

National Advisory Environmental Health Sciences Council Meeting

Report of the Acting Deputy Director

February, 2010

Activities since the last NAEHS council meeting

Office of Policy, Planning and Evaluation (OPPE)

The OPPE, directed by Dr. Sheila Newton, completed several important projects since last September: testimony and preparation for three Congressional hearings; completion and review of the 2008-2009 NIH Biennial Report; and the NIEHS portion of the NIH Health Disparities Strategic Research Plan and Budget: FY 2009-2013. These items were in addition to the usual seasonal responsibilities of OPPE, which include completion of intramural Annual Reporting, review and submission of research investment reporting for the NIH Office of Budget, and completion of the NIEHS budget narrative for the FY2011 Congressional Justification for the President's budget request.

The Office Director and staff drafted testimony and helped with preparation for the Director, NIEHS to testify at hearings of two different subcommittees of the Senate Committee on Environment and Public Works. She testified before the Subcommittee on Children's Environmental Health (September 29, 2009) on children's environmental health, before the Subcommittee on Superfund, Toxics and Environmental Health (December 2, 2009) on current science regarding chemical hazards, and again before the same subcommittee (February 4, 2010) on environmental health research and exposure assessment.

The 2008-2009 NIH Biennial Report is nearing completion, and NIEHS is strongly represented in the document as a result of the efforts of OPPE staff. NIEHS research activities and publications are mentioned in all Biennial Report chapters.

OPPE staff led the development of the NIEHS submission for the NIH Health Disparities Strategic Research Plan and Budget for FY2009-2013. As part of this research plan, each Institute and Center is required to submit a description of its scientific priorities for health disparities research in four overarching goal areas and include a detailed action plan with objectives, milestones, timelines, and budget. The four goal areas are Research, Capacity Building, Community Outreach, and a fourth goal that emphasizes integration of the other three.

Environmental Health Perspectives (EHP)

Under Dr. Hugh Tilson's leadership, *EHP* continues to be one of the top-rated journals in environmental health sciences. It learned from ISI's *Journal Citation Report* that its 2008 impact factor was 6.12, up from 5.64 the year before. The impact factor represents the number of citations divided by the number of papers published during a prior 2-year period. *EHP* was ranked second in two categories of journals- Environmental Sciences (#2 of 163) and Public, Environmental, and Occupational Health (#2 of 105). *EHP* also discovered that it was first in total articles and total citations for journals in Environmental Health as measured by the Eigen Factor during the period 2002-2007. The Eigenfactor is an estimate of the percentage of time that library users spend with a particular journal. In addition, a number of communication projects came to fruition over the last 6 months. *EHP* opened a Twitter account, initiated regular

podcasts, implemented PubMed Ahead of Print, developed a prototype digital version of the journal, and launched a new website. These developments represent a strategic shift toward the use of the internet to increase readership and decrease reliance on the printed version of the journal.

EHP also sponsored a number of activities related to science education and communication during the last several months. *EHP* staff played a lead role in an e-publishing workshop in Accra, Ghana. This 4-day workshop included several editors and co-editors from nearly a dozen African health journals. A network of African publishers was formed as a result of this meeting. This workshop represents an example of *EHP*'s commitment to build capacity for science publishing in emerging countries. *EHP* also established a number of partnerships for curriculum-sharing and developed teaching training materials and workshops for secondary schools using information derived from news and research published in the journal. *EHP* staff also initiated a number of teacher-training workshops, including one in Mexico City. *EHP*'s efforts in science education and communication represents its commitment to facilitate interest in the study of environmental health sciences by students and teachers and provide a foundation for readership of the journal in the future.

Library & Information Services Branch (LISB)

Under the direction of Dav Robertson (Chief), the main focus in LISB over the past few months has had to do with succession planning and filling positions. In December, a new Technical Services Librarian was hired to handle management of print and digital information resources. This includes book and journal acquisitions, cataloging, and interlibrary loan. In all of these functions, the NIEHS Library works very closely with the NIH Clinical Center Library, NLM, and a few smaller libraries scattered around the other Institutes. Through this consortial arrangement, NIEHS scientists have access to over 9,000 online journal titles, the Web of Science and SCOPUS databases, Elsevier's Science Direct, and other major resources we wouldn't otherwise be able to afford.

The other LISB position, for which we are recruiting now, is that of "Informationist," one of two senior positions providing literature searching, analysis, and evaluation to Institute scientists. These "embedded librarians" work very closely with specific labs to provide customized services as part of the research team. Consequently, we are looking for an experienced librarian who also has an advanced degree in the life sciences.

LISB is continuing to expand its bioinformatics role. Our bioinformaticist collaborates closely with the scientists and other bioinformatics experts. He provides an interface between the scientists and the IT group, and he is a lead person in "next generation" sequencing software and methodology. Also as part of our bioinformatics focus, LISB is leading a proposed initiative to install a visualization center for manipulating large-scale data sets.

Dr. Allen Dearry

Dr. Dearry organized, with the assistance of Mr. John Schelp, two NIEHS town meetings—in Milwaukee in October 2009 and in Sausalito, CA, in November 2009. At the “Environmental health in Milwaukee” Town Meeting, NIEHS Director Linda Birnbaum set the stage for a panel discussion by environmental public health specialists and city and regional officials. Dr. Birnbaum began her presentation with impressions from the afternoon trolley tour of the city — recounting the neighborhoods, gardens and river valley industrial brownfield sites she saw that day to emphasize the interconnectedness of the environment with public health and quality of life. She highlighted "some of the outstanding work that NIEHS is supporting here at UW-Milwaukee," including basic research into the biological mechanisms of toxicity; detection of freshwater viral, bacterial and chemical contaminants; and the innovative outreach initiative, Healthy Latino Families and Schools. She described work at University of Wisconsin-Milwaukee as an example of the productive mix of "small science conducted by individual labs" with the work of "big science teams, which may be needed to answer some of the most intractable questions." At the “Breast Cancer and the Environment” Town Meeting, Dr. Birnbaum spoke of the state of the science of breast cancer research, and also joined a distinguished panel in initiating a frank and open discussion about community needs in ongoing breast cancer research. Public participation is always encouraged at these kinds of meetings and other forums. Dr. Birnbaum added, "We need input from communities in setting a science agenda and in fostering positive partnerships. Together with my Institute's partners and grantees, we will solidify our coalition in the national effort to keep the science moving forward."

Dr. Dearry also represented NIH and DHHS at the United Nations Climate Change Conference (COP15) at the Bella Center in Copenhagen December 7-18, 2009. Dr. Allen Dearry made a presentation Dec. 11 at the U.S. Center at COP15 as the NIH member of the U.S. National Science & Technology Council Subcommittee on Disaster Reduction (SDR). Dr. Dearry’s talk, titled " Maximizing Public Investment: Disaster Risk Reduction Meets Climate Change Adaptation," presented a compelling case for enhancing disaster resilience by charting a 10-year agenda of science and technology activities to produce a dramatic reduction in the loss of life and property from natural and technological disasters. His presentation reinforced the NIEHS message that climate change has important public health implications. Mitigating climate change can produce important public health co-benefits that will help offset the costs of intervening as quickly and comprehensively as possible.

Also in December, Dr. Dearry worked with the US Environmental Protection Agency (EPA) and the National Children’s Study (NCS) Program Office to organize one of a continuing series of NIEHS-EPA-NCS meetings in Research Triangle Park. These sessions served to bring EPA and NIEHS scientists up to date on NCS status and explored the potential for the agencies and staff to work together in redesigning the NCS protocol. The December workshop focused on planned revisions to NCS recruitment strategies; evaluation of measures and methods for the main study, including environmental measures; and the NCS “scholars” program, which allows federal scientists from different agencies to participate more directly with NCS Program Office staff on relevant efforts to inform and guide the study as it goes forward.

Dr. Sally Tinkle, Senior Scientific Advisor

Since the last Council meeting, Dr. Tinkle has been involved in a number of new NIEHS nanomaterials health and safety activities. For example, she Co-chaired the Product Safety Development session of the North Carolina Environmental Health Collaborative NanoSummit entitled, “Environmentally Responsible Commercialization of Nanotechnology: Overcoming Barriers to Commercialization and Growth.” She represented NIEHS/NIH at the briefing for John Holdren, Director, OSTP, for the US-Russia Bi-lateral Conference in Moscow, and Participated in the External Advisory Board meeting for the Battelle Multi-scale Toxicology Initiative that is using nanotechnology as its pilot program. Among Dr. Tinkle’s inter-agency nano activities was to co-chair the NNI/NEHI multi-sector public workshop on *Nanomaterials and Human Health & Instrumentation, Meteorology, and Analytical Methods*. Dr. Tinkle was also invited to give a presentation to the Congressional NanoCaucus on the NNI/NEHI workshop, and as NSET co-chair and NIEHS lead, she met with the Environmental Council of States to discuss collaborations with the NNI on nano EHS and seven nationally recognized foundations to discuss collaborations with the NNI on nano EHS. She also began representation of NIH on a USG proposal to the OECD Working Party on Nanomaterials that will include nano-enabled medical and food products.

Dr. Tinkle has also been involved with many international activities since the last Council meeting. Dr. Tinkle and Dr. Birnbaum met Maria Neira, WHO Director for Public Health and the Environment and Carlos Dora, Coordinator for Public Health and the Environment to further the goal of developing a WHO CC at NIEHS. Dr. Tinkle, Dr. Birnbaum, and others also met with Francis Moussy, WHO Director of the Tropical Disease Research unit to discuss collaboration, and a proposal to collaborate on combining environmental measurements with infectious disease sensor technology sent to NIEHS director for review. Dr. Tinkle also was invited to make a presentation to the Triangle Global Health Consortium workshop on Health Care Sustainability, where she outlined how our global environmental activities, particularly WHO, support sustainable health care systems in 3rd world countries. She also joined the Trans-NIH Global Health Research Working Group subteam on clinical research in order to represent NIEHS clinical research issues.