

2010

Thomas O. Beebee, distinguished professor of comparative literature and German, received the Arts and Humanities Medal. He is an acknowledged leader in comparative studies of European and inter-American literatures. His five monographs in print and numerous articles have established him as a major critical and theoretical voice on epistolarity, literary genres, literary translation, literary cartography and millennial (apocalyptic) cultural traditions. In 2008, within a few months of each other, he published two monographs that make outstanding contributions to American and transatlantic literary studies. Professor Beebee, who is editor-in-chief of the leading journal *Comparative Literature Studies*, earned a bachelor of arts degree in comparative literature from Dartmouth College and master's and doctoral degrees from the University of Michigan.

Philip Bevilacqua, professor of chemistry, received the Physical Sciences Medal. He has built a research group of international prominence in the area of RNA chemistry since he joined the faculty in 1997. His research program has two primary goals: uncovering new functions of RNA in biology and explaining these functions in molecular detail. The most significant contribution to date has been establishing a role for proton transfer in RNA catalysis. According to one nominator, "He probes the folding of RNA, the role of metal ions and the role of proton transfer at a degree of chemical detail and precision unmatched by others in the field." He holds a bachelor of science degree in chemistry from John Carroll University and a doctoral degree in physical chemistry from the University of Rochester.

Edward Holmes, Eberly College of Science distinguished senior scholar, received the Life and Health Sciences Medal. A leading expert in the evolution of viruses, he has published extensively on their origins, emergence and spread in human populations. His early work focused on HIV and included demonstration of the role of sexual transmission of HIV in sub-Saharan Africa. More recently, his work has included the first studies of the rates of population growth and decline in RNA viruses. This work put him at the forefront of the effort to understand the origins and possible evolutionary trajectory of the recent H1N1/09 flu outbreak. With a doctoral degree from the University of Cambridge, U.K., he has played a key role in the development of Penn State's Center for Infectious Disease Dynamics.

Alan MacEachren, professor of geography received the Social and Behavioral Sciences Medal. He is renowned as a scholar and researcher in geography and the interdisciplinary areas of GIScience, quantitative social science, and information and computer science. He has pioneered an approach to cartography that moved the field from manual to computer-based techniques, from static maps to on-demand mapping and from utilizing traditional maps to visualizing geospatial data. Founder and director of the GeoVISTA Center at Penn State, the world's premier center for geographic visualization research, he holds a bachelor of arts degree in geography from Ohio University and master's and doctoral degrees from the University of Kansas.

Padma Raghavan, professor of computer science and engineering receives the engineering medal. An international leader in the field of parallel scientific computing, also known as supercomputing, she has pioneered the development of "sparse algorithms" that derive from and operate on compact yet accurate representation of high dimensional data, complex models and computed results. She has developed parallel sparse linear solvers that limit the growth of computational costs and utilize the concurrent computing capability of supercomputer hardware to enable the solution of complex large-scale modeling and simulation problems that are otherwise beyond reach. In 2007, Professor Raghavan became the first director of the Penn State Institute for CyberScience. She holds master's and doctoral degrees in computer science from Penn State.