

2014 Board of Trustees' Award for Outstanding Research and Creative Scholarship Recipient

Dr. Diane M. Strong

Professor Diane M. Strong has done creative and groundbreaking research in several areas relating to the accumulation, processing and integration of technologically based information. These areas include Data Quality research, Enterprise Information systems, and the use of technology based information in health care delivery. This research has been embodied in over a hundred combined journal articles, book chapters, and public presentations; in many well-funded grants; and recognized in thousands of citations in scholarly literature in which other researchers make use of her efforts-giving her a citation index in the top 1-2% of her field. Her essay "Beyond accuracy: What data quality means to data consumers" receives close to 2000 citations-one of the very highest citations for a paper from a WPI faculty.

The overriding theme which permeates much of Professor Strong's work is finding novel and increasingly effective ways to answer questions about how well human beings and information technology can better adapt to each other in institutional settings; particularly, in industry, business, and health care. Rather than focusing on one or the other of the human-technology dyad, Strong has specialized in trying to find an evidence based method of assessing and recommending changes to promote reciprocal interaction, proper fit, and successful adaptations.

Professor Strong's work is known both nationally and internationally. Some of her published papers are already recognized as classics in the field; many have been published in the field's most selective journals (e.g., *MIS Quarterly*, *Journal of the Association of Information Systems*, *Organization Science*). According to Professor Claudia Loebbecke, who holds an endowed chair in Management Information at the University of Cologne: "...in Germany and elsewhere in

Europe, there are research groups continuing the data quality research started by Professor Strong and her colleagues...Similarly, her research in Enterprise Systems has been taken on by several research groups in Germany and elsewhere in Europe and Australia."

Professor Strong's widely recognized expertise is also evidenced in success with granting agencies, including the National Science Foundation, The Social Science Research Council of Canada, and the Veterans' Administration. For example, she is now Principal Investigator for a \$1.2 million research grant involving an interdisciplinary team of researchers across Electrical and Computer Engineering,

Computer Science, and the School of Business, as well as researchers from the University of Massachusetts Medical School.

Given the scope and significance of health care to both individual's quality of life and the national and global economy, Strong's recent work on the integration of information systems in health care setting is particularly significant. In the words of the Associate Dean of the Simon Frazier University School of Business: Strong's "extensive investigation of the challenges of implementing electronic health records in several different health care organizations has garnered a great deal of attention from practitioners. A number of health care organizations have become so interested in this work that they have asked to become partners in the research."

Professor Strong's leadership in integrating Information Systems and health care was instrumental in her collaborative efforts to establish and direct WPI's Center for eHealth Innovation and Process Transformation (renamed Healthcare Delivery Institute). She helped secure significant grant funding for the Center and its research projects, and has built collaborative relationships with healthcare providers that provide important research opportunities and contribute to these organizations' development.

For creative and widely recognized academic work with both current and enduring social importance, we are pleased and proud to award Professor Diane M. Strong the 2014 WPI Trustees' Award for Outstanding Research and Creative Scholarship.