



Wild Music

Sounds & Songs of Life



Wild Music: Scientific Advisors

Patricia Gray, D.M.A., Co-PI of the NSF Wild Music grant, is on the faculty of the University of North Carolina at Greensboro School of Music, and co-founder and director of the BioMusic Program. Dr. Gray is a pianist who has performed at the White House, is the recipient of the prestigious Franz Liszt Commemorative Medal from the government of Hungary, and has collaborated in performances with internationally acclaimed composers and artists. In 1997, at the request of the Getty Conservation Institute, Dr. Gray produced a series of concerts entitled *Music Becomes Us*, which interfaced western music with musical cultures of India, China, South Africa/Zimbabwe, and Latin America. She is central to the Bonobo Research Project, where her skills as composer, arranger, and theorist support the research.

Jelle Atema, Ph.D., Director of Boston University's Marine Program at Woods Hole, Massachusetts, specializes in sensory biology of aquatic organisms. A flute player who studied with Jean-Pierre Rampal, Dr. Atema also does research on the origins of human music, including reconstructing the world's oldest known musical instrument, a 30,000-year-old bone flute, as well as other Paleolithic and Neolithic flutes.

Jack W. Bradbury, Ph.D., Professor of Neurobiology and Behavior, is Director of the Macaulay Library of Natural Sounds, Cornell University Laboratory of Ornithology, which houses the world's largest collection of animal sound recordings and is used worldwide for research, conservation, and educational functions. Current research focuses on calls of male grouse and several species of wild parrots.

W. Tecumseh Fitch, Ph.D., lecturer in Psychology at the University of St. Andrews, Scotland, pursues research on the neural basis of communication and cognition; acoustics, physiology, and perception of vertebrate vocalization (including human speech); evolution of animal communication systems, including human language; and auditory display of data. A former lecturer at Harvard University, Dr. Fitch is the recipient of awards and fellowships from the National Institutes of Health, Institute of Advanced Study, and NSF.

Donald A. Hodges, Ph.D., is the Covington Distinguished Professor of Music Education at the University of North Carolina–Greensboro, where he promotes and directs research in music psychology and music technology. A conductor and former director of the Institute for Music Research at the University of Texas–San Antonio, Dr. Hodges is editor of the *Handbook of Music Psychology*. Current research centers on neuroimaging studies of musicians, including pianists, conductors, and singers.

Bernie Krause, Ph.D., Wild Sanctuary, is a bioacoustician and musician who has produced more than 50 environmental albums. At the research sites of Jane Goodall (Tanzania), Birute Galdikus (Borneo), and Dian Fossey (Rwanda), Dr. Krause recorded and evaluated the effects of ambient sound on the vocalizations of the great apes. He was scientific director of the operation that rescued Humphrey the humpback whale from the Sacramento Delta (1985/1989) using processed feeding sounds of the same species to lure him to the ocean.

Terry Mikiten, Ph.D., is Professor Emeritus and former Associate Dean (retired) of the Graduate School of Biomedical Sciences at The University of Texas Health Science Center at San Antonio, studies the relationship between brain physiology and mental function, including the effect of music on human physiology and its potential medical applications.



Steve Nowicki, *Ph.D.*, Bass Fellow and Professor in the Departments of Biology, Psychology, and Neurobiology at Duke University. Nowicki's research explores proximate mechanisms underlying the evolution of behavior. He is especially interested in the structure, function, and evolution of animal communication systems, using birdsong as a model system. His current research includes work on the evolution of signal complexity, constraints on signal evolution, and mechanisms of signal production and perception.

Roger Payne, *Ph.D.*, President of the Whale Conservation Institute, has spent the past 35 years studying whales in the wild and working for their conservation. Pioneer of many of the benign research techniques now used throughout the world for studying the lives of free-swimming whales, Dr. Payne is best known for discovering that humpback whales sing, and that the calls of fin and blue whales travel across oceans. A MacArthur Fellow, he directs long-term research projects on the songs of humpback whales and the behavior of southern right whales.

Elizabeth Tolbert, *Ph.D.*, directs the program in Ethnomusicology at the Peabody Conservatory of the Johns Hopkins University, where she also holds an adjunct appointment in the Department of Anthropology. Dr. Tolbert's recent publications reflect her diverse interests in music and language, feminist theory, ritual, and music and evolution. She is writing a book on music ideologies in evolutionary discourses, with the working title *Music, Meaning, and the Birth of Representation*.

Mark Jude Tramo, *M.D., Ph.D.*, Director, Institute for Music and Brain Science, is one of the world's leading researchers on brain research and music perception. He holds posts at Harvard Medical School, The Eaton-Peabody Laboratory of Auditory Physiology at the Massachusetts Eye & Ear Infirmary, and the Research Laboratory of Electronics at M.I.T., and is on the staff at Massachusetts General Hospital and McLean Hospital. He holds numerous awards and honors and is the Associate Editor of *Journal of Cognitive Neuroscience* and Consulting Editor for *Music Perception*.

