

The Forum ~ Keynote Address

Dr. Bruce Alberts, President of the National Academy of Sciences in Washington, D.C., is a respected biochemist recognized for his work both in biochemistry and molecular biology. He is noted particularly for his extensive study of the protein complexes that allow chromosomes to be replicated, as required for a living cell to divide.

He has spent his career making significant contributions to the field of life sciences, serving in different capacities on a number of prestigious advisory and editorial boards, including as chair of the Commission on Life Sciences, National Research Council. Until his election as President of the Academy, he was president-elect of the American Society of Biochemistry and Molecular Biology.

Born in 1938 in Chicago, Illinois, Alberts graduated from Harvard College in Cambridge, Massachusetts, with a degree in biochemical sciences. He earned a doctorate from Harvard University in 1965. He joined the faculty of Princeton University in 1966 and after ten years was appointed Professor and Vice Chair of the Department of Biochemistry and Biophysics at the University of California, San Francisco (UCSF). In 1980, he was awarded the honor of an American Cancer Society Lifetime Research Professorship. In 1985, he was named Chair of the UCSF Department of Biochemistry and Biophysics.

Alberts has long been committed to the improvement of science education, dedicating much of his time to educational projects such as City Science, a program seeking to improve science teaching in San Francisco elementary schools. He has served on the advisory board of the National Science Resources Center, a joint project of the National Academy of Sciences and the Smithsonian Institution working with teachers, scientists, and school systems to improve teaching of science, as well as on the National Academy of Sciences' National Committee on Science Education Standards and Assessment.

He is one of the original authors of *The Molecular Biology of the Cell*, now in its 4th edition. Considered the leading textbook of its kind, it is used widely in colleges and universities around the world. His most recent text, *Essential Cell Biology* (1998), is intended to approach this subject matter for a wider audience.

For the period 2000 to 2005, Dr. Alberts is the Co-chair of the InterAcademy Council, a new advisory institution in Amsterdam governed by the presidents of the science academies of 15 different nations.



Dr. Bruce Alberts

President, National Academy of Sciences

**“Science Education and the
National Science
Education Standards:
The Challenges Ahead”**

**Saturday, July 26 • 11:00 AM
Adam’s Mark Hotel**

**Please visit the conference website for more
details about the Forum, including a listing of
presenters, session titles and etc.**

www.botany2003.org

Scientific Meeting ~ Plenary Lecture

Dr. Edward O. Wilson, Pellegrino University Research Professor, Emeritus, at Harvard University, is a preeminent biological theorist. He earned B.S. and M.A. degrees in biology from the University of Alabama, and a Ph.D. in biology from Harvard University. He joined the Harvard faculty in 1956 and distinguished himself over the next four decades as professor of zoology, curator in entomology at the Museum of Comparative Zoology, and researcher.

His accomplishments include pioneering work on chemical communication in the 1950s to 1970s, featuring a first comprehensive account of pheromones in ants, and (with William H. Bossert) a first evolutionary analysis of the physical and chemical properties of pheromones; the creation (with Robert H. MacArthur) of the theory of biogeography, a basic part of modern ecology and conservation biology; the creation of the discipline of sociobiology, in 1975; the first modern syntheses of knowledge of social insects (1971) and (with Bert Halldobler) of ants in particular, in 1990.

He also edited the volume *Biodiversity*, which in 1988 introduced the term and launched worldwide attention to the subject.

In 1984, with *Biophilia*, he introduced the concept of a genetically based tendency to affiliate and bond with parts of the natural world. His *The Diversity of Life* (1992), which brought together knowledge of the magnitude of biodiversity and the threats to it, had a major public impact.

Today he continues entomological and environmental research at the Museum of Comparative Zoology. Two of his 21 books have been awarded Pulitzer prizes: *On Human Nature* (1978) and *The Ants* (1990, co-authored with Bert Halldobler). Wilson's book *Sociobiology: The New Synthesis* (1975) extended neo-Darwinism into the study of social behavior. *Consilience: The Unity of Knowledge* (1998) draws together the sciences, humanities, and the arts into a broad study of human knowledge. His book, *The Future of Life* (2002), offers a plan for saving Earth's biological heritage. His most recent book is a monograph including 337 species new to science, *Pheidole in the New World: A Hyperdiverse Ant Genus* (Harvard, 2003).

In addition to his books, Dr. Wilson has written over 400 articles, most for scientific journals. Wilson has received some 75 awards in international recognition for his contributions to science and humanity, including the U.S. National Medal of Science (1976), Japan's International Prize for Biology (1993), the Crafoord Prize from the Royal Swedish Academy of Sciences (1990), the French Prix du Institut de la Vie (1990), Germany's Terrestrial Ecology Prize



Dr. E. O. Wilson

Harvard University

“The All-Species Initiative and the Future of Life”

Sunday, July 27, 2003 • 7:30 pm
Arthur R. Outlaw Convention Center

(1987), Saudi Arabia's King Faisal International Prize for Science (2000), and the Franklin Medal of the American Philosophical Society (1999).

For his conservation work he has received the Audubon Medal of the National Audubon Society and the Gold Medal of the World Wide Fund for Nature. He is also the recipient of 27 honorary doctoral degrees from North America and Europe.

Symposia, Colloquia and Addresses

PLENARY SYMPOSIUM

Recent advances in restoration of aquatic and wetland habitats

Organizer: **Judy Jernstedt**, University of California, Davis, CA

SOCIETAL AND SECTIONAL SYMPOSIA

Transgenic crops: Science, policy, politics

Organizer: **David M. Spooner**, USDA-ARS, University of Wisconsin, Madison, WI

Sponsors: BSA Economic Botany, Genetics, Tropical Biology, Ecological, Physiological, and Systematics Sections

Dating in the 21st Century: Theory and reality in finding a date for your clade

Organizers: **Patrick S. Herendeen**, George Washington University, Washington D.C. ; **Peter R. Crane**, Royal Botanic Gardens, Kew, UK

Sponsors: BSA Paleobotanical and Systematics Sections, and ASPT

Structural and functional adaptations of vascular plants to wetland ecosystems

Organizers: **James Seago**, SUNY, Oswego, NY; **Frank Ewers**, Michigan State University, East Lansing, MI; **William Friedman**, University of Colorado, Boulder, CO

Sponsor: BSA Developmental and Structural Section

Sex and individuality in lichens

Organizers: **James Lawrey**, George Mason University, Fairfax, VA; **Paula DePriest**, Smithsonian Institution, Washington, D. C.

Sponsors: ABLs and BSA Bryological and Lichenological Section

Methods and myths about conducting research in botany education

Organizers: **Marshall Sundberg**, Emporia State University, Emporia, KS; **James Wandersee**, Louisiana State University, Baton Rouge, LA

Sponsor: BSA Teaching Section and McGraw Hill Higher Education



ASPT COLLOQUIUM

Alpine plant biogeography on the large scale: Current stages and prospects

Organizer: **Reto Nyffeler**, University of Zurich, Switzerland

ANNALS OF BOTANY SPECIAL LECTURE

Wet and Wild: Conserving and Restoring Plant Diversity in Wetlands

Dr. Paul A. Keddy

Southeastern Louisiana University, Hammond, LA

Sponsor: *The Annals of Botany*

**ANNALS OF
BOTANY**



Dr. Paul Keddy began the formal study of Biology in 1969 at York University in Toronto and during the summer worked as a naturalist in Algonquin Provincial Park. He completed his Ph.D. at Dalhousie University with E. C. Pielou, holding a prestigious 1967 Science Scholarship, and studying sand dune plants. During this time he also founded the Halifax Field Naturalists and served as their first president. He began work as a professor at the University of Guelph in 1978, teaching botany and ecology, and initiating research on wetland plants.

In 1982 he moved to the University of Ottawa, became a Full Professor, and then in 1999 moved south to become the first holder of the Edward G. Schlieder Endowed Chair for Environmental Studies at Southeastern Louisiana University. His web site address there is www.selu.edu/Academics/Faculty/pkeddy.

Keddy's first book, *Competition* (Chapman and Hall, 1989), won both the Lawson Medal and the Gleason Prize; a second edition was published by Kluwer Press (2001). His latest book is *Wetland Ecology: Principles and Conservation* (Cambridge University Press, 2000). Along with Dr. Evan Weiher, he has also edited *Ecological Assembly Rules: Perspectives, Advances, Retreats* (Cambridge University Press, 1999).

Over his career Dr. Keddy has published some hundred scholarly papers on plant ecology and wetlands, as well as serving organizations including the National Science and Engineering Research Council of Canada, World Wildlife Fund and the Nature Conservancy of Canada. His current research addresses the mechanisms producing diversity in wet pine savannas and in coastal marshes.



Dr. Paul A. Keddy

Edward G. Schlieder Endowed Chair
for Environmental Studies

Southeastern Louisiana University

“Wet and Wild: Conserving and Restoring Plant Diversity in Wetlands”

Monday, July 28, 2003 • 11:00AM
Arthur R. Outlaw Convention Center