

2014

Eric Feigelson, professor of astronomy and astrophysics and of statistics, is recognized for his pioneering work in the area of astrostatistics. “Professor Eric Feigelson has, in the past five years, essentially single-handedly created the field of astrostatistics within the international and national astronomical community,” one nominator said. Feigelson is a co-founding member and associate director of the Penn State Astrostatistics Consulting Center.

In addition, he has had a long and distinguished career in high-energy astrophysics and in x-ray astronomy in particular. As a young assistant professor, he helped write the science justification for the ACIS instrument on NASA’s Chandra satellite, leading to landing this project and major federal funding for Penn State. “Dr. Feigelson’s research has had a profound and transforming impact on the field of astronomy and astrophysics in the advancement of sophisticated statistical methods for analyzing and exploiting data, in surveys of the sky to reveal ensemble properties of whole classes of x-ray sources and in observations and modeling of x-ray emissions from young stars,” a nominator said.

Feigelson has received the NSF Presidential Young Investigator award, has been a co-recipient of the Rossi Prize of the American Astronomical Society and is on the roster of the ISI Thomson-Reuters Highly Cited Researchers in Space Science list.

Eric Hayot, distinguished professor of comparative literature and Asian studies, is recognized for “both the breadth and the impact of his scholarship, which has achieved increasing momentum over the last five years,” one nominator wrote. “Eric Hayot’s publications have made him an internationally recognized figure in the field of ‘Global Asias,’ an approach to Asian studies and to East-West comparison that has created dynamically new paradigms of study and has raised interesting new questions in this field.”

In 2004, Hayot’s first monograph, “Chinese Dreams: Pound, Brecht, Tel Quel” established him as an “important critic of international modernism, specifically of European writers who idealized their constructions of China and then became disillusioned,” another nominator said. During the past five years, he has written two more monographs. “The Hypothetical Mandarin: Sympathy, Modernity and Chinese Pain” examines why Western writers are fascinated with Chinese trauma and suffering. The next, “On Literary Worlds,” offers a “distinctly innovative proposal for comparative modernism, for this book retheorizes the literary history of the past four hundred years in terms of a new vocabulary in order to compare the ways in which artworks across geography and time construct their worlds,” a nominator wrote.

To be released this summer, his next book, “The Elements of Academic Style: Writing for the Humanities,” examines the nature of humanistic discourse. In addition to his monographs, he has published regularly in major journals in comparative literature, including two articles in PMLA, the flagship journal of the Modern Language Association.

Joan Richtsmeier, distinguished professor of anthropology, is noted for her research identifying the developmental bases of craniofacial anomalies apparent in genetically caused diseases including the craniosynostosis syndromes and Down syndrome. Her work draws on research using multiple species — nonhuman primates, mice, and humans — and is shaped by an evolutionary perspective. She was among the first to apply three-dimensional analyses, based on precise measurements of the head and face, to study human facial abnormalities and co-developed an invariant approach to the statistical analysis of shapes.

“Her research has transformed our understanding of growth and development, particularly with regard to the craniofacial skeleton and the ossification process more generally,” one nominator said.

During the past five years, she has published 31 papers, most in highly ranked journals of anthropology, genetics, anatomy and medicine. Her publications have been cited more than 4,000 times. Her research has been funded by grants from the National Science Foundation and the National Institutes of Health. “Her long and continuous academic approach of applying novel methodologies to the understanding of craniofacial development has helped improve the diagnosis of genetic abnormalities in children and helped to understand the evolutionary basis for their occurrence,” a nominator said.

Karl Zimmerer, professor of geography, is honored for his contributions to the field of human cultures, socioeconomic change and natural resources. Throughout his career, he has worked within the disciplinary frameworks of geography, anthropology and biology in an integrated sociocultural-ecological approach to land-use sustainability. Zimmerer’s most extensive work has focused on agrobiodiversity-based land use, food and sustainability in various world regions — with a focus on the Andes — and with diverse global institutions. One nominator lauded his “sustained trajectory of exceptional scholarly contributions to the science and teaching of how human beings interact with their natural environment.”

Nominators cited three major dimensions to Zimmerer’s contributions. He has linked agrobiodiversity with global environmental changes through analyses and modeling of the sustainable intensification of land use. He has developed sociocultural-ecological analyses of human beliefs and values related to the environment and sustainability. Finally, he has built and tested conceptual frameworks and theoretical models in nature-society geography and the interdisciplinary sustainability sciences.

In 2013, the American Geographical Society awarded him the inaugural Alexander and Ilse Melamid Medal for outstanding work on the dynamic relationship between human cultures and natural resources, and the Association of American Geographers’ Cultural and Political Ecology Specialty Group presented him the Robert McC Netting Award for Outstanding Research Scholarship. In 2012, Zimmerer was elected a fellow of the American Association for the Advancement of Science, and in 2002 he became a fellow of the John Simon Guggenheim Foundation.