

Glenda T. Kelly, PhD

Title: Building Bridges between Scientific and Public Communities: the Importance of Partnerships

By funding multiple science and engineering nanotechnology research centers across the U.S., and parallel funding of major education/outreach initiatives such as the Nanoscale Informal Science Education Network (NISE Net), NSF has created major opportunities for research centers to partner with these initiatives to create combined networks for broad, ongoing public engagement in nano-educational programs. One such research center, the Center for the Environmental Implications of NanoTechnology-CEINT, headquartered at Duke with university partners Carnegie Mellon, Howard, Virginia Tech, University of Kentucky and Stanford, has achieved broad, substantive outreach across the US. Partnering with NISE Net, with multiple museum venues that allow an array of hands on activities in one setting, has allowed CEINT to engage visitors in educational activities that demonstrate the prevalence of nanomaterials in the environment, provide examples of ways impacts can be assessed, as well as to design activities illustrating the importance of assessing potential environmental impacts. This partnership has resulted in CEINT faculty and student participation in multiple museum sponsored educational events that include NanoDays, NanoNights, NanoCamps, Science Cafes and a NISE Net web-hosted public educational video featuring CEINT research and faculty participation. Benefits to science/engineering centers of partnering with such initiatives as NISE Net include solid recruitment for public programs, venues allowing a round-robin of activities that show integrated research and importance, training feedback for participating students, and building an enhanced combined network to support future proposals for continuing these successful outreach programs across the U.S.

BIO: Dr. Glenda Kelly is Associate Director for Assessment and Outreach for the Center for the Environmental Implications of NanoTechnology (CEINT), Pratt School of Engineering, Duke University. Dr. Kelly coordinates and develops K-12 educational outreach initiatives for CEINT in partnership with NISE Net and across four US museums. She also co-directs the CEINT REU program across three universities and the CEREGE in France as well as summer research and educational programs for high school students within CEINT. In addition, Dr. Kelly serves as evaluator for CEINT and works with CEINT faculty and staff to define measurable educational objectives for activities related to communicating scientific discoveries emerging from Center research. Her interests include building a network of collaborative partners to sustain and disseminate K-Ph.D. educational and research experiences in the critical area of nanomaterials science and environmental risk assessment. She has special interest in developing ways to teach science and engineering to optimally engage diverse populations especially females and underrepresented minorities.