



MCMASTER UNIVERSITY PRESENTS

PUBLIC LECTURE

A Molecular View of the Origin and Large-Scale Evolution of Life

Speaker:

Norman R. Pace

Hooker Distinguished Visiting Professor

Thursday March 18, 2004 at 8:00 pm
McMaster University • Hamilton, Ontario
Chester New Hall, Room 104

McMaster
University 



A B S T R A C T

Gene sequences can be used to explore the relations between all existing life forms. The results also provide the first objective views of the large-scale structure of evolution throughout the history of biology. Analyses with some genes even reach into the pre-cellular period of life. The lecture will review our current understanding of the molecular Tree of Life, with emphasis on how our perception of biological diversity has expanded with studies of natural microbial communities. Correlation of geological information with landmarks in the molecular Tree will be used to carry us beyond the textbook versions of the course of life and the origin of eukaryotic cells.

B A C K G R O U N D

Norman Pace is Professor of Molecular, Cellular and Developmental Biology at The University of Colorado, in Boulder. He is a Member of the National Academy of Sciences and a Fellow of the American Academy of Arts and Sciences, the American Association for the Advancement of Science, the American Academy of Microbiology and the John D. And Catherine T. MacArthur Foundation. He has received the United States' highest award in microbiology, the Selman A. Waksman Award for Outstanding Achievement in Microbiology, from the National Academy of Sciences. He also has received the Procter and Gamble Award in Applied and Environmental Microbiology from the American Society for Microbiology and the Lewis Bicking Award for contributions to American caving from the National Speleological Society. Professor Pace's research is focused in two arenas, on one hand RNA biochemistry and on another the application of molecular tools to the study of natural microbial ecosystems and to problems related to the large-scale pattern of evolution.



Origins is a proposed institute to be based in the Faculty of Science. The scientific focus of Origins is to create and foster multidisciplinary research on origins themes across a spectrum of interrelated research fields.

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