

## Risk Assessment Form (3)

**Must be completed before experimentation.**

Student's Name(s) Chelsea Pan

Title of Project Dysregulation of dopamine-2 receptor with neuronal deficits underlies loss of control in cocaine addiction

**To be completed by the Student Researcher(s) in collaboration with Designated Supervisor/Qualified Scientist:** (All questions must be answered; additional page(s) may be attached.)

1. List all hazardous chemicals, activities, or devices that will be used; identify microorganisms exempt from pre-approval (see Potentially Hazardous Biological Agent rules).
  - 1) 4% paraformaldehyde (PFA)
  - 2) Sectioning tissue on a cryostat
2. Identify and assess the risks involved in this project.
  - 1) Paraformaldehyde is considered a toxin and carcinogen. Exposure to this chemical can lead to irritation of the nasal passages, lungs and skin, and serious eye damage. In cases of severe exposure to this chemical death can result.
  - 2) The cryostat uses a very sharp blade to cut sections of tissue very thin. Therefore, usage of this device could result in severe cuts/lacerations if not used with care
3. Describe the safety precautions and procedures that will be used to reduce the risks.
  - 1) When handling 4% PFA the student will conduct all activities in a fume hood with the sash down to the proper level to prevent inhalation of the fumes and possible exposure to the eyes. Additionally, the student will wear nitrile gloves and a lab coat to avoid contact with skin.
  - 2) The student will be trained on how to properly use the cryostat as well as be supervised while using the device. Additionally, the student will use a blade guard.
4. Describe the disposal procedures that will be used (when applicable).
  - 1) All waste from the paraformaldehyde will be disposed of in properly labeled waste containers. Once full, this container will then be given to Stony Brook Universities' Waste Disposal team who will handle waste disposal.
  - 2) All dull blades will be disposed of in a red plastic sharps container.
5. List the source(s) of safety information.

SUNY Stony Brook Environmental Health and Safety  
MSDS for paraformaldehyde  
Cryostat manual

**To be completed and signed by the Designated Supervisor (or Qualified Scientist, when applicable):**

I agree with the risk assessment and safety precautions and procedures described above. I certify that I have reviewed the Research Plan/Project Summary and will provide direct supervision.

Kevin Clare

Designated Supervisor's Printed Name

Kevin Clare

Signature

5/25/2019

Date of Review (mm/dd/yy)

Research Aide

Position & Institution

kevin.clare@stonybrook.edu

Phone or email contact information

7+ years in basic science research labs conducting neuroscience & neuroimaging research

Experience/Training as relates to the student's area of research