

Neurobiology, Physiology & Behavior

INJURY AND ILLNESS PREVENTION PROGRAM



UC DAVIS

NEUROBIOLOGY PHYSIOLOGY & BEHAVIOR

INJURY AND ILLNESS PREVENTION PROGRAM

This Injury and Illness Prevention Program has been prepared by the University of California, **Neurobiology, Physiology & Behavior** department in accordance with University Policy (UCD Policy & Procedure Manual Section 290-15: Safety Management Program) and California Code of Regulations Title 8, Section 3203 (8 CCR, Section 3203).

UC DAVIS

NEUROBIOLOGY PHYSIOLOGY & BEHAVIOR

INJURY AND ILLNESS PREVENTION PROGRAM

TABLE OF CONTENTS

- **Preface** Department Information
 - I. Authorities and Responsible Parties
 - II. System of Communications
 - III. System for Assuring Employee Compliance with Safe Work Practices
 - IV. Hazard Identification, Evaluation, and Inspection
 - V. Accident Investigation
 - VI. Hazard Correction
 - VII. Health and Safety Training
 - VIII. Recordkeeping and Documentation
 - IX. Resources

Department Information

Department Name: NEUROBIOLOGY PHYSIOLOGY & BEHAVIOR

Department Director: Marty Usrey

Address: 196 Briggs Hall

Telephone Number: 530-752-2559

Buildings Occupied by Department

- 1. Building:Briggs HallUnit(s):Main Office and Research LaboratoriesContact:Cynthia RobertsPhone:752-2558
- 2. Building: Life Science Unit(s): Research Laboratories Contact: Gloria Partida Phone: 752-8507
- 3. Building:Hickey GymUnit(s):Research Laboratories & Teaching LaboratoriesContact:Salvador BorgesPhone:752-0965
- 4. Building: Science Laboratory Building Unit(s): Teaching Laboratories & Animal Facility Contact: Lifeng Wang Phone: 752-3582
- 5. Building: Hutchison Hall Unit(s): Research Laboratories Contact: Belvin Gong Phone: 752-2972
- 6. Building: CARU Unit(s): Research Laboratories Contact: Chuck Fuller Phone: 752-9698/752-2979
- 7. Building: ZFL Unit(s): Research Laboratories Contact: Tom Hahn Phone: 752-8531

I. Authorities and Responsible Parties

The authority and responsibility for the implementation and maintenance of the Injury and Illness Prevention rogram (IIPP) is in accordance with University Policy (UCD Policy & Procedure Manual Section 290-15: Safety Management Program) and California Code of Regulations (8 CCR, Section 3203) and is held by the following individuals:

1. Name: Marty Usrey

Title: Department Chair

Authority: Authority and responsibility for ensuring implementation of this IIPP

1m/h Date: -12-2016 Signature: 2. Name: Cynthia Roberts

2. Name: Cynthia Rober

Title: MSO

Authority: Department designated authority for implementation of this IIPP

Signature: anthis Kobuts Date: 8/11/2016

\ll Principal Investigators and supervisors are responsible for the implementation and enforcement of this IIPP in their areas of responsibility in accordance with University Policy (UCD Policy & Procedure Manual Section 290-15: Safety Management Program).

Annual Review Documentation

II. System of Communications

- 1. Effective communications with **Neurobiology**, **Physiology & Behavior** department employees have been established using the following methods:
 - Standard Operating Procedures Manual
 - Material Safety Data Sheets
 - Lab meetings
 - EH&S Safety Nets/Fire Nets
 - Hazard Alert Form
 - Safety Newsletter
 - Handouts
 - Building Evacuation Plan
 - E-mail
 - Posters and warning labels
 - Job Safety Analysis Initial Hire and Annual Review
 - Other:

- Employees are encouraged to report any potential health and safety hazard that may exist in the workplace. <u>Hazard Alert/Correction Forms (Appendix A)</u> are available to employees for this purpose. Forms are to be placed in the Safety Coordinator's departmental mail box. Employees have the option to remain anonymous when making a report.
- 3. Employees have been advised of adherence to safe work practices and the proper use of required personal protective equipment. Conformance will be reinforced by discipline for non-compliance in accordance with University policy (UCD Procedure 62 Personnel Policies for Staff Members, Corrective Action).

III. System for Assuring Employee Compliance with Safe Work Practices

Employees have been advised of adherence to safe work practices and the proper use of required personal protective equipment. Conformance will be reinforced by discipline for non-compliance in accordance with University policy (UCD Procedure 62 - Personnel Policies for Staff Members, Corrective Action).

The following methods are used to reinforce conformance with this program:

- 1. Distribution of Policies
- 2. Training Programs
- 3. Safety Performance Evaluations

Performance evaluations at all levels must include an assessment of the individual's commitment to and performance of the accident prevention requirements of his/her position. The following are examples of factors considered when evaluating an employee's safety performance.

- Adherence to defined safety practices.
- Use of provided safety equipment.
- Reporting unsafe acts, conditions, and equipment.
- Offering suggestions for solutions to safety problems.
- Planning work to include checking safety of equipment and procedures before starting.
- Early reporting of illness or injury that may arise as a result of the job.
- Providing support to safety programs.
- 4. Statement of non-compliance will be placed in performance evaluations if employee neglects to follow proper safety procedures, <u>and</u> documented records are on file that clearly indicate training was provided for the specific topic, and that the employee understood the training and potential hazards.
- 5. Corrective action for non-compliance will take place when documentation exists that proper training was provided, the employee understood the training, and the employee knowingly neglected to follow proper safety procedures. Corrective action includes, but is not limited to, the following: Letter of Warning, Suspension, or Dismissal.

IV. Hazard Identification, Evaluation, and Inspection

Job Hazard Analyses and worksite inspections have been established to identify and evaluate occupational safety

and health hazards.

1. Job Safety Analysis:

Job Safety Analysis (JSA) identifies and evaluates employee work functions, potential health or injury hazards, and specifies appropriate safe practices, personal protective equipment, and tools/equipment. JSA's can be completed for worksites, an individual employee's job description, or a class of employees' job description. Template JSA's are located in <u>Appendix B</u>.

The following resources are available for assistance in completing JSA's:

- Laboratory personnel, please refer to the Laboratory Hazard Assessment Tool
- Non-Laboratory personnel, please refer to the <u>JSA/PPE Certification Forms</u>

2. Worksite Inspections

Worksite inspections are conducted to identify and evaluate potential hazards. Types of worksite inspections include both periodic scheduled worksite inspections as well as those required for accident investigations, injury and illness cases, and unusual occurrences. Inspections are conducted at the following worksites:

- 1) Location: Frequency: Responsible Person: Records Location:
- 2) Location: Frequency: Responsible Person: Records Location:

Worksite Inspection Forms are located in <u>Appendix C</u>. (C1 - General Office and C2 - Laboratory).

V. Accident Investigation

University Policy requires that work-related injuries and illnesses be reported to Workers' Compensation within 24 hours of occurrence and state regulation requires all accidents be investigated.

Neurobiology, Physiology & Behavior employees will immediately notify their supervisor when occupationally-related injuries and illnesses occur, or when employees first become aware of such problems.

1. **Supervisors** will investigate all accidents, injuries, occupational illnesses, and near-miss incidents to identify

the causal factors or attendant hazards. Appropriate repairs or procedural changes will be implemented promptly to mitigate the hazards implicated in these events. Proper injury reporting procedures can be found

at http://safetyservices.ucdavis.edu/ps/rmwc/wcr/injuryReporting.

The **Injury and Illness Investigation Form (Appendix D)** shall be completed to record pertinent information and a copy retained to serve as documentation. It can be completed by either the supervisor or the Department Safety Coordinator.

2. Note: Serious occupational injuries, illnesses, or exposures must be reported to Cal/OSHA by an EH&S representative <u>within eight hours</u> after they have become known to the supervisor. These include injuries/illnesses/exposures that cause permanent disfigurement or require hospitalization for a period in excess

of 24 hours. Please refer to EH&S SafetyNet #121 for OSHA notification instructions.

VI. Hazard Correction

Hazards discovered either as a result of a scheduled periodic inspection or during normal operations must be corrected by the supervisor in control of the work area, or by cooperation between the department in control of the work area and the supervisor of the employees working in that area. Supervisors of affected employees are expected to correct unsafe conditions as quickly as possible after discovery of a hazard, based on the severity of the hazard.

Specific procedures that can be used to correct hazards include, but are not limited to, the following:

- Tagging unsafe equipment "Do Not Use Until Repaired," and providing a list of alternatives for employees to use until the equipment is repaired.
- Stopping unsafe work practices and providing retraining on proper procedures before work resumes.
- Reinforcing and explaining the need for proper personal protective equipment and ensuring its availability.
- Barricading areas that have chemical spills or other hazards and reporting the hazardous conditions to appropriate parties.

Supervisors should use the <u>Hazard Alert/Correction Report (Appendix A)</u> to document corrective actions, including projected and actual completion dates.

If an imminent hazard exists, work in the area must cease, and the appropriate supervisor must be contacted immediately. If the hazard cannot be immediately corrected without endangering employees or property, all personnel need to leave the area except those qualified and necessary to correct the condition. These qualified individuals will be equipped with necessary safeguards before addressing the situation.

VII. Health and Safety Training

Health and safety training, covering both general work practices and job-specific hazard training is the responsibility of the Principal Investigator and immediate Supervisor(s) as applicable to the following criteria:

- 1. Supervisors are provided with training to become familiar with the safety and health hazards to which employees under their immediate direction and control may be exposed.
- 2. All new employees receive training prior to engaging in responsibilities that pose potential hazard(s).
- 3. All employees given new job assignments receive training on the hazards of their new responsibilities prior to actually assuming those responsibilities.
- 4. Training is provided whenever new substances, processes, procedures or equipment (which represent a new hazard) are introduced to the workplace.
- 5. Whenever the employer is made aware of a new or previously unrecognized hazard, training is provided.

The <u>Safety Training Attendance Record</u> form is located in <u>Appendix E</u>.

Site-Specific Safety Orientation & Training for New Laboratory Personnel can be found in Appendix F.

VIII. Recordkeeping and Documentation

Documents related to the IIPP are maintained in the NPB main office: 196 Briggs Hall and 2018 Science Laboratory Building.

The following documents will be maintained within the department's IIPP Binder for at least the length of time indicated below:

- 1. Hazard Alert/Correction Forms (Appendix A form). Retain for three (3) years.
- 2. Employee Job Safety Analysis forms (Appendix B form) Retain for the duration of each individual's employment.
- 3. Worksite Inspection Forms (Appendix C form). Retain for three (3) years.
- 4. Injury and Illness Investigation Forms (Appendix D form). Retain for three (3) years.

The following documents will be maintained within the department's IIPP Training Records Binder for at least the length of time indicated below:

1. Employee Safety Training Attendance Records (Appendix E form and Appendix F). Retain for three (3) years.

IX. Resources

- 1. Office of the President: University Policy on Environmental Health and Safety, 10/22/86
- 2. UC Davis Policy and Procedure Manual, Section 290-15, Safety Management Program
- 3. California Code of Regulations Title 8, Section 3203, (<u>8CCR §3203</u>), Injury and Illness Prevention Program
- 4. Personnel Policies for Staff Members, Corrective Action, <u>UCD Procedure 62</u>
- 5. UC Davis Environmental Health & Safety
 - <u>Safety Services Website</u>
 - EH&S SafetyNets
 - <u>Safety Data Sheets</u>

APPENDICES

HAZARD ALERT / CORRECTION FORM

Alert Identification No. _____ Department: _____

| nsafe Condition or Hazard | | |
|----------------------------------|-------------------------------------|-------------|
| Name: (optional) | Joł |): <u> </u> |
| Title: (optional) | | - |
| Location of Hazard: | | |
| Building: | Floor: | Room: |
| Date and time the condition or h | nazard was observed: | |
| Description of unsafe condition | or hazard: | |
| What changes would you recom | mend to correct the condition or ha | nzard? |
| Employee Signature: (optional) | | |
| Date: | | |
| Management/Safety Committe | e Investigation | |
| Name of person investigating un | nsafe condition or hazard: | |

Results of investigation (What was found? Was condition unsafe or a hazard?): (Attach additional sheets if necessary.)

Proposed action to be taken to correct hazard or unsafe condition: (Complete and attach a Hazard Correction Report, IIPP Appendix E)

Signature of Investigating Party:

Date:

IIPP-Appendix A Completed copies of this form should be routed to the appropriate supervisor and department **December 2014** Safety Coordinator, and must be maintained in department files for at least three years.

HAZARD ALERT / CORRECTION REPORT

Alert Identification No.

Department:_____

This form should be used in conjunction with the "Hazard Alert Form" (IIPP Appendix A), as appropriate, to track the correction of identified hazards.

All hazards should be corrected as soon as possible, based on the severity of the hazard. If a serious imminent hazard cannot be immediately corrected, evacuate personnel from the area and restrict access until the hazard can be addressed.

Supervisor/Safety Coordinator Name:

Telephone:

Supervisor/Safety Coordinator Signature: _____ Date:

| Description and | Date | Required Action and | Completion Date | | | |
|---------------------------------|------------|----------------------------|------------------------|--------|--|--|
| Location of Unsafe Condition | Discovered | Responsible Party | Projected | Actual | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

IIPP-Appendix ACompleted copies of this form should be routed to the department Safety Coordinator and kept in
department files for at least three years.

JOB SAFETY ANALYSIS (Laboratory)

Department: Neurobiology, Physiology & Behavior Section:

| Job Function | Potential Health or Injury Hazard | Safe Practice, Apparel, or Equipment |
|---|---|--|
| Inspection and auditing of laboratories containing chemicals. | Exposure to chemicals via inhalation, contact, ingestion or injection. | Avoid all unnecessary exposures. Reduce exposures that cannot be avoided by minimizing exposure duration and concentration. Proper selection and use of personal protective equipment including gloves, protective eyewear, lab coats, and in some instances respiratory protection. Implementation of proper personal hygiene habits, including washing hands and face before eating and smoking. All personnel to receive on the job and classroom training including Chemical Laboratory Safety, Hazardous Waste Management and Minimization Training and other applicable courses during the first 6 months of employment. |
| Inspection and auditing of laboratories containing radiological materials. | Exposure to radiological agents via inhalation, contact, ingestion or injection. | Avoid all unnecessary exposures. Adhere to radiological material handling procedures including limiting exposures through combination of minimizing time, maximizing distances and use of appropriate shielding. Proper selection and use of personal protective equipment including gloves, protective eyewear, lab coats, and in some instances respiratory protection Implementation of proper personal hygiene habits, including washing hands and face before eating and smoking. Participation in radiological monitoring program including dosimetry. All personnel to receive on the job and classroom training including Radiation Safety and other applicable courses during the first 6 months of employment. |
| Inspection and auditing of laboratories containing biological materials. | Exposure to biological agents via inhalation, contact, ingestion or injection. | Avoid unnecessary exposures. Proper selection and use of personal protective equipment including gloves, protective eyewear, lab coats, and in some instances respiratory protection. Proper adherence to blood borne pathogen handling protocols. Implementation of proper personal hygiene habits, including washing hands and face before eating and smoking. Voluntary participation in Hepatitis B vaccination program. Proper adherence to biological waste handling procedures. All personnel to attend EH&S Blood borne Pathogen Program training during the first 6 months of employment. Participation in Facilities- specific medical clearances as required. |
| Inspection and auditing of laboratories, shops and spaces containing physical hazards. | Injury from physical hazards including high voltage, lasers and ultraviolet light, compressed gases and liquids, cryogenic materials, and specialized equipment as well as falling objects. | Avoid unnecessary exposures. Proper selection and use of personal protective equipment including gloves, protective eyewear and specialized equipment. Employees are not to enter restricted areas unless accompanied by a properly trained individual familiar with the hazards of the area. Employees are not to operate specialized equipment without proper training and documentation. Watch for overhead hazards and wear head protection if needed. Personnel auditing or routinely entering areas where lasers are used will receive laser safety training within 6 months of employment. |
| | | |

| Job Function | Potential Health or Injury Hazard | Safe Practice, Apparel, or Equipment |
|--------------------------------|--|---|
| General office work | Back strain, eyestrain, repetitive motion injury. Physical injuries due to slips, trips and falls, and falling objects. Electrical hazards. Physical injuries due to fires, earthquakes, bomb threats and workplace violence. | Ensure that workstations are ergonomically correct. Keep floors clear of debris and liquid spills. Keep furniture, boxes, etc. from blocking doorways, halls and walking space. Do not stand on chairs of any kind, use proper foot stools or ladders. Do not store heavy objects overhead. Do not top load filing cabinets, fill bottom to top. Do not open more than one file drawer at a time. Brace tall bookcases and file cabinets to walls. Provide one-inch lip on shelves. Do not use extension cords in lieu of permanent wiring. Ensure that high wattage appliances do not overload circuits. Use GFCIs in receptacles in potentially wet areas. Replace frayed or damaged electrical cords. Ensure that electrical cords are not damaged by being wedged against furniture or pinched in doors. Attend emergency action and fire prevention plan training including emergency escape drills. |
| Operation of motor vehicles | Motor vehicle accidents involving personal injury, or property damage | All drivers of University vehicles must attend the Driver Safety Awareness Course offered by Fleet Services and possess a valid California drivers license. Hazardous materials may not be transported in personally owned vehicles. |
| Exposure to noise hazards | Hearing loss due to noise exposure | Voluntarily participate in the Hearing Conservation Program. Use hearing protection as required. |

Name

Signature

Date

IIPP–Appendix B1 December 2014

Completed copies of this form should be routed to the Department Safety Coordinator and retained for the duration of each individual's employment.

JOB SAFETY ANALYSIS (General Office)

Department: **Neurobiology**, **Physiology & Behavior** Section:

| JOB FUNCTION | POTENTIAL HEALTH OR INJURY HAZARDS | SAFE PRACTICE, APPAREL, OR EQUIPMENT |
|--------------------------------|---|--|
| General office work. | Back strain, eyestrain, repetitive motion injury. Physical injuries due to slips, trips and falls, and falling objects. Electrical hazards. Physical injuries due to fires, earthquakes, bomb threats and workplace violence. Physical injuries due to slips, trips and falls, and falling objects. | Ensure that workstations are ergonomically correct. Keep floors clear of debris and liquid spills. Keep furniture, boxes, etc. from blocking doorways, halls and walking space. Do not stand on chairs of any kind, use proper foot stools or ladders. Do not store heavy objects overhead. Do not top load filing cabinets, fill bottom to top. Do not open more than one file drawer at a time. Brace tall bookcases and file cabinets to walls. Provide one-inch lip on shelves. Do not use extension cords in lieu of permanent wiring. Ensure that high wattage appliances do not overload circuits. Use GFCIs in receptacles in potentially wet areas. Replace frayed or damaged electrical cords. Ensure that electrical cords are not damaged by being wedged against furniture or pinched in doors. Attend emergency action and fire prevention plan training including emergency escape drills. Keep floors clear of debris and liquid spills. Do not stand on chairs of any kind, use proper foot stools or ladders. Do not store heavy objects overhead. Do not topload filing cabinets, fill bottom to top. Do not open more than one file drawer at a time. Brace tall bookcases and file cabinets to walls. Provide one-inch lip on shelves. |
| Operation of motor vehicles | Motor vehicle accidents involving personal injury, or property damage. | All drivers of University vehicles must attend the Driver Safety Awareness Course offered by Fleet Services and possess a valid California drivers license. Hazardous materials may not be transported in personally owned vehicles. |

Name

Signature

Date

IIPP–Appendix B2 December 2014

Completed copies of this form should be routed to the department Safety Coordinator and retained for the duration of each individual's employment.

WORKSITE INSPECTION FORM

General Office Environment

Location: _____ Date:

Inspector: _____ Phone:

Department:

Administration and Training

| Yes | No | NA | 1. | Are all safety records maintained in a centralized file for easy access? Are they current? |
|------|-----|------|-------|--|
| | | | - | Have all employees attended Injury & Illness Prevention Program |
| Yes | No | NA | 2. | training? If not, what percentage has attended? |
| Vec | No | N۸ | 3 | Does the department have a completed Emergency Action Plan? Are |
| 105 | INU | INA | 5. | employees being trained on its contents? |
| Ves | No | NΔ | Δ | Are chemical products used in the office being purchased in small |
| 105 | 110 | 1171 | т. | quantities? Are Material Safety Data Sheets needed? |
| Vac | No | NΛ | 5 | Are the Cal/OSHA information poster, Workers' Compensation bulletin, |
| 1 68 | INO | INA | 5. | annual accident summary posted? |
| Yes | No | NA | 6. | Are annual workplace inspections performed and documented? |

General Safety

| Yes 🗆 No | D C | NA 🗆 | 7. | Are exits, fire alarms, pullboxes clearly marked and unobstructed? |
|----------|----------|------|-----|--|
| Yes 🗆 No | D C | NA 🗆 | 8. | Are aisles and corridors unobstructed to allow unimpeded evacuations? |
| Yes 🗆 No | 0 | NA 🗆 | 9. | Is a clearly identified, unobstructed, charged, currently inspected and tagged, wall-mounted fire extinguisher available as required by the Fire Department? |
| Yes 🗆 No | o | NA 🗆 | 10. | Are ergonomic issues being addressed for employees using computers or at risk of repetitive motion injuries? |
| Yes 🗆 No | o | NA 🗆 | 11. | Is a fully stocked first-aid kit available? Is the location known to all employees in the area? |
| Yes 🗆 No | o 🗌 | NA 🗆 | 12. | Are cabinets, shelves, and furniture over five feet tall secured to prevent toppling during earthquakes? |
| Yes 🗆 No | 0 🗌 | NA 🗆 | 13. | Are books and heavy items and equipment stored on low shelves and secured to prevent them from falling on people during earthquakes? |
| Yes 🗆 No | o 🗌 | NA 🗆 | 14. | Is the office kept clean of trash and recyclables promptly removed? |

Electrical Safety

| Yes | No | NA | 15. | Are plugs, cords, electrical panels, and receptacles in good condition? No exposed conductors or broken insulation? |
|-----|----|----|-----|---|
| Yes | No | NA | 16. | Are circuit breaker panels accessible and labeled? |
| Yes | No | NA | 17. | Are surge protectors being used? If so, they must be equipped with an automatic circuit breaker, have cords no longer than 15 feet in length, and be plugged directly into a wall outlet. |
| Yes | No | NA | 18. | Is lighting adequate throughout the work environment? |
| Yes | No | NA | 19. | Are extension cords being used correctly? They must not run through walls, doors, ceiling, or present a trip hazard. |
| Yes | No | NA | 20. | Are portable electric heaters being used? If so, they must be UL listed, plugged directly into a wall outlet, and located away from combustible materials. |

IIPP-Appendix C1-Office Completed copies of this form should be routed to the department Safety Coordinator December 2014 and must be maintained in department files for at least three years.



University of California, Davis Laboratory Self-Inspection Checklist

Principal Investigator/Laboratory Supervisor:

Laboratories Reviewed: _____

Date: _____

Reviewer: _____

Revised 1/2015

| I. | SAFETY PROGRAM ADMINISTRATON | | | 1 |
|-----|---|-----|----|-----|
| Α. | Chemical Hygiene Plan | Yes | No | N/A |
| | 1. Does the laboratory have access to the campus-wide Chemical Hygiene Plan and all of the required elements? | | | |
| | 2. Are there any operations that require prior approval before beginning (e.g., Radiation Safety, Bio-safety committee)? | | | |
| В. | Illness and Injury Prevention Plan | Yes | No | N/A |
| | Does laboratory have access to Department IIPP and has it been reviewed in past year? | | | |
| | Is there documentation that all laboratory personnel have trained on IIPP? | | | |
| C. | Standard Operating Procedures (SOP's) | Yes | No | N/A |
| | 1. Are there written SOP's covering the laboratory processes and hazardous chemicals referenced in Title 8 (<i>i.e.</i> , acutely toxic substances, reproductive toxins, and regulated carcinogens)? | | | |
| | Are there exemptions to the written SOPs and are these documented? | | | |
| | 3. Training of laboratory personnel documented. | | | |
| | 4. Required specialized training complete and documented. | | | |
| | 5. Training is current with Chemical Hygiene Plan. | | | |
| | 6. Training is complete on Hazardous waste management. | | | |
| | 7. Training is complete on Blood borne Pathogen requirements. | | | |
| II. | HAZARDOUS MATERIALS | Yes | No | N/A |
| | 1. Laboratory doors are labeled with emergency contact notification names & numbers, hazards present & necessary precautions. | | | |
| | 2. Labels are clean and intact on all chemical containers. | | | |
| | 3. Chemical containers are clearly identified with contents and hazards. | | | |
| | 4. Containers with non-hazardous substances (<i>i.e.</i> , water) clearly labeled to avoid confusion. | | | |
| A. | Chemical Controls | Yes | No | N/A |



| 1 | . Chemicals are not stored on laboratory benches in excessive quantities. | | | |
|-------------|---|-----|----|-----|
| 2 | . Expired or chemicals not used (for more than one year) are disposed of as hazardous waste. | | | |
| 3 | . Secondary containment is provided for strong acids and strong bases. | | | |
| 4 | . Incompatible chemicals are segregated and stored with compatible hazard classes. | | | |
| 5 | . All chemical containers are closed, except when actively adding or removing materials from them (<i>i.e.</i> , no open funnels left in container). | | | |
| 6 | . Containers of peroxide-forming chemicals are dated upon receipt and disposed of as hazardous waste within one year of receipt. | | | |
| 7 | . Safety Data Sheets (SDS) and laboratory chemical inventory are up- to-date and readily available. | | | |
| 8 | . Chemicals (liquids) are stored below eye level and not directly on the floor, unless in secondary containment. | | | |
| 9 | . Dedicated chemical storage (cabinets, refrigerators, freezers) clearly labeled with contents and hazard warnings. | | | |
| B. F | ammable & Combustible Liquids | Yes | No | N/A |
| 1 | . Flammable liquids stored in 1-gallon or smaller containers or kept in 2- gallon or smaller safety cans. | | | |
| 2 | . Flammable liquids (including flammable liquid waste) stored outside of a storage cabinet does not exceed 10 gallons. | | | |
| 3 | . If more than 10 gallons of flammable liquids are present does the laboratory have an approved flammable storage cabinet? | | | |
| 4 | Flammable liquids, stored in flammable storage cabinets limited to 60 gallons per fire rated area. | | | |
| 5 | Flammable liquids requiring reduced temperature stored in flammable-rated refrigerator/freezer. | | | |
| C. P | articularly Hazardous Substances | Yes | No | N/A |
| 1 | . Have all particularly hazardous substances been identified? | | | |
| 2 | Designated area(s) for acutely toxic materials, reproductive toxins and/or carcinogens clearly marked. | | | |
| 3 | . Are all users adequately trained? Documentation available? | | | |
| 4 | . All necessary PPE (personal protective equipment) available and used as needed. | | | |
| D. R | adioactive Materials | Yes | No | N/A |
| 1 | . Stock materials of radioactive materials are secured against unauthorized removal? | | | |
| 2 | . Do personnel wear lab coats and gloves when handling radioactive materials? If assigned dosimeters, are they wearing them? | | | |



| | 3. | Are all radioactive materials registered with the EH&S Health Physics Program? | | | |
|------|------------|--|-----|---------|-----|
| | 4. | Radioactive Waste – Properly labeled, segregated, and shielded? | | | |
| III. | Cł | IEMICAL WASTE | | <u></u> | 1 |
| Α. | Sto | prage | Yes | No | N/A |
| | 1. | Are chemical waste containers properly segregated, sealed with tight- fitting caps and stored with EH&S Hazardous Waste Labels attached? | | | |
| | 2. | All hazardous chemical waste is arranged to be picked up by EH&S — not drain disposed or evaporated. | | | |
| | 3. | Hazardous chemical waste has been accumulating for less than 270 days. Extremely hazardous waste has been accumulating less than 90 days. | | | |
| | 4. | All hazardous chemical waste is secondary contained. | | | |
| | 5. | Training for personnel handling hazardous waste is documented? | | | |
| | 6. | EH&S is called for waste pick up when containers are full (90% capacity or full line) or have reached their accumulation date threshold. | | | |
| | 7. | Waste containers sturdy, compatible with the waste, routinely checked for leaks and kept closed when not actively being filled. | | | |
| В. | La | beling | Yes | No | N/A |
| | 1. | All hazardous waste containers have the proper labels with contents and accumulation start date. | | | |
| | 2. | The hazardous waste accumulation area is clean with waste containers clearly marked. | | | |
| IV. | B] | OHAZARDOUS WASTE | | | |
| Α. | Sto | prage | Yes | No | N/A |
| | 1. | Solid bio hazardous waste is bagged in red polyethylene bags as per the Medical Waste Management Plan. | | | |
| | 2. | Bio hazardous liquid waste is managed per the Medical Waste Management Plan. | | | |
| | 3. | Sharps stored in puncture-proof containers and labeled appropriately, not past fill line. | | | |
| В. | La | beling | Yes | No | N/A |
| | 1. | Secondary containers for laboratory medical waste storage or transport labeled with the international biohazard symbol and the word "Biohazard." | | | |
| V. | PE | RSONAL HEALTH AND SAFETY | | | |
| Α. | Fo | od and Drink | Yes | No | N/A |
| | 1. | Sinks labeled "Industrial Water – Do Not Drink". | | | 1 |
| | 2. | Food and drink is not permitted in laboratories. | | | 1 |
| | 3. | Food and drink is stored only in refrigerators/freezers dedicated and labeled "for food only". | | | |
| | | | | | |



| В. | Standard Practices | Yes | No | N/A |
|-----|--|-----|----|-----|
| | 1. Employees wash areas of exposed skin prior to leaving the laboratory. | | | |
| | Sink is available and hands washed after removing gloves and before leaving laboratory. | | | |
| | 3. Cosmetic applications, taking medication, touching eyes, nose or mouth avoided in laboratory. | | | |
| VI. | HEALTH AND SAFETY EQUIPMENT | | | |
| Α. | Safety Showers and Eye Washes | Yes | No | N/A |
| | 1. Approved safety showers and eye washes provided within 10 seconds travel time from the work area for immediate use, with no barriers (<i>i.e.</i> doors) for use or storage of corrosives. | | | |
| | 2. All eyewashes and showers have unobstructed access. | | | |
| | 3. Units inspected and activated monthly. Annually certification by Facilities Management for proper functioning. | | | |
| | 4. Sign indicating location of safety shower and eye wash unobstructed. | | | |
| В. | Personal Protective Equipment | Yes | No | N/A |
| | Has the correct PPE been selected based on a hazard assessment or SDS recommendation? | | | |
| | 2. PPE required for laboratory work: () Lab Coats, | | | |
| | () Safety glasses with side shields/goggles, () Hearing protection, () Face Shield, () Proper foot-wear, () Gloves, () Aprons | | | |
| | 3. All necessary equipment is available, in good condition, and properly used. | | | |
| С. | Laboratory Fume Hoods | Yes | No | N/A |
| | 1. Storage inside of hood is kept to a minimum. | | | |
| | 2. Equipment in use does not interfere with proper functioning of the hood. | | | |
| | 3. All work is done at least 6 inches inside hood. | | | |
| | 4. Front sash is lowered when hood is not in use. | | | |
| | Certified annually by Facilities Management, semi- annually for Title 8 §5209 "listed" Carcinogens. | | | |
| | 6. Hood has continuous flow monitor. | | | |
| | 7. The back ventilation slot is not obstructed. | | | |
| | 8. Drains are protected from hazardous materials entering. | | | |
| D. | Biological Safety Cabinet | Yes | No | N/A |
| | 1. Certified within the last year. | | | |
| | 2. Proper type of hood for work being conducted. | | | |
| | 3. Equipment is properly labeled for the hazard present (radiation, UV,), Manufacturer approved for hazard. | | | |
| | 4. Hood ducted per manufacturer and ASHRAE requirements and meets the bio-safety specifications. | | | |



| Ε. | Compressed Gas Cylinders | Yes | No | N/A |
|----|---|-----|----|-----|
| | Cylinders stored in well protected, well vented and dry locations away from combustible materials. | | | |
| | 2. Flammable gases stored away from oxidizers. | | | |
| | 3. Cylinders are secured to a rigid structural component of the building with non-flammable restraints located $1/3$ and $2/3$ (preferred) or $\frac{1}{2}$ the height of the cylinder. | | | |
| | 4. Protective caps in place while cylinders are in storage and full/empty tags attached. | | | |
| | Proper regulators are being used and closed when cylinders are not in use. | | | |
| F. | Housekeeping & Miscellaneous Laboratory Safety | Yes | No | N/A |
| | Bench tops clean, organized and environs maintained to eliminate harmful exposures or unsafe conditions. | | | |
| | 2. Supplies stored at minimum of 24 inches from ceiling and off the floor. | | | |
| | 3. Vacuum lines equipped with traps designed specifically to accumulate/filter the hazardous materials being evacuated. | | | |
| | 4. All moving machinery (<i>i.e.</i> , vacuum pumps) belts adequately protected by a rigid belt guard or housing. | | | |
| | 5. All sharps disposed properly. | | | |
| | 6. The condition of the broken glass box is adequate and placed out of the way. | | | |
| | 7. Ceiling tiles present and in good condition. | | | |
| | 8. Refrigerators/freezers labeled according to use. | | | |
| G. | Electrical Safety | Yes | No | N/A |
| | 1. High voltage equipment (>600V) labeled, grounded and insulated. | | | |
| | 2. No equipment has damaged or frayed cords. | | | |
| | 3. Extension cords are not connected together. | | | |
| | 4. Power strips used only if they are equipped with circuit breakers. | | | |
| | 5. All equipment is grounded via 3-prong plugs. | | | |
| | 6. Damaged equipment tagged out to prevent use. | | | |
| Н. | General Safety | Yes | No | N/A |
| | 1. Cabinets and bookshelves are secured. | | | |
| | Overhead storage is minimized and restrained from falling (i.e., shelf lips, rails). | | | |
| | 3. Heavy equipment is secured or braced from falling. | | | |

| I. Respiratory Protection | Yes | No | N/A |
|---|-----|----|-----|
| 1. Use of respiratory protection conforms to UC Davis Policy. | | | |
| 2. Respirators are inspected monthly and before use. | | | |



| | 3. | The user has been fit tested by the Occupational Health Services. | | | |
|----|-----|---|-----|----|-----|
| | 4. | Cartridges are changed on designated schedule and are the appropriate cartridge for the hazard. | | | |
| J. | La | ser Safety | Yes | No | N/A |
| | 1. | Does the laboratory use any Class 3b or 4 lasers? | | | |
| | 2. | Are the lasers registered with EH&S Health Physics Program? | | | |
| | 3. | Are the Standard Precautions for lasers prominently posted for each laser? | | | |
| | 4. | Are appropriate warning signs and labels posted? | | | |
| | 5. | Does the laboratory entrance have a warning light or lighted sign showing when the laser is in use? | | | |
| | 6. | Have all workers attended the EH&S Laser Safety course? | | | |
| | 7. | Does the laboratory have appropriate laser eyewear? | | | |
| К. | No | n-Ionizing Radiation (NIR) Source | Yes | No | N/A |
| | 1. | Have proper warning signs been posted? | | | |
| L. | En | ergency Planning & Procedures | Yes | No | N/A |
| | 1. | Emergency Response Guide and evacuation map visibly posted and current. | | | |
| | 2. | Chemical spill kit/cleanup materials available. | | | |
| | 3. | Training in spill clean-up procedures provided and documented. | | | |
| | 4. | First aid materials kept in adequate supply (in a sanitary and usable condition) and made readily available. | | | |
| М. | Fir | e Prevention | Yes | No | N/A |
| | 1. | Appropriate fire extinguisher mounted, unobstructed, available within 75 feet, in working order and inspected within the last year. A fire extinguisher should be available in a room containing flammable and/or combustible liquids. | | | |
| | 2. | Fire extinguisher sign is clearly visible. | | | |
| | 3. | 18-inch vertical clearance maintained from sprinkler head (<i>i.e.</i> , over shelving). | | | |
| | 4. | Are all laboratory doors kept closed? Closure devices in place? | | | |
| | 5. | Storage of combustible material is minimized. | | | |
| N. | Ex | its | Yes | No | N/A |
| | 1. | Exits and aisles are clear and free of obstructions in case of emergency. | | | |
| | 2. | Exit signs clearly visible. | | | |

IIPP-Appendix C2 December 2014 Pg. 6

| | | UCD Employer's Repor | t of Occupation | nal Injury or | Illness | |
|---|--|--|--|--|---|--|
| UNIVER OCCUP | RSITY POLICY REQU RRENCE AND STATE event of a serious iniu | JIRES THAT INDUSTRIAL INJURY/ILLN REGULATIONS REQUIRE THAT ALL A IV or hospitalization, call Workers' Compe | ACCIDENTS BE REPORTED ACCIDENTS BE INVE | D TO WORKERS STIGATED. at (530) 752-7243 | COMPENS | ATION WITHIN 24 HOURS OF |
| mailed | or faxed (530) 752-34 | 39 to Workers' Compensation. Omission | of information could re | esult in a delay of t | penefits. | |
| EMPL | Employee Name: | PLETE THESE SECTIONS: | | Employee's UC | Davis ID #: | |
| | Address: | | | | | |
| ΑΤΑ | City/State/Zip: | | | Home Phone: | () | of Pirth: |
| 0 | | | Sex: | Female Male | Date | |
| Ŋ | Department/Location | n: | 1 | Employee's Wo | rk Phone: (|) |
| РГС | Payroll Title/TC: | | Date of Hire: | | Annı \$ | ual Gross Salary: |
| Ш | Supervisor's Name: | | Super | visor's Work Phor | ne: () | |
| | Employee () Volu | inteer () Student-Employee () | ()hours per | day ()da | ays per week | () total weekly hours |
| | Specific Injury/Illnes | s/Exposure: | B | ody Part(s) affecte | d: | Date of injury/illness: |
| LN I | Location where injur | y or illness occurred: | | | Othe | ers Injured? Yes No |
| EME | What equipment, ma | aterials or chemicals caused the injury/illne | ess?: | | Who | witnessed this injury? |
| TAT | Explain in detail how | v the injury occurred. Include specific activi | ities/tasks performed a | at the time. | | |
| ы | | | | | | |
| ОУЕ | Medical Treatment | provided by: | | | | |
| EMPLO | Employee Healt | h Services Sutter Davis Hospital EF n UC Davis Medical Cent dical care needed | R Other: (Prov er | vide Name &Phone | e #) | |
| | Employee Signature | : | | Т | oday's Date: | |
| EMPL | OYER'S INVESTIG | ATION AND STATEMENT (EMPLO | YER COMPLETES |): | | |
| ĸ | After the investigation | on, explain in detail how the injury/illness o | ccurred and the speci | fic activity being p | erformed: | |
| OYE | | | | | | |
| ИРГ | | | | | | |
| ۳ ۳ | What was the injury | , illness or exposure? | | | - | |
| INIT Stru | IAL CAUSE | CONTRIBUTING FACT | ORS AND ACTIVITIE | ES on issues | SUPERV | PREVENTIVE ACTIONS |
| obje Cau betw Fall Mate lifting moti expo Bod expo I S Anin Expl | ct (indicate) ght in/under/ /een / Slip / Trip erial handling or g Repetitive on Chemical osure y fluid osure: Needle stick Sharps nal bite Other, lain | Equipment failure Equipment unavailable Improper equipment or material used for job Personal protective equipment Not worn Not readily available Not adequate for the task Personal protective equipment failure Training/Experience Lack of training Safety training provided, not followed New task for employee or lack of experience Work Area Work area set up improperly Inadequate lighting or noise issues Housekeeping issues Environmental factors (rain, wind, temp. etc) | Ergonor Employee Physically no Employee fa Unbalanced or motion Incorrect pro task Other unsafe Assistance Difficult to pe without help Safety featur readily avail Assistive dev Lack of policy/j Animal (explain) Other (explain) | nic factors ot able to do work tigue or poor position ocedures used for e practice erform task res or devices not able vices not used procedure below) | Develor update Reque Order Order Remo repair/ Schec Will re re-ass Perfor update Recor Comm in job Other Name Expected | op/revise safety procedures and a IIPP or Chem. Hyg. Plan est ergonomic evaluation new equipment new personal protective equipment ve equipment from use and replace lule preventive maintenance train employee before task is igned. m on-site review of work activity, e job safety analysis. Infigure work area nunicate corrective actions to others category. ve actions will be completed by: date of completion |
| DEPAR | TMENT HEAD'S SIG | NATURE: | | | ם ח | ate of investigation: |
| PLEA | ASE NOTE: COMPLETING T | HIS FORM IS NOT AN ADMISSION OF UNIVERSITY | LIABILITY | | | 7/2011 ER: WC/H/MJB |
| | IIPP-App Decembe | endix D er 2014 | | | | |

SAFETY TRAINING ATTENDANCE RECORD

| Training Topic: (attach a copy of the training session curriculum) | Date: |
|---|----------------|
| Instructor: | Training Aids: |
| Location: | Time: |

Attendees – Please print and sign your name legibly. Use additional sheets if necessary.

| No. | Print Name | Signature |
|-----|------------|-----------|
| 1. | | |
| 2. | | |
| 3. | | |
| 4. | | |
| 5. | | |
| 6. | | |
| 7. | | |
| 8. | | |
| 9. | | |
| 10. | | |
| 11. | | |
| 12. | | |
| 13. | | |
| 14. | | |
| 15. | | |
| 16. | | |
| 17. | | |
| 18. | | |
| 19. | | |
| 20. | | |
| 21. | | |
| 21. | | |
| 22. | | |
| 23. | | |
| 24. | | |
| 25. | | |
| 26. | | |
| 27. | | |
| 28. | | |
| 29. | | |
| 30. | | |

IIPP-Appendix ECompleted copies of this form should be routed to the department Safety Coordinator**December 2014**and must be maintained in department files for at least three years.

Site-Specific Safety Orientation & Training for New Laboratory Personnel

Revised - 07/2014

Prior to completing this site safety orientation and training, all laboratory personnel must have successfully completed the <u>UC Laboratory Safety Fundamentals</u> course. Completion of this training is required prior to personnel being granted unescorted access to the laboratory. This serves to satisfy components of the <u>University of California Policy - Laboratory Safety Training</u> and UC Davis policy <u>PPM290-56</u>.

| Ι | | confirm receipt of training on the listed topics on |
|-----------------------|------------------------|--|
| (print nam | e, trainee) | |
| | from | All of my questions regarding |
| (date) | (print name, tra | iner) |
| this material have be | een answered. Topics l | have been initialed, or marked with an "X" where not |
| applicable. | | |

(signature, trainee)

(signature, trainer)

| Initial | Торіс | Action |
|---------|--|---|
| | EMERG | ENCY PROCEDURES |
| | Fire Alarm Pull Station: | Show location(s) and proper activation. |
| | Eye Wash / Safety Showers: | Show location(s) and proper operation. |
| | Spill Procedures | Show location of spill kit(s), SafetyNets $\frac{#13}{2}$ and $\frac{#127}{2}$ (if applicable), and describe procedures. |
| | First Aid Kits: | Location(s) and description of contents. |
| | Phone: | Location(s), detail dialing instructions, '911' dialing instructions, bomb threat card. |
| | Emergency Response Guide: | Location(s) of flipchart guide, discuss scenario actions |
| | Emergency Action Plan: | Review Emergency Action Plan. Demonstrate both paths to Emergency Assembly Area. Review evacuation procedures for disabled employees if applicable. |
| | Warn Me: | Enroll in UC Davis <u>Warn Me</u> emergency alert system, recommend registering cellular phone number. |
| | | |
| | ENGIN | EERING CONTROLS |
| | Chemical Fume Hood(s): | Demonstration of proper use, instruction on adjustable controls, flow sensor function, and training requirements. |
| | Biological Safety Cabinet(s): | Demonstration of proper use, instruction on adjustable controls and training requirements. |
| | Chemical Storage Location(s): | Location(s) and segregation rules, volume limits (>10 gallons requires flammable storage cabinet). |
| | Other Controls (<i>e.g.</i> , Glove Boxes, Snorkels, Gas Cabinets, Paint Booths, Laminar Flow Benches): | Demonstration of proper use, instruction on adjustable controls. |
| | Describe in detail: | |
| | | |
| | | |

| Laboratory Safety Manual (incl. Chemical Hygiene Plan): | Location and content description. Also, any applicable Laboratory Safety Plan(s) location and content. |
|--|--|
| Safety Data Sheets (SDSs): | Demonstrate electronic access and describe laborator repository of hard copy SDSs, if applicable |
| Standard Operating Procedures (SOPs): | Location of lab's SOPs, describe required approvals. Identification of chemical processes / areas requiring specific SOP use, and laboratory safety rules. |
| Describe in detail: | |

| PERSONAL F | PROTECTIVE EQUIPMENT |
|---|--|
| Determine Hazard-Specific Safety Training: | Consult <u>UC Davis Training Matrix for Laboratory</u> <u>Personnel</u> , enroll in courses |
| | Provide at no cost fitted laboratory coats. Some labs/hazards require flame resistant coats. |
| Lab Coat: | ● Type: □ Cotton/Blend □ Barrier □ Flame Resistant |
| | Size: |
| Eye Protection: | Provide at no cost pair(s) of safety eyewear. Glasses r fit appropriately, be comfortable to wear, and stay secu in place. For labs where goggles must be worn provide pair(s) of fitted chemical splash goggles. When a face shield is required, demonstrate proper use, care and storage. |
| | Corrective Prescription Y / N |
| | Model: |
| Gloves: | Location(s), provide knowledge and resources to selec correct type. Instruct proper procedure to don and doff |
| | OTHER |
| Department IIPP: | Location and review |
| Hazardous Waste: | Overview of laboratory hazardous waste procedures. Location(s) of accumulation area, demonstrate proper labeling, describe proper storage requirements, and de pickup/removal procedures. |
| Specialized Equipment: | Review of safety procedures for proper operation. <i>e.g.</i> light, laser, high voltage equipment, superconducting magnets, cryogen handling, high/low vacuum, etc |
| | |
| Describe in detail: | |

IIPP-Appendix F