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) Sophia Jang

Title of Project The Effect of Light on the Epitranscriptome of Plants

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.
   See attached
2. Describe the site of experimentation including the level of biological containment.
   See attached
3. Describe the procedures that will be used to minimize risk (personal protective equipment, hood type, etc.).
   See attached
4. What final biosafety level do you recommend for this project given the risk assessment you conducted?
   See attached
5. Describe the method of disposal of all cultured materials and other potentially hazardous biological agents.
   See attached

SECTION 2: TRAINING

1. What training will the student receive for this project?
   See attached
2. Experience/training of Designated Supervisor as it relates to the student's area of research (if applicable).
   See attached

SECTION 3: For ALL CELL LINES, MICROORGANISMS 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 to be 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 to be 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 to be 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 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.

Oliver Artz
QS/DS Printed Name

O. A
Signature

7/10/19
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.

Raymond Gressner
SRC Printed Name

R G
Signature

1/29/2020
Date of review (mm/dd/yy)

Potentially Hazardous Biological Agents Risk Assessment Form (6A) Addendum
Sophia Jang
The Effect of Light on the Epitranscriptome of Plants

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 bacteria was biosafety level 1. *Agrobacterium tumefacians* strain GV3101 was purchased from VWR and the *E. coli* strain DH5-ALPHA Cell was purchased from Thermo Fisher Scientific. rDNA: The pDONR 221 vector used for gateway cloning was purchased from Invitrogen through Thermo Fisher Scientific; The p19 vector, Ac6 plasmid, Dn6 plasmid, and mCherry vector were purchased from Addgene and Oliver Artz created the vectors for FIP37, MTA, and MTB.
2. Describe the site of experimentation including the level of biological containment.
   Cell Culture Lab in Delbruck at Cold Spring Harbor Laboratory - Biosafety Level 1
3. Describe the procedures that will be used to minimize risk (personal protective equipment, etc.)
   Sophia will wear gloves, a lab coat, and safety goggles when appropriate. When using the flow hood, she will clean the surface with ethanol before and after experimentation. All pipette tips, centrifuge tubes, and Eppendorf tubes that come in contact with potentially hazardous biological agents will be discarded in biological hazardous waste containers after they have been used.
4. What final biosafety level do you recommend for this project given the risk assessment you conducted?
   Biosafety Level 1
5. Describe the method of cultured materials and other potentially hazardous biological agents.
   All cultured material is disposed in biological hazardous waste containers and collected by the internal EHS department.

Section 2: Training

1. What training will the student receive for this project?
   The student will receive biosafety training through the Cold Spring Harbor Laboratories Safety Training Department, and specific training regarding molecular cloning, protein-protein interactions, and plant phenotyping.

2. Experience/training of Designated Supervisor as it relates to the student's area of research (if applicable).
   Ph.D. in molecular plant biology and biochemistry