George Santayana was a Spanish-American philosopher, essayist, poet, and novelist. In 1905, he penned the famous aphorism “those who cannot remember the past are condemned to repeat it.” More than a century later, the saying reverberates with professionals the world over. The following is a summary of a recent incident at Columbia University. The information presented is intended to provide awareness and help readers plan against the occurrence of a similar situation in their laboratory or work area.

When the Chemicals Hit the Bench, Everyone Gets Wet – With or Without a Lab Coat.

Two researchers were splashed with a chemical when a container was accidentally dropped during a procedure. The researcher performing the procedure at the bench was doing so for the first time and with the assistance of a more experienced researcher, as such procedures should be performed. While the researcher performing the procedure for the first time donned the proper Personal Protective Equipment (PPE), specifically a lab coat, safety glasses and gloves, the more experienced researcher did not don PPE to assist with the procedure. The lab cleaned up the liquid and immediately contacted Environmental Health & Safety (EH&S). The two researchers removed contaminated clothing and washed affected areas. EH&S referred the exposed personnel to Workforce Health & Safety for medical attention and following an assessment of the spill area, EH&S cleared the laboratory for re-occupancy.

Lessons Learned

- The laboratory did many things right:
  - The junior researcher was working with the assistance of a senior lab member to receive task-specific training on the procedure being performed.
  - The laboratory immediately reported the incident to EH&S. This allowed for closer examination for “hidden” spilled material, and air monitoring to assess whether or not it was safe to remain inside. The exposed researchers removed contaminated clothing, washed affected areas and went to Workforce Health & Safety with a copy of the Safety Data Sheet (SDS) for the chemical as advised by EH&S. The lab collected contaminated bench pads, debris and clothing (including shoes), in a separate bag – and not in a sharps container, red bag or trash can. As a result, disposal of contaminated items was expedited.

- Actions that may help prevent this type of incident from occurring again include:
  - Ensuring PPE is worn by all researchers in the “Splash Zone,” thus ensuring everyone in the immediately vicinity of hazardous materials work is protected.

For further information on this or any other safety related matter, please visit www.ehs.columbia.edu