DERT Annual

Scientific Retreat
4-5 December 2000
Southern Pines, North Carolina

Objectives

The objectives of the second annual DERT Scientific Retreat were to explore research opportunities in both new and existing topics, to consider how emerging technologies can be incorporated into current environmental health science research, and to provide a setting that was conducive to stimulating discussion and interactions among DERT scientific staff, colleagues in academia, and invited speakers.

Topics

The retreat was developed around three sessions that incorporated scientific presentations and discussions. Sessions were designed to educate participants and encourage their active involvement.

- Molecular Epidemiology and the Role of Polymorphisms in Populations—Through the Environmental Genome Project, researchers have identified various classes of genes and have been able to look at the stress response to xenobiotics. This session highlighted the value and challenges of incorporating molecular genetics in population-based studies to better understand gene-environment interactions.
- Imaging in Environmental Toxicology—New techniques and technologies are being developed that allow visualization of biological processes at levels ranging from whole animal or organ to subcellular organelles. This session focused on exploring the opportunities and realistic expectations for applying state-of-the-art imaging technologies to the field of environmental toxicology.
- Cellular and Molecular Pathophysiology: Intergenerational Toxicity and Fetal Programming— Fetal programming is the concept that conditions present during the perinatal period can alter lifelong biological processes and disease susceptibility. Equally important to alterations in the developmental environment is the critical timing of these changes.

For more information, read the entire retreat report at http://www.niehs.nih.gov/dert/profiles/rtrt2000.htm.

Invited Speakers

David H. Abbott, Ph.D., University of Wisconsin-Madison Peter T. Fox, M.D., The University of Texas Health Science Center at San Antonio Clement E. Furlong, Ph.D., University of Washington-Seattle Tomas R. Guilarte, Ph.D., The Johns Hopkins University Robert Millikan, D.V.M., Ph.D., University of North Carolina-Chapel Hill Peter W. Nathanielsz, M.D., Ph.D., Sc.D., Cornell University Kent Pinkerton, Ph.D., University of California, Davis Bruce R. Pitt, Ph.D., University of Pittsburgh Gail S. Prins, Ph.D., University of Illinois at Chicago