# Smart Labs Coordinator

## Job Summary:

The Smart Labs Coordinator is the principal individual responsible for the development and implementation of the Smart Labs program at [Insert organization name]. The objectives of the position are to both support the mission of the [Insert organization name] to ensure that all research is conducted safely and according to federal laws and institutional guidelines while also supporting the [organization name] sustainability and energy efficiency goals. The Smart Labs Coordinator optimizes the performance of laboratories by mitigating safety and health risks, reducing energy consumption, and improving ventilation. This position will lead a multidisciplinary Smart Labs team represented by the [Insert groups; suggested groups: Environmental Health and Safety (EHS), and facilities services, faculty, researchers, and students].

## Responsibilities:

***Work to build and implement a Smart Labs program:***

* The [Insert organization name] program will follow the DOE’s Smart Labs program found on the [Smart Labs Toolkit](https://smartlabs.i2sl.org/).
* Assemble and lead a Smart Labs core team with representation from [Insert groups]. Act as the laboratory ventilation management program (LVMP) coordinator on the team.
* Develop and implement key performance indicators to establish goals and transparently report progress. Work with the Smart Labs team to establish overall program goals and metrics related to safety, energy efficiency, lab optimization, reduction in operating costs, and risk reduction.
* Ensure that safety is never compromised by working closely with team, faculty, EHS teams, and other experts as required. Incorporate their expertise in chemical safety and overall risk management to create a safe and effective Smart Labs program.
* Promote, encourage, and facilitate Smart Lab practices throughout the organization by providing training and guidance on procedures, techniques, and best practices.
* Coordinate tasks, schedules, meetings, analysis, and deliverables. The manager or coordinator is responsible for maintaining lines of communication, scheduling tasks, and ensuring program deliverables.
* Manage the development of a Smart Labs plan that includes a method for prioritizing projects based on safety, impact, feasibility, and alignment with university sustainability strategy.
* Work with facilities services to develop an annual portfolio of projects and activities necessary to implementing a Smart Labs Program.
* Publish regular reports highlighting energy and operational cost avoidance and progress toward goals/key performance indicators.

***Build and manage the LVMP:***

* The Smart Labs Coordinator is responsible for the development, management, and implementation of an LVMP. The LVMP utilizes a combination of physical, administrative, and management techniques to help optimize and maintain performance of the exposure control devices and the laboratory ventilation systems.
* Develop and manage a process to complete and update laboratory ventilation risk assessments at all laboratory facilities to assess risk, improve occupant safety and comfort, and optimize operational efficiency of laboratory ventilation systems.
* Serve as a liaison between various stakeholders and facilitate communication and coordination of tasks and activities necessary to monitoring and managing laboratory facility operational activities related to Smart Labs, operation of the ventilation systems, and exposure control devices.
* Provide training of personnel, such as facility managers, EHS staff, maintenance staff, laboratory managers, and researchers to promote safe, efficient, and dependable operation of the lab ventilation systems.
* Understand and participate in the specification, design, operation, and maintenance of critical workspace ventilation systems and exposure control devices.
* Revise and update the LVMP as needed per applicable codes, standards, and research needs. Incorporate LVMP requirements in the design guidelines and specifications.
* Monitor and assess impact of changes on operation or performance of ventilation systems.

***Promote sustainable best practices:***

* Serve as a liaison between laboratory principal investigators and managers to improve laboratory recycling programs.
* Work with EHS to provide expertise for green laboratory chemical reagent alternatives. Work with procurement to provide and promote alternatives to laboratory managers.
* Review laboratory equipment and promote high-efficiency and sustainable alternatives where possible. Work with procurement to ensure preferred equipment is prioritized.
* Develop and improve laboratory behavioral programs and toolkits to reduce energy consumption via cold storage usage and fume hood sash closing initiatives.
* Lead collaboration efforts between groups such as facilities, EHS, faculty and students to evaluate and implement sustainability practices and develop educational materials. Present laboratory trainings, seminars, and safety courses as the subject matter expert in these areas.
* Review construction documentation and specifications for major laboratory construction and renovation projects to ensure best practices for lab safety and efficiency are being implemented.

***Manage specialized containment systems:***

*Provide consultative support in the research, design, development, and modification of engineering controls for containment of hazards associated with campus research as they pertain to new facilities, as well as to existing campus facilities.*

* This position will be responsible for research, design, evaluation, and modification of specialized containment systems employed in research laboratories and animal facilities. This will require application of advanced expertise in accordance with NIH-CDC, ANSI, ASHRAE, state, OSHA, and other applicable regulations. Accordingly, the incumbent will:
  + Research engineering controls and develop specialized laboratory and animal containment facilities and equipment with emphasis on containment of hazardous biological, chemical, and radiological agents.
  + Identify problems associated with the HVAC component of research laboratories and animal facilities, propose and implement solutions to these problems, and communicate these problems/solutions to lab managers, principal investigators, deans, facilities services, and other organization officials.
  + Inspect air flow patterns in laboratory or animal care spaces where procedures involving hazardous materials are conducted.
  + Recommend remedial modifications to existing laboratory and animal facility air handling systems.
  + Recommend installation of alarm devices and inspect existing devices to ensure proper orientation of air flow systems servicing laboratory and animal facilities.
  + Determine adequacy of ducting and safe exhaustion of contaminated air (e.g., flow of exhaust plume away from building air intakes).
  + Together with an industrial hygienist perform laboratory surveys and evaluations.
  + Evaluate plans for new research facilities and/or remodeling of existing facilities, with particular attention to the HVAC component. Revise and modify plans as necessary. Prepare supporting documents for grant and contract proposals.
  + Prepare highly detailed engineering specifications for laboratory safety equipment.

**Competencies:**

* Exhibit business acumen and organizational astuteness
* Ensure decision quality, accountability, and drive results
* Foster partnership and collaboration.

**Education and Experience:**

* Bachelor of Science degree in science, engineering, energy management OR an equivalent combination of education and relevant experience required
* Graduate degreepreferred
* Experience in analyzing building and system energy consumption patterns to identify energy conservation and efficiency improvement opportunities, appropriate technology applications, and project cost and energy saving forecasts preferred
* Minimum of 5 years relevant experience in energy efficiency preferred
* Minimum 2 years of progressive experience in a laboratory setting or research preferred
* Experience in a customer-oriented environment preferred
* Knowledge of Smart Labs best practices required
* Expertise in mechanical engineering preferred.

**Certifications:**

* Current certification as Certified Energy Manager or Professional Engineer preferred.

**Technical Knowledge or Skills:**

* Computer proficiency in Microsoft Office required
* Understanding of complex interrelationships between multiple electrical, mechanical, and controls-based systems
* Ability to maintain accuracy and attention to detail
* Ability to exert informal authority
* Ability to effectively communicate orally, in writing, and electronically.