



Bundesministerium
für Bildung
und Forschung



Overview of the GBRCN microbial domain

David Smith

Joint human and microbial domain GBRCN meeting
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Summary



- **The GBRCN demonstration project**
- **Goals**
- **MIRRI**
- **Human derived material and Microbial domain commonalities and differences**

The GBRCN Demonstration Project



- Builds upon the OECD BRC initiative with an initial focus on microorganisms
- Global co-ordination of laboratory-based microbial resource collections
- Microbial culture collections at different stages of development with different remits
- Developing a common operational framework
- Implement best practice
- Establish governance structures and membership requirements
- The German Government BMBF funds a small Secretariat to co-ordinate activities
 - 22 candidate microbial domain BRCs in 15 countries contributing at their own cost
 - Brazil ● Belgium ● Canada ● China ● Finland
 - France ● Germany ● Italy ● Japan ● Kenya
 - The Netherlands ● Portugal ● Spain ● Uganda

NEXT phase MIRRI and linkage to BBMRI and other Infrastructures



The GBRCN goals:



- Facilitated legal access to high quality microbial resources
- User interface to develop improved output
- Common operations delivering best practice
- Harmonised mechanisms for compliance with legislation
e.g. Biorisk:- biosafety and biosecurity
- Common rules for materials and data exchange; user and member confidence
- Adding value to facilitate uptake and use
- A mechanism for capacity building
- A shared work programme to address key challenges

The aim to provide better defined resources and services with broader coverage to facilitate innovative research

The GBRCN Capacity building programme

- **At the BRC level**
 - the human resources
 - Facilities
 - technologies
 - knowledge necessary for development

- **Network capacity**
 - Information system
 - Funding mechanisms
 - Tools for governance and co-ordination
 - Harmonised policy



Implementation through funded projects

Microbial Resources Research Infrastructure - MIRRI



- The GBRCN represents all domains ; animal, human derived material, plant and microorganisms globally
- MIRRI is pan European with a global approach
 - Partners - 66 European BRCS with some others from Africa, Asia, Oceania and the Americas with
 - Policy makers, funders, International Organisations, Scientific communities, sector representatives
 - Role to enhance coverage and quality of materials and associated services
 - Focus on agricultural biotechnology linking into healthcare and other sectors
- MIRRI is a cluster within the GBRCN microbial domain

Commonalities between Human and Microbial Domains



1. **Creating awareness and encouraging use**
 2. **Engagement of Governments and policy makers**
 3. **Legal operational framework - although different emphasis**
 4. **Data management and provision**
 5. **Working with higher education to generate needed human resources**
 6. **Implementing best practices, establishing quality and trust**
 7. **Address customers needs, bring them into decision making process**
 8. **Long-term funding - business plan**
 - Network sustainability versus national support of BRCs
 - Research programme allocation for BRC support to protect investment *i.e. the long-term use of the biological resource*
 - Projectise specific activities for funding (commons issues *e.g. IT*)
1. **Governance, structure and function (some details different but compatible)**
 2. **Secretariat scope and function**

Differences between Domain-Specific Networks



- 1. Microorganisms self propagate**
 - Both positive and negative aspects
- 1. More than one species**
 - Microbial taxonomic expertise diminishing – transition to molecular and automation
- 1. CBD considered a hindrance due to restricted distribution between countries**
 - Potential honest broker status mBRCs
- 1. Biosecurity – dual use dilemma**
- 2. Complementarities with existing networks**
 - e.g. WFCC; ECCO; 20 National
- 1. Different user communities for different domains**

**BRCs
underpin the
life sciences**

Thank you



GBRCN Asia Seminar: International Symposium on management and Utilisation of microbial Resources and Fungal DNA Barcoding



**Working together
to address the
challenges**

**Next GBRCN demonstration project seminar
February 2011 in Kenya**

Identified activities in common for discussion

Structure: Hub and spoke: Secretariat and resource centres; activity clusters

Participants: Governments – MoU

Members: BRCs – agreement/commitment

Capacity building

Implementation of OECD Best Practice

Data

Legal operational framework

Outreach

