

INSTITUTE FOR SOCIETY, CULTURE AND ENVIRONMENT

www.isce.vt.edu

Karen A. Roberto

Professor of human development, Director of the Center for Gerontology, and Director of the Institute for Society, Culture and Environment

MISSION STATEMENT

To strengthen the university's competitive position in the social sciences, humanities, and the arts. The Institute for Society, Culture and Environment (ISCE) provides organizational, technical, and financial support for targeted creative, interactive, multidisciplinary, and interdisciplinary research endeavors that address issues of social and individual transformation.

Goals and Objectives Achieved for FY 2012

Enhance support for interdisciplinary collaborations, particularly in the area of social, behavioral, and public health.

Goal accomplishment: Institute-supported faculty received over \$5.5 million in grant funds to support collaborative research projects.

Interdisciplinary teams of ISCE-supported faculty submitted proposals to federal agencies and private foundations to support health-related research including autism, mild cognitive impairment, cancer survivorship, childhood obesity, adult depression, rural health care, and chronic disease management. Examples of funded projects include:

Isabel Bradburn is leading an NIH supported initiative (\$40,000) designed to develop interdisciplinary research teams and fundable research projects that include investigators from the social and behavioral sciences. The focus of the ISCE program is intergenerational obesity and involves more than 30 scientists and scholars from across the university.

Thurmon Lockhart, Dong Ha, and Karen Roberto, in collaboration with John Lach at the University of Virginia, received a \$1.2 million grant from the National Science Foundation's Smart Health and Wellbeing Program to create and evaluate a portable fall prediction monitoring system for early detection of fall risks. The goal of the project is to reduce adverse health effects and injuries, and ultimately, reduce falls-related mortality.

In addition, Michael Evans and colleagues from computer science, education, learning sciences, mathematics, mobile software engineering, and psychology are leading two NSF-funded projects. Studio Stem (\$1.3 million) focuses on the

implementation and evaluation of an inquiry-based after-school program for middle school students in Appalachia, and the GAMES project (\$1.3 million) investigates how digital games engage middle-school students and how game features can be leveraged to enhance students learning of fractions.

Expand investment and leadership in the area of social complexity and individual risk.

Goal accomplishment: The Institute provided faculty financial and technical support for developing successful proposals that address issues of risk and resilience. Examples of fund projects include:

A multidisciplinary group of researchers, led by Dianna Ridgwell, received funding for a Research Experience for Undergraduates Program (REU) from NSF (\$365,000) that brings together scholars from the Colleges of Engineering, Liberal Arts and Human Sciences, and Science and 10 students for an on-campus research experience focused on understanding and preventing societal violence. This is one of the first NSF REUs in the social sciences and humanities.

Building on research jointly supported by ISCE and ICTAS, Mark Edwards and Yanna Lambrinidou received a \$350,000 grant from NSF to create and evaluate a graduate-level ethics course designed to help students bridge the gap between engineering and society.

In the National Capital Region, Kris Wernstedt and Patrick Roberts received funding from NSF (\$400,000) to examine opportunities for use of seasonal climate forecasts in flood planning and management.



Michael Evans from the School of Education and his interdisciplinary team members Osman Balci of computer science, Mido Chang of the School of Education, Kriby Deater-Decker of psychology, and Andy Norton of math created CandyFactory, an educational game that teaches the concept of fractions to middle-school students. The CandyFactory transformative educational app (release two) for the iPad was released on June 13, 2012.

Promote opportunities among the faculty to develop international collaborations.

Goal accomplishment: The Institute supported the development of faculty interests and efforts across the globe.

David Orden, director of ISCE's Global Issues Initiative, collaborated with colleagues at the International Food Policy Research Institute to secure funding for the four-year, \$22.7 million, multi-dimensional Pakistan Agriculture and Food Security Strategy Support Program.

Three faculty members received ISCE - University of Kent Partnering Awards designed to foster links and forge relationships that will ultimately result in the submission of grant proposals to a government or private agency for collaborative research projects.

Additional Accomplishments

- ◆ In July 2011, ISCE launched the Center for Public Health Practice and Research (CPHPR), directed by Kathy Hosig. The vision for the center is to be a catalyst for engaged scholarship in public health through applied research and practice-based teaching.

GOALS AND OBJECTIVES

for FY 2013

Invest in growth of interdisciplinary collaborations, particularly in the area of human development and social, behavioral, and public health.

Facilitate and support the development of faculty teams addressing issues of social complexity and individual risk, particularly in the area of applied ethics.

Collaborate with other institutes and colleges to support faculty efforts in developing cross-disciplinary and international collaborations.