



## THE UNIQUE ROLE OF FEDERAL SCIENTIFIC COLLECTIONS

INFRASTRUCTURE GENERATING  
BENEFITS, SERVING DIVERSE  
AGENCY MISSIONS

A Report of the Interagency Working Group  
on Scientific Collections

EDITED BY

David E. Schindel, Diane C. DiEuliis,  
and Bruce Geyman



# A Report of the U.S. Federal Interagency Working Group on Scientific Collections

# IWGSC Collections: Microbes to Moon Rocks



# IWGSC Background

- IWGSC created in 2005, part of White House National S&T Council (NSTC)
- Reflects federal view of collections as S&T infrastructure
- 2009 IWGSC “Green Report”
  - **First-ever survey of Federal collections**
  - **Seven recommendations, three selected for implementation by OSTP**
    - **Improve Web-based information access**
    - **Document and share collection policies**
    - **Create online information clearinghouse**



# 2023 Report: Unique Federal Role

## Contents:

- Summary of IWGSC accomplishments, 2009-present
- Forward look at challenges and opportunities for Federal collections
- How do Federal scientific collections differ from non-Federal counterpart collections?
- “Vignettes” of mission-driven benefits and impacts
  - Covid-19 and National Health
  - Climate Change
  - National Food Security
  - Environmental Health and Safety
  - Scientific Discovery
  - Innovation and Commerce
  - Stem Education

# IWGSC Milestones and Products

2005

**The White House Engages:** The IWGSC is chartered by OSTP



2009

**The First Survey:** IWGSC publishes "Scientific Collections: Mission Critical Infrastructure for Federal Science Agencies"



2012

**Congress Engages:** "America COMPETES" is signed into law, incorporating IWGSC's recommendations



2020

**Measuring Costs and Benefits:** IWGSC publishes landmark economic study



2006

**Lost Legionaire's:** Veterans Affairs Medical Center, Pittsburgh, destroys 10,000 specimens in historic collection



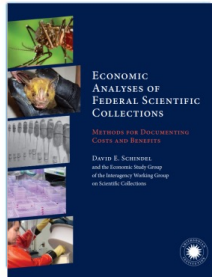
2010

**Setting Policy:** IWGSC publishes "Recommendations for Departmental Collections Policies"



2015

**Enhancing Access:** IWGSC launches GRSciColl, its public information clearinghouse with the first-ever Registry of Federal Scientific Collections



2023

**More than a Decade of Progress:** IWGSC publishes "The Unique Role of Federal Scientific Collections"

2014

An official website of the United States government. [Here's how you know.](#)

**USDA** Interagency Working Group on Scientific Collections  
U.S. DEPARTMENT OF AGRICULTURE

[Home](#) [About](#) [IWGSC Documents](#) [Agency Documents](#) [News](#) [Registry](#)

## IWGSC Clearinghouse

- Hosted by USDA National Agricultural Library
- Collections policies for Departments and Agencies
- IWGSC reports
- Registry of Federal scientific collections
- News reports and publications related to Federal collections

# Potential Topics for IWGSC Decadal Program of Work

- Facilitate cross-disciplinary use of Federal collections for societal risk research on Climate Change, Emerging Pandemics, and others
- Promote education and professional development for next generation of Federal collection workforce
- Support Federal initiative on Bioeconomy
- Facilitate agency digitization to increase access and impact of Federal collections
- Examine Federal policies concerning international benefit sharing stemming from access and use
- Improve evidence-based collection management

# How are Federal Scientific Collections Different?

- Tied to Department and Agency Missions
  - Research is primarily mission-driven, not curiosity- or profit-driven
- Long-term goals and support derived from Congressional legislation
  - Sampling can extend over decades, creating unique longitudinal time-series for trend analyses
- Often used for legal and regulatory enforcement
  - Sampling and collection management may require chain-of-custody sampling, more secure storage

# Conclusions of the Report

- Federal scientific collections have expectations for:
  - Transparency in use and access regulations
  - Accessibility within and across disciplines
  - Accountability for the services offered
  - Long-term preservation and security
  - Contributing to All-Of-Government responses
- Digitization is essential for accessibility and generating benefits



# IWGSC Member Departments and Agencies

Agency for International  
Development

Department of Agriculture

Department of Commerce

Department of Defense

Department of Energy

Department of Homeland  
Security

Department of Justice

Department of Health and  
Human Services

Department of the Interior

Department of State

Department of Transportation

Department of Veterans Affairs

Environmental Protection

Agency

National Aeronautics and Space

Administration

National Science Foundation

Smithsonian Institution

# Acknowledgments

The Co-chairs also thank the following Agencies that provided 21 examples of examples of benefits generated by Federal scientific collections:

- USDA/Agricultural Research Service, Forest Service
- Smithsonian Institution
- Interior/National Park Service, USGS,
- Commerce/NOAA, NIST
- HHS/CDC, NIH, NCI
- Veterans Affairs
- National Science Foundation

The Co-chairs gratefully acknowledge the following individuals who provided support to production of this report:

- Eileen Graham, SI
- Thomas Olszewski, IDA Science and Technology Policy Institute

# Additional Information

- IWGSC Clearinghouse: <https://iwgsc.nal.usda.gov>
- Blue Report webpage:  
<https://iwgsc.nal.usda.gov/unique-role-federal-scientific-collections>
- Other IWGSC Reports:
  - Green Report  
[https://iwgsc.nal.usda.gov/sites/default/files/IWGSC\\_GreenReport\\_FINAL\\_2009.pdf](https://iwgsc.nal.usda.gov/sites/default/files/IWGSC_GreenReport_FINAL_2009.pdf)
  - Economic Study  
<https://iwgsc.nal.usda.gov/economic-analyses-federal-scientific-collections>