

Q1 LAB SAFETY CULTURE AWARD

Topic: Rethinking the Basics by Deepening Awareness of Workspace Hazards.

Lab work in everyday life feels like a habit-pipetting, preparing samples, calibrating instruments, etc., beneath all this lie many potential life-threatening hazards that can cause serious injuries in a matter of seconds. We become numb to these hazards and often overlook them. When I paused to consciously observe my workspace, I began noticing subtle risks I used to overlook: reagent bottles without updated labels, cords looping across walkways, and gloves used longer than recommended. These small hazards are invisible when we are doing rushed experiments and can become a possible source of contamination, injury, or data loss. By reimagining the basic hazards of the laboratory, we can increase awareness about them in our workplace. So I changed my daily habit of ignoring the small hazard, and instead of treating safety protocols as checklists, I started viewing them as active habits that protect both people and the integrity of our research. When I started doing that, I felt like recognizing these hazards when I am doing my experiments did not feel like a burden; it made me more curious about how my experimental systems work. For example, when checking a biosafety cabinet's airflow, I now consider not just its technical settings, but how our shared use impacts sterility and cross-contamination over time. Space becomes a living ecosystem, one shaped by awareness and collaborative responsibility. This change in mindset of mine spread like wildfire in my lab, and all my lab mates started to think about hazard protection when they are doing their experiments. Our lab meeting started with a separate session about what we discovered in the past week about small hazards that are present in the lab, and we started to make one another more aware of these hazards and how to protect ourselves from them. The true shift comes when safety becomes an expression of care for colleagues and the pursuit of reliable science. Another important shift in perspective occurs when we recognize that hazards are not limited to chemicals or biological materials. Ergonomic risks, electrical hazards, sharp instruments, and even mental fatigue can compromise safety. Long hours in the lab may lead to reduced concentration, increasing the likelihood of mistakes. Poor posture at the microscope or workstation can cause long-term physical strain. Awareness of these factors encourages researchers to think holistically about safety, acknowledging that well-being and productivity are closely connected. Ultimately, rethinking the basics is about cultivating

curiosity and mindfulness in everyday laboratory activities. By paying attention to details that might otherwise be ignored, we gain a deeper appreciation for how small actions influence safety outcomes. This awareness leads to more thoughtful decision-making, improved communication, and a stronger safety culture. When individuals actively reflect on their workspace hazards, they not only protect themselves but also contribute to a healthier, more responsible research environment.