

School of Biological Sciences

Spring 2013



THE LECTURE SERIES AND ITS PURPOSE

The R. Omar and Evelyn Rilett Family Life Sciences Lecture Series was established in April 2007. It recognizes Dr. Rilett's vision and leadership, which built a Department of Biological Sciences at Illinois State University that advanced education in the natural sciences, fostered scholarly endeavors, and nurtured the development of research to the benefit of all who chose to teach and learn at this institution. The purpose is to bring outstanding life scientists and lectures to Illinois State University to benefit academic and local communities.

School of Biological Sciences

—presents—

R. Omar and Evelyn

Rilett Family

Life Sciences Lecture Series

Co-Sponsored by the

School of Biological Sciences,
Phi Sigma, and Provost Office



Dr. James Hanken
Director,
Museum of Comparative Zoology
Harvard University
Cambridge, MA

April 4th, 2013 7:00 P.M.

Prairie Room

Bone Student Center

Illinois State University

LECTURE SERIES PROGRAM

WELCOME

Dr. David Rubin

School of Biological Sciences

HISTORY OF LECTURE SERIES

Dr. Craig Gatto

Director, School of Biological Sciences

INTRODUCTION OF SPEAKER

Dr. David Rubin

School of Biological Sciences

PRESENTATION

“Biodiversity 2013: Crisis and Opportunity”

The state of biodiversity science in 2013 presents a tremendous paradox. Comparative biology is more productive today than ever before; the rate of new species discovery, for example, is higher than it's ever been. The advent of molecular-genetic techniques, digital imaging technologies, and high-speed computing offer the promise of answering fundamental questions regarding the origin and diversification of life that have been pondered for decades, if not centuries. At the same time, the rate of species extinction is increasing dramatically due to human-mediated environmental degradation on a global scale. This crisis for the future of biological diversity offers unparalleled challenges and opportunities for the professional scientific community, which is responding with new approaches and a heightened sense of urgency, with increasing focus both on the inventory and conservation of species and their habitats and on the major drivers of extinction.

Highlights of Dr. James Hanken's career, thus far:

Current:

Alexander Agassiz Professor of Zoology, Curator in Herpetology, and Director, Museum of Comparative Zoology Department of Organismic and Evolutionary Biology, Harvard University, Cambridge, MA

Education:

1981–83: I. W. Killam Memorial Postdoctoral Fellowship, Developmental biology, Dalhousie University, Canada.

1980: Ph.D., Zoology, University of California at Berkeley.

1973: A.B., Zoology, University of California at Berkeley.

1969–70: Biology major, State University of New York at Binghamton.

Faculty Appointments:

2002: Director, Museum of Comparative Zoology, Harvard University.

2002: Member, Biological Sciences in Dental Medicine (BSDM) Program, Harvard School of Dental Medicine.

2005: Associated faculty, Center for Health and the Global Environment, Harvard Medical School.

1999: Professor of Biology, Department of Organismic and Evolutionary Biology, and Curator in Herpetology, Museum of Comparative Zoology, Harvard University.

1983–99: Assistant (1983–90), to Associate (1990–94), to Full (1994–99) Professor, Department of Environmental, Population, and Organismic (EPO) Biology, University of Colorado (CU), Boulder.

Awards and Honors:

2000–15: Alexander Agassiz Professor of Zoology, Museum of Comparative Zoology, Harvard University.

2011–13: Member, Board of Directors, American Institute of Biological Sciences (AIBS).

2010: Associate Editor, Zoological Science.

2010: President, American Society of Ichthyologists and Herpetologists (President-elect, 2009).

2004, 06: Member, NSF grants panel, Division of Environmental Biology.

1998: Associate Editor, Evolution and Development.

1997: Elected Fellow, American Association for the Advancement of Science.

1996: Gompertz Lecturer in Integrative Biology, University of California, Berkeley.

1991–92: Visiting Research Fellow, Institute of Dental Surgery, London, England.

1990: von Hofsten Lecturer, University of Uppsala, Sweden.

1988: Associate Editor, Journal of Morphology.

Grant Funding:

Dr Hanken has received over \$14 million dollars from these Agencies: Alfred P. Sloan Foundation, National Oceanographic and Atmospheric Administration (NOAA), John D. and Catherine T. MacArthur Foundation, National Science Foundation (NSF), and National Institutes of Health (NIH).

Books:

Hanken, J. and B. K. Hall, eds. 1993. The Skull: Vol. 1, Development; Vol. 2, Patterns of Structural and Systematic Diversity; Vol. 3, Functional and Evolutionary Mechanisms. University of Chicago Press, Chicago.

Publications:

Over 110 peer-reviewed publications.