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) Arpie Bakhshian

Title of Project The Development of a CRISPR/Cas9 System with Nanoblades in Order t

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.
   All of the biological agents user are biosafetly level 1 such as reagents for DNA extraction, PCRs, Westerblot5s and competent bacteria.
2. Describe the site of experimentation including the level of biological containment.
   Most of the experiments were done on the bench, the cell culture expeirments were done in a tissue culture hood.
3. Describe the procedures that will be used to minimize risk (personal protective equipment, hood type, etc.).
   Lab coat, Gloves, Tissue culture hood
4. What final biosafety level do you recommend for this project given the risk assessment you conducted?
   Biosafety level 2
5. Describe the method of disposal of all cultured materials and other potentially hazardous biological agents.
   They are disposed in a biohazard contaniner

SECTION 2: TRAINING

1. What training will the student receive for this project?
   Arpie will receive training in the maintenance of cell cultures, the creation of viral vectors, and other standard lab techniques, including PCR and gel electrophoresis.
2. Experience/training of Designated Supervisor as it relates to the student's area of research (if applicable).
   Faculty member/principal investigator in the student's research area.

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 or ▪ BSL-2 laboratory. This study has been reviewed by the local SRC and the procedures have been approved prior to experimentation.
- ☐ Experimentation on the microorganisms/cell lines/tissues used in this study will be conducted at a Regulated Research Institution and was approved by the appropriate institutional board prior to experimentation; institutional approval forms are attached.
  Origin of cell lines:_____ Date of IACUC/IBC approval _____
- ☐ 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 SUPERVISOR

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.

Julie Magarian Blander — QS/DS Printed Name

J Magarian Blander — Signature
Digitally signed by J Magarian Blander
Date: 2020.01.27 10:10:27 -05'00'

06/26/19 — Date of review (mm/dd/yy)

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.

_____ SRC Printed Name

_____ Signature

_____ Date of review (mm/dd/yy)