

Dr. Robert S. Turner

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Dr. Robert Turner oversees a peer review group at Oak Ridge Associated Universities (ORAU) that manages over 20 scientific panels encompassing the biological, physical, and social sciences each year. For over 20 years, ORAU's peer review program has performed independent scientific reviews of controversial and uncertain issues for many offices of DOE, DHS, EPA, NASA, TVA, NIOSH, and others.

Dr. Turner has spent most of his career assisting others with decision-making when scientific data and results are incomplete and methods are questioned. In 2008, Dr. Turner led an independent scientific review of the controversial DOE's Office of Civilian Radioactive Waste Management "Simulation of Net Infiltration for Present-Day and Potential Future Climates" for the proposed nuclear waste repository site at Yucca Mountain, Nevada. The planning stage included a site visit and visits with partners and stakeholders to reduce the risk of controversy. The team assessed the range of technical expertise required to review the 942-page multidisciplinary infiltration modeling report and selected a panel of five recognized technical experts from the arid and semi-arid southwestern states region who encompassed the required disciplines and met strict conflict of interest (COI) requirements.

As Executive Director (1999–2005) of the Southern Appalachian Man and the Biosphere (SAMAB) Program, and Technical Director (2001–2005) of the Southern Appalachian Information Node (SAIN) of the National Biological Information Infrastructure (NBII), Dr. Turner worked with resource managers and policy analysts from 11 federal agencies and five states to use available, but incomplete, scientific knowledge to address many issues inherent in conservation, ecosystem management, energy needs, and sustainable development. Through assessments, topical meetings and workshops, and annual symposia, he brought geospatial data, field research, and simulation modeling results to the attention of public- and private-sector natural and economic resource managers to aid in sustainably using our mosaic of public and private lands and their communities and resources. As SAMAB director, Dr. Turner facilitated a series of three public meetings for the National Park Service involving a contentious swap of land with the Eastern Band of the Cherokee Indians. Controversy centered around disparate views of the natural, scientific, and social values associated with building a new school complex in a highly diverse and relatively undisturbed montane valley within the Great Smoky Mountains National Park.

As Deputy and then Interim Director (1996–2000) of the National Center for Environmental Decision-making Research (NCEDR), Dr. Turner planned and organized two national conferences, a seminar series, a summer internship program, a decision-maker-in-residence program, and an interactive Website for communicating scientific knowledge useful for environmental decision-making at the state, tribal, and local level.

As Group Leader and Research Staff Member at Oak Ridge National Laboratory (ORNL), 1983–2005, Dr. Turner coordinated and conducted a wide range of research, assessments, and demonstrations of human interactions with the environment, including scientific assessments of nutrient cycling, subsurface transport of contaminants, and acidic deposition; National Environmental Policy Act (NEPA) assessment of the effects of a scenic highway in the Great Smoky Mountains National Park; and integrated assessments of regional effects of global climate change, sustainable development, and terrestrial and aquatic effects of hydrologic

and chemical changes.

Dr. Turner holds degrees in Geology and Regional Planning from the University of Pennsylvania and in Zoology from Duke University. He has published 28 peer-reviewed articles and over 50 technical reports and proceedings, and has given over 60 public scholarly addresses, seminars, and presentations in the areas of conservation, ecosystem management, energy needs, and sustainable development. His scientific research in biogeochemical cycling, subsurface transport, and terrestrial and aquatic ecosystem effects of atmospheric deposition have contributed to our nation's scientific knowledge. Over the course of his career, he has always sought to bridge the science policy gap by translating complex science into language that nontechnical decision makers can use in discussing conservation, ecosystem management, energy needs, and sustainable development. Assessments that Dr. Turner has coordinated or participated in have been used by local, state, and federal authorities for land and other resource-use decisions. He has organized and participated in many types of meetings to communicate scientific knowledge and stimulate interdisciplinary interactions among scientists and between scientists and decision makers and policy analysts.

In recognition of his scientific accomplishments, Dr. Turner has received the following awards: SAMAB Hinote Award, 2005; V.P. Gore Hammer Award, NASA Group Achievement Award, 1995; Sigma Xi, 1990; Special Achievement Award, ORNL, 1990; Significant Event Award, ORNL, 1987, 1990; Eugene P. Wigner Fellowship, ORNL, 1983-1985; and Dean's Fellowship, University of Pennsylvania, 1981, 1982.