Chapter 390, Emergency Management and Campus Security
Section 60, Laboratory Security
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I. Purpose

This policy establishes minimum-security requirements to ensure all laboratories operate in a safe and secure manner while protecting confidential information and technologies developed there.

II. Definitions

A. Chemicals of interest (COI)—chemicals covered by the Chemical Facility Anti-Terrorism Standards (CFATS), which are subject to U.S. Department of Homeland Security (DHS) requirements for Chemical-terrorism Vulnerability Information (CVI).

B. Confidential laboratory information (CLI)—the sensitive work product material, including intellectual property, derived from research, and is the proprietary work product of the University.

C. Hazardous substance—a substance such as chemicals, biological agents, radioactive materials, nuclear materials, fissile materials, explosives, and controlled substances. Exposure results or may result in a health and/or physical hazard to humans, animals, plants, and the environment.

D. Laboratory—a location, including teaching and research facilities, using hazardous substances.

III. Policy

A. Laboratory access is restricted to authorized laboratory personnel. All visitors must be accompanied by authorized laboratory personnel at all times.

B. Dangerous equipment and hazardous substances in laboratories requires protection from unauthorized access, misuse, criminal use, or removal. When applicable, laboratories conducting specific sensitive research must comply with State and/or Federal guidelines and site-specific security plans.

C. Background screening of authorized laboratory personnel is required in accordance with the University's Select Agent, Controlled Substance, Export Control, Dual Use Research of Concern, and Radioactive Material Increased Control programs; and for all laboratory personnel using chemical weapons or explosives (see Sections 290-55, 290-70, and 290-75).

IV. Roles and Responsibilities

A. All authorized laboratory personnel

1. Pass required training or acquire proper licensing and receive approval to conduct authorized, unescorted work within a laboratory space. See the Safety Services Safety Training Matrix for Laboratory Personnel for minimum training and medical clearance requirements. See Sections 290-55, 290-56, 290-65, 290-70, and 290-75 for program-specific training and certifications.

2. Be vigilant of unauthorized activities and question the presence of unfamiliar and unauthorized individuals attempting to gain access.

a. Immediately report unfamiliar or unauthorized individuals, suspicious activity, or building security problems to UC Davis Police Department. Dial 911 for in-progress emergencies.

b. Immediately report unauthorized activities to the laboratory Principal Investigator (PI), laboratory manager, and/or faculty member in charge of the laboratory space.

c. Report missing dangerous equipment and hazardous substances immediately to UC Davis Police Department and Environmental Health and Safety (EH&S). See Section 290-70.

d. When required by State or Federal regulations, log visitors in and out of the laboratory.

3. Ensure all doors to the laboratory space are closed, locked, and secured when leaving the laboratory unattended. Fire-rated laboratory doors must remain closed at all times for fire code compliance unless approved by the campus Fire Marshal.
4. Restrict access to hazardous substances to authorized laboratory personnel.
5. Lock and secure all hazardous substance storage areas and equipment located in common areas outside of the laboratory when not in use or are unattended.
6. Properly dispose of unneeded hazardous materials as soon as possible.

B. PIs/laboratory managers/faculty members in charge of laboratory space

1. Follow the roles and responsibilities noted in IV.A. of this policy.
2. Ensure authorized laboratory personnel comply with this policy.
3. Restrict CLI access to those with a legitimate business need to access the research information.
4. Restrict laboratory access to authorized laboratory personnel.
5. Maintain a visitors log when required by State or Federal regulations.
6. Are responsible for all inventories maintained within the laboratory they oversee and must provide regular inventory reports to EH&S.
7. Coordinate the removal of any unused hazardous substances with EH&S or a campus-approved outside vendor.
8. Ensure the laboratory space has applicable hazard signage posted and includes current emergency contact information.
9. Implement measures based on security assessments to reduce the impact of the threats by reducing amount and scope of the vulnerabilities. See V below.
10. Develop and implement an internal security plan that must be part of the laboratory training program provided to authorized laboratory personnel (annually at a minimum).

C. Department Chairs

1. Ensure all users of the responsible department using laboratory spaces comply with this policy.
2. Ensure PIs/laboratory managers/faculty members satisfactorily complete required training to maintain secure and safe laboratory practices.
3. Have knowledge of activities conducted in department laboratory spaces.

D. EH&S

1. Monitors chemical inventories, maintains the Chemical Inventory System (CIS), and notifies CIS account holders and the UC Davis Police Department if a facility meets or exceeds the threshold quantity for any COI.
2. Monitors other hazardous substance inventories, including, but not limited to radioactive material (RAM) inventories.
3. Monitors use of biological agents.
4. Responds to reports of missing hazardous substances.

E. UC Davis Police Department

1. Provides situational awareness training to authorized laboratory personnel.
2. Coordinates security assessments with the individual responsible for overseeing the laboratory.
3. Responds to reports of missing hazardous substances, missing dangerous equipment, suspicious activity, and building security problems.

V. Security Assessment

An external security specialist/consultant or the UC Davis Police Department may conduct a security assessment of laboratory spaces. EH&S may participate in the security assessment in conjunction with the UC Davis Police Department.

A. The assessment examines the types of threats that affect the ability to safely manage the laboratory, document existing vulnerabilities that may expose the laboratory to known threats, and include recommendations to limit those threats.

B. The assessment may include, but is not limited to, addressing the following issues:

1. Existing threats, based on the history of the laboratory (e.g., theft of laboratory materials, sabotage, data security breaches, protests);
2. The attractiveness of the institution as a target, and the potential impact of an incident;
3. Hazardous substances or other laboratory equipment or materials with dual-use potential (e.g., use in research and in military applications);
4. Sensitive data or computerized systems;
5. Animal care facilities;
6. Infrastructure vulnerabilities (e.g., accessible power lines, poor lighting);
7. Security systems in place (e.g., access control, cameras, intrusion detection);
8. Access controls for laboratory personnel (e.g., background checks, authorization procedures, badges, key controls, escorted access);
9. Institutional procedures and culture (e.g., tailgating, open laboratories, inadequate visitor management); and
10. Implementation of security plans.

VI. Protecting Confidential and Sensitive Laboratory Information

If the laboratory produces private, sensitive, or proprietary data, the PI/laboratory manager/faculty member overseeing the laboratory must:

A. Provide training to those with access to this information, stressing the importance of confidentiality.

B. Establish procedures for releasing such information outside the laboratory or group;

C. Maintain a written and signed confidentiality agreement for those with access to such information;

D. Keep computer passphrases confidential and safeguard computing resources as part of the campus Cyber-Safety Program (see Section 310-22);

E. Safeguard keys, access cards, or other physical security tools (see Section 360-50);

F. Before discarding materials that contain sensitive information, destroy or render them unusable by shredding them, or by erasing magnetic tape;

G. Report any known or suspected breaches in security related to the unauthorized disclosure of CLI immediately to UC Davis Police Department;

H. Report any suspected data breaches involving personal information to the Privacy Officer.

I. Report any suspected information security breaches to the Chief Information Security Officer, regardless of the type of data.

J. Establish policies and procedures for the storage of proprietary information on hard drives or portable storage media and for the removal of proprietary information from the laboratory or secure area. Consult the Data Sensitivity Guide for campus-approved data storage methods.

VII. Chemicals and Chemicals of Interest (COI)

A. DHS has promulgated regulations that apply to chemical facilities, including laboratories, regarding COI with the purpose of keeping dual-use chemicals out of the possession and control of terrorists. The CFATS are concerned with the following types of chemicals:

1. EPA Risk Management Plan chemicals;
2. Highly toxic gases;
3. Chemical weapons convention chemicals;
4. Explosives; and
5. Precursors of the above chemicals.

B. PIs/laboratory managers/faculty members are required to periodically (annually at a minimum) take physical inventory of chemical inventories and remove chemicals not in use or those determined to no longer be needed within the laboratory.

1. A current inventory of any quantity of COI in the Chemical Inventory System must be maintained. Quantities of COI may not exceed the Screening Threshold Quantity (STQ) at any time without written authorization from EH&S.
2. A copy of the physical inventory must be provided to EH&S.

VIII. Dual Use Security

A. The following steps must be taken by the PI/laboratory manager/faculty member overseeing the laboratory when the laboratory possesses materials, equipment, or technologies that have the potential for dual use (use in research and in military applications), such as Select Agents or COI:

1. Maintain chemical inventory records of dual-use materials;
2. Limit the number of laboratory personnel who have access to dual-use agents;
3. Annually review laboratory access controls to areas where dual-use agents are used or stored;
4. Maintain a log of personnel that access areas where dual-use materials are used or stored;
5. Develop a formal policy prohibiting use of laboratory facilities or materials without the consent of the PI/laboratory manager/faculty member overseeing the laboratory;
6. Monitor and authorize specific use of these materials;
7. Remain alert and aware of the possibility of removal of any chemicals for illicit purposes; and
8. Train all laboratory personnel who have access to these substances, including the security risks of dual-use materials.

B. The security assessment must address these steps, in addition to any other security-related issues, and ensure that the security plan adequately addresses all relevant issues.

IX. Further Information

A. Additional information regarding laboratory safety is available from Safety Services, Environmental Health & Safety, 530-752-1493, researchsafety@ucdavis.edu.

B. Report suspicious activity, building security problems, or missing hazardous chemicals to the UC Davis Police Department; Davis Campus, 530-754-COPS (2677); Sacramento Campus, 916-734-2555; or http://police.ucdavis.edu. Dial 911 for any emergencies or crimes in progress.

C. Additional information security resources is available at http://security.ucdavis.edu.

X. References and Related Policies

A. Chemical Facility Anti-Terrorism Standards (CFATS).

B. U.S. Department of Homeland Security Requirements for Chemical-terrorism Vulnerability Information (CVI).

C. U.S. Federal Select Agent Program.

D. U.S. Department of Agriculture Animal and Plant Health Inspection Service (APHIS).

E. U.S. Nuclear Regulatory Commission 10 CFR 37 – Physical Protection of Category 1 and Category 2 Quantities of Radioactive Material.

F. U.S. Department of Justice Drug Enforcement Administration Diversion Control Division.

G. U.S. Department of Labor Occupational Safety and Health Administration 29 CFR 1910.1200 – Toxic and Hazardous Substances.

H. UC Davis Policy and Procedure Manual:

1. Section 290-55, Biological Safety.
2. Section 290-56, Chemical Safety.
3. Section 290-65, Hazardous Chemical Use, Storage, Transportation, and Disposal.
4. Section 290-70, Controlled Substances.
5. Section 290-75, Radiological Safety--Health Physics.

6. Section 310-22, UC Davis Cyber-Safety Program.
7. Section 360-50, Key/Access Card Control.
8. Section 390-10, Campus Emergency Policy.

I. UC Davis Personnel Policies for Staff Members: UCD Procedure 21, Exhibit D, Background Checks.

J. UC Davis Office of Research, Export Controls in Research Policy.

K. UC Davis Safety Services SafetyNet #513, Fire Door Regulations.

L. UC Davis Safety Services, Dual Use Research of Concern.