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NSF-SUPPORTED RESEARCH DATA ALLIANCE/U.S. COLLABORATES WITH INTERNATIONAL PARTNERS TO ACCELERATE DATA SHARING

Rensselaer computer scientist Francine Berman to lead U.S. engagement

Data sharing across media and national borders can enhance discovery and innovation.

Credit and Larger Version

November 8, 2012

The National Science Foundation today awarded a $2.5-million grant to Rensselaer Polytechnic Institute to enable its participation in a new international organization that will accelerate research data sharing among scientists around the globe.

The grant will be used to develop a Research Data Alliance (RDA) that will allow researchers the world over to collaboratively use scientific data to speed up innovation.

To date, more than 120 U.S. and international participants are helping conceptualize the organization and populate its first efforts. Along with scientific and data leaders from the United States, members from Australia and the European Union are part of the new alliance’s organizational steering committee. U.S. participation will be led by Rensselaer Computer Science Professor Francine Berman.

"The Research Data Alliance addresses a world-wide need for efforts that accelerate data-driven innovation," Berman said. "The National Science Foundation, with U.S. and international partners, is expanding the global conversation on data-driven research. Community
development of the RDA will contribute to the global infrastructure needed for new discovery and insights."

The international launch and first plenary of the RDA will be held in Gothenburg, Sweden, in March of 2013.

As an example of gains that can be expected from the RDA, Berman explained that researchers sharing open-access data sets about a particular disease would increase the pool of information, and therefore, the potential for insights that can only be gained at large scale.

She added that the coordination of economic data sets, geographic data sets and census data to create urban data sets can be used to make strategic predictions about programs and initiatives that can improve the quality of life in cities. "All of us use digital information every day to augment our lives in innovative ways," Berman said. "The goal of the Research Data Alliance is to help researchers work with a world of useful digital information more innovatively and at scale."

"RDA today is a timely, ambitious and practical advance in data sharing that is key to scientific collaboration, enabling discoveries to address needs of our global society," said Robert Chadduck, NSF program director for data and cyberinfrastructure, which funded the grant. "We are proud to join our global colleagues in supporting this initiative."

Leading up to RDA's March launch meeting in Sweden, collaboration is already underway in a number of areas, with new RDA members developing charters for working groups. Berman and her collaborators expect the RDA to facilitate outcome-oriented efforts in a variety of areas, including the development and adoption of data cyberinfrastructure, the harmonization of standards, and the development and adoption of data-sharing policy and practice, as well as other efforts. The goal is to make data obtained from scientific research easier to access, combine, use and re-use for discovery.

Although the RDA has broad scope, it is being loosely modeled on a number of successful community organizations, including the Internet Engineering Task Force, which focuses on Internet standards, and the Message Passing Interface Forum, which focused on communication protocols for parallel computers.

"At some point, individual efforts achieve a 'tipping point,' where community coordination is needed to accelerate progress," Berman said. "With increasing global recognition of the potential of 'Big Data' to drive new insights, the data community is coming together to facilitate efforts that require community-wide coordination to achieve impact."

Berman is an international leader in data cyberinfrastructure. Prior to joining Rensselaer in 2009, she served as director of the San Diego Supercomputer Center for nine years. She joined Rensselaer as vice president for research and recently stepped down to serve as the Chair of Research Data Alliance/U.S.

"This is a tremendously exciting time for the data community and the world that benefits from ubiquitous information everywhere," Berman said. "I am delighted to be contributing at a global level, and to help..."
develop an organization that has tremendous potential for positive impact."

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Related Websites
Research Data Alliance Website: http://www.rd-alliance.org
Francine Berman’s biographical information: http://www.cs.rpi.edu/~bermaf

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