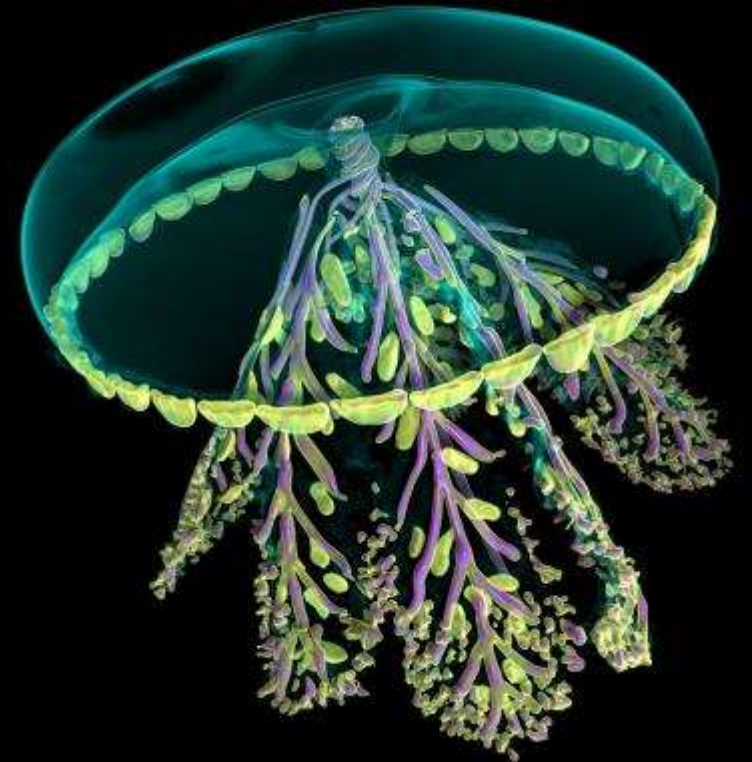


Work package:
**NA3: Collections in the age of
genomics - standards & processes**

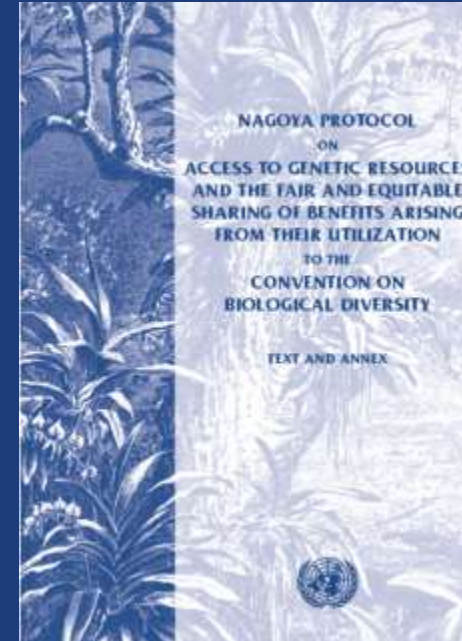
Ole Seberg, Executive Committee Chair of GGBN
Natural History Museum of Denmark



- GGBN is an unincorporated global network of Biodiversity Biobanks initiated in 2011 and formally created in 2016
- Vision: To create a global network of well-managed collections of genome-quality (and other) tissue samples from across the Tree of Life, benefiting society through biodiversity research, development and conservation
- GGBN presently consists of 85 members



- Foster collaborations among repositories of molecular biodiversity in order to ensure quality standards, improve best practices, secure interoperability, and harmonize exchange of material in accordance with national and international legislation and conventions.
- What do we bring to the table? Eight years expertise in managing and handling genomic samples and data



Key Goals vision + aspiration of NA3

Evaluate standards for
biodiversity /
environmental
biobanks

Define best practices
for the use of
molecular collections

Try to ease exchange
of samples and related
information while
staying compliant with
legislation and
conventions

Task 1 (NA3.1)

- Landscape analysis of biodiversity and environmental biobank standards and practices
- GGBN/Zoological Research Museum Alexander Koenig
- Research standards for different biobank types
- Integrate traditional collections with environmental specimen collections
- Develop a handbook of standards

Task 2 (NA3.2)

- Best practices for usage of molecular collections
- GGBN/Botanical Garden and Botanical Museum Berlin
- Evaluation of existing standards incl. policies for GR samples
- Documentation of loan and on-demand requests of GR

Task 3 (NA3.3)

- Adopt a common Code of Conduct on Access and Benefit Sharing (ABS) – Facilitate use
- GGBN/Natural History Museum of Denmark
- Establish an IPEN-like system
- Landscape analysis for other options than IPEN
- Integration with CETAF's CoC
- Facilitate data integration of Biorepositories with GGBN standards

Work Package Deliverables

D3.1

- Handbook about missing standard for biodiversity biobanks
- Compare standards (storage, data, etc.) among
 - Museums
 - Environmental samples
 - Culture collections
 - Veterinary
 - Zoos/aquaria

D3.2

- Handbook on best practice for usage of molecular collections
- Loan request policies
- Documentation of molecular loans
- Fee models for services

D3.3

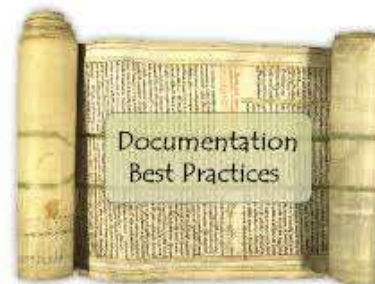
- Certification System created
- Registration procedures
- Towards one legal entity
- Evaluate IPEN's tracking system

Dissemination Plans



Task 3.1 Month 36

Handbook on
biodiversity and
environmental standards



Task 3.2 Month 48

Share best practices for
molecular collections



Task 3.3 Month 36

Towards a trans-
institutional registration
system CoC

GBBN is a part of the global infrastructure

GBBN Data
Standard

GBBN Data
Portal

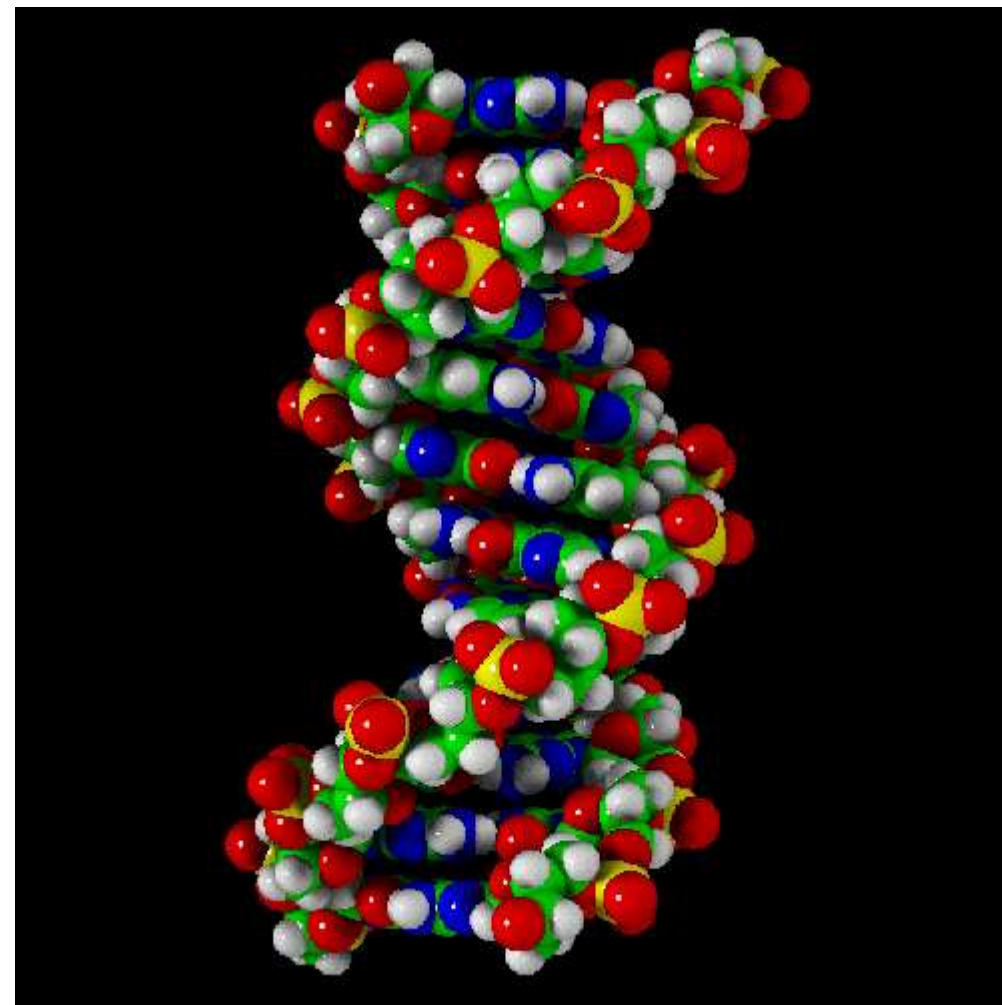
ABS guidelines

The mission of DiSSCo

To **mobilize, unify** and **deliver** bio- and geo-diversity information at the *scale, form* and *precision* required by scientific communities; transforming a fragmented landscape into a coherent and responsive research infrastructure.

External challenges affecting NA3

- Activities related to the Convention on Biological Diversity, e.g., DSI not defined, the implementation of the clearinghouse mechanism slow, lack of coordination between national stakeholders
- Data management tools must be aligned with other initiatives such as GBIF.
- Standards must be accepted by TDWG
- Alignment with other EU initiatives is needed, ICEDIG, Mobilse, DiSSCo Prepare
- To get impact beyond EU – Getting a Global outreach



- Planned meetings
 - Teleconference including all participants March 5th, 2019
- Key stakeholders and drivers

GD



Jonas Astrin -> NA3.1

GGBN/ Zoological Research Museum A. Koenig
Leibniz Institute for Animal Biodiversity

Gabi Droege -> NA3.2

GGBN/ Botanischer Garten und Botanisches Museum Berlin

Ole Seberg-> NA3.3

GGBN/ Natural History Museum of Denmark

Katie Barker

GGBN Secretariat, Program Manager
National Museum of Natural History, Smithsonian Institution

KB



OS



JA



- Insufficient participation by institutions/individual
- Interference of unknown consequences from CBD (ABS/Nagoya)
- Slow acceptance of Data standards by TWDG
- Training in molecular and digital standards and protocols especially those aimed at improving interoperability of data within the molecular (NA3) and digital (NA4) work packages difficult to implement
- Stable identifiers (NA2) usable for tracking molecular derivatives are needed
- Integration of JRA2 virtual access and NA3.2 challenging

Any questions?

