

## Safety of Minors in Research

|                                                                         |  |
|-------------------------------------------------------------------------|--|
| Principal Investigator Name:                                            |  |
| Lab Supervisor Name (if different):                                     |  |
| Minor Student's Name:                                                   |  |
| Personnel assigned to mentor or supervise minor student (if different): |  |

### Project Description:

Please summarize the research project(s) that the minor will be working on in the research laboratory or facility.

- 1) Briefly, in 2-3 sentences, describe the scope of the project for a lay audience,
- 2) Include a description of all planned procedures, manipulations or assays the student will be directly performing and/or shadowing as lab personnel performs. Specify which activities will be hands-on vs. observed,
- 3) Identify any hazardous materials or equipment to be used during the aforementioned activities (i.e., specific biohazardous materials or laboratory chemicals, lasers).
- 4) Describe the personal protective equipment (ppe), engineering controls and hazard mitigation procedures involved in the described procedures,
- 5) Please feel free to include or attach any supplementary materials that will assist in the description of the project. The submission site for the Safety of Minors in Research form allows the for attachment of files.



PI Name:

Minor Name:

## Safety of Minors in Research

**Principal Investigator:** Completion of this form will serve to inform the Department of Research Safety as they conduct their risk assessment for the project, and includes general recommendations for PPE for the activities described. You may also use this form as a guide to what training is required for the activities the student will perform or observe.

**Parent/Legal Guardian:** Scientific research involves the potential for exposure to various hazards. When deciding to allow your child to participate in research projects conducted at the University of Kentucky, it is important to be aware

### PROJECT HAZARD ASSESSMENT

**Please check the box for each activity in which the student will participate directly or observe in close proximity.**

| Check if YES                                                                                                                                                                          | Activity<br>(Animal Hazards)                                                                                                           | Potential Hazard(s)                                                                                 |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|
|                                                                                                                                                                                       | Working with live animals                                                                                                              | Animal bites, allergies.                                                                            |
|                                                                                                                                                                                       | Working with live animals in conjunction with other hazards (i.e., chemicals, infectious agents)                                       | Animal bites, allergies. Exposure to hazardous materials used in conjunction with animals           |
| Check if YES                                                                                                                                                                          | Activity<br>(Biological Hazards)                                                                                                       | Potential Hazard(s)                                                                                 |
|                                                                                                                                                                                       | Working with unpreserved human blood, bodily fluid, or other potentially infected materials                                            | Exposure to infectious material                                                                     |
|                                                                                                                                                                                       | Working with preserved animal and/or human specimens or samples                                                                        | Exposure to infectious material or preservative chemicals                                           |
|                                                                                                                                                                                       | Working with Risk Group 1 (RG1) infectious agents or recombinant/synthetic nucleic acid materials handled at Biosafety Level 1 (BSL-1) | Eye or skin irritation, potential for infection in immunocompromised individuals                    |
|                                                                                                                                                                                       | Manipulation of Risk Group 2 (RG2) cell lines, viruses, bacteria, or other organisms handled at Biosafety Level 2 (BSL-2)              | Exposure to infectious material, particularly via broken skin, mucous membranes or ingestion        |
| <b>Minors are prohibited from working in areas designated as or performing procedures with biological materials requiring Biological Safety Level 3 (BSL3) or higher containment.</b> |                                                                                                                                        |                                                                                                     |
| Check if YES                                                                                                                                                                          | Activity<br>(Chemical Hazards)                                                                                                         | Potential Hazard(s)                                                                                 |
|                                                                                                                                                                                       | Working with corrosives                                                                                                                | Eye or skin damage                                                                                  |
|                                                                                                                                                                                       | Working with acute toxins                                                                                                              | Poisoning, increased potential for eye or skin damage, potential injury via inhalation or ingestion |
|                                                                                                                                                                                       | Working with organic solvents or flammable liquids/solids                                                                              | Eye or skin damage, potential harm via skin or eye contact                                          |

PI Name:

Minor Name:

## Safety of Minors in Research

### PROJECT HAZARD ASSESSMENT (continued)

Please check the box for each activity in which the student will participate directly or observe in close proximity.

| Check if YES                                                                                                                                                                        | Activity<br>(Chemical Hazards)                                                                                                                                                                            | Potential Hazard(s)                                                                                                                                                                |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                                                                     | Working chemicals with known detrimental effects on human health or for which there are sensitivity or allergy concerns  | Eye or skin damage, potential injury via skin or eye contact, inhalation or ingestion                                                                                              |
|                                                                                                                                                                                     | Minor chemical spill cleanup                                                                                                                                                                              | Eye skin, or respiratory damage, potential injury via skin or eye contact                                                                                                          |
| <b>Minors are prohibited from performing procedures with, or working in an area with active use reactive chemicals, explosives, or large volumes (&gt;4L) of flammable liquids.</b> |                                                                                                                                                                                                           |                                                                                                                                                                                    |
| Check if YES                                                                                                                                                                        | Activity<br>(Laser Hazards)                                                                                                                                                                               | Potential Hazard(s)                                                                                                                                                                |
|                                                                                                                                                                                     | Performing alignment, trouble-shooting or maintenance that requires working with an open beam and/or defeating the interlock on any Class 3 or 4 laser system                                             | Eye damage                                                                                                                                                                         |
|                                                                                                                                                                                     | Viewing a Class 3R laser beam with magnifying optics (including eye glasses)                                                                                                                              | Eye damage                                                                                                                                                                         |
|                                                                                                                                                                                     | Working with a Class 3B or 4 laser open beam system with the potential for producing direct or specular reflections                                                                                       | Eye and skin damage                                                                                                                                                                |
| Check if YES                                                                                                                                                                        | Activity<br>(Nanomaterials)                                                                                                                                                                               | Potential Hazard(s)                                                                                                                                                                |
|                                                                                                                                                                                     | Working with engineered nanomaterials                                                                                                                                                                     | Inhalation and dermal exposure. Level of hazard is determined by the nature of the nanomaterial                                                                                    |
| Check if YES                                                                                                                                                                        | Activity<br>(Physical Hazards)                                                                                                                                                                            | Potential Hazard(s)                                                                                                                                                                |
|                                                                                                                                                                                     | Working high temperatures, including working with hot liquids or equipment, or with open flames.                                                                                                          | Burns, splashes, or fire                                                                                                                                                           |
|                                                                                                                                                                                     | Working with an apparatus or equipment with contents under vacuum or pressure, including compressed gas cylinders                                                                                         | Increased potential for injury or bodily harm, especially the eyes                                                                                                                 |
|                                                                                                                                                                                     | Working with cryogenic liquids (i.e., working with adding or removing freezer vials from a liquid nitrogen dewar). Working with very cold to freezing equipment or dry ice                                | Frostbite or skin burn. Skin, eye and tissue damage. Lacerations for other injury from exploding vials from rapid warming or inappropriate storage of dry ice in closed containers |

PI Name:

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## Safety of Minors in Research

### PROJECT HAZARD ASSESSMENT (continued)

Please check the box for each activity in which the student will participate directly or observe in close proximity.

| Check if YES                                                                                                                                                                                                   | Activity<br>(Physical Hazards)                                                                                         | Potential Hazard(s)                                                 |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------|
|                                                                                                                                                                                                                | Washing glassware                                                                                                      | Lacerations                                                         |
|                                                                                                                                                                                                                | Working with loud equipment, noises, sounds, or alarms                                                                 | Potential damage to or loss of hearing                              |
|                                                                                                                                                                                                                | Working with a centrifuge                                                                                              | Exposure to hazardous materials, lacerations from unbalanced rotors |
|                                                                                                                                                                                                                | Working with sharps (i.e., needles, scalpels, glass slides and pipettes).                                              | Laceration, exposure to hazardous materials via skin puncture       |
| Minors are prohibited from areas or activities requiring the use of a respirator.                                                                                                                              |                                                                                                                        |                                                                     |
|                                                                                                                                                                                                                | Activity<br>(Radiological Hazards)  | Potential Hazard(s)                                                 |
| Minors are prohibited from performing any activities involving sealed or unsealed radioactive materials, or radiation producing equipment. Minors can observe procedures with these materials from a distance. |                                                                                                                        |                                                                     |

PI Name:

Minor Name:



## Safety of Minors in Research

### Principal Investigator/Sponsor

I, \_\_\_\_\_, agree to sponsor the minor,  
\_\_\_\_\_, and by my signature below agree to the following:

- I have read, understand, and will adhere to the University of Kentucky Safety of Minors in Research Policy and understand that approval from the University of Kentucky Department of Research Safety must be granted before the minor may participate in any research activities.
- I will provide the minor with Laboratory Specific Training, specific to the laboratory hazards associated with the Minor's research project.
- I will provide personal protective equipment (PPE) appropriate and specific to the laboratory hazards present.
- This Minor will be always supervised while in the laboratory. The Minor will never be left unsupervised.
- This Minor's hours of work will comply with Federal Regulation 29 CFR 570.35.
- My laboratory is in full compliance with all applicable Research Safety programs and regulations and any UK institutional regulatory oversight committees (i.e., IBC, RSC, IRB, IACUC).

PI Signature: \_\_\_\_\_

Date of Signature \_\_\_\_\_

### Minor Student

I, \_\_\_\_\_, by my signature below, agree to the following:

- I have read, understand, and will adhere to the University of Kentucky Safety of Minors in Research Policy to best protect myself and those around me from accidental exposures and/or incidents.
- I have read and understand the hazard assessment for this project and will follow all instructions provided to me in the laboratory regarding safe practices and procedures, including the wearing of all assigned prescribed personal protective equipment (PPE) for all activities involving hazardous materials.

Minor Student Signature: \_\_\_\_\_

Date of Signature \_\_\_\_\_

### Parent/Guardian of Minor Student

I, \_\_\_\_\_, by my signature below, agree to the following:

- I have read and understand the Safety of Minors in Research Policy, including the hazard assessment for this project. I understand the hazards associated with my child's research project.
- I understand and agree that my child's research project may be suspended at any time, at the discretion of the University of Kentucky and its officers, agents, and employees, if the safety of my child, University of Kentucky employees and/or other volunteers becomes a concern.

Guardian Signature: \_\_\_\_\_

Date of Signature: \_\_\_\_\_