

## **SAFETY AND COMPLIANCE POLICY FOR MINORS IN TEACHING LABORATORIES**

Minors often seek and acquire opportunities to study or work at the University of South Carolina (USC) and gain valuable knowledge and experience. The University recognizes both the importance of the educational and outreach missions of the university, and the need to ensure a safe environment for all faculty, staff, students, and visitors. This safety and compliance policy is one of multiple University policies involving minors who seek volunteer work in USC teaching laboratories. A separate policy is available for minors who seek volunteer work in USC research laboratories.

For the purposes of this policy, “teaching laboratory” refers to any part of a building used or intended to be used for teaching science courses. These laboratory facilities have designated preparation rooms where hazards are handled and prepared for use in the laboratory classrooms. The use of laboratory hazards in classrooms corresponds with a well-defined set of experiments for the course taught in the classroom. A teaching laboratory classroom is generally a low-hazard environment where minimal concentration and volume of hazardous materials are used in the short term. There is a recognition that these labs are used by students with limited experience. Some research lab spaces may qualify as a “teaching laboratory” if they can be described as a low-hazard, well-controlled laboratory environment.

A minor is defined as a person under the age of eighteen (18) who is not enrolled or accepted for enrollment at the University. The following policy pertains to the presence of minors in all University teaching laboratory settings and other areas where storage and use of laboratory hazards are minimal.

1. Allowable activities for minors are based on their age.
  - Children under 12 years of age are prohibited from entering teaching laboratory areas under all circumstances.
  - No individual between the ages of 12 and 14 may enter a laboratory, unless they are part of a one-time tour that was approved by the host faculty member and the Department Chair. Tours may only be conducted at times when all hazardous materials are properly stored and not being used for experiments. The faculty member will be responsible for proper supervision and for providing any appropriate personal protective equipment for the visitors. Tours must be supervised at all times while a minor is on the premises, and tour participants may not participate in any laboratory activities.
  - Individuals between the ages of 14 and 16 may be allowed to participate in laboratory activities on a case-by case basis after a complete review of the planned activities by the Environmental Health and Safety (EHS), Office of General Counsel, Office of Enterprise Risk Management, and the Department Chair
  - Individual between the ages of 16 and 18 may enter and participate in laboratory activities if they are
    - a) Part of a group or individual educational program reviewed in advance by the Environmental Health and Safety (EHS), Office of Enterprise Risk Management, and the Department Chair, or
    - b) Part of a relationship in which a faculty member or researcher is acting as a mentor to the minor, and all activities performed by the minor have been approved by all applicable University departments, divisions and/or representatives. Applications proposing that a minor be present in the lab for longer than two weeks will be

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evaluated on a case-by-case basis by applicable university representatives, and may be denied or subject to additional requirements.

2. Proposed activities that will be conducted by minors in University teaching laboratories must adhere to all applicable requirements or restrictions imposed by the Department Chair, Environmental Health and Safety (EHS), Law Enforcement, Enterprise Risk Management, General Counsel, Continuing Education, Human Resources, and other University research safety or compliance committees. In addition, all required training must be provided by the sponsor faculty or researcher and completed before the minor engages in any lab activities. The lab activities must be conducted under an appropriate supervisory plan developed by the Sponsor and included in this document.

3. Signed *parental consent forms and liability waivers* are required for all participants under 18 and must be obtained prior to submitting this evaluation form. For ongoing recognized educational programs with competitive application processes, these forms may be obtained once the participating students have been selected. Prior to the minor beginning work, the sponsor faculty/researcher must complete this form, initial all pages, and submit the form to all applicable University representatives.

4. Minors under the age of 18 are prohibited from handling any of the following hazardous materials in University teaching laboratories:

- **Biological**

- Recombinant or synthetic nucleic acids requiring biosafety level 2 (BL2) or higher containment
- Biological agents (e.g. bacteria, fungal agents, viruses) classified as [Risk Group 2](#) or higher
- Human-derived materials covered under the OSHA Bloodborne Pathogens Standard
- HHS/USDA select agents
- Biological toxins
- Animals presenting special hazards (e.g. experimentally infected animals, venomous reptiles)

- **Chemical**

- Known and suspect carcinogens
- Known human reproductive toxins
- High acute toxicity substances
- Potential explosives (organic peroxides, perchlorates, picrates)
- Water and reactive chemicals (e.g., sodium, lithium, tert-butyl lithium)
- Compressed gases
- Cryogenic substances
- Any process, or combination of low-hazard chemicals that may generate the above
- DEA controlled substances

- **Radiation/Physical**

- Ionizing radiation-generating equipment (XRD, X-ray, fluoroscopy, accelerator, cyclotron)
- Radioactive materials
- Unshielded Class 3 or 4 lasers
- High magnetic field equipment (> 5 G)

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- **Other Equipment or Machines**

- High voltage equipment

- Extreme temperatures

- Pressurized systems and procedures

- Hazardous machines (e.g., shop equipment that burns, cuts, crushes or has exposed moving parts)

5. Minors are prohibited from working in laboratories that use and store highly hazardous substances (e.g., flammable/toxic/corrosive/pyrophoric gases, hydrofluoric acid, and organic mercury) and in laboratories with serious unresolved safety or compliance violations.

Minors that are not enrolled at the University are not covered under some institutional safety policies and procedures, therefore according to University policy, their participation in laboratory activities must not involve any hazards listed above. Non-participatory observation of experiments involving one or more of the hazards described above may be considered based on the age of participants and an appropriate supervisory plan.

6. Minors' use of hazardous chemicals in university teaching laboratories requires prior approval by EHS according to University policies for participants under the age of 18. These chemicals include:

- organic solvents,
- strong oxidizers,
- strong acids, and
- strong bases.

7. The purpose of the minor student's participation in laboratory activities at USC is to provide the student with an introduction to an academic field of study and/or to offer the student an educational mentoring opportunity. This experience at USC is solely for the benefit of the student. Accordingly, at no time will there be an employment relationship between the minor and USC, and the minor may not receive wages or other compensation for any of his/her educational activities at USC.

**Safety and Compliance Evaluation Form Review Procedures:**

1. The faculty sponsor submits this document in full (**all responses typewritten**), with completed *Application Form*, signed *Volunteer Participation Agreement* and signed *Sponsor Faculty Responsibilities*, and all pages initialed, to the sponsor's department Chair for review and approval or disapproval.
2. The department Chair reviews the application, adds any necessary comments, then electronically forwards the application with their recommendation to Jocelyn Locke at [jlocke@mailbox.sc.edu](mailto:jlocke@mailbox.sc.edu).
3. All required information must be entered prior to EHS review. All required attachments (Standard Operating Procedures, experimental procedures, others) must be included in the submission. All applicable University representatives will review the completed evaluation form and provide additional safety or compliance comments, recommendations, or requirements under "Reviewer Comments". Review comments will be emailed by Jocelyn Locke ([jlocke@mailbox.sc.edu](mailto:jlocke@mailbox.sc.edu)) to the Faculty sponsor and Department Chair

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4. EHS provides guidance and recommendations consistent with University policy. The Policy UNIV 4.00 Programs Involving Minors was issued by the President’s Office for all campuses. This policy states “Programs involving minors participating in activities in University laboratories or research facilities must also comply with applicable Environmental Health and Safety guidance documents.” EHS does not authorize final approval for minors in teaching laboratories. EHS reviews proposed lab activities involving minors and issues recommendations, requirements, or restrictions based on laboratory safety guidelines and University policy. Additional approval considerations may include, but not be limited to, the following policies and guidelines:
- a) University of South Carolina Policy (UNIV 4.00) on Programs Involving Minors
  - b) University Guidelines for Designing and Operating Programs Involving Minors
  - c) Human Resources Background and Employment Verification Check (policy HR 1.90)
  - d) School of Medicine Basic Sciences: Research Experiences for Minors (REM) Committee
  - e) Other applicable requirements based on University policies issued by Law Enforcement, Risk Management, General Counsel, Continuing Education and Conferences, or Human Resources.
  - f) Other policies, procedures or applications required by the Department sponsoring the minor(s).

**Disclaimer:**

The Principal Investigator or laboratory supervisor is solely responsible to fulfill all minor evaluation review and approval requirements, document approvals obtained, and maintain records for review upon request. EHS is not responsible for facilitating reviews or approvals involving other departments.

Please contact the following departments directly with questions or for further guidance:

- a) EHS – Questions regarding requirements to prevent exposure to hazardous materials in labs
- b) Risk Management – Questions regarding insurance or other general minors policy guidance
- c) Law Enforcement – Questions regarding assault, abuse or criminal activities involving minors
- d) General Counsel – Questions regarding waivers of liability and media release or legal issues
- e) Human Resources – Questions regarding background checks or other applicable HR policies

Policy UNIV 4.00 requires the individual or program sponsoring minors in the laboratory to:

- Exercise due diligence in designing program activities in such a way as to reflect safety considerations for all minor participants. Sponsoring units should design safe program activities and identify potential hazards or risk before accidents or injuries occur. Additional assistance can be obtained through Law Enforcement, Office of Risk Management, Office of General Counsel, Continuing Education and Conferences and Human Resources as necessary.
- Make all reasonable efforts to ensure the safety of minors participating in programs and activities covered by this Policy, including removal of minor participants from dangerous or potentially dangerous situations, irrespective of any other limitation or requirement. If a situation is felt to present imminent danger, or potential criminal activity toward a minor, University Law Enforcement must be called immediately.

**University of South Carolina**  
**Department of \_\_\_\_\_**  
**VOLUNTEER PARTICIPATION AGREEMENT**  
**AND ACKNOWLEDGEMENT OF RISKS**

Please read the statements carefully and sign in the space provided below.

In consideration of my being permitted to participate in the

\_\_\_\_\_  
 <Enter brief description of activity>

volunteer activity in the Department of \_\_\_\_\_ over the time period from  
 \_\_\_\_\_ to \_\_\_\_\_

\_\_\_\_\_  
 <Enter time period or dates involved>

I understand that there may be risks inherent in the volunteer work in which I will be participating. I acknowledge and assume these risks and accept that my participation may result in losses or personal injury. I also acknowledge and assume monetary responsibility for any such losses or personal injury.

Further, I agree now and forever to waive, release, hold harmless, defend, indemnify, and discharge the University of South Carolina, employees, servants, agents, officers, trustees, and other affiliated persons or entities from any and all claims, injuries, causes, actions, liability, demands, losses, legal or equitable, of any kind whatsoever, known or unknown, foreseen or unforeseen, including all legal fees and expenses, to include attorney's fees and court costs, arising out of, or in any way related any loss or damage to property, injury, illness, disease, loss of services, medical bills, charges, or otherwise, including Death, which may arise out of, or in any way be related to, my volunteer activities.

I agree and understand that as a volunteer with the University of South Carolina, I am not covered under the State Workers Compensation Act, nor does the University provide medical or health insurance coverage for me. As a result, if I am injured while serving as a volunteer, I cannot be compensated or reimbursed for medical expenses incurred through the State Workers Compensation Fund. Because of this, I may wish to consider securing adequate health and accident insurance to cover myself while performing my duties as a volunteer. I agree to be personally and completely liable for any expenses including, but not limited to, medical or health care expenses for medical treatment, illness, or condition, incurred for or on my behalf. I consent and give the University and any others associated with the University my permission, in case of accident or injury, to administer standard First Aid and to arrange for transportation to a medical facility.

If the volunteer activity involves the use of chemicals, I agree to complete University-sponsored Chemical and Laboratory Safety training before starting the activity. If the activity involves generation of hazardous waste, I also agree to complete University-sponsored Hazardous Waste Management training. I further agree to advise my sponsor in the Department of \_\_\_\_\_ of any situation or condition that may be a potential hazard or risk to me or to others.

I also agree that I will serve as a volunteer with the University of South Carolina without monetary compensation and recognize that the University of South Carolina is not required to provide any specific material support, space, or funding for my volunteer activity.

Initials of Volunteer/ Parent/Legal Guardian: \_\_\_\_\_ *(in addition, please sign and date page 2)*

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I will abide by all the rules, policies, procedures, and other requirements of the University of South Carolina. If I do not abide by these rules, I may be required to discontinue my activity as a volunteer.

\_\_\_\_\_  
Volunteer Signature

Date: \_\_\_\_\_

\_\_\_\_\_  
Print name

**If Volunteer is under 18:**

I warrant I am the parent or authorized legal Guardian of the Participant and I warrant I am 18 years of age or older. I have carefully reviewed and I agree to the terms of this entire document.

\_\_\_\_\_  
Volunteer Signature

Date: \_\_\_\_\_

\_\_\_\_\_  
Print name

\_\_\_\_\_  
Parent/Guardian Signature (required)

Date: \_\_\_\_\_

\_\_\_\_\_  
Print name

**EMERGENCY CONTACT:**

Name \_\_\_\_\_ Relationship: \_\_\_\_\_

Home: ( ) \_\_\_\_\_ Work: ( ) \_\_\_\_\_ Cell ( ) \_\_\_\_\_ Other: ( ) \_\_\_\_\_

Name \_\_\_\_\_ Relationship: \_\_\_\_\_

Home: ( ) \_\_\_\_\_ Work: ( ) \_\_\_\_\_ Cell ( ) \_\_\_\_\_ Other: ( ) \_\_\_\_\_

Please submit this signed form to the Faculty in charge of your host laboratory. This form will be attached to the application and submitted to the Chair of the Department who will review your application.

If you have any questions or concerns regarding this evaluation form, please call the Office of Risk Management at 777-2828 or the Laboratory Safety Manager at 777-7650

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Minor's Project Information	
Student Name(s) and Date of Birth	<i>List all participants here</i>
Faculty Sponsor	
Department	
Building	
Laboratory Room #	
Telephone #	
Start Date to End Date (≤2 weeks)	

**Description of laboratory experiments and procedures: *Attach standard operating procedures or materials and methods for all tasks and experiments to this document.***

**Materials: (list all samples/materials the minor will be using or handling: specify in Biological if using recombinant or synthetic nucleic acids; specify in Others: human subjects and animals)**

- Chemical \_\_\_\_\_
- Biological \_\_\_\_\_
- Equipment \_\_\_\_\_
- Sharps \_\_\_\_\_
- Other(s) \_\_\_\_\_

**Personal Protective Equipment provided:**

- Safety glasses                       Lab coat
- Safety goggles                       Corrosive-resistant apron
- Face shield                             Gloves (circle one or more): nitrile, latex, butyl, neoprene, cryogen-resistant
- Other(s) (specify): \_\_\_\_\_

**Department Chair Approval**

APPROVED BY	PRINT NAME	SIGNATURE	DATE
Department Chair			

**Chair Comments:**

**Additional Information (any other information useful for evaluating safety of this project)**

***Note: The Faculty sponsor must ensure the minor(s) demonstrates proficiency in all applicable work practices and procedures before working with any potentially hazardous materials.***

<p><b>Lab and hazard-specific training(s) provided by the Faculty sponsor</b>          (Training must include demonstrating proficiency in all work practices, proper use of PPE and other safety equipment, procedures for responding to hazardous material spills and exposure, etc.)  <b>NOTE: Training must be documented and a copy kept in Department files</b></p>	<p><b><u>Describe type of training &amp; anticipated date of completion</u></b></p>
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**Supervisory Plan (describe work hours, name(s) of supervisor(s) and supervision provided to the minor)**



Reviewer(s) Comments:

PI Initials

\_\_\_\_\_

Reviewer Name/Position	Office or Committee	Reviewer Comments, Recommendations or Additional Requirements

**FACULTY SPONSOR RESPONSIBILITIES**  
**FOR MINORS IN TEACHING LABORATORIES**

- Review the University of South Carolina Policy (UNIV 4.00) on Programs Involving Minors and all other applicable University policies with each minor that will be working in the laboratory.
- Discuss with the minor’s parent/guardian all potential risks associated with proposed activities.
- Provide lab minor(s) with written protocols describing potential hazards and necessary precautions.
- Provide personal protective equipment (PPE) required to prevent exposure to hazardous materials.
- Instruct and train the minor(s) in safe work practices for all proposed experiments.
- Instruct and train the minor(s) in procedures for dealing with accidents.
- Always supervise the minor(s) to ensure that required safety practices and techniques are employed.
- Ensure that other assigned supervisors are qualified scientists who can provide proper safety guidance.
- Correct work errors or conditions that may result in a release of hazards or personnel injury/ exposure.
- Ensure the integrity of physical containment (e.g., biosafety cabinet, chemical fume hood).
- Adhere to University emergency plans for handling accidental spills and personnel contamination.
- Verify lab minor(s) have completed the required EHS trainings, if any, before starting work in the laboratory (e.g., Laboratory Safety, General Biological Safety, Hazardous Waste).
- Submit any subsequent experimental changes to Environmental Health and Safety (EHS) and all other applicable representatives, departments, or divisions for review and approval or disapproval.
- Remain in communication with all parties involved in the project review and approval throughout the duration of the project (e.g., notify all parties if the designated project timeline must be amended).
- Report any significant problems pertaining to the operation and implementation of practices and procedures, violations of safety or compliance requirements, or any significant lab-related accident or illness to the EHS Laboratory Safety Manager (jlocke@mailbox.sc.edu) within 48 hours of the incident.

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By signing below, I agree to fulfill all the Principal Investigator’s responsibilities as stated above, and I assume complete responsibility for the safety and oversight of minor(s) in my lab.

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Sponsor’s Name (Print)

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Sponsor’s Signature

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Date

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