



Dr. Rita R. Colwell

**Chairman, Canon US Life Sciences, Inc.
Distinguished Professor,
University of Maryland College Park and
Johns Hopkins University Bloomberg
School of Public Health**

**Botany 2004 Plenary Address
Sunday, August 2, 2004 - 7:30pm
Title and Location To Be Announced**

Dr. Rita Colwell is Distinguished University Professor at the University of Maryland at College Park and at Johns Hopkins University Bloomberg School of Public Health. Her interests are focused on global infectious diseases, water, and health, and she is currently developing an international network to address emerging infectious diseases and water issues, including safe drinking water for both the developed and developing world.

As the 11th Director of the National Science Foundation, 1998-2004, Dr. Colwell's policy approach enabled the agency to strengthen its core activities, as well as establish support for major initiatives, including Nanotechnology, Biocomplexity, Information Technology, and the 21st Century Workforce. In her capacity as NSF Director, she served as Co-chair of the Committee on Science of the National Science and Technology Council. One of her major interests include K-12 science and mathematics education,

graduate science and engineering education and the increased participation of women and minorities in science and engineering.

Under her leadership, the Foundation received significant budget increases totaling approximately 70%, and its funding reached a level of approximately \$6 billion.

Before going to NSF, Dr. Colwell was President of the University of Maryland Biotechnology Institute and Professor of Microbiology and Biotechnology at the University Maryland. She was also a member of the National Science Board from 1984 to 1990.

Dr. Colwell has held many advisory positions in the U.S. Government, nonprofit science policy organizations, and private foundations, as well as in the international scientific research community. She is a nationally-respected scientist and educator, and has authored or co-authored 16 books and more than 700 scientific publications. She produced the award-winning film, *Invisible Seas*, and has served on editorial boards of numerous scientific journals.

She is the recipient of numerous awards, including the Gold Medal of both Charles University, Prague, and the University of California, Los Angeles and Alumna Summa Laude Dignata from the University of Washington, Seattle. She has also received the American Institute of Biological Sciences Outstanding Service Award and the Central Intelligence Agency Civilian Recognition Award.

Dr. Colwell has also been awarded 35 honorary degrees from institutions of higher education, including her Alma Mater, Purdue University. Dr. Colwell is an honorary member of the microbiological societies of the UK, France, Israel, Bangladesh, and the U.S. and has held several honorary professorships, including the University of Queensland, Australia. A geological site in Antarctica, Colwell Massif, has been named in recognition of her work in the polar regions.

Dr. Colwell has previously served as Chairman of the Board of Governors of the American Academy of Microbiology and also as President of the American Association for the Advancement of Science, the Washington Academy of Sciences, the American Society for Microbiology, the Sigma Xi National Science Honorary Society, and the International Union of Microbiological Societies. Dr. Colwell is a member of the National Academy of Sciences, the Royal Swedish Academy of Sciences, Stockholm, the American Academy of Arts and Sciences, and the American Philosophical Society.

Born in Beverly, Massachusetts, Dr. Colwell holds a B.S. in Bacteriology and an M.S. in Genetics, from Purdue University, and a Ph.D. in Oceanography from the University of Washington.

Plenary Symposium

- ✿ Seed plant gametophytes: Still the forgotten generation?!?

Organizer: Scott D. Russell, University of Oklahoma

Societal & Sectional Symposia

- ✿ The Convention on Biological Diversity: What is it and why should botanists care?

Organizers: R. Geeta, State University of New York, Stony Brook and Susana Magallón, Universidad Nacional Autónoma de México

Sponsors: BSA Ecology, Economic Botany, Phytochemical, Systematics, and Tropical Biology Sections

- ✿ Discerning homologies: Gene expression, development, and morphology

Organizers: Larry Hufford, Washington State University, Pullman and William E. (Ned) Friedman, University of Colorado, Boulder

Sponsors: BSA Developmental and Structural and Paleobotany Sections, and the Molecular and Organismal Research on Plant History (MORPH) Research Coordination Network, funded by NSF.

- ✿ Resolving the green branch of life: Current progress and future challenges

Organizers: Paul G. Wolf, Utah State University, Logan and Brent D. Mishler, University of California, Berkeley

Sponsors: BSA Systematics Section, and the Deep Gene Research Coordination Network and Green Tree of Life projects, funded by NSF.

- ✿ Resistance, emigration, or adaptation? Phylogeography and ecology of European alpine plant species

Organizer: Frank R. Blattner, IPK, Denmark

Sponsors: BSA Ecology and Systematics Sections

- ✿ After the book - progress in parasitic plant research since Kuijt's *Biology of Parasitic Flowering Plants* (1969)

Organizers: Lytton Musselman, Old Dominion University, Daniel Nickrent, Southern Illinois University, Andrea Wolfe, Ohio State University and Erica Maass, University of Namibia, Windhoek, Namibia,

Sponsors: BSA Tropical Biology and Systematics Sections

- ✿ Plant development and evolution: Lessons learned from candidate genes

Organizers: M. Alejandra Jaramillo and Elena M. Kramer, Harvard University

Sponsors: BSA Developmental & Structural and Genetics Sections

- ✿ Don Kaplan - his legacy: Influencing teaching and research

Organizers: Ann M. Hirsch, University of California, Los Angeles and Darleen A. DeMason, University of California, Riverside

Sponsors: BSA Developmental & Structural and Teaching Sections

- ✿ A century of seed ferns: A symposium to celebrate paradigm shifts in the understanding of seed plant evolution

Organizers: Michael T. Dunn, Cameron University and Gar W. Rothwell, Ohio University

Sponsor: BSA Paleobotanical Section

- ✿ Sexual dimorphism in bryophytes: Patterns and consequences

Organizers: Lloyd Stark, University of Nevada, Las Vegas and Linda Fuselier, University of Kentucky

Sponsors: ABLS and BSA Bryological and Lichenological Section

- ✿ The biology of rarity: Conservation of lichens and bryophytes

Organizers: Nancy G. Slack, The Sage Colleges and Natalie Cleavitt, Cornell University

Sponsors: ABLS and BSA Bryological and Lichenological Section

- ✿ Pylogeography of pteridophytes

Organizer: Christopher Hafler, University of Kansas

Sponsors: AFS and BSA Pteridological Section

Societal & Sectional Colloquia

- ✿ Methods and theory of phylogenetic inference

Organizers: Scot A. Kelchner, Australian National University, and Mark Simmons, Colorado State University,

Sponsors: ASPT and BSA Systematics Section

- ✿ Rupert Barneby and his legume legacy

Organizers: Aaron Liston, Oregon State University and Marty Wojciechowski, Arizona State University

Sponsors: ASPT and BSA Genetics and Systematics Sections

Annals of Botany Special Lecture

- ✿ Plant Allometry: Is There a Global Theory?

Dr. Karl Niklas, Cornell University, Editor-in-Chief, *American Journal of Botany*

Sponsor: *The Annals of Botany*



Dr. Karl J. Niklas

Editor-in-Chief
American Journal of Botany
The Botanical Society of America

Special Lecture Sponsored by:

ANNALS OF
BOTANY

Plant Allometry: Is There a Global Theory?

Time and Location to Be Announced

Dr. Karl J. Niklas was born in Manhattan, New York, where he received a B.S. in mathematics from the City College of the City of New York. He holds a M.S. and Ph.D. in plant biology from the University of Illinois, Urbana, Illinois.

After accepting a Fulbright-Hayes Post-Doctoral Fellowship at the University of London, Berbeck College, he returned to New York to become the Curator of Paleobotany at the New York Botanical Garden. Dr. Niklas joined the faculty of Cornell University in 1978. He is the current Liberty Hyde Bailey Professor of Plant Biology. He is also a Visiting Erskine Fellow at the University of Canterbury, Christchurch, New Zealand. Dr. Niklas teaches courses in introductory botany, plant evolution, and biomechanics.

Dr. Niklas research deals with a biophysical approach to plant evolution and the quantification of the relationships among form, function, and environment. He is the author of over 240 research articles and three books, (*Plant Biomechanics: an Engineering Approach to Plant Form and Function*, 1992; *Plant Allometry: the Scaling of Form and Process*, 1994; and *The Evolutionary Biology of Plants*, 1997; all published by the University of Chicago Press).

Dr. Niklas is the recipient of numerous awards, including a John S. Guggenheim Fellowship, the George Gaylord Simpson Prize of the Peabody Museum, Yale University, the New York State University Chancellor's Award for Excellence in Teaching, the Alexander von Humboldt Stiftung Preis for Senior USA Scientists, the Jeanette Siron Pelton Award for studies in plant morphogenesis, and the Botanical Society of America's Merit Award. He is the current Editor-in-Chief of the *American Journal of Botany*.