

UC Irvine Environmental Health & Safety

Section:	Title: <i>Visitors and Minors in Labs & Shops</i>
Initiator:	Revision Date: 12-19-2013

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1. Program Description

The UCI *Visitors & Minors in Labs and Shops* program establishes guidelines for ensuring visitors' safety while in potentially hazardous areas on campus. Program guidelines cover visitations ranging from passive tours to active research projects and notes exceptions applicable to minors. Visitors and minors are not permitted in potentially hazardous work areas except as outlined below.

2. Scope

In the event that faculty, staff, or students bring a visitor to work on a limited, short-term basis, the supervisor must be informed in advance. If he/she approves, adequate steps must be taken to prevent injury or disruption to others at work.

It is especially important that younger minors below the age of 14 be restricted from hazardous work areas due to their developing immune/neurological systems and their general lack of hazard recognition ability. We recognize that there may be times when minors may be invited to University sponsored events (e.g., Bring Your Child to Work Day) however; careful attention must be given to work areas where hazardous material or equipment is located.

3. Definitions

Potentially Hazardous Work Area: An area where hazardous substances (e.g. hazardous chemicals, biohazardous agents, radioisotopes) or physical hazards (e.g., radiation, lasers, moving machinery parts, extreme temperatures, electrical apparatus) are present.

Visitors: A visitor is anyone who is not UCI faculty, staff, or a registered student.

Minors: Anyone under the age of 18.

4. Responsibilities

It is the responsibility of the Vice Chancellors, Deans, Directors, and Department Heads to assure that employees under their respective jurisdictions comply with this program. Supervisors of hazardous work areas (Principal Investigators, Lab Managers etc.) must ensure that all tenets of this program are being followed for all visitors and minors.

Human Resources must conduct a criminal background check in accordance with university policies and procedures on UC employees overseeing minors.

EH&S is responsible for assisting lab personnel in monitoring health and safety of minors and proper visitors' procedures.

Parents and Guardians of minors must sign all required liability and release forms permitting their minors to tour or work in hazardous areas.

5. Program Components

A. Visitor Restrictions Based on Activity

Visitors are not permitted in potentially hazardous work areas except when the following criteria are met:

1. **Passing through** a potentially hazardous area (e.g. to reach an office area):
 - A University employee who is trained and knowledgeable of the area's potential hazards escorts the visitor directly to the destination.
 - The visitor is protected from potential hazards as deemed appropriate by the area supervisor and is provided with necessary PPE.
2. **Briefly touring** the potentially hazardous work area (e.g., class tours, donor presentations, parent showing work area to minor etc.):
 - Visitor completes ***Waiver of Liability, Assumption of Risk, and Indemnity Agreement*** for Voluntary Activity (attached in the Appendix). Parent/Legal Guardian must sign for minors. Completed form to be maintained by the Department for three years.
 - Visitor is personally accompanied at all times by University employee who is trained and knowledgeable of the area's potential hazards.
 - The trained University employee ensures that visitor is NOT placed into a situation where the health and safety of self or others may be compromised.
 - Visitor is provided appropriate personal protective equipment.
 - For group tours, a safety briefing is provided to the group prior to entry.
3. **Participating in** a University-sponsored function requiring more than intermittent presence in the work area (e.g., lab coursework, research, volunteering etc.):
 - Visitor completes ***Waiver of Liability, Assumption of Risk, and Indemnity Agreement, Potential Hazard Information Sheet, Rules for Visitors & Minors in Lab, and the Research Proposal Form***. Completed forms are to be maintained by the Department. (If visiting as part of UC employment or enrolled coursework, UC employees and students are exempted from completing the UC Liability Waiver).

- Visitor completes [Lab Specific Site Safety Checklist](#) and all components of it including SOPs, waste management, emergency evacuation etc.
- Visitor is under the direct supervision of a university employee at all times who is trained and knowledgeable of the hazards.
- Visitor is provided appropriate safety training through both UCLC ([UCINetID is required](#)) and work unit specific training by the supervisor, (Exception: Visitors staying under one week are exempt from UCLC training if **always** under direct supervision).
- Visitor is provided appropriate personal protective equipment and complies with UCOP PPE policy including long pants and closed-toe shoes.
- Visitor is provided appropriate site specific training.
- Department Chair approval required for exceptions to this policy.

B. Minors in Labs and Shops

1. The following are general guidelines and exceptions to visitors who are minors:

- Minors below the age of 14 are not allowed in any UC labs or shops except when participating in supervised tours, ***this includes minors related to lab personnel.***
- **Minors are never allowed in labs where research with controlled substances is performed.**
- Minors are not allowed in the Vivaria unless their participation has been reviewed by the IACUC and the Vivaria facility manager.
- Minors between the ages of 14-18 are allowed only when they are enrolled in an academic lab class or they are part of a supervised tour, or if they have their guardian's consent to participate in lab activities whereby they received all required training and are always under supervision.
- Minors must:
 1. Review and sign *UC Waiver of Liability, Assumption of Risk, and Indemnity Agreement, Potential Hazard Information sheet, Rules for Minors in Lab and Shops, Release of Liability and Hold harmless Agreement* and *Research Proposal form* (only if the minor will be performing any continuous work or activity in the lab). All records must be kept 3 years after the minor has turned 18.
 2. Review all emergency procedures with the supervisor.
 3. Be assigned a supervisor who will review the *Lab Site Specific checklist* and ensure that criteria have been met.
- Minors of lab personnel must follow all guidelines required of other minors. They are allowed with UC personnel under the following conditions:
 - Are with supervising personnel in areas of the lab free of hazards (commonly called "Clean Areas"), or
 - Part of a campus event or
 - When escorting a minor through a lab to reach a non-lab area.

Note: Principal Investigators/Supervisors should keep in mind that minors need considerable explanatory preludes to understanding standard documents such Safety Data Sheets, Standard Operating Procedures etc. Supervisors should perform all training necessary to try and bring the minor to a safety awareness level comparable to trained lab personnel.

2. The following additional restrictions apply to minors working with the following categories of hazardous activity:

Chemical Activity	Requirements
<i>Exception for Minors:</i>	Minors are prohibited from working with: <ol style="list-style-type: none"> 1. Highly hazardous material- including pyrophorics, explosives, flammables more than 4L and compounds with an LD-50 LESS than 50 ppm. 2. Cal-OSHA regulated carcinogens 3. International Agency for Research on cancer Group 1 or Group 2A carcinogens.
<i>Biological Agents</i>	Minors 14-16 may never work with situations that may require BSL-2, BSL-3 or BSL-4 containment. They may enter a BSL-1 and 2 combined area provided there is NO contact with BSL-2 work. Minors 16-18 may never work with or around BSL-3 or BSL-4; they may enter BSL-2 with appropriate medical training and constant surveillance.
<i>Radioactivity or radiation producing machines</i>	Minors may never work with radioactive material or radiation-producing machines. Exceptions must involve Radiation Safety Officer approval and documented training.
<i>Physical Hazards</i>	Especially hazardous equipment, heavy machinery, high voltages, elevated pressures/temperatures or heights must be avoided and the minor must always be accompanied while performing a physically hazardous operation.

NOTE: Work more hazardous than described here requires approval by Department Chair or School Dean. See *Research Project Proposal Form*.

6. Reporting Requirements

Any conflicts resulting from implementation of the program shall be brought to the attention of the appropriate supervisory personnel and, if necessary, referred to the appropriate Vice Chancellor, Dean, or Director who shall make a final decision.

Visitors may also need to comply with other policies and procedures specific to the school/department.

7. Information and External References

[UC IRVINE ADMINISTRATIVE POLICIES & PROCEDURES](#)
[Sec. 903-10: Environmental Health & Safety \(EH&S\) Policy](#)

RELEASE OF LIABILITY, WAIVER OF CLAIMS, EXPRESS ASSUMPTION OF RISKS, AND HOLD HARMLESS AGREEMENT

-Required only if Visitor is a minor

I HAVE READ, UNDERSTAND, and INITIALED the documents Rules for a Minors Working in Laboratories and Shops and Potential Hazard Information Sheet describing the potential risks and dangers associated with my child's research project. I fully understand that there are potential risks and hazards associated with exposure to hazardous materials or substances. I AGREE TO ALLOW my minor child to participate on a scheduled assignment in the University of California laboratories and freely accept and assume all associated risks and hazards. I ALSO AGREE AND UNDERSTAND that my child's research project may be suspended at any time, at the discretion of the University of California and its officers, agents, and employees, if the safety of my child, University of California employees and/or other volunteers at the University of California become a concern.

I, for myself and my estate, heirs, administrators, executors, and assigns, hereby release and hold harmless the State of California, the UC Board of Regents, and their officers, directors, employees, representatives, agents, and volunteers (collectively, the "Releases"), from any and all liability and responsibility whatsoever, however caused, for any and all damages, claims, or causes of action that I, my estate, heirs, administrators, executors, or assigns may have for any loss, illness, personal injury, death, or property damage arising out of, connected with, or in any manner pertaining to my child's scheduled assignment in the University of California laboratories, whether caused by the negligence of Releases or otherwise. I further hereby agree to defend, indemnify and hold harmless the Releases from any judgment, settlement, loss, liability, damage, or costs, including court costs and attorney fees that Releases may incur. In signing this agreement, I acknowledge and represent that I have read and understand it and that I sign it voluntarily and for full and adequate consideration, fully intending to be bound by the same.

Printed Name of Minor Child

Signature of Parent/Legal Guardian

Printed Name of Parent/Legal Guardian

Date

I have read, understand, and will adhere to the University of California Minors in Laboratories and Shops Policy. I understand that failure to comply with this Policy is dangerous to my health and safety and that I may be removed from the facility immediately for any failures or deviations in compliance.

Signature of Minor

Date

RULES FOR VISITORS & MINORS IN LABORATORIES AND SHOPS

1. Never participate on a scheduled assignment alone in any laboratory environment without direct, immediate adult supervision (if minor) from the sponsor or someone designated by the sponsor.
2. Complete and follow safety training specific to the hazards in the laboratory.
3. Always wear the personal protective equipment as directed and dispose of it appropriately. This personal protective equipment (PPE) includes goggles, gloves, coats/gowns, and other face/body protection as dictated by the hazard being worked with or around. Always remove PPE when leaving the work area.
4. Always follow the instructions of the sponsor or laboratory supervisor.
5. Always report any accident (regardless of severity) immediately to the sponsor or laboratory supervisor.
6. Always keep your hands away from your face and wash them well with soap and water prior to leaving any laboratory area and after removing gloves.
7. Never eat, drink, chew gum, apply lip balm, or touch contact lenses while in any laboratory environment.
8. Always wear closed-toe shoes while in any laboratory.
9. Always tie back long hair to keep it out of all the hazards listed above.
10. Always wear clothing that reduces the amount of exposed skin.
11. Always ask questions if you don't understand the safety requirements.

Printed Name of Visitor

Signature of Visitor

Signature of Parent/Legal Guardian if Minor

Printed Name of Parent/Legal Guardian

Date

Visitors & Minors: *Potential Hazards Information*

This list may NOT cover all hazards; supervisors should ensure that all hazards have been thoroughly communicated and understood.

Type	Characteristics/potential hazards		Examples
Chemicals	Refined compound that may be in the form of a solid, liquid or gas. These may or may not be hazardous. Some compounds may have numerous hazard classifications (e.g. flammable, toxin & carcinogen)	Carcinogens: may cause cancer with long term exposure - usually many years in the future	Benzene
		Teratogens: known to affect the reproductive system of males /females & may cause birth defects in the developing fetus.	Alcohol, thalidomide, X-rays
		Neurotoxins: may affect the nervous system.	Ethidium bromide, snake venom
		Flammables: may burn or explode	Acetone, Xylene, Alcohol
		Reactives: may react explosively	Peroxides, acrylamide
		Corrosives: may cause tissue damage through inhalation or direct contact with eyes, skin, etc.	Acids & Bases
		Toxins: may cause illness or death on exposure.	Cyanide
Compressed Gases	Gases frequently housed in large & heavy high-pressure cylinders. The gas itself may be harmless, toxic, corrosive, flammable	Physical hazard: Explosion hazard upon rupture Asphyxiant hazard if gasses enter workplace & displace oxygen	Asphyxiant: nitrogen, helium, any other non-oxygen gas Flammable: hydrogen Toxic: ammonia
Radiation / Radioactive Materials	High energy particles (alpha & beta) or photon (X-rays, gamma)	Tissue & Organ damage with high doses	Uranium, Phosphorus-32, Sodium-35, X-rays
Physical Hazards	Exposure to noise, machinery, heat, cold, etc.	Tissue damage, hearing loss	Scrapes, cuts Cold: liquid nitrogen Heat: burners
Lasers	Light Amplification by Stimulated Emission of Radiation	Eye damage and possible skin damage	Class IIIB and IV, and open beam laser operation
Biological Agents	Living organisms or products of living organisms such as viruses, bacteria, fungi, prions & parasites. Hazards from infection are organism dependent & may range from mild treatable to severe untreatable. Hazards are classified according to recommended containment protocol.	Biosafety Level 1 - No hazard Biosafety Level 2 - Mild to severe illness Biosafety Level 3 – Severe illness & possible death Biosafety Level 4 – Fatal disease	Baker's yeast & E. coli K12

Recombinant DNA	Genetically modified organisms.	Scant scientific knowledge as to effects once introduced to the human body.	Viral vectors such as Adeno & Adeno-associated viruses used to transfect or express genes.
Toxins – Microbial, Plant, Animal	Poisonous substances produced by plants, living organisms or animals.	Tissue & organ damage or death.	Plants – Ricin Animals – fish / Reptile venom Pathogens– Staphylococcus, Tetanus

Visitor's Name: _____

Visitor's Signature: _____ Date: _____

If Visitor is a minor, the following is required:

Parent/Legal Guardian Name: _____

Parent/Legal Guardians Signature: _____ Date: _____

Assigned Supervisor's Name: _____

Assigned Supervisor's Signature: _____ Date: _____

Visitors Research Proposal Form

Principal Investigator/Sponsor Name _____ Dept: _____

Phone: _____ Email: _____

Visitor's Name: _____ Date of Birth (only if minor): _____

Project Information: The nature of this project is (check one)

◆ Student Intern ◆ Volunteer ◆ Part of a UC Sponsored Program: _____

Other (specify) _____

Project Title: _____

Start Date: _____ End Date: _____ Location: Bldg: _____ Room(s): _____

Project Description (attach separate sheet if necessary):

Materials and Equipment to be Used Check and List all that apply:

Chemicals
<input type="checkbox"/> Flammable
<input type="checkbox"/> Reactive
<input type="checkbox"/> Carcinogenic
<input type="checkbox"/> Toxic
<input type="checkbox"/> Corrosive
<input type="checkbox"/> Oxidizer
<input type="checkbox"/> Cryogen
<input type="checkbox"/> Pharmaceuticals
<input type="checkbox"/> Gases

Biological Material
<input type="checkbox"/> Recombinant DNA
<input type="checkbox"/> Bacteria
<input type="checkbox"/> Viruses
<input type="checkbox"/> Fungi
<input type="checkbox"/> Parasites
<input type="checkbox"/> Human Source Material
<input type="checkbox"/> Insects
<input type="checkbox"/> Plants
<input type="checkbox"/> Animals

Equipment
<input type="checkbox"/> Fume Hood
<input type="checkbox"/> Biosafety Cabinet
<input type="checkbox"/> Laminar Clean Bench
<input type="checkbox"/> Autoclave
<input type="checkbox"/> Centrifuge
<input type="checkbox"/> Analytical Instruments
<input type="checkbox"/> Industrial Machinery
<input type="checkbox"/> Noise Producing Equip.
<input type="checkbox"/> Other Equipment

Other:

I AGREE TO SPONSOR (Visitor Name) _____, UNDER THE FOLLOWING TERMS:

- I have read, understand, and will adhere to the "Minors in Laboratories and Shops" Policy. The potential hazard information signature sheet is attached. I will ensure that this Minor's Hazard Specific Safety Training is completed and documented.
- Personal protective equipment appropriate for, and specific to, laboratory hazards will be provided. This individual will be supervised at all times if they are a minor while in the laboratory and never left alone.
- My laboratory is in full compliance with all applicable University of California safety programs and regulations
- I understand that my failure to adhere to the "Visitors and Minors in Laboratories and Shops" Policy may result in my receiving corrective action or discipline, up to and including dismissal.

Printed Name of PI/Sponsor

Signature of PI/Sponsor

Date

Printed Name of Department Chair

Signature of Department Chair

Date

Retain for 3 years (3 years after 18 if visitor is a minor)