

CLOSE ENCOUNTERS OF THE LAB KIND

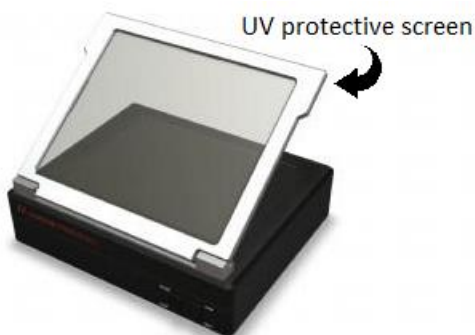
THE SANTAYANA REPORT

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.

Rethink Your Training Protocols

Recently, a researcher in a Columbia University laboratory was exposed to UV light over a period of six months while working in a dark room. This researcher received benchtop training on the use of a UV box from another member of the laboratory who utilized the built-in UV protective screen and did not wear any UV protective glasses while using the instrument. At some point the built-in screen had cracked and was repaired with duct tape by an unknown member of the laboratory. Unfortunately, the placement of this duct tape covered the warning label on the UV box which stated the seriousness of the hazard and emphasized the necessity of personal protective equipment.

The affected researcher often lifted the damaged protective screen during the process and did not wear UV safety glasses or a UV face shield. After six months of sporadic eye pain, several doctor visits and misdiagnoses, the pain was determined to be a result of corneal damage due to chronic UV exposure. Fortunately, this damage was reversed after stopping work for a period of recovery and utilizing appropriate personal protective equipment when returning to work.



Lessons Learned

- Never modify engineering controls or obscure warning labels. Signs should be added to doors and walls to supplement labels on equipment.
- Be aware that researchers new to a laboratory may not fully understand all the nuances of a task that more experienced members of the laboratory have already internalized. Therefore, it is important to document training on specific processes in order to reduce operational ambiguity and be explicit about best practices. This documentation can then be used as training material for new members of the laboratory.
- Immediately mobilize to address any safety issue as soon as it becomes evident and take necessary actions to prevent reoccurrence. In this case, the laboratory was able to reorganize their dark room to prevent future exposures.
- Store personal protective equipment required for a particular task in a visible and easily accessible location.

For further information, or to view previous Santayana Reports, please visit our [lessons learned website](#). For any other safety related matter, please contact the [EH&S office](#).