

## SCIENTIST DANIEL KOSHLAND '37 RECEIVES THE PHILLIPS AWARD

If you were to ask him, Daniel E. Koshland '37 would tell you his 65 years in science have been full of both hard work and tremendous fun. "The way my life unfolded for me, I wouldn't have predicted any of it," he says.

Perhaps not so unpredictable was Koshland's visit to the Academy last fall to receive one of its highest honors, the John Phillips Award, which recognizes an Exeter graduate "whose life and contributions to the welfare of community, country and humanity exemplify in high degree the nobility of character and usefulness to humanity that John Phillips sought to promote in establishing the Academy."

Presenting Koshland with the Phillips Award at the October 3 assembly, trustee Michael Plater '74 said, "Throughout your career as a research scientist, educator and leader among your peers, you have exemplified how one person's pursuit of an intellectual passion can benefit society at large. When you talk about science you never fail to mention fun. At the same time, your research is applied in addressing some of humanity's most pressing problems. Your impact on the world has been both molecular and monumental."

A scientific researcher and professor of biochemistry and molecular biology at the University of California–Berkeley since 1965, Koshland is most noted for his "induced fit" theory, which describes the ability of enzymes to change shape as they react with other molecules and which plays a central role in contemporary drug design. From 1985 to 1995, he was also editor-in-chief of *Science* magazine, America's foremost general science journal. As editor, he wrote more than 200 editorials, each penned with his trademark wit and humor; he is also credited with instituting new policies encouraging scientists to write articles. At the very start of his career, even before completing his graduate studies, Koshland was invited to become a researcher on the Manhattan Project, which laid the groundwork for the development of the first nuclear bomb.

Although officially retired from UC–Berkeley, Koshland remains active as a professor and researcher in the Graduate School Division of Biochemistry and Molecular Biology.



*(Top) Throughout his career as scientific researcher and professor of biochemistry and molecular biology, Daniel Koshland '37 (center) "has exemplified how one person's pursuit of an intellectual passion can benefit society at large." With Koshland are Principal Ty Tingley (left) and trustee Michael Plater '74. (Left) A lifelong academic and a strong advocate for teachers, Koshland has established the Dr. Daniel E. Koshland, Jr. Distinguished Faculty Fund Award to honor "a teacher whose exemplary effort, special promise and creative initiative enriches the life and learning at Exeter." The award's first recipient, physics instructor Tanya Waterman (left), used the award to travel to Great Britain last summer to attend a 17-day conference on "The Age of the Earth and the Evolution of Life."*

Recently his research has focused on how short-term memory is converted to long-term memory. His laboratory is also developing therapies for Alzheimer's disease, and studying how to make enzyme modifications that could help with environmental cleanup and waste disposal.

For all of his achievements, Koshland summed up his philosophy with a few simple adages. "Success," he told students, "is getting what you want; happiness is wanting what you get." He advised students to work hard, but also to "find something to do in life that you really love, because if you love it, it's not work." Most of all, Koshland admonished the students to find their success by defining themselves. "Success for you should be something you really want to do. You can't let anyone else define success for you."