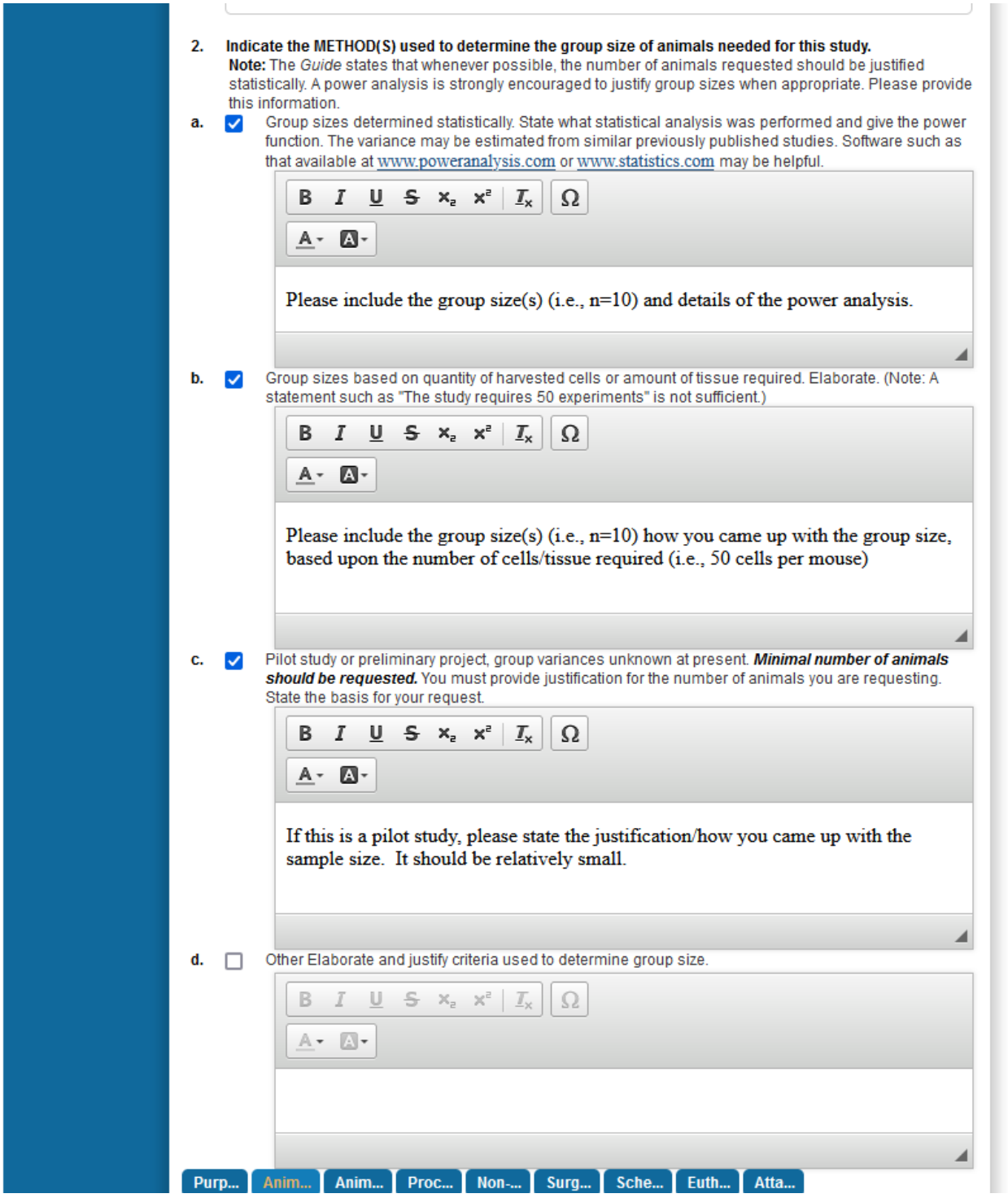
Purpose and Value: You can add more than one title, to coincide with grant. See instructions for lay description below



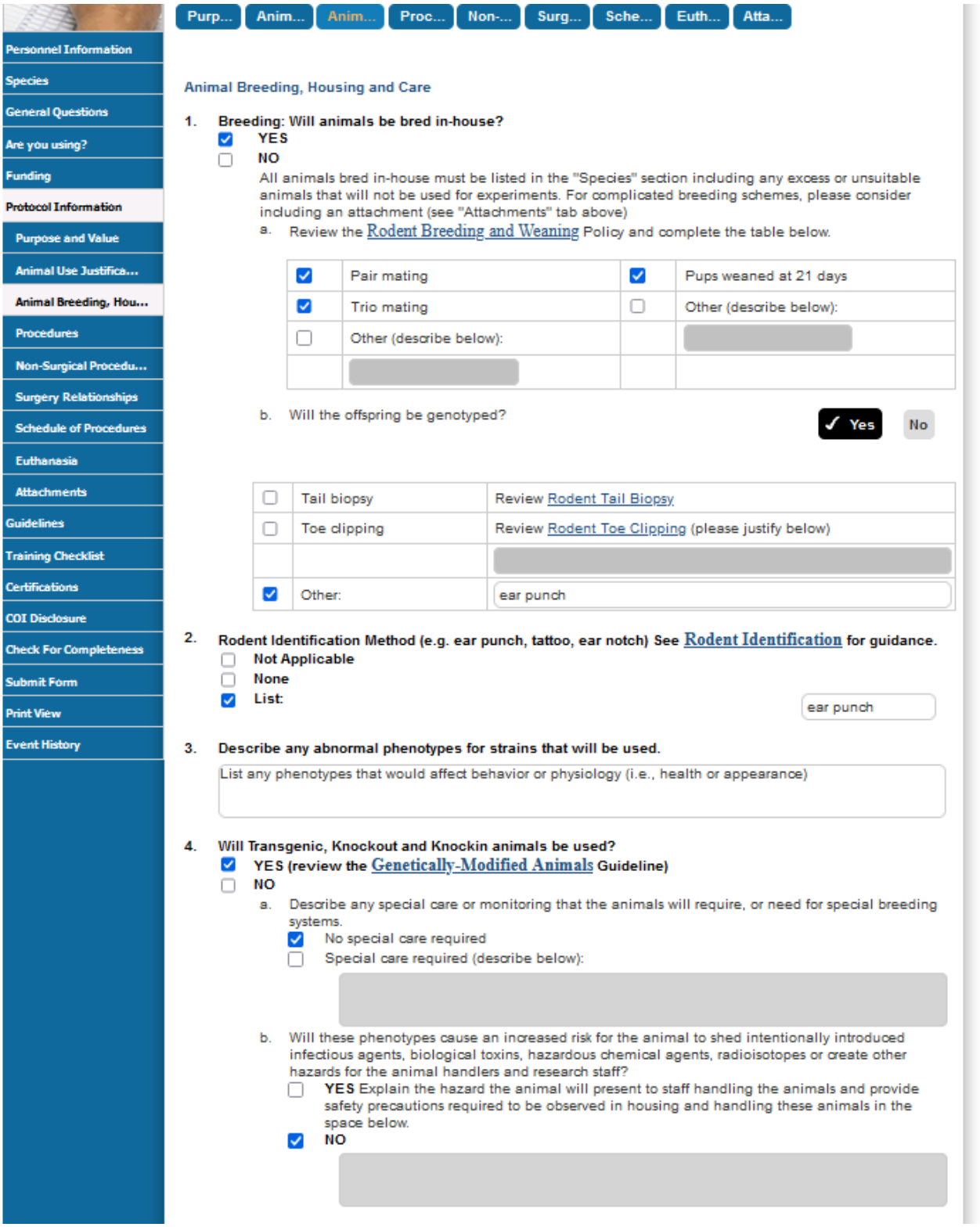
For Question 1a of the Animal Use Justification Section, enter the keywords you searched in the appropriate databases to search for alternatives to painful procedures (USDA Category D or E only). If you don't have USDA Category D/E you do not have to answer 1a.



Animal Use Justification Section: For the group size calculation questions, see suggestions below.



For Animal Breeding, Housing and Care Section, indicate the type of breeding and when weaning will occur (21 days is standard). For delayed weaning (>21 d, no more than 28 d), please list the strains which require delayed weaning You should also indicate how you will genotype and identify pups. FYI, ear punching will accomplish both and does not require anesthesia.



Animal Breeding, Housing, and Care Section: If you are housing outside of DLAR, indicate where and who is providing the care. Answer subsequent questions 4a-d. For question 7, please justify any special caging.

5. **Housing Outside DLAR Facilities: Will animals need to be maintained outside the DLAR facilities for more than 12 hours?**

- ☐ **YES (Review Overnight and Long-Term Housing of Animals in Investigator Laboratories)**
- ☑ **NO**
  - ☐ >12 hours but <=24 hours
  - ☐ >24 hours

If animals are housed more than 24 hours in a laboratory, the room is designated as a satellite animal housingfacility and must comply with all pertinent regulations as if it was a DLAR facility. If this room has not been set up as such, contact the IACUC office immediately.

Building: Select One

Room:

- ☐ DLAR will provide all husbandry and oversight.*
- ☐ DLAR and PI will share the responsibilities for husbandry and oversight.*
- ☐ PI will be responsible for all husbandry and oversight. Provisions for care and housing, animal monitoring and environmental monitoring will meet or exceed standard DLAR SOPs.*

*All outside housing requests require a Husbandry Agreement between the Veterinarian and PI. A scanned signed agreement must be attached to this protocol, See attachments tab in the Protocol information.
In the Training Checklist section, please select the persons responsible for taking care of animals outside of DLAR facilities.

a. Which animals will be housed outside of the DLAR facilities? Please include species and specific information about which animals will be housed (e.g. post-op animals, animals undergoing behavioral testing).

b. How many animals will be housed outside the DLAR facilities at one time?

c. How long will the animals be maintained outside of the DLAR facilities?

d. Justify why it is necessary to house animals outside of the DLAR facilities?

6. **Housing Locations: Please list the buildings where animals will be housed.**

list buildings where animals will be housed

7. **Caging Requirements**

- ☐ Standard housing (appropriate for species, including sterile for immunocompromised animals)
- ☑ Special housing needs required (e.g. suspended wire mesh flooring, non-standard size) for **some or all** animals on this protocol. Provide justification and describe circumstances below:

If smaller than normal caging would be used (i.e., metabolic caging) or housing on wire bottom cages, justification is required and should be scientific and include duration and circumstances when animals will be in the special housing.

Animal Breeding, Housing, and Care Section: Please see below for examples and explanations for questions on special food/water, social housing, enrichment, and acclimation.

8. **Food/Water Replacement: Please list any special food and/or water requirements (i.e., fasting, special diet, special water, etc.)**

   If special food/water is to be used (including periods of fasting), please list here.

9. **Social Housing: The *Guide* states: "Single housing of social species should be the exception and justified based on experimental requirements or veterinary-related concerns about animal well-being."**

   - ☐ Standard social housing
   - ☑ Single housing will be required for **some or all** animals on this protocol. Provide justification and describe circumstances below; include the duration of time animals will be singly housed:

     Justification for single housing should be scientific (i.e., published references) and/or experimental (i.e., unpublished data). Describe when animals are singly housed and for how long. This includes single housing of post-operative animals.

10. **Environmental Enrichment: The *Guide* states: "The primary aim of environmental enrichment is to enhance animal well-being by providing animals with sensory and motor stimulation, through structures and resources that facilitate the expression of species-typical behaviors and promote psychological well-being through physical exercise, manipulative activities, and cognitive challenges according to species-specific characteristics"**

    - ☐ Species-specific enrichment will be provided (see Environmental Enrichment and Behavioral and Social Management of Research Animals Policy/Guideline)
    - ☑ Enrichment will not be provided for **some or all** animals on this protocol. Provide justification and describe circumstances below:

      Justification should be scientific (i.e., published references) and/or experimental (i.e., unpublished data). You should describe when enrichment won't be given and what types of enrichment. Also, add if any alternate types can be given. Also include deviation from single-housing extra enrichment requirement in this section. E.g. post-operative animals are singly-housed but cannot receive hut d/t potential to damage cranial post.

11. **State the period of time animals will be allowed to acclimate following arrival at WSU and prior to the initiation of experimental or breeding procedures** (Review the Acclimation of Animals Guideline).

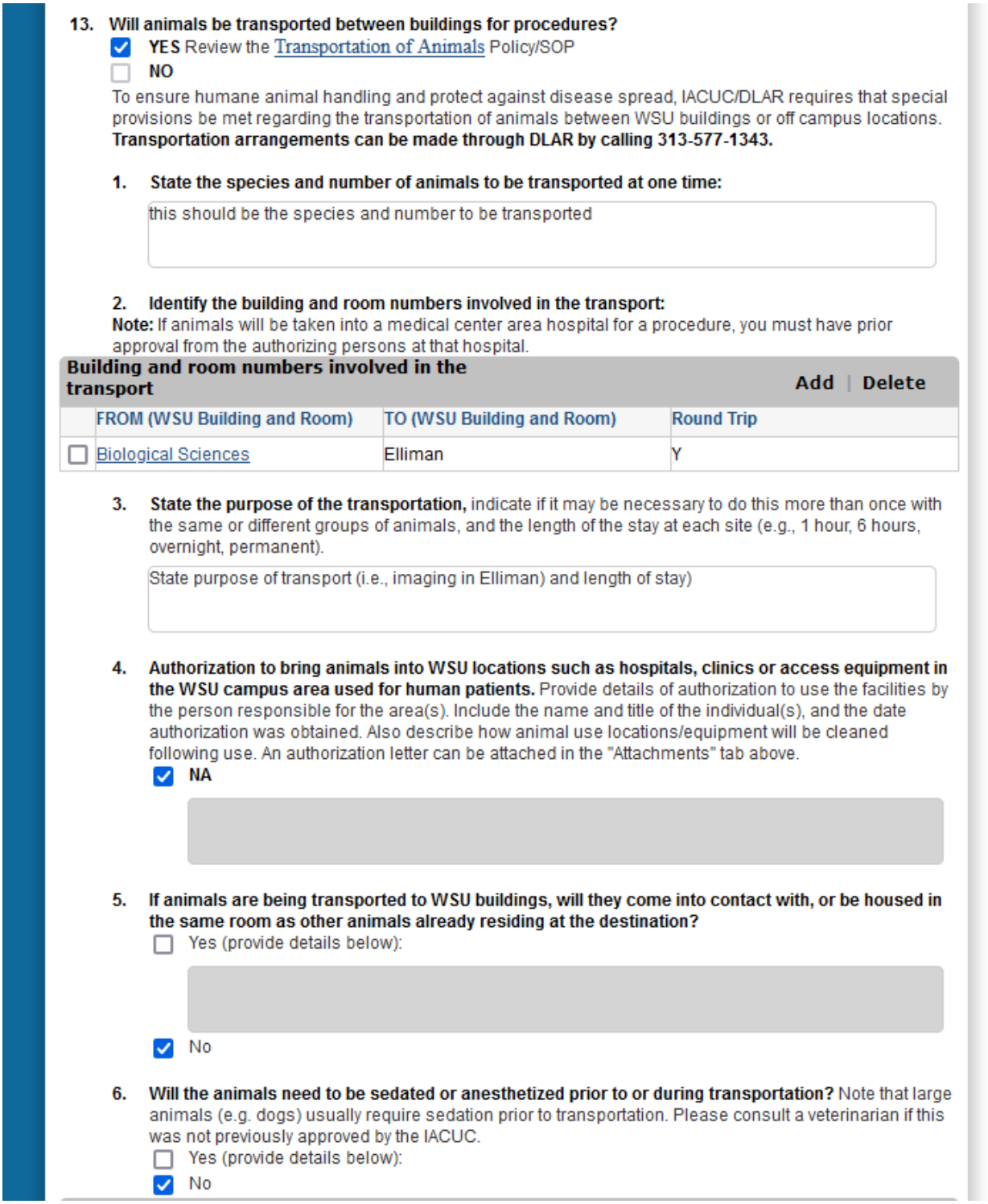
    Ideally, animals should be acclimated for several days before procedures begin. Only reduced acclimation periods require justification.

12. **Will photographs and/or videos of animals be taken in an animal holding facility (i.e. DLAR)? Review the Security Policy/Guideline.**

    - ☐ **YES, list building(s) and room number(s) and describe: images to be taken and for what purpose these images will be used for (i.e., used in publication, websites, seminars, teaching) and how they'll be stored**
    - ☐ **NO**

Animal Breeding, Housing, and Care Section: If animals are to be transported, answer subsequent questions as below.

If you are transporting in a hospital, answer questions 4 as “yes” and include a letter approving the transport and use of equipment in that hospital.



13. Will animals be transported between buildings for procedures?

- [x] **YES** Review the Transportation of Animals Policy/SOP
- [ ] **NO**

To ensure humane animal handling and protect against disease spread, IACUC/DLAR requires that special provisions be met regarding the transportation of animals between WSU buildings or off campus locations. **Transportation arrangements can be made through DLAR by calling 313-577-1343.**

1. State the species and number of animals to be transported at one time:

this should be the species and number to be transported

2. Identify the building and room numbers involved in the transport:

Note: If animals will be taken into a medical center area hospital for a procedure, you must have prior approval from the authorizing persons at that hospital.

Building and room numbers involved in the transport — **Add** | **Delete**

	FROM (WSU Building and Room)	TO (WSU Building and Room)	Round Trip
☐	Biological Sciences	Elliman	Y

3. State the purpose of the transportation, indicate if it may be necessary to do this more than once with the same or different groups of animals, and the length of the stay at each site (e.g., 1 hour, 6 hours, overnight, permanent).

State purpose of transport (i.e., imaging in Elliman) and length of stay)

4. Authorization to bring animals into WSU locations such as hospitals, clinics or access equipment in the WSU campus area used for human patients. Provide details of authorization to use the facilities by the person responsible for the area(s). Include the name and title of the individual(s), and the date authorization was obtained. Also describe how animal use locations/equipment will be cleaned following use. An authorization letter can be attached in the "Attachments" tab above.

- [x] **NA**

5. If animals are being transported to WSU buildings, will they come into contact with, or be housed in the same room as other animals already residing at the destination?

- [ ] Yes (provide details below):
- [x] No

6. Will the animals need to be sedated or anesthetized prior to or during transportation? Note that large animals (e.g. dogs) usually require sedation prior to transportation. Please consult a veterinarian if this was not previously approved by the IACUC.

- [ ] Yes (provide details below):
- [x] No

Animal Breeding, Housing, and Care Section: If you are performing the transportation at any time, mark "no" to question 8. FYI, DLAR will not provide transportation of hazardous animals. See below for tips on answering 8b.

7. Will the animals be coming from a chemical or biological hazard exposure room or be shedding chemical or biological hazards?

If yes, please see Transportation Policy for specific SOP.

8. Will the animals be transported by DLAR?

You are encouraged to make arrangements with DLAR to transport your animals free of charge by calling 313-577-1452 if you are considering using a personal vehicle in all circumstances.

- ☐ Yes
- ☑ No, provide details below. You will be required to select the person(s) responsible for transporting the animals in the Training Checklist.

a. If you and/or your staff will be transporting the animals at any time, please assure the Committee that:

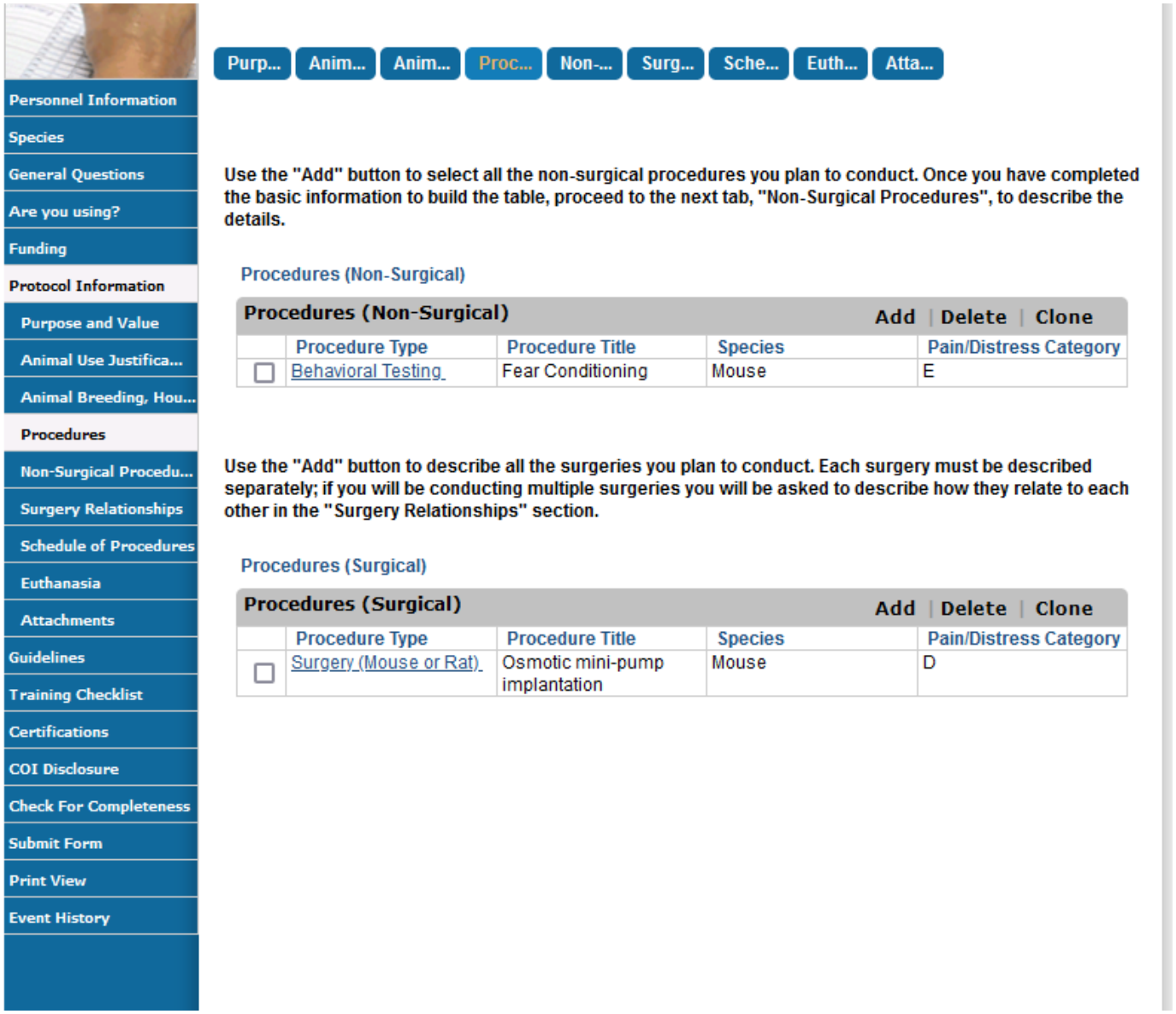
- Animals will be transported in an appropriate climate controlled vehicle. (i.e. air conditioned/heated). The use of personal vehicles is discouraged, as it can result in allergen exposure to the occupant and future occupants of the car, as the car can serve as a potential reservoir of animal pathogens. During regular business hours, arrangements can be made with DLAR to transport animals free of charge.
- Animals will be transported expeditiously in a draped cage or cart by an approved route (out of public view avoiding personnel areas such that no one is aware that an animal is being taken into the hospital area).
- Animals will be hand carried between WSU buildings (the use of carts is discouraged due to uneven pavement conditions on walkways).
- Rodents will be transported in clean filtered microisolator cages and water bottles Inverted to prevent leakage.
- Rodent cages will be sanitized at the destination. Rodent cage exteriors must be sprayed with bleach solution (1 part bleach to 20 parts water) when they reach their destination. Cages cannot be opened until the bleach solution has been on the cage for 10 minutes.
- DLAR facility leaders will be notified at least 24 hrs in advance of the return of the animals.

☑ I will comply with the transportation requirements outlined above and have reviewed the Transportation of Animals Policy/SOP

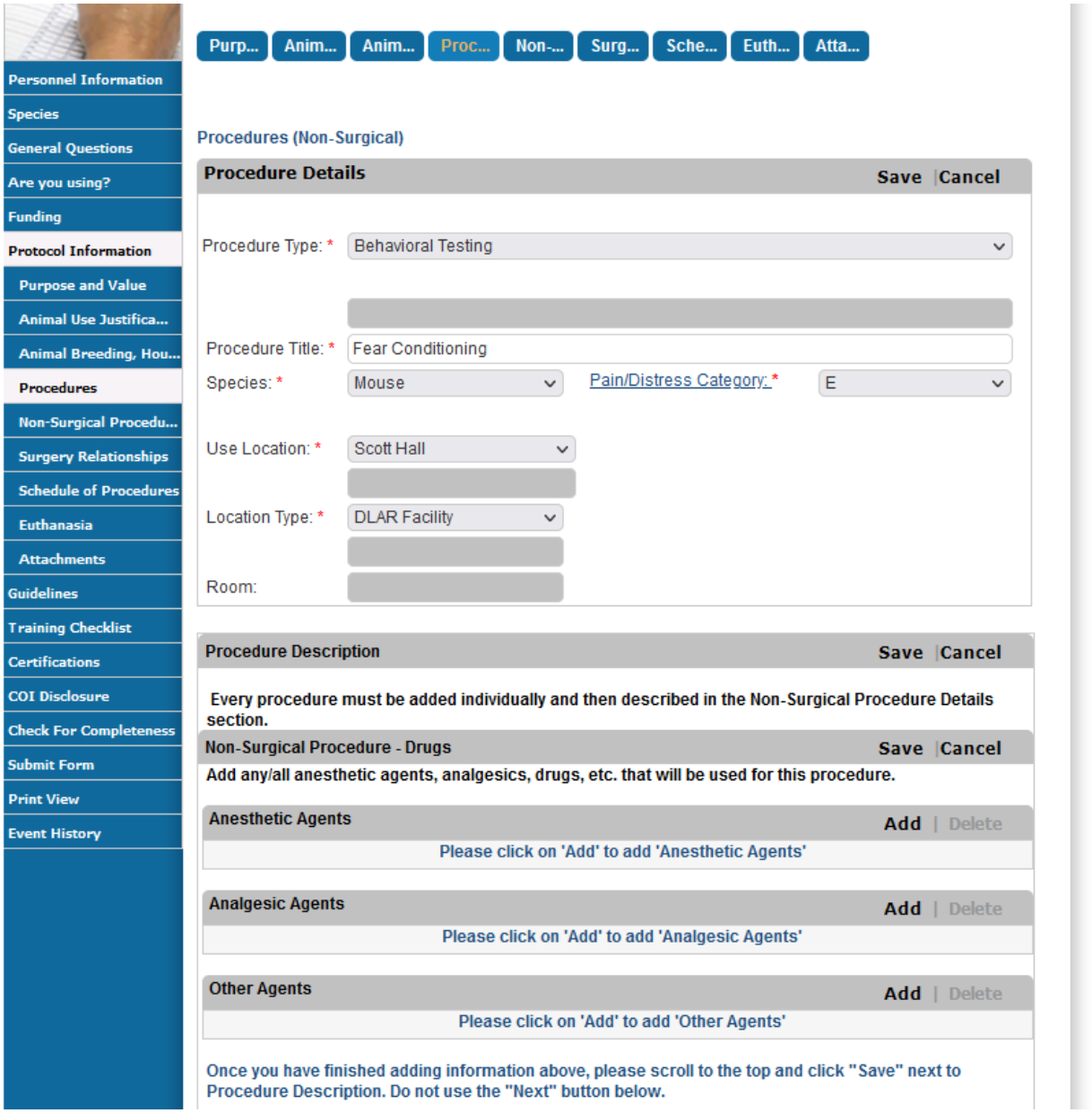
b. Briefly describe transportation route below and specify if this will be a vehicle or pedestrian transport.

Transportation will be from Bio Sciences to Elliman and will occur using PIs own vehicle (Ford Edge 2022). This vehicle is regularly inspected by IACUC and follows the Transportation Policy/SOP. The use of PIs vehicle is due to unusual transportation times.

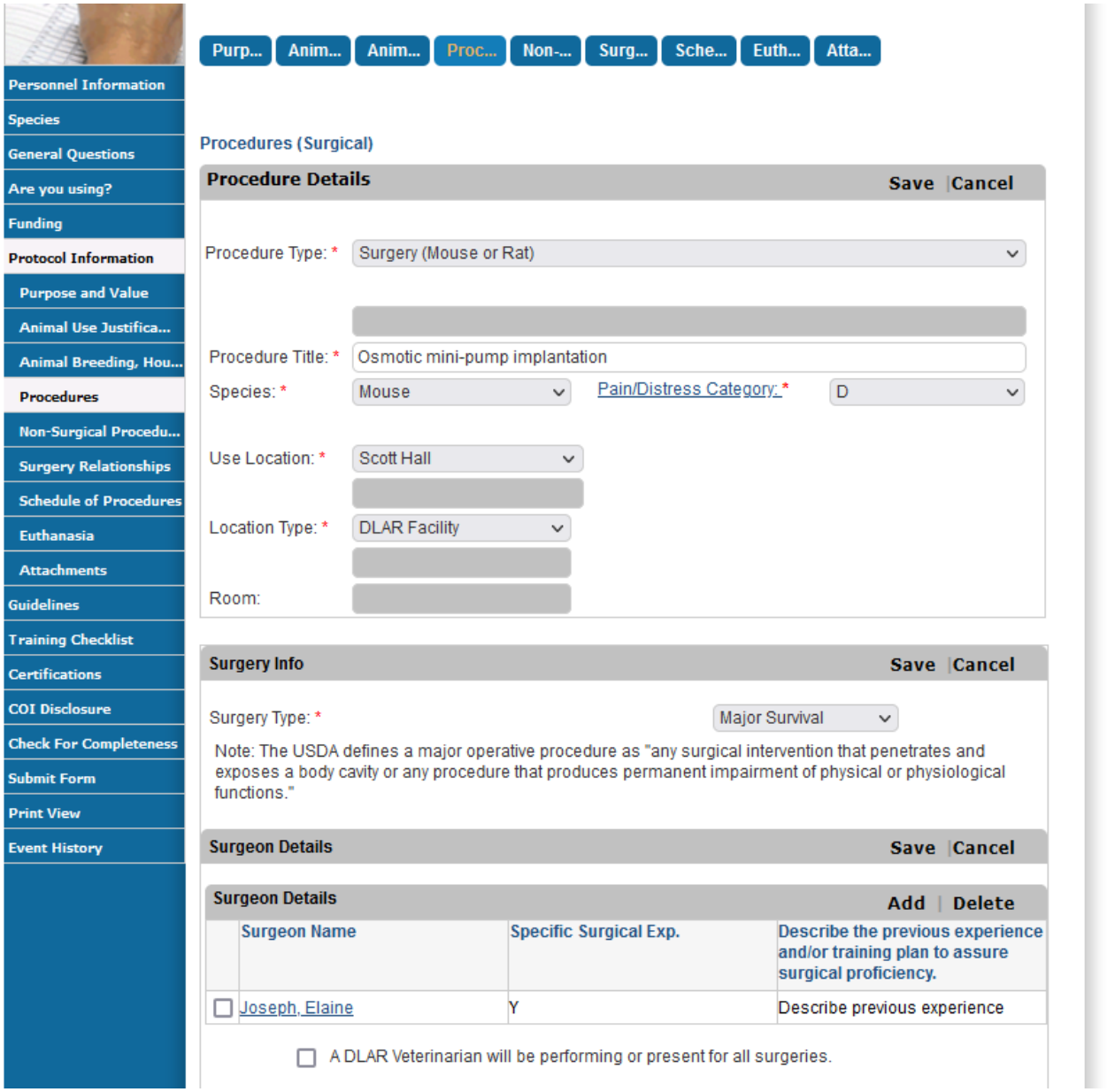
Protocol Information, Procedures Section: Add Procedures using the Add button. Make sure the Use Categories for these Procedures match the Species section.



This is an example of the “pop-up” screen where you can add a procedure. You should add all anesthetics, analgesics, and any other agents/drugs to be administered/given to animals during the procedure. Remember to hit “Save” when you are done.



This is an example of a pop-up screen where you can add a surgical procedure (a surgery is anything that requires an incision) – the example below is an osmotic mini pump implantation.



On the same pop-up, enter the surgical details, tips for how to answer are below.

Procedure Description Save | Cancel

Surgical Procedure in Rodents

1. Surgical Details
Give a detailed overview of the surgical procedure to be performed, the size and anatomical location of incision, the anticipated time to perform the surgery, and the time frames of the performance in relation to the overall protocol. Clearly indicate the time of planned euthanasia following the surgery.

NOTE: If more than one surgery will be conducted on this protocol, you will be asked to describe how they relate to each other in a separate section.

This should be a detailed surgical description. Please include all surgical procedures, including thermal support given, supplement fluids given, etc. Specify dosages of anesthesia and analgesia given prior and during surgery. You should include animal prep (i.e., surgical site prep, instrument sterilization, etc.),

Example
Surgery is performed with aseptic technique. Hair around surgical site is removed using surgical clippers. Gross debris is removed using alcohol and the surgical site is scrubbed three times alternating with chlorhexidine (or providone-iodine) followed by sterile water (or alcohol). Ophthalmic ointment is applied to eyes. Sterile instruments will be used, along with sterile surgical drapes. Proper PPE will be used including sterile surgical gloves, surgical caps, surgical masks, and sterile gowns.

Animals will be given Ethiqa XR (3.25 mg/kg, SQ) and then anesthetized with isoflurane (5% initially, reduced to 2% for the duration of the procedure) with a nose cone and placed in dorsal recumbency. Depth of anesthesia will be checked by toe pinch. The skin and instruments are prepared as described above. Anesthetic depth is assured and monitored through toe pinch. After adequate anesthesia and buprenorphine administration, a ventral incision will be made in order to separate skin, muscle, and fascia and gain access to the peritoneal cavity. Through the opening, a sterile osmotic minipump will be placed in the peritoneal cavity. The body wall incision will be closed by suturing (absorbable PDS sutures), then the skin incision closed using wound clips or sutures. After 7-14 days, surgical wound clips or suture will be removed using sterile wound clip forceps or scissors.

Pre/Intra operative details Save | Cancel

2. List pre/intra-operative analgesia, anesthesia, sedation, and muscle relaxation as well as any pre-treatment:

Anesthetic Agents Add | Delete

	Agent Name	Dosage (in mg/kg if possible)	Route
☐	Isoflurane	2-5%	Inhalation (INH)

Finally, indicate the anesthetics, analgesics, or other agents and how you will monitor the animals post-operatively.

Anesthetic Agents Add | Delete

	Agent Name	Dosage (in mg/kg if possible)	Route
☐	Isoflurane	2-5%	Inhalation (INH)

Indicate what parameters will be used to determine the need for additional doses of anesthesia.

Toe pinch, whisker twitch

Analgesic Agents Add | Delete

	Agent Name	Dosage (in mg/kg if possible)	Route
☐	Ethiqa XR	3.25 mg/kg	Subcutaneous (SQ)

Other Agents Add | Delete

Please click on 'Add' to add 'Other Agents'

Post operative details Save | Cancel

3. **Will post-operative analgesia or other treatment be administered?** Yes No

Analgesic Agents

Please click on 'Add' to add 'Analgesic Agents'

Other Agents

Please click on 'Add' to add 'Other Agents'

4. **How will the animals be monitored for adverse effects? Describe any potential effects.**

Example:
Animals will be monitored for signs of post-surgical pain and infection or other complications. Boost and food pellets will be placed on the floor of the cage for easy access. In addition, mice will be monitored a minimum of once a day for the first 7 days following the surgery, and 2x weekly for the duration of the study. To determine whether the animals have pain, distress, and infection, the PI or study personnel will specifically pay attention to the following parameters: For infection, drinking, eating, and walking patterns will be monitored. For pain, the presence of awkward gait, hunched back, ocular and/or nasal discharge, and aggressive behavior will be monitored. If any animal manifests signs of pain or infection, the veterinarian will be consulted and appropriate treatment provided.

Non-Surgical Procedure Details: This should be a summary/narrative of all procedures that are proposed in the protocol. You should make sure to list/describe all procedures in Procedures list.

Non-Surgical Procedure Details

Procedures

Species	Procedure Title	Procedure Type	Pain Category
Mouse	Fear Conditioning	Behavioral Testing	E

DESCRIBE ALL NON-SURGICAL PROCEDURES: Summarize in a narrative what procedures will be done. Include only those experiments where animals are directly involved. When animals are used as donors of organs, tissues, or cells, only describe how the organs, tissues or cells will be obtained. Do not describe what will be done with those organs, tissues or cells once they have been removed from the animal.

1. **Describe every procedure.**

The protocol you submit is a "stand alone" document. Do not refer to procedures in other protocols or publications or assume that they are so generally understood or used that everyone will know what you will do. This section should correlate with what you included in the Experimental Timeline and should include a brief experimental design statements for each experiment. The committee does not require descriptions of in vitro experiments.

This section is for the reviewers. It is important that they understand the experimental plan in detail, so that they know what happens to each animal throughout the experiment, from beginning to end, and also that they understand how the experimental design accomplishes the goals of the research. Please use consistent names/labels that correspond with the procedure titles. If a procedure or drug has multiple names, use one and stick with it. Don't vary it throughout the text.

For breeding protocols, make sure you explain the breeding system (monogamous, trio breeding, etc.) as well as when and how you will wean the animals, genotype the animals, and tag or identify the animals.

For experimental protocols an example follows:
In this study, we propose to conduct an experiment to determine whether social stress will produce an escalation on ethanol consumption. We hypothesize that greater effects will be seen in FVB/NJ mice as we have seen for the intermittent access procedure.

Experiment 1: Social Defeat induced escalation of .....

Methods and Design:
[list all methods here including amounts of compounds given/injected/etc., amounts of blood/urine/etc taken and describe the overall experimental design, for example]

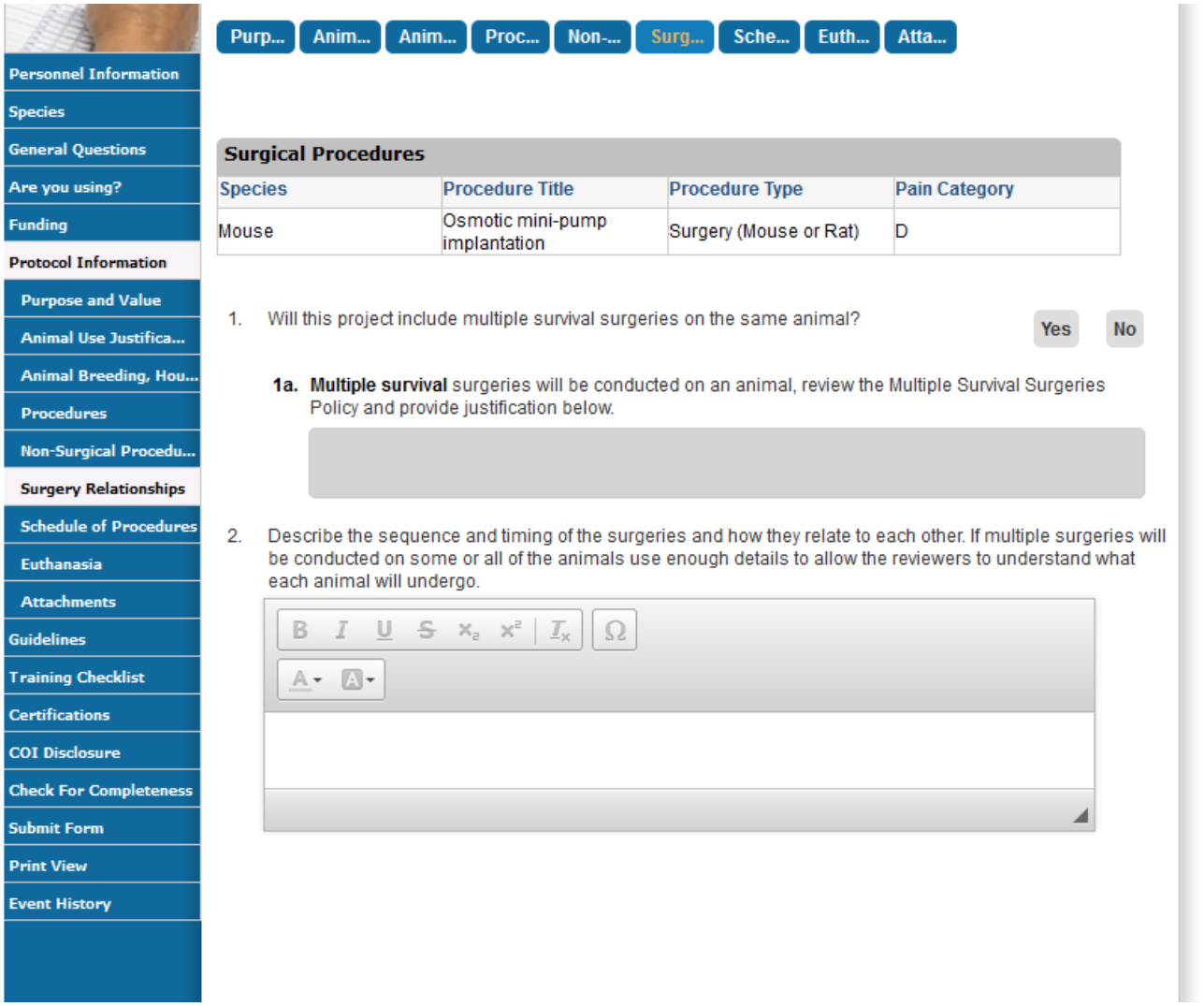
A. Fear Conditioning Behavior Tesing ....

2. **How will the animals be monitored for adverse effects? Describe any likely effects.**

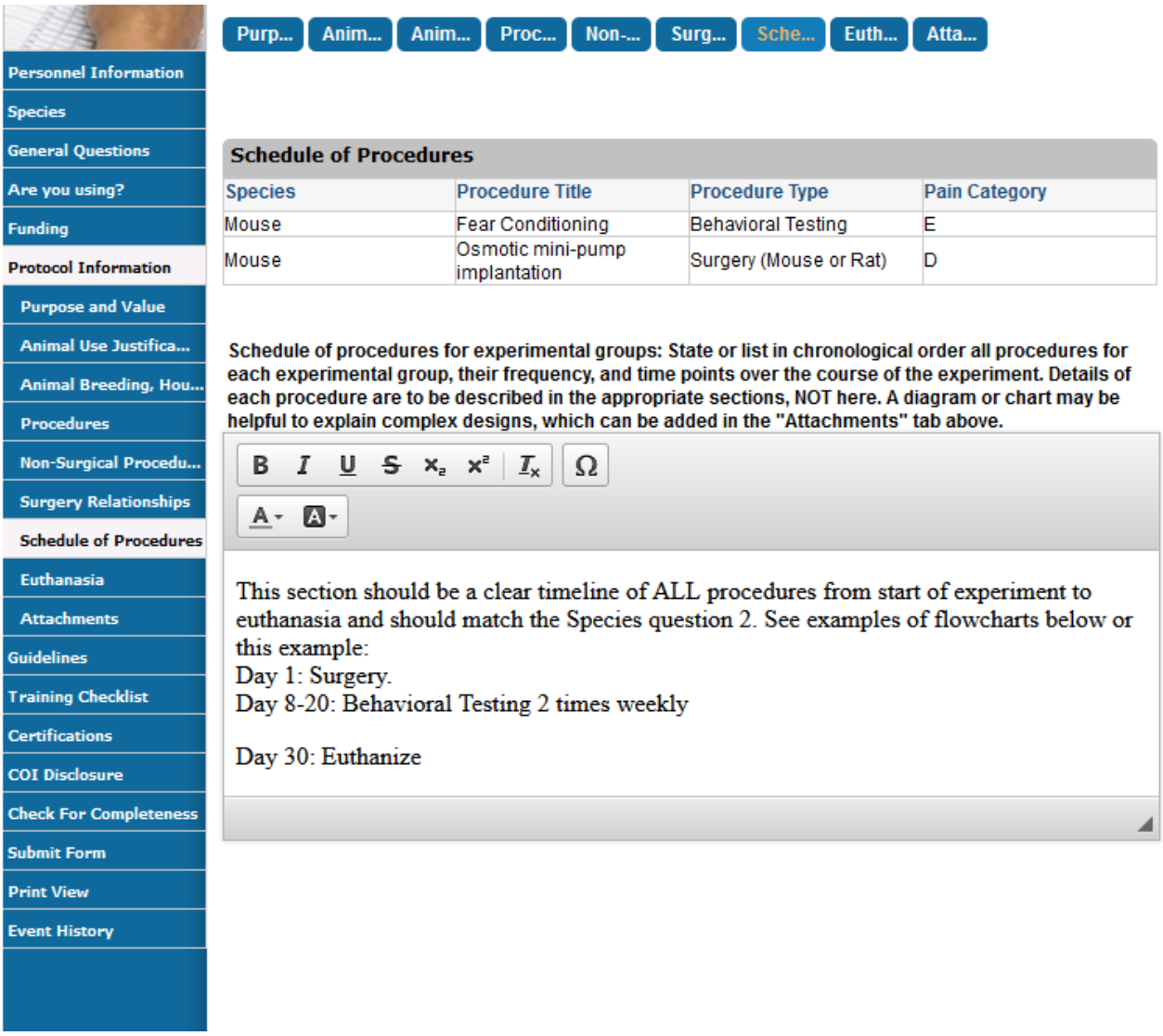
Describe how often animals will be monitored (every other day, once a week) and what they will be monitored for (poor body condition (body condition score <2); weight loss > 20%; labored breathing; signs of severe illness including scruffy, hunched and inactive). More invasive procedures, or those that have the potential to induce more or more severe adverse effects may require more intensive monitoring. Monitoring should be specifically described for those circumstances.

If weight loss of 20% is selected as an endpoint, regular monitoring of weight should be performed and described here. If weight will not be monitored, body condition scoring (BCS < 2/5) should be used as an endpoint.

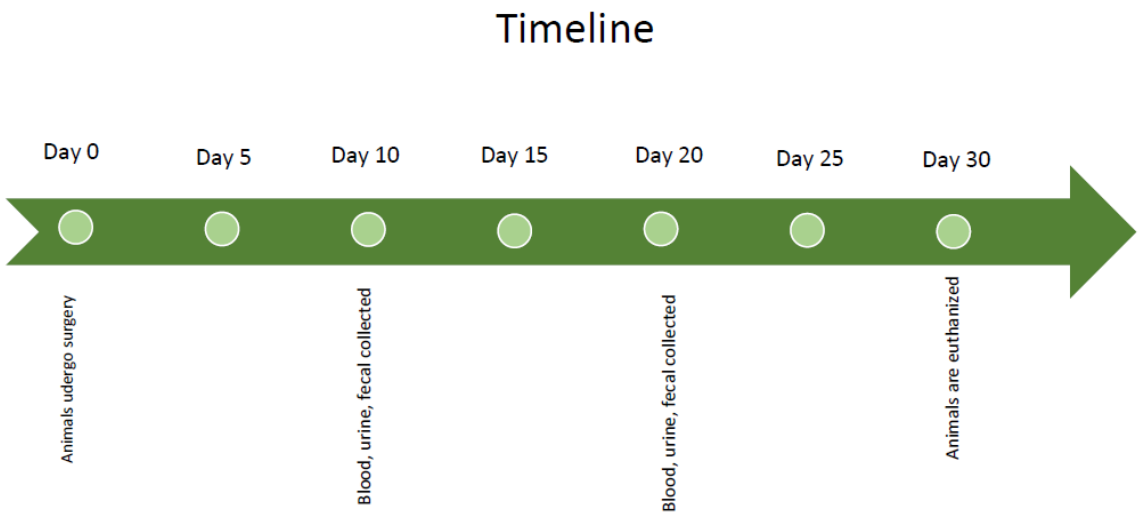
Surgery Relationships: If more than one surgery has been proposed, indicate if multiple survival surgeries will occur on the same animal at any time in the protocol. If yes, you must provide justification (question 1a) and explain the order of the surgeries and time between them (question 2).

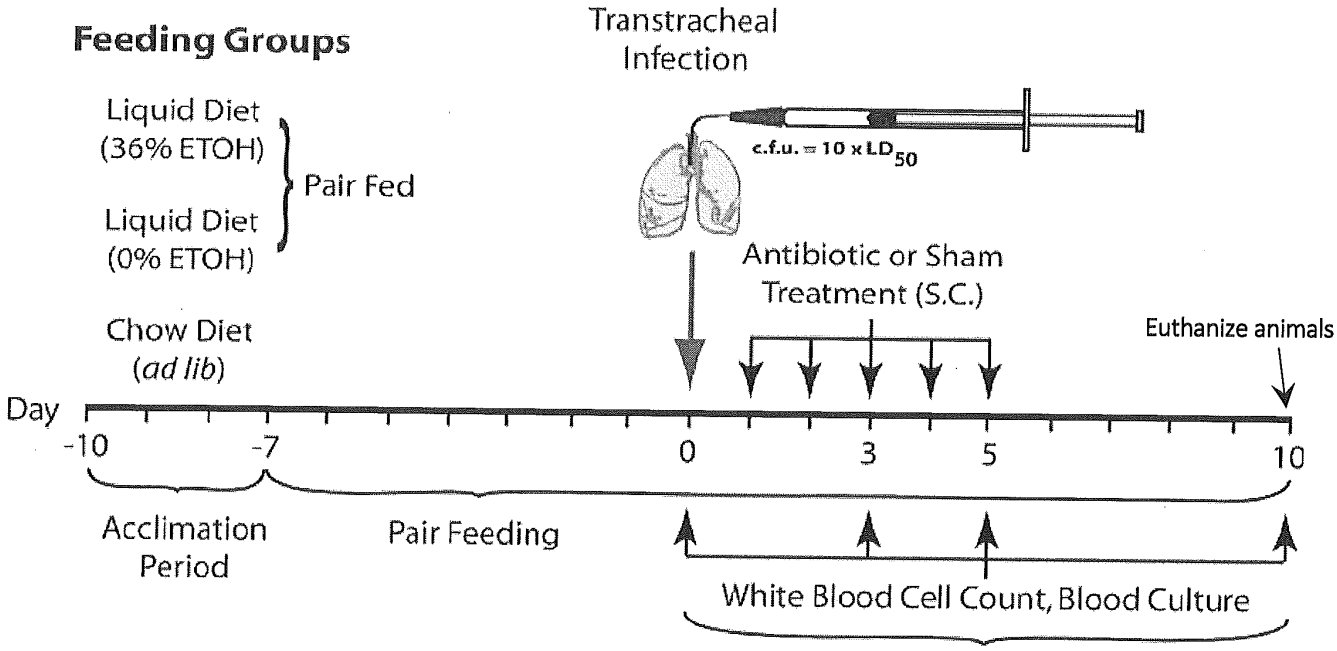


Schedule of Procedures section (see explanation below)

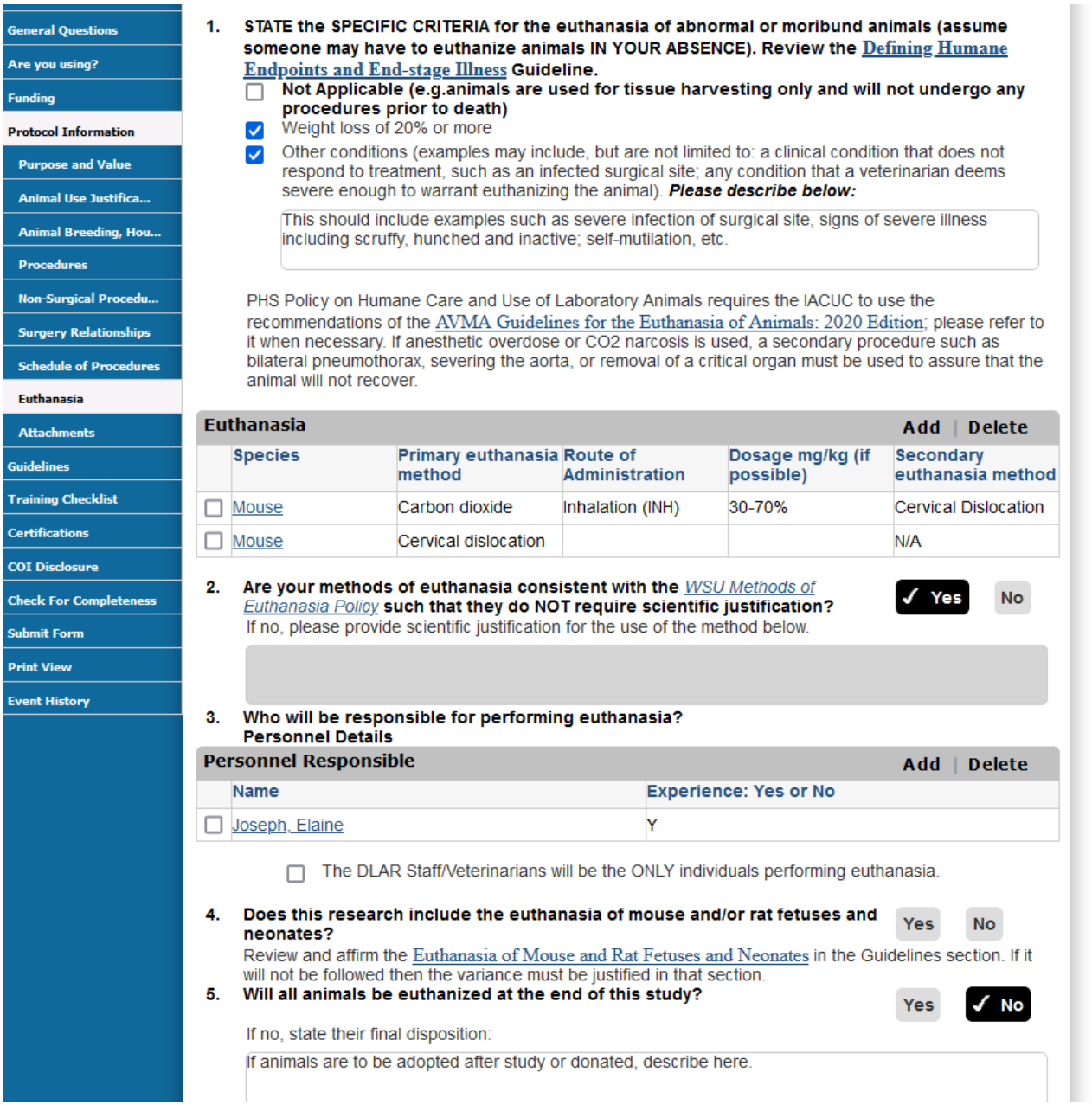


Example Timelines that could be uploaded as Attachments

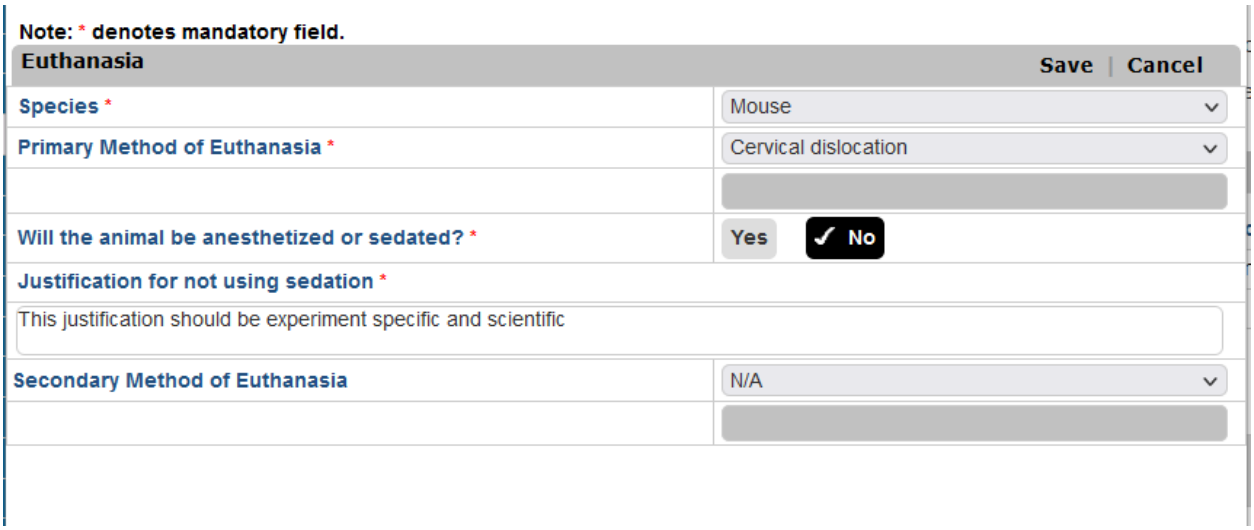




Euthanasia section: State conditions that would warrant euthanasia (i.e., humane endpoints) as well as the methods of euthanasia for each species.



For euthanasia that requires justification, see example below.


Note: * denotes mandatory field.

Euthanasia — Save | Cancel

Species *	Mouse
Primary Method of Euthanasia *	Cervical dislocation
Will the animal be anesthetized or sedated? *	Yes ✓ No
Justification for not using sedation *	
This justification should be experiment specific and scientific	
Secondary Method of Euthanasia	N/A

Finally, if training is complete, you will perform a Certification, COI Disclosure, and submit to your Department Chair for Approval.