## Potentially Hazardous Biological Agents Risk Assessment Form (6A)

Required for research involving microorganisms, rDNA, fresh/frozen tissue (including primary cell lines, human and other primate established cell lines and tissue cultures), blood, blood products and body fluids.

SRC/IACUC/IBC approval required before experimentation.

Student's Name(s) Gillian Gold

Title of Project The role of Wnt/β-catenin signaling in angiogenesis and BBB repair in EAE (Multiple Sclerosis) To be completed by the QUALIFIED SCIENTIST/DESIGNATED SUPERVISOR in collaboration with the student researcher(s). All questions are applicable and must be answered; additional page(s) may be attached.

## SECTION 1: PROJECT ASSESSMENT

- 1. Identify potentially hazardous biological agents to be used in this experiment. Include the source, quantity and the biosafety level risk group of each microorganism.
  - Concentrated hydrochloric acid, Phenol/Chloroform/Isoamyl Alcohol, acetic anhydride, paraformaldehyde, triethanolamine, hydrogen peroxide
- Describe the site of experimentation including the level of biological containment.
  - Lab bench, contained
- 3. Describe the procedures that will be used to minimize risk (personal protective equipment, hood type, etc.).
  - Lab coat, gloves, full length clothes, closed toed shoes, laminar flow hood.
- 4. What final biosafety level do you recommend for this project given the risk assessment you conducted?

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Describe the method of disposal of all cultured materials and other potentially hazardous biological agents.
 Harmful chemical were disposed of in appropriate containers, sharps were disposed of in sharps containers, and rest of the materials were disposed of in red biological dumpster bins.

## **SECTION 2: TRAINING**

SRC Printed Name

Date of review (mm/dd/yy)

- What training will the student receive for this project?
  - Laboratory Safety/Chemical Hygiene/Hazardous Waste Training and Bloodborne Pathogen/Biosafety Training/Biological Safety Cabinets
- 2. Experience/training of Designated Supervisor as it relates to the student's area of research (if applicable).

Has been in the lab multiple years researching EAE as a PhD candidate and has supervised previous high school research student before.			
SECTION 3: For ALL MICROORGANISMS, CELL LINES and TISSUES — To be completed by the QUALIFIED SCIENTIST or DESIGNATED SUPERVISOR - Check the appropriate box(es) below:  Experimentation on the microorganisms/cell lines/tissues used in this study will NOT be conducted at a Regulated Research Institution, but will be conducted at a (check one)BSL-1 orBSL-2 laboratory. This study has been reviewed by the local SRC and the procedures have been approved prior to experimentation.			
	approved by the appropriate institutional board prior to experimentation; institutional approval forms are attached.		
Experimentation on the microorganisms/cell lines/tissues used in this study will be conducted at a Regulated Research Institution, which does not require pre-approval for this type of study. The SRC has reviewed that the student received appropriate training and the project complies with Intel ISEF rules.			
CERTIFICATION-To be SIGNED by the QUALIFIED SCIENTIST	or DESIGNATED SUPERVIS	OR	
The QS/DS has seen this project's research plan and supporting documentation and acknowledges the accuracy of the information provided above. This study has been approved as a (check one) BSL-1/ BSL-2 study, and will be conducted in an appropriate laboratory.			
Sanjid Shahriar	Sanjid Shahriar	Digitally signed by Sanjid Shahriar Date: 2019.09.04 20:20:31 -04'00'	
QS/DS Printed Name	Signature		
06/10/2019	80		
Date of review (mm/dd/yy)	-		
CESTION A CEPTIFICATION T. L.			
SECTION 4: CERTIFICATION – To be completed by the LOCAL or AFFILIATED FAIR SRC			

The SRC has seen this project's research plan and supporting documentation and acknowledges the accuracy of the information provided above.

Signature