Biosafety Protocol Registration Form C - Toxins

Protocol Title:

Principal Investigator (PI)/ Teaching Lab Instructor:

Section 1- Description of Toxin(s) and Quantities

1. Toxin Name (and any common synonyms that are used):

2. Is the toxin a select agent: ☐ Yes ☐ No

If yes, contact ISU Environmental Health and Safety Office regarding use of select agent

3. Toxin Source/Vendor:

4. Toxicity data (LD_{50}, LC_{50} or LD_{Lo}) (include species and route):

5. Describe any possible routes a researcher may be exposed to the toxin(s):

6. List the target organ(s) or system(s) affected by the toxin(s):

7. For each toxin listed, describe the signs and symptoms of exposure of the toxin in humans:

8. List any special groups of workers (e.g., pregnant, immune-compromised, allergic) at greater risk for infection or disease from the use of the listed pathogen(s). In addition, describe any additional precautions that will be implemented to protect these special groups. If there are no special groups of workers at greater risk, type “None” in the text block:

9. Provide the maximum volume and concentration of toxin(s) that will be stored:

10. Provide the maximum volume and concentration of toxin(s) that will be used at one time for each experiment:

11. List any available antidotes for the toxin(s). If there are available antidotes, you must provide information on location, accessibility, and administration of each antidote:

12. Will animals or human subjects in experiments be exposed to the toxin(s)? ☐ Yes ☐ No

Section 2 - Location and Security

13. Please select what security type will be used:

- ☐ Facility doors are off-master, and the facility is locked to exclude unauthorized personnel.
- ☐ Freezer/refrigerator for toxin storage is locked to exclude unauthorized personnel.
- ☐ Select toxin is stored in a secured lockbox attached to a permanent or semi-permanent fixture
- ☐ Other (please describe):

14. Describe how inventory control of the toxin(s) will be achieved:

15. Is a Chemical Fume Hood or Biosafety Cabinet used for reconstitution or dilution? ☐ Yes ☐ No

Make/model/serial number:

Location:

Date last certified:

Section 3 - Specific Procedures and Controls

16. Describe procedure controls and minimum PPE when reconstituting toxin(s):

17. Describe procedure controls and minimum PPE when handling stock solutions:

18. Describe procedure controls and minimum PPE when handling dilute toxin solutions:

19. Describe procedure controls and minimum PPE when performing microinjections, electrophysiology, etc.:

20. Describe methods to be used to neutralize the toxin. You must also cite references that validate the methods to neutralize.

21. Do you have a laboratory-specific standard operating procedure for working with the toxin and exposure management? ☐ Yes ☐ No

**If yes,* attach laboratory-specific standard operating procedure.

Section 4- Risk Assessment Acknowledgement by PI/Instructor - *Please initial next to each requirement*

☐ PI/instructor will maintain a laboratory-specific biosafety manual

☐ PI/instructor will maintain a laboratory-specific acute toxin Standard Operating Procedures

☐ PI/instructor is responsible for conducting risk assessment training for all personnel working under this protocol and maintain record that all personnel trained understand risks associated

☐ PI/Instructor assures that the use of the toxin will be conducted in accordance with the BMBL (Biosafety in Microbiological and Biomedical Laboratories) published by the CDC and NIH