

CLOSE ENCOUNTERS OF THE LAB KIND

THE SANTAYANA REPORT

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.

Under Pressure

A research scientist was injured during a recent laboratory incident when a Schlenk flask ruptured inside a chemical fume hood during a routine chemistry experiment. The researcher was working at a chemical fume hood with the horizontal sash panels open, instead of positioned directly in front of their body, when the flask ruptured. Shards of glass from the ruptured Schlenk flask struck the researcher, resulting in lacerations to their face, neck, and hands. Fortunately, the researcher avoided more serious injury by wearing appropriate personal protective equipment (PPE), including suitable eye protection, a lab coat, and gloves during this routine procedure, as required by the University’s Personal Protective Equipment Policy (<http://ehs.columbia.edu/ppe.html>). The researcher received prompt assistance from Public Safety and was transported to the emergency room by CU-EMS for evaluation and treatment.

Lessons Learned

- Chemical fume hoods with combination sashes have the ability to move both vertically and horizontally, offering the user a choice in how they are protected and how the interior of the hood is safely accessed. In order to provide proper protection to the user, the sash should always be aligned in front of the user when hazardous materials are in use. Users should be instructed to reach under vertical sashes or around the sides of horizontal sashes to safely access the chemical fume hood contents. This arrangement will minimize exposure to face, neck, and core injuries if a hazardous material or other object is ejected from the fume hood. To ensure maximum protection and optimal airflow the horizontal sash panels must be shut when utilizing the vertical sash for protection and the vertical sash panel must be shut when utilizing the horizontal sash for protection.

For further information on this or any other safety related matter, please contact the [EH&S office](#).