| | | |
|---|---|---|
| **Title** | : | **Scientific Data: Increasing Transparency and Reducing the Grey** |
| **Author(s)** | : | Bonnie C. Carroll and June Crowe |
| | | Information International Associates, Inc. (USA) |
| **Session Four** | | |
| **Paper 1** | | |

The foundation for all scientific research begins with data, however most raw data is not publicly available.  Past practices safeguarding scientific data, such as the data used to create technical reports in the post WWII era, as well as the metadata used to describe this data are major obstacles in the efficient collection, management, and accessibility of scientific grey literature.  Furthermore, modern information technologies are enabling increasing amounts of data creation and opportunities to transform and apply such data in innovative ways.

We will provide an overview of the current scientific data landscape, primarily in the United States with regard to both policies and tactical approaches to better scientific data management and access.  This includes how to improve bibliographic control (a metric for the definition of grey) as well as approaches to make data sets more usable.  Since few scientific data sets are commercially produced, the historical framework for differentiating grey literature must adapt to new ways of making scientific data sets less grey.

To illustrate how the identification, collection, management and access to scientific data is increasingly less grey, we will examine a few case studies from communities of practice including medicine, earth sciences, and biodiversity.  We will examine what has been done to make them less grey and more discoverable, and the policies that are driving the change.  We will conclude with a look to the future – the policies and technologies that will facilitate additional progress.

Keywords: Scientific data, Information policies, Grey Literature, Data Discovery, Open Data

## Bionote(s)

**Bonnie C. Carroll**, President of Information International Associates, Inc. (IIa), supports government and industry in managing information as a strategic resource. She is Secretariat Director of CENDI, the federal scientific and technical information (STI) managers' group and Consultant to USGS, supporting the development of the National Biological Information Infrastructure and the OSTP Biodiversity Informatics Working Group to promote interagency coordination of national and international biodiversity informatics initiatives. For over 3 decades, she has participated in research and development projects including a major assessment of STI in the U.S. for the National Science Foundation; the development of a topography of STI systems for the Library of Congress; and the development of a system to provide input to the DOE's Energy Science and Technology Database.  She helped develop a National Information Strategy for the Kingdom of Jordan and has done special studies for the International Atomic Energy Agency, UNESCO and the World Bank.  Before starting IIa, Ms. Carroll worked at DOE's Office of Scientific and Technical Information as Director of Program Development and International Activities and Deputy and Acting Assistant Manager for Information Services. She worked with contract research companies, Oak Ridge National Laboratory, and Cornell University.  She served as President of the American Society for Information Science &Technology and as Chair of the American Association for the Advancement of Science Section on Information, Computing and Communications. Ms. Carroll is currently the US National Representation to International CODATA under the auspices of the International Committee for Science (ICSU) and is on the editorial board for the journal Information Services and Use.  She has an MS from Columbia University and a BA from Cornell University. Ms. Carroll has been active in gray literature research and management dating back to the early 1990s. Email: bcarroll@iiaweb.com

**June Crowe** is the Senior Researcher and Group Manager, Open Source Research Division at Information International Associates, Inc. (IIa).  She received her AMLS from the University of Michigan, Ann Arbor and her M.Ed. in geographic education from the University of Georgia, Athens.  She has extensive experience in the management and operations of library services across government, public, academic, and special libraries. At IIa she manages the open source research division which focuses on medical, socio-cultural, science and technology and business research. Her primary interests are open source information in Grey Literature, digital repositories, and open source intelligence tools. Email: jcrowe@iiaweb.com