

Laboratory Safety Coordinator: Guidance for PIs

What is an LSC and what do they do?

The Lab Safety Coordinator (LSC)¹ is a person within each research group who primarily acts as a liaison between EHS and their group. In addition, LSCs may also support the principal investigator with delegated safety duties and can assist in the safety management of their groups. **However, it is important to recognize that the PI carries the overall responsibility for the safety of all laboratory members and for ensuring that laboratory personnel follow university policies and protocols.**

Some of the [Core Tasks](#) of LSCs include:

- Serving as the PI-delegated liaison between lab personnel and EHS, helping to communicate safety and regulatory information
- Working with EHS to coordinate and conduct periodic laboratory safety inspections
- Coordinating resolution of safety issues discovered during EHS safety inspections
- Updating the Laboratory Hazard Assessment Tool (LHAT) or similar digital tools
- Maintaining copies of safety manuals (biosafety, laser, and radiation) and/or safety plans (Chemical Hygiene Plan, Injury and Illness Prevention Plan, Emergency Response Plan)
- Maintaining lab safety documentation (Standard Operating Procedures, Safety Data Sheets)
- Maintaining lab safety records (training records, inspection reports, corrective actions)

Why Does the LSC Role Matter?

Effective LSCs help the PI manage safety in their groups, which can improve group performance in several ways. For example, an LSC can help manage the onboarding of new researchers, maintain training records, and update group material inventories, all of which can save researchers time. Additionally, safety is seen as a valuable skill when organizations hire new Ph.D. graduates.

Who Should be the LSC?

PIs should appoint people with the appropriate knowledge and skills as LSCs.

Knowledge	Skills
<ul style="list-style-type: none"> • At least one year of experience with the group's research, protocols, materials, instruments, and lab spaces • Completed foundational safety training • Advanced safety expertise is valuable, but not required 	<ul style="list-style-type: none"> • Demonstrated ability to convince peers to take or not take action • Ability to resolve interpersonal conflict • Capability for positive peer leadership • Respected by other group members • Expresses interest in safety

Strategies for a Successful LSC

- Foster a supportive environment where the LSC feels comfortable voicing their thoughts

¹ The LSC may also have a different name such as Lab Safety Contact, Officer, or Liaison.

- For large research groups, consider having more than one LSC or a system of task delegation headed by the LSC. In addition, more automation, formalization, and documentation may be needed.
- For small research groups fewer responsibilities may need to be delegated to the LSC, or an LSC may not be needed at all. Well-documented and updated training or support documents may be needed if an immediate transition between an outgoing and incoming LSC is not possible.
- Use group processes that can be instigated and leveraged by the LSC, but which don't involve actual authority. For example: A documented procedure for within-group incidents or non-compliance reporting to the PI.

How Can You Support the LSC?

Empowerment	Recognition	Professional Development
<p>Delegating appropriate authority gives LSCs the tools they need to accomplish their tasks, and trusting them empowers them to take ownership of their role.</p> <p>PIs can empower LSCs by delegating authorization to:</p> <ul style="list-style-type: none"> • Enforce safety requirements. • Take appropriate action in case of non-compliance • Develop and deliver group safety programs • Participate in decision-making processes, like developing protocols or group safety measures • Collaborate on safety projects with others, both internal and external to the group 	<p>Acknowledgements or incentives boost morale, improve motivation, and reinforce values.</p> <p>PIs can recognize or reward LSCs by:</p> <ul style="list-style-type: none"> • Publicly acknowledging the LSC's contributions during group meetings and beyond • Nominating the LSC for external awards or recognition programs • Providing written recommendations that also emphasize their exceptional safety efforts. • Sending them appreciation emails in acknowledgment of their work • Providing them with a supplemental stipend or bonus • Fostering a culture of peer recognition and encouraging group members to acknowledge the LSC's contributions 	<p>Supporting the professional development of LSCs can enhance their knowledge and skills, improve their credibility, and better prepare them to lead others in their future careers.</p> <p>PIs can support the professional development of LSCs by:</p> <ul style="list-style-type: none"> • Encouraging and supporting their attendance at workshops, seminars, and conferences focused on laboratory safety • Allocating dedicated time and resources for LSCs to engage in professional development activities. • Involving the LSC in the development of group lab safety protocols and guidelines • Facilitating networking opportunities with experts in laboratory safety. • Highlighting their role and achievements on a group website

When Should the LSC Role Transition?

Transitions between people is often overlooked, but is critical to a well-functioning LSC role. Start the transfer processes up to 1 year before the outgoing LSC is expected to leave. For the first 6 months, have the incoming LSC shadow the outgoing LSC and gradually take over the role. Over the last 6 months, have the outgoing LSC serve in an advisory support role to the incoming LSC, and create/update written documentation detailing changes or lessons that they learned during their tenure as an LSC.