



Editors' Note

“There is a single light of science, and to brighten it anywhere is to brighten it everywhere,” the author Isaac Asimov once said. Beyond visual optics, there is more to the science of light than meets the eye.

Since the beginning of the universe, life on earth has depended on light for its main source of energy. However, it was only recently that scientists were able to fully harness the power of light, an endeavor that has led to a variety of novel innovations in nearly every discipline. Scientists now use light-activated molecular probes to visualize basic scientific processes or to track cell survival, millions of dollars are invested by companies to investigate alternative energy sources harnessing energy from the sun, and global health initiatives are providing safer and cleaner sources of light to improve health in developing areas.

The focus of this issue, *Illuminating Science: Let There Be Light*, is inspired by these ideas in order to explore key issues in a variety of interdisciplinary fields through light. We invite readers to explore these fields through articles on the history and applications of the

famous green fluorescent protein, the possibility of algae and bioethanol as alternative green energy sources, and the role of LED light innovation in the global health nonprofit, One Million Lights. Beyond these focus articles, our writers have also covered a variety of cutting-edge scientific research, ranging from stem cell biology, to mental health, to the battle against aging.

In this issue, we are also excited to introduce a special addition, one well-suited to our current focus topic: a photo feature on the highlights of Harvard's Science Exhibits. We hope to open your eyes to the many fascinating scientific treasures and artifacts on and around the Harvard campus. We are also pleased to feature an interview with Professor Frederico Capasso, inventor of the quantum cascade laser and professor at the Harvard School of Engineering and Applied Sciences.

We hope that you find the present issue illuminating, and gain an appreciation for how light is shaping scientific progress today. Thank you for reading *The Harvard Science Review!* **H**

Katie Ransohoff and Tina Y. Tan
Editors in Chief

