

University of Illinois to develop national center for ethics in science, mathematics and engineering

Urbana, III. (October 11, 2010) – Laurel Smith-Doerr of Boston University has been named to the Advisory Board of a new ethics center at the University of Illinois. The center, funded through a five-year, \$5 million grant from the National Science Foundation, will include an online portal for professional and research ethics in science, mathematics and engineering.

The online center, called the National Center for Professional and Research Ethics, will develop, gather, preserve and provide comprehensive access to resources related to ethics for teachers, students, researchers, administrators and other audiences. As such, it will provide information and expertise for instructors who teach ethics, students with questions about research integrity, researchers and engineers who encounter ethical challenges in practice, administrators in universities and businesses who oversee ethics and compliance policies, scholars who conduct research on professional and research ethics, and others with questions or interests in these areas.

"Almost everybody wakes up everyday and wants to do the right thing," said Center Director C. K. Gunsalus, CSL research professor and professor of business. "Many people who face ethical dilemmas know the general principles but not necessarily how to apply them in the complexity that real-life professional and research practice present. The Center seeks to create an online environment that encourages the life-long development of ethical practices through materials and interaction with other professionals."

The center, part of the Coordinated Science Laboratory (CSL), an interdisciplinary research laboratory in the College of Engineering at Illinois, will draw on the University's collective strength in engineering, digital library technologies, mathematics, medicine, business and law, among other fields. Co-principal investigators include Taft Broome, Howard University (Civil Engineering); Nicholas Burbules, University of Illinois (Education); Michael Loui, University of Illinois, (CSL and Electrical and Computer Engineering); and William Mischo, University of Illinois (University Library).

A multidisciplinary research team will gather existing information, generate new innovative curricular materials and create interactive collaboration tools that will help scientists and engineers incorporate ethical issues and reasoning into their pedagogy, research and practice. The grant also funds several other partner institutions and organizations around the country who will contribute content and expertise to the

project. These partner institutions include the National Academy of Engineering and the Public Responsibility in Medicine and Research organization.

"A key focus of this grant is to explore the merging of several important digital library technologies. It is our hope that this work will serve as a model for all other online resource centers," says Mischo, head of Illinois' Grainger Engineering Library Information Center.

In addition, experts from the University and across the country will advise the center through its Education, Ethics, Futures, Steering and Technical Committees.

The portal infrastructure will be physically located in the Grainger Engineering Library Information Center at Illinois and will be built around the HUBZero e-learning and collaboration platform. The grant work will feature the development of HUBZero extensions that will allow the integration of custom federated search applications, extended content harvesting and database technologies and true preservation and archiving repository technologies. Under earlier grant support, the Library has developed and deployed a suite of federated search tools and user interface, archiving and database technologies.

The center will also leverage existing NSF investments in ethics education. At the end of the grant, the University Library will incorporate the Center's resources into its permanent collection.

About the Coordinated Science Laboratory

The University of Illinois' Coordinated Science Laboratory is a premier, multidisciplinary research laboratory that focuses on information technology at the crossroads of computing, control and communications. With a rich history of nearly 60 years of innovation, CSL has developed and deployed new technologies that have achieved international scientific recognition and transformed society. Led by a faculty of world-renowned experts and researchers, CSL uses these innovations to explore critical issues in defense, medicine, environmental sciences, robotics, life-enhancement for the disabled and aeronautics.

About University Library

The University of Illinois at Urbana-Champaign Library holds over 12 million volumes, more than 90,000 serial titles, and more than nine million manuscripts, maps, slides, audio tapes, microforms, videotapes, laser discs, and other non-print material. The University Library is ranked highly nationally and globally, and its collections and services are used heavily by students, faculty, and scholars. More than one million items are circulated annually, and many more are used on site and virtually from anywhere in the world. For more information, please visit www.library.illinois.edu.

About the National Science Foundation

The National Science Foundation (NSF) is an independent federal agency created by Congress in 1950 "to promote the progress of science; to advance the national health, prosperity, and welfare; to secure the national defense..." With an annual budget of about \$6.9 billion (FY 2010), we are the funding source for approximately 20 percent of all federally supported basic research conducted by America's colleges and universities. In many fields such as mathematics, computer science and the social sciences, NSF is the major source of federal backing. Learn more at www.nsf.gov.