

Life Sciences in Lighting

The impact of lighting on human life has become a field of research involving a wide-range of professionals from many disciplines including medicine, psychology, cognitive science, human factors, biology, and other sciences.

The LRC recently launched a new education program built on a body of knowledge combining the biological, physiological, and psychological aspects of light into a single specialty—Life Sciences in Lighting, a program focused on how light impacts health, well-being, productivity, and other areas of human life.

The program is designed to have LRC faculty and students work with several scientific and academic institutions, as well as industrial firms to advance lighting science and technologies. The following represent just some of the LRC's recent collaborative efforts:

- Fox Chase Cancer Center – cancer research
- Skidmore College – animal studies
- Harvard School of Public Health – epidemiology
- Office of Naval Research – alertness studies
- Federal Aviation Administration (FAA) – night vision
- Russell Sage College – elderly trips and falls
- U.S. Department of Transportation, NHTSA – glare evaluation
- NYSTAR – phototransduction research



A life science intern prepares to calibrate blue light goggles for an experiment.

Program participants may choose from three education options:

- **Life Sciences in Lighting Institute** – An intensive two-day summer seminar exploring the biological, physiological, and psychological aspects of light

- **Summer Internship for Undergraduate Students in the Life Sciences** – An eight-week paid summer internship program for undergraduate students in degree programs within the life sciences who are interested in learning more about the impacts of light on human life. This could potentially lead to fully-funded graduate study in this area.



An intern prepares an actigraph for data download.

- **Graduate Study Concentrating in the Life Sciences in Lighting** – The LRC's existing graduate programs in lighting can be adapted to allow students to concentrate their masters or Ph.D. education and research in the area of the life sciences and lighting.

For more information on the Life Sciences in Lighting program, please visit:

www.lrc.rpi.edu/education/lifesciences/index.asp



A student researcher gathers data from a Daysimeter, a light-measuring device developed at the LRC.