

# BIOLOGICAL TOXIN REGISTRATION FORM

For Registration of Naturally Occurring Biological  
Toxins or their Synthetic Analogues



## IBC Use Only

Registration # \_\_\_\_\_

Review Date: \_\_\_\_\_

**THIS APPLICATION MUST BE TYPEWRITTEN**

Section I. Personnel			
1. Principal Investigator:		M.D. <input type="checkbox"/> Ph.D. <input type="checkbox"/> Other:	
2. Department/Division:		Email:	
3. Office Address:		Phone:	
4. Lab Address:		Phone:	
5. List all professional personnel, employees and students involved in the project who will be working with these materials. Attach an additional sheet if needed.			
Name	Job Title	Lab Address	Phone Number
6. Do you request medical surveillance?			Yes <input type="checkbox"/> No <input type="checkbox"/>

Section II. Type and Location of Toxin Research	
1. Project Title:	
2. Grant # (if applicable):	
3. AGENT DESCRIPTION (Check all that apply):	
<input type="checkbox"/> Abrin	<input type="checkbox"/> Conotoxins
<input type="checkbox"/> Ricin	<input type="checkbox"/> Saxitoxin
<input type="checkbox"/> Tetrodotoxin	<input type="checkbox"/> Botulinum Neurotoxins
<input type="checkbox"/> Shigatoxin	<input type="checkbox"/> Staphylococcal Enterotoxins
<input type="checkbox"/> Other (List Specific Toxin(s)):	
4. For toxins listed in 3 above, will total amounts on hand at any one time (stored and in use) exceed the following limits:	<input type="checkbox"/> Yes <input type="checkbox"/> No
<ul style="list-style-type: none"> <li>0.5 mg Botulinum neurotoxins</li> <li>5.0 mg <i>Staphylococcal</i> enterotoxins</li> <li>100 mg Abrin, <i>Clostridium perfringens</i> epsilon toxin, conotoxin, ricin, saxitoxin, shigatoxin, shiga-like ribosome inactivating protein, or tetrodotoxin</li> <li>1,000 mg diacetoxyscirpenol (DAS) or T-2 toxin</li> </ul>	Total amount: _____mg
5. Indicate the building and room number where toxins listed in 3 above are stored:	Building: Room(s):
6. Indicate the building and room number where toxins listed in 3 above are handled:	Building: Room(s):
7. Will research involve human subjects?	<input type="checkbox"/> Yes <input type="checkbox"/> No
8. Will research involve nucleic acids that code for functional forms of toxins listed in 3 above?	<input type="checkbox"/> Yes <input type="checkbox"/> No
9. Will research involve whole animals?	<input type="checkbox"/> Yes <input type="checkbox"/> No

<b>Section III. Equipment, Facilities, &amp; Security</b>			
1. Mark all pieces of equipment that apply to this project that have the potential to aerosolize toxin when used:			
Centrifuge	Yes <input type="checkbox"/> No <input type="checkbox"/>	Homogenizer	Yes <input type="checkbox"/> No <input type="checkbox"/>
Blender	Yes <input type="checkbox"/> No <input type="checkbox"/>	Vortex Mixer	Yes <input type="checkbox"/> No <input type="checkbox"/>
Sonicator	Yes <input type="checkbox"/> No <input type="checkbox"/>	Other:	
2. Laboratory is equipped with at least one class II biological safety cabinet or a fume hood in which aerosol-producing tasks can be conducted?			Yes <input type="checkbox"/> No <input type="checkbox"/>
3. Toxins are secured in a locked refrigerator, freezer, or storage cabinet when not in use?			Yes <input type="checkbox"/> No <input type="checkbox"/>
4. An accurate inventory is maintained and physical inventory of toxin stocks is conducted on a regular basis?			Yes <input type="checkbox"/> No <input type="checkbox"/>
5. Access to laboratories where toxins are handled or stored is restricted to those individuals with approved security risk assessments?*			Yes <input type="checkbox"/> No <input type="checkbox"/>

\* Applies only to those laboratories that exceed the limits identified in Section II above.

<b>Section IV. Research Summary</b>
Attach a <b>short, clear summary</b> of your research that involves the toxins listed in Section II above. Your proposed experiments should be described in lay terms that will explain their essential features. Avoid jargon and excess technical detail. Briefly <u>explain and justify</u> the use of toxins listed in Section II.

<b>Section V. Risk Assessment</b>
Address each of the following items and include any other data that you feel has important bearing upon the safety of this project:
1. Identify and describe the major health risk(s) to humans, animals, and the environment associated with the toxins identified in Section II.
2. Is there a known antidote(s) for the proposed toxin if exposed?
3. Describe all procedures and tasks related to this research where laboratory personnel may be exposed to toxins identified in Section II. Examples include procedures where accidental exposure may occur by direct contamination of mouth, eyes or other mucous membranes; by inadvertent aerosol generation; and by needle-sticks or other accidents that may compromise the normal barrier of the skin. Specifically address whether toxins will be diluted in solvents that can absorb through the skin (e.g. dimethyl sulfoxide, etc.).
4. List the amount and/or concentration of toxin that will be used during the tasks and procedures outlined above. Is the amount/concentration enough to pose a significant hazard to laboratory personnel in the event of an exposure incident? Why or why not?
5. Based on the tasks and procedures outlined above, and based on the amounts and concentrations of toxin being handled, identify and describe the specific safety measures that will be used to protect laboratory personnel.
6. Describe the methods that will be used to decontaminate equipment and work surfaces, and to inactivate toxin following a spill.

<b>Section VI. Documentation*</b>	
1. Chemical Hygiene Plan attached, including lab-specific standard operating procedures for the toxin work outlined in section V above (Appendix I in Chemical Hygiene Plan)?	<input type="checkbox"/> Yes <input type="checkbox"/> No
2. Training records indicate the date of training, the identity of the trainer and trainees, a summary of the training content, and how the training was evaluated?*	<input type="checkbox"/> Yes <input type="checkbox"/> No

\* Chemical Hygiene Plan and training records are required for approval.

\*\* Training content must include a description of the toxins and laboratory procedures that will be used, health effects, signs & symptoms of exposure, routes of exposure, precautions to prevent exposure, spill clean-up procedures, personal protective equipment use and cleaning, post-exposure response, decontamination, and waste disposal.

**I hereby apply for approval of my plans for experiments involving biological toxins or their analogues. I am familiar with, and agree to abide by, the provisions of the CDC Guidelines (April 2002 Federal Register (or later) and appendices), and any other specific NIH or University of Utah instructions pertaining to the proposed project. I agree to provide the IBC prompt written notification of any significant changes in these protocols or of any major accidents involving hazardous agents used in this research. I agree to comply with all federal and state requirements pertaining to shipment and transfer of toxins or other hazardous agents used in this research.**

**I accept responsibility for the safe conduct of work with this material as indicated on any page of this form, and in any additional information submitted in connection with this application, or updating or revising this application. I will ensure that all personnel receive appropriate training in regard to proper safety practices and personal protective equipment needed for this work and that all building occupants are educated when warranted.**

**I certify that all herein provided information, and any subsequent information submitted in connection with this application, is accurate and complete.**

**Principal Investigator (signature/date):** \_\_\_\_\_

Send a copy of completed forms to the following individual:

Jim Johnston, MSPH, Biosafety Officer  
 University of Utah  
 Environmental Health and Safety  
 Bldg. 605  
 Telephone: 581-6590  
 FAX: 585-7240  
 e-mail [biosafety@ehs.utah.edu](mailto:biosafety@ehs.utah.edu)