POLICY:
In order to ensure that laboratory activities are conducted safely, and in compliance with environmental health and safety regulations, all laboratory activities must be conducted under the supervision of a designated laboratory supervisor.

RESPONSIBLE AUTHORITY:
Vice President for Research; Environmental Health and Safety Department

SCOPE:
This policy applies to the supervision of all laboratories maintained by UNR that possess recognized biological, chemical, radiological, or physical hazards, and chemical stockrooms and storerooms. This includes teaching and research laboratories, and service laboratories that provide testing, diagnostic, measurement, or other laboratory services.

BACKGROUND:
It is clear that the University has a legal duty to establish an effective laboratory safety program that will minimize risks. Inherent in this duty is supervision of laboratory personnel to ensure that environmental health and safety procedures are followed. Additionally, most federal research sponsors also require adherence to safety regulations as a condition of funding, highlighting the fact that laboratory safety is an inherent component of, and complement to, the teaching and research mission of the University. Although not as well defined, professional practice, and moral and ethical responsibilities also necessitate a high standard of laboratory safety. In short, it is not acceptable to merely conduct productive laboratory research; it must be conducted safely and in compliance with laboratory safety regulations.

The University’s duty to supervise laboratory personnel is delegated through the academic administrative line from the President to the Provost and Vice Presidents, to Deans, Department Chairs, Directors and ultimately to faculty and staff directly responsible for teaching and research laboratory activities. For teaching laboratories, the faculty in charge of the course is responsible for laboratory safety, and for research laboratories, the Principal Investigator is responsible for laboratory safety. Although specific duties associated with laboratory safety may be delegated to qualified and trained students and staff, the responsibility cannot be delegated. Laboratory personnel who have been trained and are otherwise qualified, are responsible for working safely and in accordance with procedures and guidelines established by the University, academic department or program, and specific laboratory.

Regulatory requirements and legal duty do not recognize university education, publication history, or laboratory experience, *per se*, as evidence of laboratory safety.
training or competence. It is not sufficient to rely on the assumption that laboratory personnel know, and follow, laboratory safety regulations and procedures. Laboratory supervisors must ensure sufficient training so that all laboratory workers under their direction, or working in laboratory space for which they are responsible, understand the hazards that they are exposed to, and know how to work safely and in compliance with laboratory safety regulations.

To assist laboratory supervisors in meeting these responsibilities, the University has established the Environmental Health and Safety Department (EH&S). The function of EH&S is to facilitate University activities, including laboratory research, through prudent risk management practices that minimize risks to people, the environment, facilities, and other university resources. EH&S provides services, materials, tools, and guidance to aid laboratory supervisors in meeting their health and safety responsibilities.

REFERENCE REGULATIONS:
NAC 459, Hazardous Materials
NIH/CDC, Biosafety in Microbiological and Biomedical Laboratories
NIH, NIH Guidelines for Research Involving Recombinant DNA Molecules
29 CFR 1910, OSHA Regulations

DEFINITIONS:
Laboratory Supervisor – Person who has been assigned responsibility for a particular laboratory space or activity. Principal investigators assume this responsibility for laboratory space assigned to them for research activities. Teaching faculty assume this responsibility for academic laboratory courses for which they are the designated course instructor.

Laboratory Personnel – Students, employees, or volunteers who work in, or receive training in, a laboratory space or activity for which a lab supervisor has responsibility.

RESPONSIBILITIES:
Department Chairs and Directors – Ensure that all faculty and principal investigators are aware of the responsibilities and procedures contained in this policy. For laboratory space that is shared by investigators, or which is considered to be common laboratory space (such as core laboratory facilities and instrument rooms), assign a faculty member to be responsible for that space.

Laboratory Supervisor – Ensure that environmental health and safety policies are implemented in laboratories for which they are responsible.

Health and safety responsibilities of UNR Laboratory Supervisors include the following:

1. Ensure that all laboratory personnel receive documented training on the specific health and safety hazards to which they are exposed, and that personnel are competent to perform their assigned work. Training documentation must include the name of the instructor, the name of the person receiving the training, the date, and the
training topic(s). A training documentation form is available as an appendix to the University Chemical Hygiene Plan (CHP); however, other formats may be used. This training must communicate laboratory hazards, methods, procedures, and equipment required to work safely in the laboratory, proper emergency response actions, and when and how to obtain treatment for workplace illness or injury.

2. Develop written standard operating procedures (SOPs) that address biological, chemical, radiological, and physical hazards associated with the specific laboratory operations for which the supervisor is responsible. Information on developing SOPs for chemical procedures is available in Chapter 3 of the CHP and an example template is available as an appendix to the CHP. Information on developing SOPs for use of biological agents and radioactive material is available in the Biosafety Manual and Radiation Safety Manual, respectively. SOP topics will typically be included in laboratory-specific training.

3. Upon request from authorized personnel, communicate information regarding hazards and necessary safe work practices to authorized laboratory visitors, including: other laboratory personnel, maintenance workers, custodians, and vendors.

4. Provide supervision of laboratory personnel at a level commensurate with the education, experience, and competence level of the personnel.

5. In the event of an extended absence, the Laboratory Supervisor should arrange for a qualified alternate to provide supervision of laboratory operations (generally this will be another qualified faculty member or an experienced member of the research group).

6. Ensure that laboratory ventilation devices, safety showers and eyewashes, fire extinguishers, personal protective equipment, and other safety equipment are available, in proper working order, and appropriate for the laboratory and the work being conducted. Deficiencies in facility-maintained safety equipment, including laboratory fume hoods, safety showers and eyewashes, and fire extinguishers, are to be reported to the Facilities Services Department for remediation.

7. Implement and enforce preventative measures to control hazards and minimize risks to personnel. This includes complying with regulations, University and Departmental laboratory safety policies, and prudent laboratory safety practices.

8. Promote environmental health by maintaining compliance with environmental regulations, including minimization and proper management of hazardous wastes, reduction of laboratory water and air effluents, and prudent management of hazardous materials inventories.

9. Take active steps to identify laboratory safety deficiencies and ensure remediation.
10. Ensure that laboratory-related injuries and illnesses are reported to the Worker’s Compensation Office, EH&S, and the responsible Department Chair, and necessary forms are filed according to current policy.

**Laboratory Personnel**

1. Must obtain appropriate lab safety training and conduct laboratory work safely in accordance with all relevant policies.

2. Must promptly report to the laboratory supervisor any unsafe conditions, any deficiencies in laboratory safety equipment or any unsafe behaviors, practices, or procedures.

3. Must promptly report laboratory-related injuries and illnesses to the laboratory supervisor and the Worker’s Compensation Office.

**RELATED DOCUMENTS:**
- UNR Biosafety Manual
- UNR Chemical Hygiene Plan
- UNR Laser Safety Manual
- UNR Radiation Safety Manual