**Princeton University Lab Safety Orientation Checklist**

Researcher Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Principal Investigator \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Lab Location\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Status: □ Faculty □ Staff □ Post-Doc □ Princeton Undergraduate □ Princeton Graduate Student
 □ Visiting Student □ Visiting Researcher □ High School Student

 □ Researcher added to SHIELD (<http://shield.princeton.edu>) Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_

Supervisor/Trainer Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

The person providing instruction should initial and date each item when the topic is covered. Items that do not apply to the lab or the researcher should be marked “NA.”

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| **Initials & Date** |  ***Emergencies*** |
|  | Review of Emergency Response Guidelines for Laboratory Workers, including reporting procedures for medical, fire or safety emergencies |
|  | Basic building alarms, response to alarms |
|  | Emergency Action Plan including: exits, evacuation routes and designated meetinglocations |
|  | Location of emergency equipment such as eyewash stations, fire extinguishers, fire pullstations, safety showers,  |
|  | Reporting requirements for laboratory incidents and accidents, especially relating topersonal injury |
|  | Location and use of spill kits for materials handled in the laboratory |
| ***General Lab Safety*** |
|  | Process for raising and addressing health and safety concerns in the lab |
|  | Lab security requirements (e.g., locked doors, access policies, etc.) |
|  | Location of stored personal protective equipment (PPE: gloves, glasses, lab coat)  |
|  | Hazards and proper use of compressed gases and cryogenic material, including moving cylinders, how to secure cylinders, procedures for attaching and removing regulators, etc. |
|  |  ***Chemical Safety*** |
|  | Location and access instructions for a copy of the laboratory chemical inventory, Chemical Hygiene Plan, and other safety information |
| Applicable? □Yes □No  ***Biological Safety*** |
|  | Approved use of sharps when working with infectious agents |
|  | Review tasks that should be conducted in a biological safety cabinet  |
|  | Procedures, including reporting requirements, for follow-up after an exposure to a biohazard, including human-derived materials and recombinant and synthetic nucleic acid molecules |
| Applicable? □Yes □No  ***Radiation Safety*** |
|  | Awareness of radiological hazards, signs and symbols specific to the lab |
|  | Radiation Safety Officer name and phone number |
|  | Protocol-specific training needed to perform the lab’s radioisotope procedures |
| Applicable? □Yes □No  ***Laser Safety*** |
|  | Awareness of laser hazards, signs and symbols specific to the lab |
|  | Type of hazards for specific lasers in use; e.g., eye, skin, thermal, photochemical, etc. |
|  | Laser Safety Officer name and phone number |
|  | Review of protective eyewear specific to the laser hazard(s) |
|  | Procedure to properly align lasers |

***Equipment***

List equipment found in your lab that requires orientation and proof of proficiency.

* Include equipment that if used improperly may pose a hazard to the user or others in the lab, damage the equipment and/or lab environment.
* Include equipment unique to the lab and standard laboratory equipment, such as: chemical fume hoods, biosafety cabinets, cryostats, centrifuges, autoclaves, ovens, UV equipment, x-ray equipment.

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| Equipment | Initials/Date Orientation | Initial/Date Proven Proficiency | Comments on working alone, supervision and/or PI approval |
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***Operating Procedures and Higher Hazard Materials***

List the processes or specific chemical or materials that may present an elevated risk of serious injury or property damage. Review the precautions, safeguards and procedures associated with these materials or processes. Examples include, but are not limited to:

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| * Highly toxic metals, such as arsenic, lead, barium, etc.
* Hydrofluoric acid
 | * OSHA-defined particularly hazardous substances[[1]](#footnote-1)
* Nanomaterials
 | * Pyrophoric, explosive and water-reactive materials
* DEA controlled substances
 |
| Procedure/MaterialIf appropriate please reference Standard Operating Procedures that have been used in the orientation process.  | Initials/Date Orientation | Initial/Date Proven Proficiency | Comments on working alone, supervision and/or PI approval |
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Your signature confirms that all items noted in this document have been communicated during a training session administered by the Principal Investigator or Laboratory Trainer and that you had the opportunity to ask questions.

Researcher Signature\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_   Date\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Training reviewed by: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_   Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. OSHA defines *particularly hazardous substances* as carcinogens, reproductive toxins and substances with a high degree of acute toxicity. For more information, see the Particularly Hazardous Substance section of the EHS website at <https://ehs.princeton.edu/laboratory-research/chemical-safety/particularly-hazardous-substances> [↑](#footnote-ref-1)