

National and International Efforts to Create Policy for Scientific Collections



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Collections are infrastructure for science as roads and bridges are infrastructure for commerce



I-35 Bridge collapse in Minneapolis, Aug 07

Administration Priorities in Research and Development

- Joint memoranda from OSTP and OMB on Administration Budget Priorities for R&D (issued in 2005, 2006, 2007) for FY 2007, 2008, 2009 called on Federal agencies to maximize coordination and planning for scientific collections
- President's Science Advisor, Dr. Jack Marburger, brought up collections as a topic at G-8 Science Ministers meeting in Dec. 05.

The Federal Interagency Working Group on Scientific Collections

- ❑ Created in 2005 by NSTC to examine policy issues in the framework of scientific collections as national and international infrastructure for science
- ❑ Concerned with all object-based scientific collections (not collections of data only)
- ❑ Survey of Federally held collections—from microbes to moonrocks; living and nonliving



The Federal Interagency Working Group on Scientific Collections

- ❑ NSF survey of its grantees
- ❑ Federal survey + NSF survey still do not cover the universe of US collections
- ❑ Many collection managers were reluctant to participate in the surveys

- ❑ IWGSC report just finalized; on the OSTP website at www.ostp.gov/cs/nstc/documents_reports

Major Findings of the IWGSC

- ❑ Federal agencies own and maintain diverse collections that are essential to supporting agency missions and the global research enterprise
- ❑ Most federal collections grow at predictable rates, but trained staff and funding are declining
- ❑ There is a lack of documentation of contents and condition of some Federal collections

Major Findings of the IWGSC

- ❑ Collections are generally accessible for research or other uses, but databases are not widely developed and Web access to collection information is in its infancy
- ❑ Agencies varied widely in the degree to which they had developed written policies for management and use of collections
- ❑ Collections often have impacts in areas that are unrelated to their original purposes

Major Findings of the IWGSC

- ❑ Meeting the financial and staffing needs of managing Federal collections can require trade-offs among different competing agency responsibilities
- ❑ Federal agencies have developed a variety of business models for long-term management of collections
- ❑ The legal status of, and legislative authority behind, some federal collections is not well understood by some agencies

Major Findings of the IWGSC

- The degree to which Federal and non-Federal collection databases can communicate with one another is highly variable

Recommendations of the IWGSC

1. Agencies with scientific collections should develop realistic cost projections for collection maintenance and operation, and work to incorporate the needed support as stable budget elements
2. Agencies should improve both the documentation of the contents of their collections and access to the documentation on the internet

Recommendations of the IWGSC

3. Agencies should exchange documents that describe their policies, procedures, and best practices
4. A review is needed of the legal and legislative basis for the Federal role in scientific collections, thereby clarifying agency responsibilities
5. An online clearinghouse of information about Federal collections should be created. GRIN was cited as one model

Recommendations of the IWGSC

6. A periodic report on the status and condition of scientific collection infrastructure be prepared and submitted to COS, OSTP, and OMB
7. The IWGSC should be continued beyond its expiration date of March 2009

OECD Global Science Forum

- Workshop on Scientific Collections convened in the Netherlands in 2007
- US chaired second workshop in 2008
- In October, 2008, the GSF authorized further work to create a coordinating mechanism for international scientific collections issues
- Next meeting to be held in London, March 2009

Unmet needs relating to scientific collections

- “Orphaned” collections
- Workforce development and training
 - Unclear career paths
 - Limited mobility
 - Needs for capacity development
- Need for common standards and best practices

Unmet needs relating to scientific collections

- Need for improved electronic cataloging and accessibility
- Some research questions can only be answered by combining information from multiple collections

Mission of an International Coordinating Mechanism for Scientific Collections

- ❑ Enable global-scale research activities
- ❑ Promote an international culture of scientific collections as large-scale infrastructure
- ❑ Improve access to and mobility of collection objects and associated data

Mission of an International Coordinating Mechanism for Scientific Collections

- ❑ Improve training and mobility of people associated with collections; foster capacity-building
- ❑ Identify and integrate existing standards of community practice, and develop additional standards deemed necessary

Overarching Principles for a Coordinating Mechanism

- Add value to existing initiatives without duplicating efforts
- Realizing full scientific value of collections as global research infrastructure will require global interdisciplinary integration

Next Steps for International Group

Four Working Groups

1. Strategic Planning
2. Program of work and outreach to research communities
3. Governance, staffing, business planning, and budget
4. Launch event and fund-raising

Reps to this meeting are designated by their governments. However, they will be seeking input from the whole scientific community in their respective countries.

Other Pertinent Happenings

- ❑ VA destruction of bacterial isolates that led to hearing by House Committee on Science and Technology
- ❑ “Situation Report on Systematic Biology” issued by Federal Interagency Committee on Invasive Terrestrial Arthropods and Pathogens (ITAP) at www.itap.gov/nal_web/itap/docs/itapreprt_mar23.pdf
- ❑ Interest in IWGSC activity from a variety of professional societies
- ❑ “Launch event” for IWGSC report late March or early April to generate attention to these issues