I. PURPOSE AND SCOPE

The purpose of this document is to inform the University of Houston, faculty, staff and students of the Laboratory Safety Program (LSP) and the university’s safety manuals. This document applies to all persons who visit, work, perform research, or receive an education at the university.

II. POLICY

It is the university’s policy to comply with all safety-related regulations that govern the university’s operations, and to protect the safety of the university’s faculty, staff, students, and visitors. The Environmental Health and Life Safety Department (EHLS) develops safety-related policies and programs to accomplish this objective.

III. RESPONSIBILITIES

Many of the university’s safety policies are incorporated into the safety manuals that are posted on the EHLS website at http://www.uh.edu/ehls. The university’s safety policies are designed to facilitate compliance with regulations and enhance the safety of the university community. Compliance is mandatory to achieve the expected high level of safety and regulatory responsibility for the university as detailed in the safety manuals. The LSP and corresponding safety manuals are the primary tools used to accomplish this objective.

IV. LABORATORY SAFETY PROGRAM

A. There are over 1,763 laboratories on campus. Many of these laboratories have chemicals, biological agents, radioactive materials, controlled substances or equipment that may pose a hazard to faculty, staff and students working within the laboratories. EHLS addresses these potential hazards by developing safety practices, training and policies that are catalogued in several safety manuals.

B. In addition, EHLS audits compliance with these policies and provides a number of other services to assist the laboratory workers maintain a high level of safety in the laboratories. While the LSP focuses on laboratories as a primary function, this program also serves as best practices for non-laboratory operations.

C. Safety is everyone’s personal responsibility and must be taken seriously at all times. There is never reason to take a short cut when it comes to safety. Additionally, proper Personal Protective Equipment (PPE) is required at all times while inside a laboratory unit.

D. The Principal Investigator is responsible for all students, employees, and visitors while they are in the laboratory. The Principal Investigator may delegate supervisory responsibilities to a Laboratory Manager, but remains ultimately responsible for the laboratory.
E. Any violations found within the laboratory shall be corrected as soon as possible. If a violation or operation is determined to be an Immediate Danger to Life or Health, the work in the laboratory shall cease immediately until such time as the violation of corrected. The determination will be made by EHLS.

V. SAFETY MANUALS

The majority of safety policies are organized in Manuals, Policies, Procedures posted on the EHLS website.

A. Laboratory Safety Manual

The laboratory safety manual provides guidance to Principal Investigators and Authorized Users regarding control measures essential for protecting all laboratory occupants and university operational personnel who may enter the laboratory from common hazards found in the laboratory. These controls consist of, but are not limited to, policies, guidelines, training requirements, standard operating procedures, personal protective equipment, and laboratory inspections. The manual also describes a minimum level of safe practices that are expected from all individuals (faculty, staff, and students) involved in the laboratory operations.

The manual is accessible at http://www.uh.edu/ehls/about/manuals/.

B. Hazardous Waste Manual

The Hazardous Waste Manual contains the documentation used in the Hazardous Waste Program. The purpose of the program is to ensure that university faculty, staff, students and visitors comply with applicable hazardous waste regulations in disposing of hazardous waste, as well as other regulated waste (biological, grease, non-hazardous industrial solid waste, etc.), from around the campus. The program applies to all waste except general refuse (i.e., general trash dumpsters) generated on campus. Hazardous waste as defined by the Environmental Protection Agency and the Texas Commission of Environmental Quality (TCEQ) is highly regulated from “cradle to grave” and compliance with these regulations is crucial to the university. The University has developed a non-pour policy, meaning that no hazardous waste shall be disposed of by pouring it down a drain. All waste must be collected in an appropriate container and stored properly ready for pick up.

C. Biological Safety Manual

The Biological Safety Manual contains the documentation used in the Biosafety Program. The purpose of the program is to promote safety through the proper management of potentially hazardous biological materials and to comply with federal and state regulations regarding the use of biohazardous materials in the research and teaching laboratory. The manual contains a description of the program with all the policies, responsibilities, and requirements for working with biological materials, such as recombinant or synthetic nucleic acid molecules, potentially hazardous microorganism, biological toxins and blood-borne pathogens. In addition, this manual contains helpful information for the day-to-day management of a safe and compliant laboratory.

All new biological work or changes to existing biological work on campus must be brought to the attention of EHLS Biological Safety Officer (Manager) and receive prior approval from the Institutional Biosafety Committee (http://www.uh.edu/ehls/research-lab/biological-safety/).
D. Safety Manuals, Policies and Procedures

Safety policies and procedures that cannot be grouped into subject-specific manuals are maintained in the Safety Manuals, Policies, Procedures section of the EHLS website. The section contains various policies, including subjects such as entry of confined spaces, hazard communication and reproductive health.

E. Radiation Safety Manual

The Radiation Safety Manual contains the documentation used in the Radiation Safety Program. The objective of the Radiation Safety Program is to assist all levels of management in fulfilling the commitment at the university to provide a place of employment and learning which is as free as possible from recognized radiation hazards. The purpose of the Radiation Safety Manual is to assist personnel, students and management in complying with the state radiation regulations and the Radiation Safety Program. This Radiation Safety Manual is not intended to be an exhaustive or fully-comprehensive reference, but rather a guide for Principal Investigators and Authorized Users. The Radiation Safety Manual is an enforceable component of the Radioactive Material Broad Scope License and Radiation Producing Devices Registrations under which the university is authorized. All new radiation research (radioactive materials, x-ray machines, Class 3b and 4 lasers) or changes to existing radiation research on campus must be brought to the attention of EHLS Radiation Safety Officer (Manager) and receive approval from the University Radiation Safety Committee prior to its commencement. (http://www.uh.edu/ehls/research-lab/radiation-safety/).

F. Chemical Hygiene Plan

The Chemical Hygiene Plan contains the basic guidelines of the Chemical Safety Program. The purpose of this Chemical Hygiene Plan is to define work practices and procedures to help protect students, laboratory workers, researchers, and supervisors at the university from health hazards associated with the use of hazardous chemicals. The Chemical Hygiene Plan is consistent with the Texas Department of Health Services, which has adopted by rule of the U.S. Department of Labor Occupational Safety and Health Administration (OSHA) standard entitled “Occupational Exposures to Hazardous Chemicals in Laboratories” (Code of Federal Regulations, 29 CFR 1910.1450) and the Texas Hazard Communication Act (Chapter 502 of the Texas Health and Safety Code). (http://www.uh.edu/ehls/research-lab/chemical-safety/)

G. Training

EHLS has many different types of training courses available to faculty, staff and students. All of the above disciplines require training of some type. Contact EHLS for information on specific requirements in each discipline. The lack of required training in the above listed disciplines will result in personnel not being allowed to do activity within the lab setting. A list of EHLS training courses can be found on the EHLS website: http://www.uh.edu/ehls/training/.

EHLS also provides special awareness training for staff employees or contractors (such as custodial employees or contractors, maintenance business administrators, etc.) that normally do not work in a laboratory that contains hazardous materials, but must enter the laboratory space to conduct their jobs. Those employees/contractors must take the EHLS special awareness training before entering a laboratory that contains hazardous materials.
H. Personal Protective Equipment (PPE)

Everyone entering or working in a laboratory that contains hazardous materials of any kind must wear proper Personal Protective Equipment (PPE). The type of PPE required is dependent on the activities conducted in the laboratory but, at a minimum, shall include gloves, lab coat, eye protection, closed toe shoes and long pants. Any person found in a laboratory without the proper PPE shall be required to leave the laboratory.

VI. REVIEW AND RESPONSIBILITY

Responsible Party: Assistant Vice President for Campus Safety
Review: Every three years on or before June 1

VII. APPROVAL

Jim McShan
Senior Vice President for Administration and Finance

Renu Khator
President

Date of President's Approval: November 14, 2018

REVISION LOG

<table>
<thead>
<tr>
<th>Revision Number</th>
<th>Approved Date</th>
<th>Description of Changes</th>
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<tbody>
<tr>
<td>1</td>
<td>01/15/2004</td>
<td>Initial edition (originally entitled “Safety Manuals”)</td>
</tr>
<tr>
<td>Revision Number</td>
<td>Approved Date</td>
<td>Description of Changes</td>
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<tr>
<td>3</td>
<td>11/23/2010</td>
<td>Applied revised MAPP template to meet current documentation standards. Changed title to “Laboratory Safety Program and Corresponding Safety Manuals,” and removed “corresponding” throughout text. Changed the organization from the Environmental Health and Risk Management department to the Environmental Health and Safety Department (EHS) throughout text. Added links to Section V.F. Changed review period from every three years on or before August 1st to every three years on or before June 1</td>
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<tr>
<td>4</td>
<td>12/04/2015</td>
<td>Added new Revision Log. Changed Environmental Health and Safety Department to Environmental Health and Life Safety Department (EHLS) in Sections II, IV, V, and V.D. Changed number of laboratories in Section IV from 800 to 1,100. Changed web site links as applicable. Updated location of safety manuals in Manuals, Policies, Procedures on the EHLS web site in Sections V and V.D. Added Texas Commission of Environmental Quality (TCEQ) to Section V.A. Removed Section V.C. Added synthetic nucleic acid molecules to replace DNA molecules in Section V.B. Updated responsible party as Assistant Vice President for Public Safety and Security. Change title in Section VII to Interim Vice President for Administration and Finance</td>
</tr>
<tr>
<td>5</td>
<td>11/14/2018</td>
<td>Changed the number of laboratories on campus from 1,100 to 1,763 in Section IV. Added information at the end of Section IV about responsibilities of Principal Investigator and/or Laboratory Manager for all students, visitors, and staff inside of a laboratory unit; any violation of operation which is considered a damage to life of health will be corrected immediately. Added Section V.A for Laboratory Safety Manual. Added the non-pour policy to Section V.B on Hazardous Waste Material. Added rule on new biological work on campus to Section V.C. Added rule on new radiation research on campus in Section V.E. The Texas Department of Health Services has adopted the rule by OSHA as documented in Section V.F, Chemical Hygiene Plan. Added Section V.G on training programs offered by EHLS. Added Section V.H on Personal Protective Equipment (PPE) rules and guidelines; additional documentation will be developed later on EHLS training and PPE</td>
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