

CONTENTS

A. INTRODUCTION:

1. Scope:

The policies and procedures described here apply to all GS operating units and address site-specific safety issues, if applicable. The Genome Sciences Department is located in the WH Foege building on the UW main campus. In addition to the WH Foege building, GS has labs in two satellite locations. Several GS labs are located in the Brotman Building at South Lake Union, 815 Mercer and one lab (Stamatoyannopoulos Lab) is located at the World Trade Center East, 2211 Elliott Ave, Seattle, WA.

2. Health and Safety Policy:

This Accident Prevention Program, or Health and Safety Plan, shares the commitment of the University of Washington to provide a “safe and healthful environment for all individuals associated with the institution, including faculty, staff employees, hospital patients, and visitors” (University Handbook Vol. IV, Part VI, Chapter 4). It follows UW policy set in the Administrative Policy Statements (APS) 10.3, and is consistent with requirements in the Washington State Industrial Safety and Health Act (WISHA) (WAC 296-24, 296-62 and 296-800) which is administered by the Department of Labor and Industries (L&I).

3. Responsibility:

The GS Director of Finance and Administration and all Principal Investigators are responsible for maintaining safe work practices in their respective units, including required health and safety training. We understand that it is University policy that this responsibility can neither be transferred nor delegated (University Handbook, Vol. IV, Part VI, Chapter 4, Section 1.A). Genome Sciences has a decentralized structure for maintaining safe practices. Each employee belongs to a specific lab or group. The head of the group or lab is responsible for following all EH&S requirements and WA state regulations. The group or lab is strongly encouraged to follow the EH&S best practices recommendations in this document.

In addition, GS requires all employees to comply with health and safety regulations, with departmental policies and procedures that apply to their own conduct on the job, and to report accidents, injuries and unsafe conditions to their supervisor.

4. Safety Coordinator:

We have chosen Beth Hammermeister to serve as a Safety Coordinator for our department (see “Back Page”). She has been given adequate authority to carry out the following responsibilities:

- Promoting this Health & Safety Plan in Genome Sciences
- Updating this Plan, at least annually, with management approval
- Scheduling employee safety training as requested by supervisors
- Coordinating with Environmental Health & Safety
- Provide assistance to supervisors and employees as needed to resolve safety complaints

- Keeping safety bulletin boards current
- Maintaining our organization's safety records
- Keeping the department head aware of current safety concerns.

B. FUNDAMENTALS: 8 KEYS

1. New Employee Health and Safety Orientation:

All Genome Sciences new employees, including those that are permanent, temporary, or part-time, must receive instruction for the following:

- a. Reporting procedures for fire, police, or medical emergencies;
- b. Evacuation procedures during an emergency;
- c. Location of fire alarm pull-stations and fire extinguishers; Employees using fire extinguishers must have previously received training;
- d. Procedures for reporting all accidents and incidents to their supervisors and completing a written online report using OARS;
- e. Procedures for reporting unsafe conditions or acts to their supervisors and, when possible, taking action to correct unsafe conditions;
- f. Exact location of first-aid kits and identification of first-aid certified employees;
- g. Description of UW and departmental Hazard Communication Program for chemical hazards to which they may be exposed;
- h. Identification and explanation of all warning signs and labels used in their work area;
- i. Use and care of any personal protective equipment they are required to use;
- j. Description of safety training they will be required to attend for their job. GS required training includes:

1. General Asbestos Awareness Training - Mandatory for all UW employees, students, and staff once a year

2. EH&S Biosafety Training Required once every three years for all Principal Investigators and research staff using any form of recombinant DNA (including transgenic animals and plants), pathogenic microorganisms, human / non-human primate tissues (including cell lines), or other biohazardous agents.

Each new GS employee is instructed to attend a departmental New Employee Orientation. Genome Sciences holds group orientation sessions once a month. Asbestos training and EH&S Biosafety Training is recorded in the GS Personnel Database. Each lab is responsible for ensuring that their members have the proper safety training. A record of lab safety training for each lab member is kept in their Lab Safety Manual. In addition, the department tracks yearly asbestos training and biosafety training.

New employee safety orientation checklists can be found on the EH&S web-site at <http://www.ehs.washington.edu/ohshsplans/index.shtm>.

2. Emergency Evacuation and Operations Plan (EEOP):

All University employing units must develop procedures for evacuation in an emergency and for response to fires, bomb threats, chemical spills, earthquakes, etc. The GS EEOP is located at <http://www.gs.washington.edu/office/facilities.htm>, Hard copies of the EEOP are located in S250, S340, S340B, S041F, and

S026.

The Genome Sciences EEOP contains:

- a. Building floor plans that show safety equipment and exit pathways;
- b. Evacuation procedures;
- c. Evacuation assembly point(s);
- d. Methods for accounting for staff, students, visitors;
- e. Areas of refuge for mobility-impaired occupants.

All department staff must be trained in the EEOP. If an employee moves to a new location, the EEOP must be reviewed for the new work-site.

3. Accidents:

a. Medical Emergencies:

All medical emergencies must be reported to the nearest Emergency Medical Services (EMS), usually 911.

b. Report form to supervisor and EH&S:

All accidents *and near misses* must be reported to the employee's supervisor or lab manager immediately. EH&S must be notified asap and no later than 24 hours after the incident. Near misses are valuable opportunities to correct unsafe situations, which under slightly different circumstances, would result in serious injury. A report may be filled out by the employee, the supervisor, or both using the Online Accident Reporting System (OARS) at: <http://www.ehs.washington.edu/ohsoars/index.shtm>.

Information on Workplace Injury Procedures is located at:
<http://www.gs.washington.edu/office/facilities.htm>

c. Investigation:

All accidents and near accidents must be investigated by the supervisor who then summarizes the details and corrective measures in OARS report. EH&S and the department's organizational safety committee review the report. Assistance from EH&S is available by calling 206.543.7388.

4. First Aid Kits and CPR Given:

Quick and effective first-aid for minor injuries results from the availability of strategically located first-aid kits and first-aid/CPR certified individuals whenever department staff are working.

a. Department First Aid

Consistent with the UW First Aid Response Plan (APS 10.5), certified first-aid and CPR assistance is available to department employees by calling 911.

The following options are recommended to help departments meet First Aid planning required by DOSH (formerly WISHA). See: <http://www.ehs.washington.edu/ohshsplans/index.shtm> for EH&S guidelines:

- Offices can have either 1 first aid person per floor/suite/area or if on campus, they may rely on calling 911 to receive immediate aid from the UW Police Department (or Seattle

Police Department for off campus locations).

- *Laboratories* need at least 1 first aid person at all times. This may require several certified staff per floor/suite.
- *Shops* need at least 1 first aid person at all times. This may require several certified staff. (N/A)
- *Field Activities* require at least 1 first aid person at all times.

b. First Aid Kits

Locations of first-aid kits in our department are listed below. First aid kits are inspected periodically so they can be restocked before running out of an item. It is recommended that names and phone numbers of those employees who are first aid / CPR trained and those employees who are responsible for first-aid kits are listed on the outside of the kits.

First aid kit Locations: Each GS lab has its own first aid kit. Additional kits are located in the admin supply room (S250E), 3rd floor kitchen (S300E), and the GS wash room (S030).

WH Foege LABS:

Josh Akey Lab - S303A

Celeste Berg Lab - S433A

Bonny Brewer Lab - S041A

Elhanan Borenstein Lab - S103A

Breck Byers Lab - S041A

Maitreya Dunham Lab - S403A

Evan Eichler Lab - S413A

Joe Felsenstein Lab - S420

Phil Green Lab - S320

Mike MacCoss Lab - 113D

Colin Manoil Lab - S243E

Debbie Nickerson Lab - 213A

Bill Noble Lab - S220

Outreach Lab - S031A

Leo Pallanck Lab - S443F

Christine Queitsch Lab - S410

Jay Shendure Lab - S210

John Stamatoyannopoulos Lab - two lab locations: Foege S310 at 2211 Elliott Ave, Suite 600

Willie Swanson Lab - S143C

Jim Thomas Lab - S333A

Bob Waterston Lab - S343E

Judit Villen Lab - S133A

South Lake Union Proteomics Resource Group Labs:

Jim Bruce, Jimmy Eng, Alejandro Wolf-Yadlin, Priska Von Haller

An AED (automated emergency defibrillator) is located in the second floor lobby area. It is on the north wall next to the large white board. Names and phone numbers of people who taken the AED class are listed on the AED cabinet. Use of the AED is not restricted to people who have taken the AED class.

(Kit contents and stock numbers are listed on the EH&S website at: <http://www.ehs.washington.edu/ohshsplans/firstaidkit.shtm>.)

5. Safety Problems: Reporting and Resolving:

Employees are encouraged to report safety concerns to their supervisor. If employees do not feel they can do this, or have done so and do not feel the problem has been resolved, they may discuss the situation directly with their safety coordinator or safety committee representative. Assistance from EH&S is available, if needed, to resolve a problem. Safety problems may be reported online using OARS as you do for accidents/incidents. Additional GS contacts for safety concerns are:

Nancy Cameron; 206 221-4692 Director, Finance and Administration, Genome Sciences S350B

Beth Hammermeister; 206 543-8948 Manager of Physical Operations, Genome Sciences

Gina Alvino; 206 543-9446 GS Safety Officer

Lorease Kendrick; 206 616-4433, 206 543-9406; Sr. Human Resources Consultant, Campus HR Operations, UW Tower C-1

Safe Campus Office 685-SAFE

6. Safety Meetings: Supervisor Leadership

Supervisors can promote health and safety in formal safety meetings or in regular staff meetings. EH&S recommends documenting such things as organizational policy, meeting frequency, responsibility for minutes, location of minutes, and how part-time employees can participate or be informed.

GS follows the decentralized model by requiring each GS lab or group to be responsible for holding periodic safety meetings. In addition, all new GS personnel are instructed to attend a GS New Employee Orientation session. The hour long presentation is held monthly. Safety issues take up approximately 20 minutes of each orientation session. All GS staff are invited to attend the monthly meeting. Safety information is also available on the GS website at: <http://www.gs.washington.edu/office/facilities.htm>

7. Health & Safety Committee Participation:

Health & Safety Committees at three organizational levels help determine unsafe conditions and procedures, suggest corrective measures, and obtain the participation of all UW personnel. At the Organizational and University-Wide levels, fifty percent (or more) of the representatives are elected by employees and fifty percent (or less) are appointed by management. Safety issues may originate at any level. Health & Safety Committees are required by Washington State regulation (WAC 296-800-14005). A listing of committees and current members may be found at the EH&S web-site: <http://www.ehs.washington.edu/> (search for Safety Committees).

a. Departmental Health and Safety Teams

Departmental Health & Safety Teams deal with “front line” issues. Large departments may especially benefit from this centralized approach to health and safety issues. In addition to providing a pathway for communication between different sections, teams involve employees in the process of identifying and resolving safety issues. Our department *does not have* a formal health and safety team. Instead, health and safety issues are discussed in staff meetings (see section B.6) and as part of our Organizational Health & Safety Committee.

b. Organizational Health and Safety Committees

The University is divided into eleven organizational groupings, each one represented by an *Organizational Health and Safety Committee*. This committee deals with issues the members may have in common but can handle more effectively together. Each elected member represents all units of that organizational group, including his/her own.

Our department is represented on the Group 4 Health & Safety Committee.

The Group 4 Committee’s Director is Bob Ennes. Bob Ennes is also a member of:

- Campus Security Advisory Committee
- Infectious Waste Committee
- Emergency Management Planning Committee
- Environmental Stewardship Advisory Committee

Our current representatives are identified on the “Back Page” of this document.

c. University-wide Health and Safety Committee

In addition, to provide consistency and oversight, a *University-wide Health and Safety Committee* has been established. Its members come from the official organizational committees. Safety issues referred to this level are relevant to the entire University community. The member(s) who currently represent us from the Group # 4 Organizational Health & Safety Committee are listed on the “Back Page” of this document.

8. Safety Bulletin Boards

Our departmental safety bulletin boards are used for posting DOSH (formerly WISHA) posters, safety notices and safety newsletters. Safety committee minutes, training schedules, safety posters, accident statistics, and other safety education material may also be posted. They are located in S000M and S400R where all employees, students, and visitors can see them (WAC 296-800-19005) and at all University reference stations.

C. ACCIDENT/ILLNESS PREVENTION: 6 KEYS:

1. Identification of hazards:

- The responsibility for inspecting work areas, and examining processes from beginning to end in order to record possible hazardous situations lies primarily with each lab or group.
- GS complies with all recommendations from inspectors outside our department, such as EH&S.

- GS defers to the Washington Administrative Code (WAC) Chapters 296-24, 296-62 and 296-800 for General Safety and Health Standards and Occupational Health Standards established by the State Department of Labor and Industries (L&I), as well as the University of Washington Administrative Policy Statements (APS), 10.3.

If you can't decide whether a hazard is present or not, please contact EH&S for help at 206.543.7388.

General Guidelines for Job Hazard Reviews

- Review job injury and illness reports (including "close calls") to determine which jobs to analyze first.
- Involve employees in all phases of the analysis. Explain to workers that you are studying the job, itself, not checking up on them.
- Review work plans for an overview of job activities.
- First note deficiencies in general conditions, such as inadequate lighting, noise, or tripping hazards that may not be directly related to the job.
- Break the job down into steps in the order of occurrence.
- Examine each step to determine hazards that exist or might occur.
- Determine whether the job could be performed in another way or whether safety equipment or precautions are needed.
- If safer job steps can be used, write new procedures to describe specifically what the worker needs to know to perform them.
- Determine if any physical changes will eliminate or reduce the danger (e.g. redesigned equipment, different tools, machine guards, personal protective equipment or ventilation).
- If hazards are still present, try to reduce the necessity or frequency for performing the job.
- Document the assessment: job covered, task, date, and person performing the analysis.
- Review recommendations with all employees performing the job.
- Review and update the job hazard analysis periodically, especially if an accident occurs in that job.

2. Reduction of hazards:

Each GS lab or group complies with the requirement for a written plan in their areas of responsibility by *identifying* each of the above hazards, *evaluating* its potential risk, and *controlling* or eliminating it according to the measures described below. Some plans (e.g., Laboratory Safety Manuals) are located in each lab, hard copies of the Emergency Evacuation and Operation Plans are located in S340, S350B, S250, S041F, and S026. The EEOP is also located on the GS website: <http://www.gs.washington.edu/office/facilities.htm>
Radiation Safety records are located in the Facilities Manager's files in S340.

When possible, our facilities and equipment were designed to eliminate employee exposure to hazards. Where engineering controls are not possible, we rely on work practice controls that effectively prevent employee exposure to the hazard. When these methods of control are not possible or not fully effective, we require the use of personal protective equipment (PPE), such as safety glasses, hearing protection, etc.

a. Evaluation

Evaluation of potential risk (probability and magnitude of harm) has been done for certain hazards. When hazards are either (1) present in an unknown or a variable amount (such as airborne contaminants like asbestos or carbon monoxide), or (2) subject to complicating factors (such as extreme risk or individual medical sensitivity), monitoring has been done to determine the safest procedures. EH&S has been consulted as needed. The following describes evaluations we have made:

GS has one employee who is monitored for radiation exposure through EH&S – RSO. EH&S has investigated a noxious smell on one occasion. They could not find the source and they did not believe the odor was harmful.

b. Engineering Controls

Engineering controls have been employed, whenever possible, as the preferred way to eliminate the following specific hazards (facility or equipment design, e.g., fume hoods, guardrails, proper tool guards, walkway surfacing).

GS follows all recommended safety guidelines and requirements set forth by the University, State and Federal agencies.

c. Administrative Controls

Administrative controls, the way a job is done, have been used to reduce some of the hazards in our department, and on-going training is an inherent part of our safety program (see section C.5).

(Administrative controls may include rotation of workers to reduce exposure time, specialized training, or using less hazardous procedures. The best procedures are usually those recognized as safe by professionals working in the field, by equipment manufacturers, by consensus in a specialized group, or simply by tradition. They are often referred to as “standard operating procedures,” (SOP’s), “operating instructions,” “safe practices,” “prudent practices,” “Universal Precautions,” etc., and are often found in something like a manual.)

The following administrative controls are used in our department:

Each lab has lab specific SOP’s in their lab safety manual.

d. Personal Protective Equipment

Personal protective equipment (PPE) is used as a “last line of defense” for some hazards, particularly chemicals. Our hazard assessment and training documentation is located each lab’s safety manual. The following information is required (UW APS10.4):

- Hazard Assessed, (site, evaluator, date, supervisor verifying)
- PPE Selected
- Type and frequency of Training

3. Safety Inspections

To maintain our commitment to safe work practices, and to ensure that our department continues to meet regulatory standards, we conduct regular, thorough inspections of

associated work areas and continually check for unsafe conditions and practices. We consider these inspections an additional opportunity to provide practical training in safety awareness as well as a systematic method for involving supervisors and others in the process of reducing workplace hazards. Our department's policy on the frequency and methods for periodic safety inspections, and the location of inspection records is described below:

Each lab is required to maintain safe practices on a daily basis within their lab and Eye wash stations are inspected weekly.
EH&S conducts lab safety inspections periodically.

change

More information about conducting inspections at your work-site and sample inspection check lists may be found at the EH&S web-site <http://www.ehs.washington.edu/fsosurveys/checklists.shtm>

4. First Aid and CPR Training

- We primarily rely on calling 911 for immediate access to emergency first aid for our employees.
- However, each lab must have a trained first aid/cpr person. EH&S suggests that labs or groups put the names and phone numbers of employees who are first-aid/CPR certified on each lab's emergency evacuation clipboard.
- GS suggests that each lab safety person update their first aid/CPR training every two years.
- Training can be done in person: <http://www.ehs.washington.edu/psotrain/corsdesc.shtm#firstaid>
- Training can be updated by reviewing the information located here:
- <http://depts.washington.edu/learncpr/>

5. Safety Training: On-Going

To ensure an effective health and safety program, we continually re-educate employees on how to work safely with all applicable hazards. Supervisors are responsible for this training and for seeing that safe practices are followed. Listed below are the training requirements for hazards identified in our department, how training is obtained, and how often it must be renewed (tracked either according to individual or according to position and may vary with degree of potential exposure). Training records, including completion dates, are kept to maintain program continuity and to satisfy legal requirements. Documentation is kept by in the GS Personnel Database.

GS tracks biosafety training and asbestos training. New employees are made aware of EH&S classes.

Additional information regarding training requirements may be found on the EH&S home page under "Training Information". Supervisors are encouraged to attend EH&S training for hazards faced by employees in their areas of responsibility. The class "HazCom Train-the-Trainer," for example, would apply to most work places.

6. Medical Exams and Vaccinations

Certain work environments or specific work practices create health risks that require medical examinations or immunizations for employees. Our department has called the Occupational Health Nurse at 206.221.7770. GS has one lab, the Evan Eichler Lab, that deals with bloodborne pathogens. They have a program in place for managing bloodborne pathogens.

D. DOCUMENTATION AND FOLLOW-UP

1. Record-Keeping

To meet State requirements, our department maintains records of safety activities for varying lengths of time depending upon the type of record, and is able to produce them when requested by EH&S or L&I. Note: the EH&S Training office maintains records for EH&S classes. Call 206.543.7201 for more information.

The responsibility for record keeping lies primarily with the lab or group unit. It is recommended that the lab or group records include:

- Results of self-evaluation inspections.
- Records of requests for assistance in correcting noted deficiencies.
- Minutes of safety education-accident prevention meetings.
- Records of employees requiring medical evaluations including dates of examinations and immunizations.
- Records of employee safety training, including dates when certificates expire, where applicable.

For this Plan, we have listed below applicable records maintained by our department, and their locations.

Genome Sciences records employee training for Biological Safety Training and General Asbestos Awareness in the GS Personnel Database. This data base is kept up to date by GS Admin staff. In addition, each lab keeps records of employee safety training in their lab safety manual.

2. Updates:

For this Plan to be useful as a "living document," it must reflect the department's *current* safety program and its *current* responsible parties. Periodic updates, at least annually, are necessary to ensure this. The "Back Page" of this document provides a convenient place to look for the most recent revision date, the names of key safety personnel, and other information.

E. The Safe Campus Program

While there are specific regulatory requirements for hospitals and late night retail operations regarding workplace violence that don't apply to general University operations, we do recognize that individual attacks on faculty, staff and students can and have occurred due to domestic violence or workplace violence. As part of maintaining a healthy, safe working environment, the University has developed and administers a UW Violence in the Workplace Policy and Procedure through the Human Resource's Violence Prevention and Response Program. Information on the program/policies is published on the UW website at

<http://www.washington.edu/admin/hr/polproc/work-violence/index.html>.

University services include nighttime safety escort services, counseling sessions, a dedicated assessment team, and informational materials and training, but services are not limited to these items.

All managers, supervisors, and employees must be aware of the appropriate processes to follow regarding workplace and domestic violence prevention. They can receive assistance in answering any employee questions from the HR Violence Prevention and Response Program Manager. *We expect our entire faculty and staff to take Workplace Violence training at least once every biennium, as well as receive information during new employee orientation.* GS will begin tracking work place violence training in 2011. Information about workplace violence training is disseminated by the Manager of Physical Operations. Records of the training are maintained by each lab or group.

For more comprehensive information, access the SafeCampus website at <http://www.washington.edu/safecampus>.

If any staff has concerns regarding a threat of violence, call:

- . Seattle: 206-685 SAFE (206-685-7233)
- . Bothell: 425-352-SAFE (425-352-7233)
- . Tacoma: 253-692-SAFE (253-692-7233)

In a life threatening situation or imminent danger call 911, immediately!

“Back Page”

1. Department: Genome Sciences

1. Today's date / signature: August 23, 2011 / Beth Hammermeister

1. Last update (date/person): _____

3. Health and Safety Coordinator for our department: (from 6/08 to present):

Beth Hammermeister

206-543-8948

bethh@uw.edu

WH Foege S340

1. Health and Safety Team members in our department:

Sandra Pennington 206-5437539

Gina Alvino 206-543-9446

Beth Hammermeister 206-543-8948

1. Organizational Safety & Health Committee:

Group # 4:

Elected: Toni Bennett / aree@uw.edu / 3-0092 (from 10/09 to 10/11)

Appointed: Greg Brasil / glbrazil@uw.edu / 5-6627 (from 10/09 to 10/11)

Union Representative: Jean Dinh / jeandinh@uw.edu / 744-3220 (from 10/09 to 10/11)

Chair: Bob Ennes / wrigley@uw.edu / 3-6114 (from 10/09 to 10/11)

1. University-Wide Safety & Health Committee representative for above Group 4:

Name/e-mail/phone Bob Ennes / wrigley@uw.edu / 3-6114 (from 10/09 to 10/11)

7. The responsibility for keeping track of First-Aid/CPR Certified employees lies with the group or lab unit. EH&S recommends that the following information is put on the outside of each first aid kit.

Name/Phone/Expiration Date _____

Person responsible for stocking First-Aid Kits (UW APS 10.5):

1. Important Non Emergency Phone Numbers:

685-UWPD (8973) UNIVERSITY POLICE

543-7262 EH&S

See EH&S web-site at www.ehs.washington.edu

Click on “Service Phone Numbers”

Small Utility Vehicle and Golf Cart Procedure: *NOTE: NOT APPLICABLE TO GENOME SCIENCES*