

Abstract for Presentation by Chris Greer, NIST

Title: International cooperation and coordination for an interoperable, global research data infrastructure

Progress on many of today's grand challenges for science and engineering – from clean energy to sustainable environments and improved health care - can best be achieved through international cooperation and coordination. Advanced sensor technologies, digital instrumentation, high performance computing, powerful modeling and simulation capabilities, and advanced networking and other information technologies are producing digital data streams at unprecedented scales. To meet these challenges and ensure maximum benefit for progress from these growing data streams, science in the digital age must be global and data-driven. This requires a research data infrastructure that is global in scale and allows sharing of scientific data across disciplinary and other boundaries. This talk will focus on strategies for international cooperation and coordination in creating a global research data infrastructure as a platform for discovery and innovation. The Research Data Alliance, or RDA, is a non-profit, international organization focused on consensus, voluntary approaches to global data interoperability. The RDA vision is one of “researchers and innovators openly sharing data across technologies, disciplines, and countries to address the grand challenges of society.” The Alliance comprises 1600 members from more than 70 countries. It includes 17 current and proposed working groups ranging from data citation to big data analytics along with 24 interest groups from metadata to domain repositories. Through its broad representation and reliance on voluntary, consensus strategies, the RDA provides a forum for working together toward an interoperable, global data infrastructure.