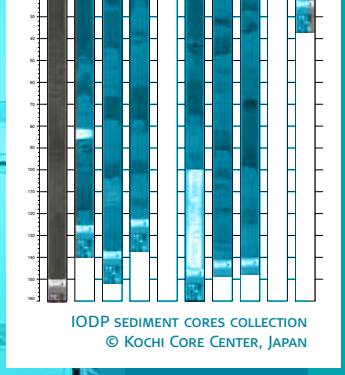
Herbarium
© Natural History Museum, London



IODP sediment cores collection
© Kochi Core Center, Japan

Ice Core Storage facility
© National Ice Core Laboratory, USGS (USA)

Collection of anthropological casts moulded on the living (19th century)
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SciColl
Scientific Collections International

AN INTERNATIONAL, SCIENCE-DRIVEN, INTERDISCIPLINARY COORDINATING MECHANISM FOR SCIENTIFIC COLLECTIONS

A project fostered by the Global Science Forum of the OECD

What are scientific collections?

Scientific collections are samples and specimens stored primarily for research purposes **rather than for historical or artistic reasons. These include collections and repositories of biomedical samples, human artefacts, natural history samples (rocks, plants, animals), and diverse other objects of scientific study, together with their associated data and archival material.**

Scientific collections are large-scale facilities **which are critical for the conduct of** research on global issues **such as food security, public health, global change, and conservation of biodiversity and ecosystems.**

Long-term scientific progress in these fields will depend on the collections. The success of future generations of researchers requires the highest standards of preservation and management of these collections to ensure:

- **Rapid access to samples that may be in collections around the world;**
- **Opportunities to use new analytical techniques on old samples to generate new knowledge;**
- **Ability to verify past results by studying voucher and reference material and to re-use them to address new research questions; and**
- **Availability of samples that document conditions at a time and place (such as environmental samples), and may be critical for government regulation or legal decisions.**

Why a coordinating mechanism?

Scientific collections are the essential infrastructure of many research disciplines but, unlike large centralized infrastructure facilities like telescopes or synchrotrons, collections are distributed geographically and managed independently. No one country can provide all the collections and trained collection management staff needed by a research community **but collectively they can support the needs of all disciplines. International coordination is required to ensure that the collections in each country and discipline are accessible and well-managed, so that researchers in all disciplines and countries will have the research infrastructure they need.**

One of the most pressing needs is coordination of the Information Technology infrastructure of the collections distributed across disciplines. Some disciplines are creating and implementing data standards that improve access to their collections, but interoperability among collections in different disciplines is at a very low level. **Future generations of interdisciplinary research will need access to collections across traditional disciplinary boundaries and coordination of data standards and access will be essential.**

Frozen tissue collections, Maryland (USA)
© SeraCare Life Sciences

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National Animal Parasite Collection
© Agricultural Research Service, USDA

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What will SciColl do?

SciColl will enable and promote global-scale, interdisciplinary collaborative research that relies on collections and their associated information **by:**

- Engaging the participation of institutions and government agencies concerned with collections in all geographic regions and relevant scientific disciplines;
- Creating international, interdisciplinary working groups that will replace scattered, redundant activities and will lower costs of managing collections and increase their research impacts and benefits to society;
- Promoting the development and use of standards and best practices in collection management, including specimen conservation, performance measurement and assessment, workforce training;
- Catalyzing development and implementation of data management policies and practices that will improve access to and interoperability among collections;
- Enabling researchers in different disciplines to identify and pursue next-generation research opportunities that emerge from and require access to collections across scientific disciplines; and
- Providing an interface between collections-based research communities and policy-makers concerned with many broader societal issues such as climate change and food

SciColl's mission

- To help scientific collections and their host institutions increase their effectiveness and the return on investments made in the long-term collections management and the training they provide to the professional workforce responsible for them,

- To catalyze ground-breaking interdisciplinary research that relies on access to scientific collections and their associated information.

How to get involved

Expressions of interest are welcome on
www.scicoll.org