

Plaxco Group Laboratory Safety Check-In

BEFORE beginning work in ANY of the Plaxco Group Labs, rotation students, new group members, and visiting scholars must:

1. **Complete the online EH&S safety course** (print out quiz results and attach).
 - a. <http://ehs.ucsb.edu/4DAction/WebCourseSessionList> (LS60)
 - b. You are exempt from completing this if you are a new UCSB Grad student who went through New Graduate Academic Training through your home department.
2. **Complete the in-person EH&S safety course** “Lab Safety Class – LIVE – LS01” as soon as it is offered (usually once a quarter)
 - a. You must enroll at <http://ehs.ucsb.edu/4DAction/WebCourseSessionList>
 - b. You are exempt from enrolling separately if you are a new Chemistry or BMSE Grad Student who went through New Graduate Academic Training.
3. **Read and understand** the Laboratory Safety Program including:
 - a. Both the EH&S Chemical Hygiene Plan (CHP) and the Plaxco lab-specific CHP, which are located in a binder below the printer in the student office.
 - b. Standard Operating Procedures (SOP) for the Plaxco Group and OSHA regulated SOPs (placed in the CHP binder)
 - c. Laboratory Worker Safety form (located in the binder below the printer in the student office)
4. **Sign/date the master copy of the Laboratory Safety Program/CHP** in the CHP binder (located below the printer in the student office).
5. **Be familiar with the proper procedure for starting any new experiments** in the lab.
 - a. Review the SOP (in binder above first desk), the Merk Index entry (in bookshelf in student office) and the MSDS (available for download on-line) for all chemicals that you will be using. You must also **sign the relevant SOP entry**. This should be done **every time** that you first begin to work with a new chemical, and all MSDS should be kept in a personal file or individually bookmarked on your computer.
 - b. Identify any Particularly Hazardous Substances that are to be worked with. This should be done every time that you begin work with *any* new chemical. If there is no SOP in the chemical hygiene plan, please speak with Prof. Plaxco and the departmental safety officer (Nikolai Evdokimov; nevdokimov@ucsb.edu) and work with them to craft one. This not only protects you, but also future members of the group.
 - c. Incorporate the proper safety precautions for dealing with the hazards identified into your experimental protocol (i.e., necessary personal protective equipment (PPE), hazardous waste disposal, proper labeling).
 - d. **DO NOT START WORK** until you are certain that you have taken all hazards into account. You can contact the Prof. Plaxco, the group Safety Coordinator, the departmental safety officer (Nikolai Evdokimov; nevdokimov@ucsb.edu) or EH&S at any time if you are uncertain about how to control the hazards associated with any substance or experiment.
6. **Familiarize yourself with the location of all emergency response items**, including 1) the safety shower, 2) the eye wash station, 3) the spill control kit, 4) all fire extinguishers, and 5) the first aid kit.
7. **Familiarize yourself with all emergency exits** and the building evacuation plan.
8. **Familiarize yourself with proper chemical waste handling**, including the location of the hazardous waste storage area, proper waste labeling, and how to contact EH&S for appropriate disposal.

9. **Learn where Particularly Hazardous Substances (PHS) may be worked with** and how to label any experiments using these materials clearly so as to inform others of potential hazards they may encounter.
10. **Familiarize yourself with the areas where biohazardous materials work is conducted.**
 - a. A biohazard is a material that is a risk to human health or the environment arising from biological work, including but not limited to work with human samples (e.g., blood serum, tissues, etc.).
 - b. Identify the proper biohazard symbol.
 - c. Locate areas marked with the biohazard symbol.
 - d. If you are **not trained** to work with biohazard materials, **do not touch anything** in biohazard areas.
 - e. If you plan to complete biohazard work, you must complete the biohazard safety checklist before starting this type of research. This includes **mandatory BSL2 handling practices, blood-borne pathogens and medical waste live training and autoclave training.**
 - f. Ask any biohazard questions to the biohazard safety officer.
11. **Be equipped with the proper personal protective equipment (PPE),** which is as follows:
 - a. **Safety glasses, long pants, and closed-toed shoes are required in the lab at all times.**
 - b. **Prescription glasses are not appropriate eye protection. Safety glasses must be worn** over your regular glasses or prescription safety glasses with shatter proof lenses and side shields must be used.
 - c. **Non-flammable lab coats (the blue ones) are required** when working at a hood or with anything readily absorbed through the skin/eyes, carcinogens, flammable, corrosive, or toxic.
12. **Familiarize yourself with** the EH&S website and contact information (phone numbers, etc.).
13. **Identify the designated laboratory Safety Coordinator.**
14. **Familiarize yourself with the procedure for reporting unsafe activity.** As colleagues, we are mutually responsible for each other's safety, and have the responsibility to both raise concerns about others' unsafe behavior and take others' concerns seriously.
 - a. First step: Approach unsafe individual directly and discuss your concerns.
 - b. Second step: If you still have safety concerns after 1st step, contact the group Safety Coordinator.
 - c. Third step: If safety concern still exists, contact Prof. Plaxco directly.
 - d. Fourth step: If safety concern still exists, contact Nikolai Evdokimov (nevdokimov@ucsb.edu), a Chemistry graduate student safety representative, and/or EH&S directly.
15. **Familiarize yourself with the definition of and reporting procedures for near miss incidences.** These must be reported directly to EH&S (this may be done anonymously).
16. **Understand that any violations will be taken seriously** and handled at the discretion of Prof. Plaxco, Nikolai Evdokimov, and the group safety coordinator.

Once the checklist is complete, it must be signed by the individual, the principal investigator, and the check-in coordinator and kept on file in the CHP in the student office.

_____	_____	_____
New Member Name	Signature	Date
_____	_____	_____
Safety Coordinator	Signature	Date
<u>Kevin W. Plaxco</u>	_____	_____
Principle Investigator	Signature	Date