UCLA Policy 905: Research Laboratory Personal Safety and Protective Equipment

Issuing Officer:	Vice Chancellor for Research
Responsible Dept:	Environment, Health & Safety
Effective Date:	March 31, 2014
Supersedes:	UCLA Policy 905, dated 2/1/2010

I. REFERENCES

1. University of California Policy on Personal Protective Equipment (06/12/2013);
2. University of California Policy on Management of Health, Safety and the Environment (10/28/2005);
3. Guiding Principles to Implement the University of California Policy on Management of Health, Safety and the Environment (10/28/2005);
4. UCLA Policy 811, Environmental Health and Safety;
5. Code of Federal Regulations, Title 29 CFR, Part 1910, Subpart 1;
6. California Code of Regulations – Subchapter 7. General Industry Safety Orders – Group 16. Control of Hazardous Substances – Article 109. Hazardous Substances and Processes - §5194. Hazard Communication.

II. STATEMENT

The University of California is committed to providing a healthy and safe working environment for all members of the campus community. It is University policy to comply with all applicable health, safety and environmental protection laws, regulations and requirements. The Occupational Safety and Health Administration (OSHA) ensure workplace safety through the enforcement of established federal legislation, and the California Occupational Safety and Health Administration (CalOSHA) operates as the acting regulatory enforcement body under the direction of the OSHA act.

Title 29 of the Code of Federal Regulations, Part 1910, Subpart 1. *Personal Protective Equipment*, states that "protective equipment, including personal protective equipment for eyes, face, head, and extremities, protective clothing, respiratory devices, and protective shields and barriers, shall be provided, used, and maintained in a sanitary and reliable condition wherever it is necessary by reason of hazards of processes or environment, chemical hazards, radiological hazards, or mechanical irritants encountered in a manner capable of causing injury or impairment in the function of any part of the body through absorption, inhalation or physical contact." Pursuant to this regulation, and in an effort to prevent workplace injuries and illnesses, UCLA has established this Policy regarding Personal Protective Equipment (PPE) requirements for all campus research laboratory faculty, staff and students.

III. RESPONSIBILITIES

Preventing workplace injuries and illnesses is the responsibility of every member of the campus community. Specific responsibilities are assigned to higher level members of the research and teaching community in order to implement and ensure compliance with this Policy by their subordinate staffs.

The Chancellor has overall responsibility for compliance with health and safety requirements at all facilities and programs under campus control.

The Vice Chancellor for Research is responsible for the implementation of this Policy in all applicable research and teaching laboratories within his or her jurisdiction.

The UCLA Laboratory Safety Committee (LSC) is responsible for promoting a safe working environment in all research and teaching laboratories on campus.

Department Chairpersons are responsible for communicating, promoting and enforcing the Policy in their respective research and teaching areas.

Principal Investigators and laboratory management staff are responsible for complying with this Policy and ensuring their staff receive appropriate training and comply with this Policy as it relates to their research and teaching activities.

All staff members working in laboratory areas are responsible for following laboratory safety requirements and for wearing PPE as outlined in this Policy and in laboratory-specific safety training.

The UCLA Office of Environment, Health & Safety (EH&S) is responsible for inspection of laboratories and enforcement of this Policy. In cases where laboratory activities pose an immediate danger to life or health, designated EH&S staff have the responsibility and authority to order the temporary cessation of the activity until the hazardous condition is abated.

IV. SAFETY REQUIREMENTS

The following requirements pertain to all research and teaching laboratory environments utilizing hazardous chemical, hazardous biological or unsealed radiological materials (see section V., below). The requirements do not apply to those research and teaching laboratories that involve solely mechanical, computer, laser, other non-ionizing radiation, or electrical operations; these hazards will be addressed under separate policies, as appropriate. In addition, these requirements will not apply to laboratories which have been designated as non-hazardous materials use areas. In order to qualify as a non-hazardous materials use area, a laboratory must obtain approval and appropriate labeling from EH&S. EH&S, in cooperation with regulation mandated safety committees, has the final authority for determining whether any specific material is classified as hazardous. Deviations from these requirements, including the defining of specific hazardous materials use areas within rooms, may be permitted under certain conditions and will require express, written approval from EH&S.

A. Full length pants, or equivalent, and close-toed shoes must be worn at all times by all individuals that are occupying the laboratory area. The area of skin between the shoe and ankle should not be exposed.

B. Protective gloves must be worn while utilizing any hazardous chemical, biological or unsealed radiological material. These gloves must be appropriate for the material being used. The Safety Data Sheet (SDS) for the material should be referenced when determining the effectiveness of the type of glove to be used. Additionally, the EH&S website (www.ehs.ucla.edu) offers guidance on glove selection based on material handling as well as links to other resources. This requirement does not apply when working with non-hazardous materials and an open flame or other heat source that might cause injury by melting plastic gloves.

C. Laboratory coats, or equivalent, are required to be worn while working on, or adjacent to, all bench top procedures utilizing hazardous chemicals, biological or unsealed radiological materials. These laboratory coats must be appropriately sized for the individual and be buttoned to their full length. Laboratory coat sleeves must be of a sufficient length to prevent skin exposure while wearing gloves.

D. Flame resistant laboratory coats must be worn when working with any amount of pyrophoric materials, or any amount of flammable liquids near ignition sources. Flame resistant laboratory coats must be worn when working with flammable liquids in amounts that pose a greater than de minimus risk as determined by a risk assessment. It is recommended that cotton (or other non-synthetic material) clothing be worn during these procedures to minimize injury in the case of a fire emergency.

E. Laboratory coats may not be worn outside of a laboratory unless the individual is traveling directly to an adjacent laboratory work area. Protective gloves must not be worn in any public area outside of the laboratory (i.e., hallways, elevators, offices). Gloves should also be removed prior to handling any equipment that could likely result in cross-contamination (e.g., telephones, computer work stations, etc.).

F. Each department or research unit shall be responsible for providing professional laundry services as needed to maintain the hygiene of laboratory coats. They may not be cleaned by staff members or students at private residences or public laundry facilities. Any clothing that becomes contaminated with hazardous materials must be decontaminated before it leaves the laboratory.

G. Eye protection or equivalent engineering controls must be used while handling any hazardous chemical, biological or unsealed radiological materials. All eye protection equipment must be American National Standards Institute (ANSI) approved and appropriate for the work being done.

H. Some operations and procedures may warrant further PPE, as indicated by the SDS, the standard operating procedures for the material being used, facility policies, regulatory requirements, or the EH&S Laboratory Hazard Assessment Tool.

V. DEFINITIONS OF HAZARDOUS MATERIALS

The following materials are defined as hazardous for the purposes of this Policy:

1. Any unsealed radioactive material.
2. Biological materials in the BSL-2 Category, or greater.
3. Chemicals listed as Select Carcinogens and Regulated Carcinogens. (See http://www.dir.ca.gov/Title8/5191.html for the Cal/OSHA criteria for select carcinogens)
4. Chemicals listed as Reproductive Toxicants. (See http://www.oehha.org/prop65/prop65_list/Newlist.html#files for a list of reproductive toxicants and carcinogens identified under California Proposition 65)
5. Chemicals listed as Toxic or Highly Toxic. (See http://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=STANDARDS&p_id=10100 for OSHA guidance on identifying Highly Toxic Chemicals)
6. Flammable, air reactive, or water reactive chemicals.
7. Corrosive chemicals in concentrations of one (1) molar or greater.
8. Known significant skin or eye irritants.

This list is to be used as a guideline and allows for some laboratories to be classified as non-hazardous materials laboratories. It does not supersede Cal/OSHA regulations or accepted safe work practices for specific materials. PPE and other safety measures, as appropriate, must be used to protect workers from any and all known hazards that are present in all work-related activities at UCLA. Refer to the California Code of Regulations for additional guidance in developing protective measures for laboratory use of hazardous materials.

Issuing Officer

/s/ James Economou

Vice Chancellor for Research

Questions concerning this policy or procedure should be referred to the Responsible Department listed at the top of this document.