



BBMRI

Biobanking and
Biomolecular
Resources Research
Infrastructure



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Biobanking and Biomolecular Resources Research Infrastructure: The need for common standards

K. Zatloukal

Medical University of Graz, Austria

Washington,

June 5th 2012

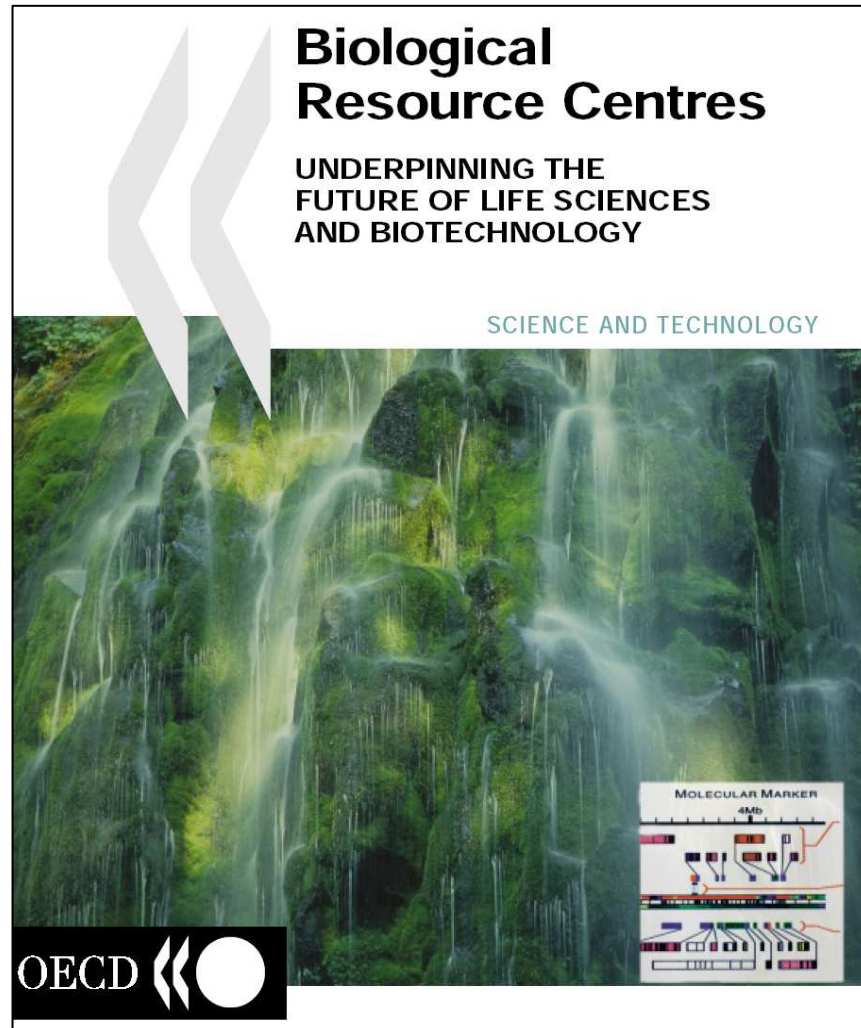
The Grand Challenges

- Global warming
- Supplies of energy, water and food
- Ageing societies
- Public health
- Pandemics and security

The Grand Challenges

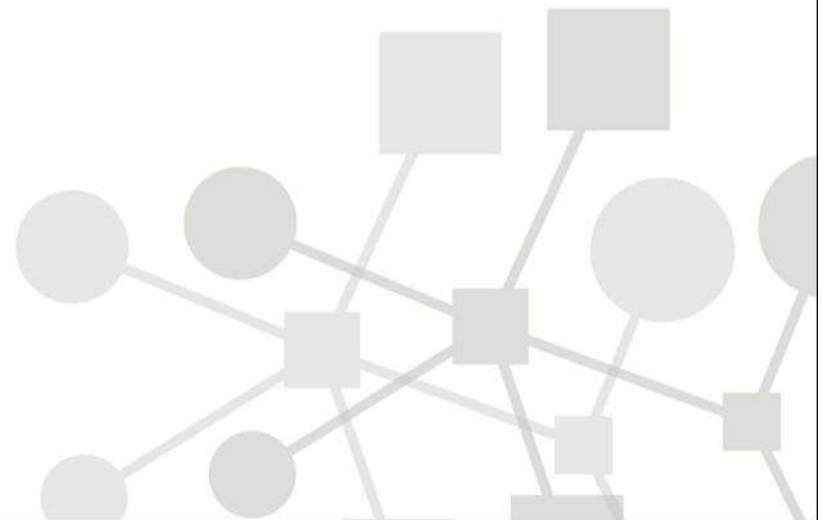
- Global warming
- Supplies of energy, water and food
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} require access to
human biological
samples and medical data



“Biological resources – living organisms, cells, genes, and related information – are the essential raw material for the advancement of biotechnology, human health, and research and development in life sciences“

Addressing the grand challenges require international collaboration

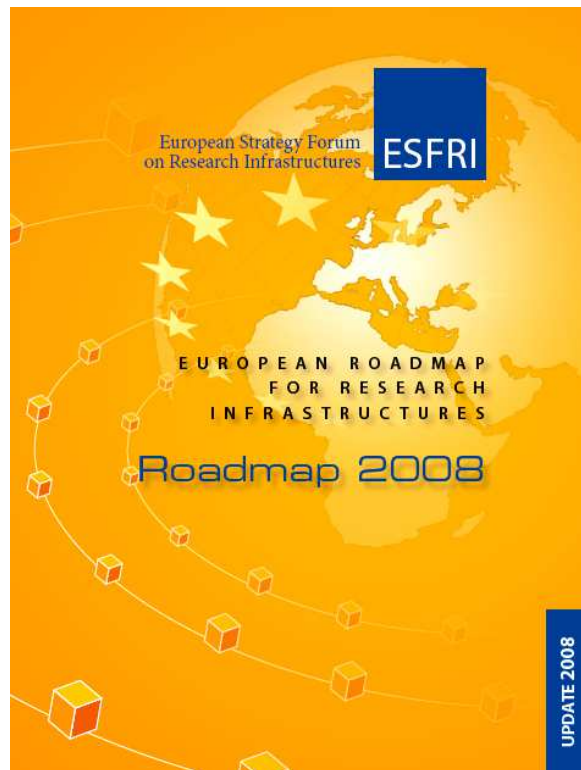


Hurdles and Roadblocks for International Collaboration

- Lack of common quality criteria for biological samples and data
- Different languages, developing taxonomies
- Current disease taxonomies are not appropriate for precision medicine
- Heterogeneous ethical and legal frameworks
- Societal issues
 - How to share finite resources
 - Balanced win-win scenarios



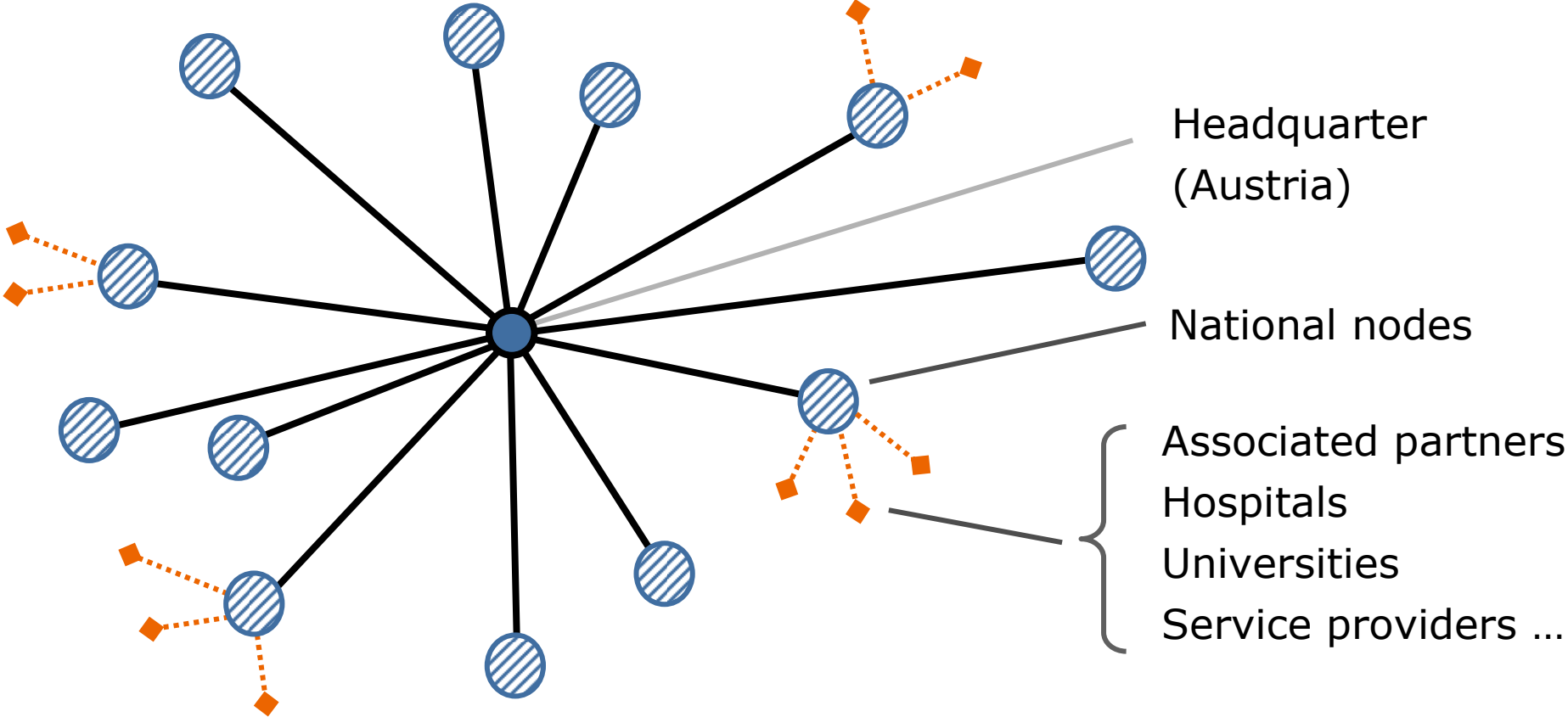
The European Research Infrastructure for Biobanking and Biomolecular Resources



- **Scientific excellence**
- **One type of infrastructure for Europe**
- **Access to high quality human biological samples and associated data**
- **Ethical and legal compliance**
- **Long-term sustainability**
- **International integration**

Distributed Structure of BBMRI-ERIC

hub and spoke structure

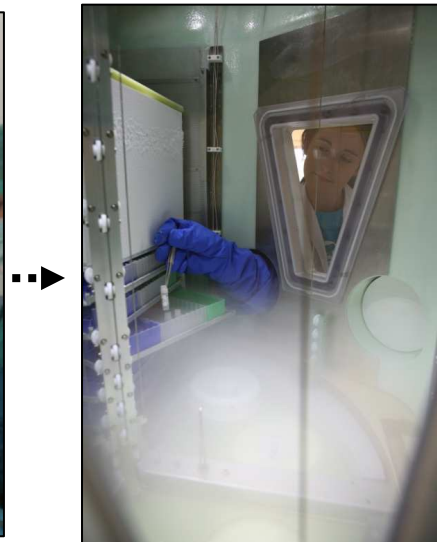


The Need for Evidence-based Quality Standards for Biological Samples and Data

The garbage in – garbage out problem



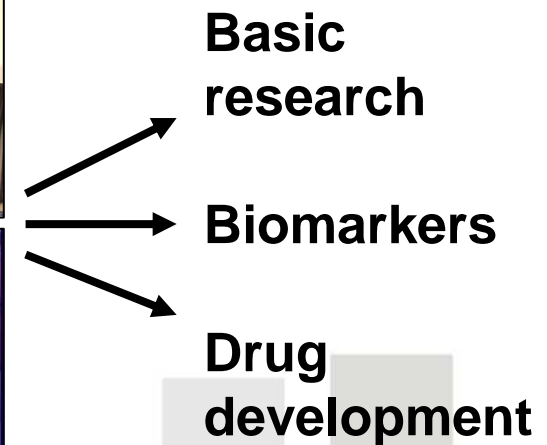
Patient



Biobanking & Pre-analytics



Analysis



Result

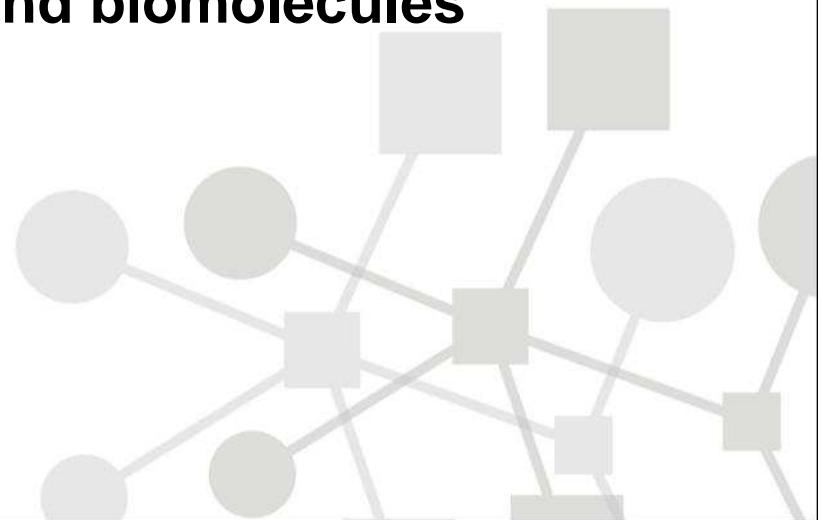


European FP 7 Large Integrated Project

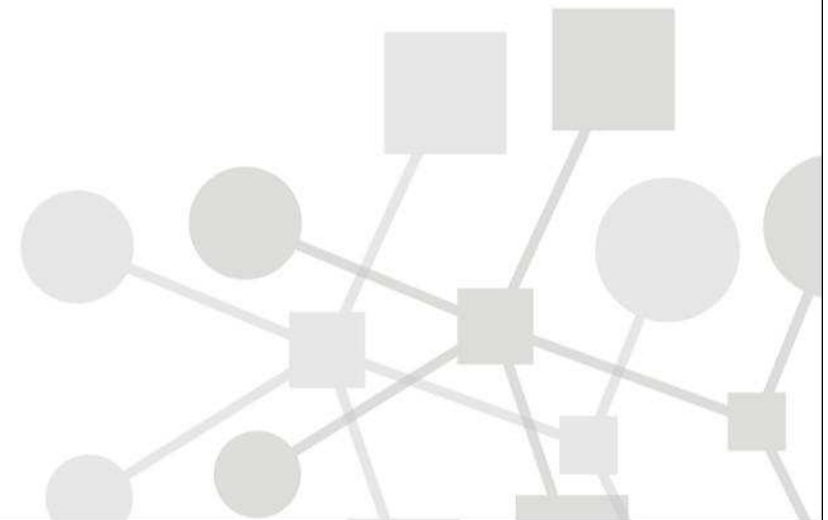
- **Evidence-based European standards and norms for pre-analytics in molecular diagnosis**



Comprehensive investigation of pre-analytical factors impacting on sample quality and biomolecules

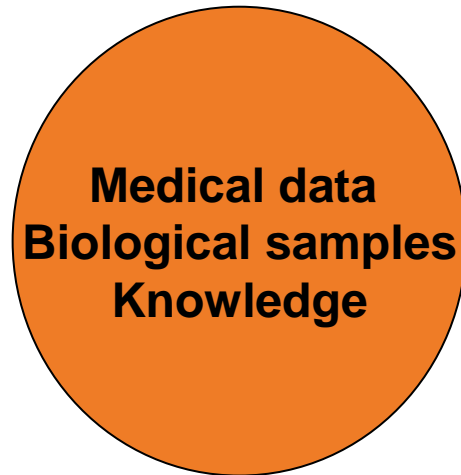


The translation of biological samples into data, knowledge and innovation

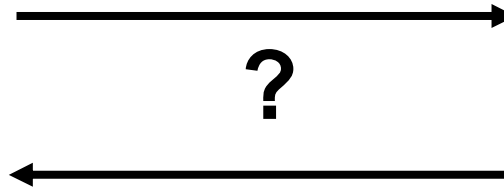


Access for Industry

Common good
(donations)



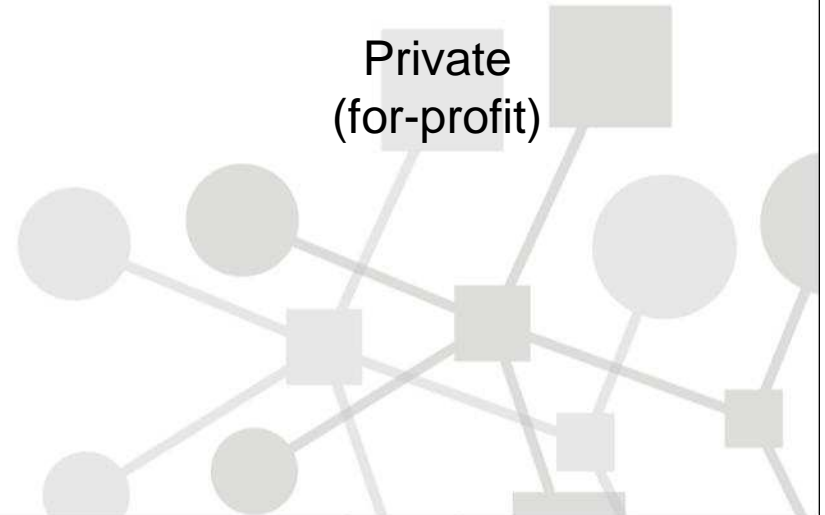
Public
(not-for-profit)



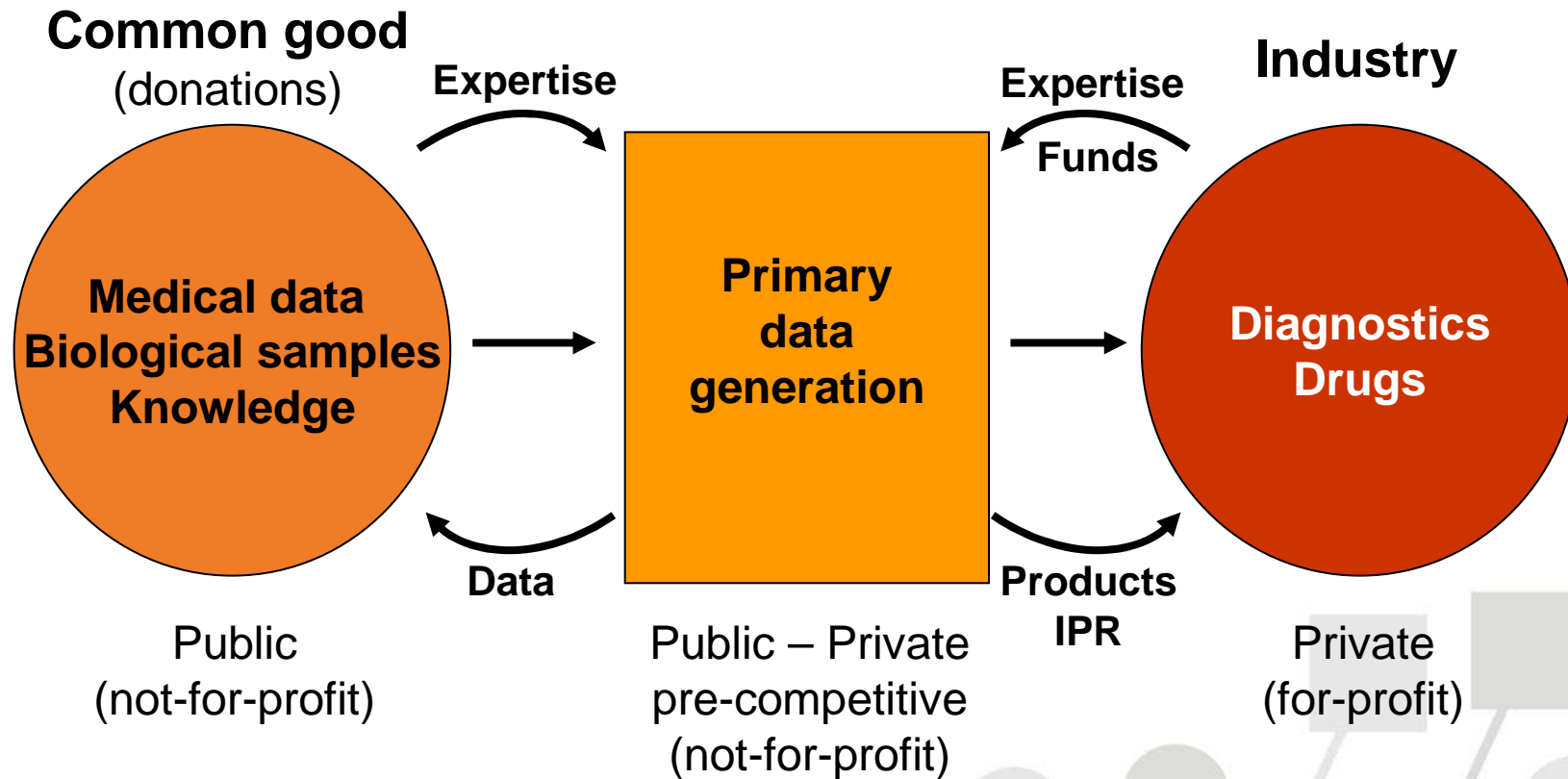
Industry



Private
(for-profit)



Expert Centres: Win-Win for Public and Private Sectors



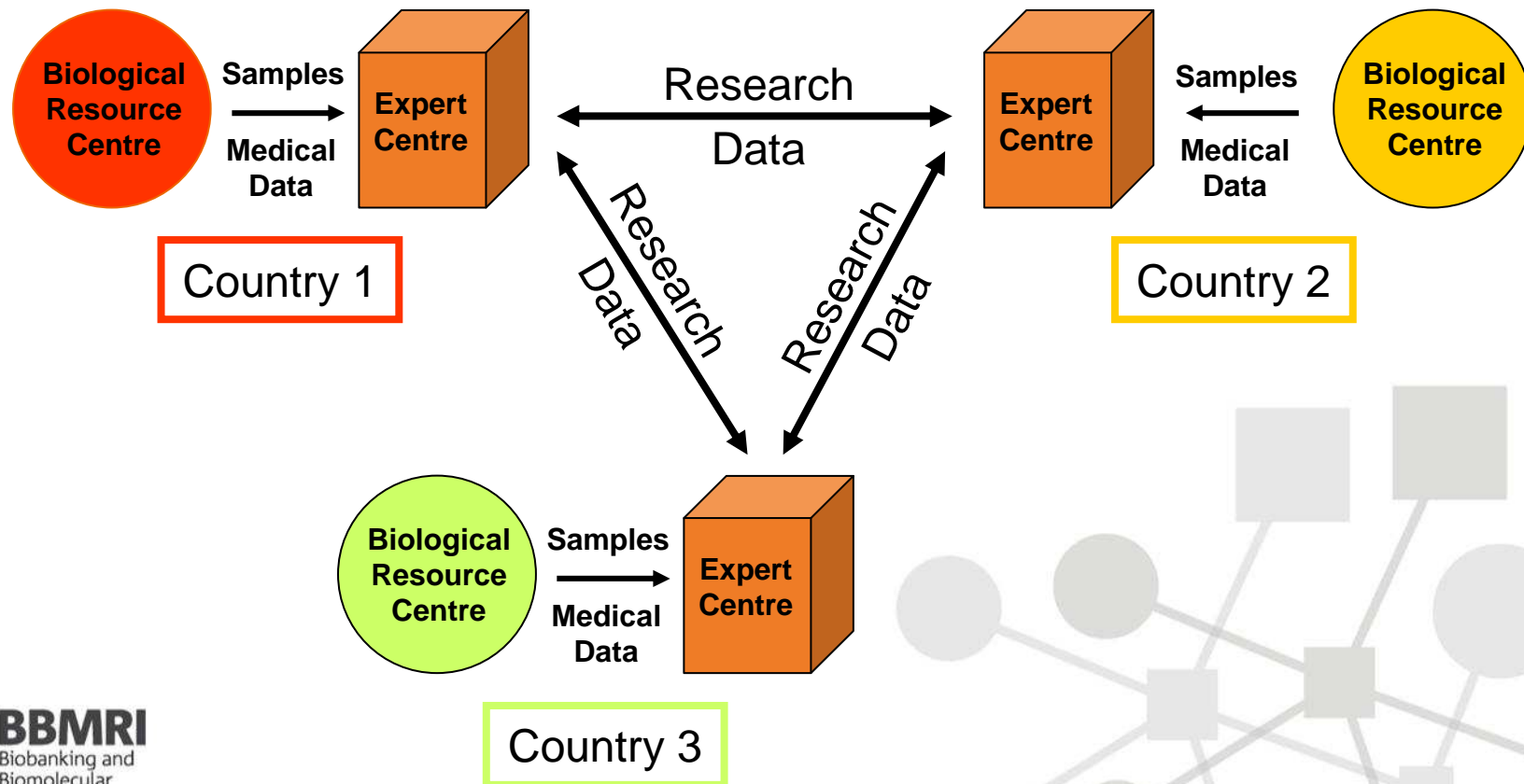
Standardisation of data generation

Basis for data sharing

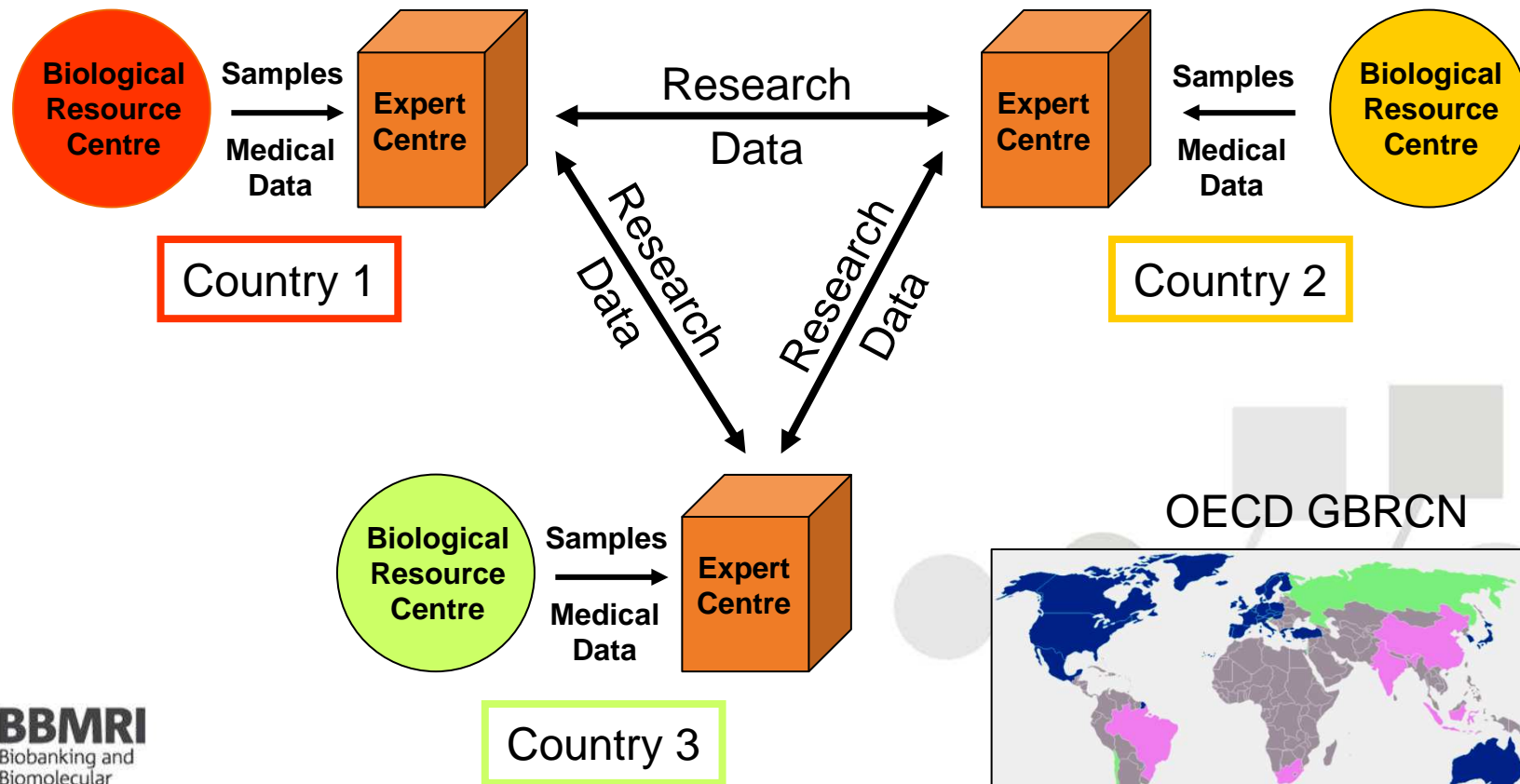
Better usage of finite resources

Collaborative research to improve innovation

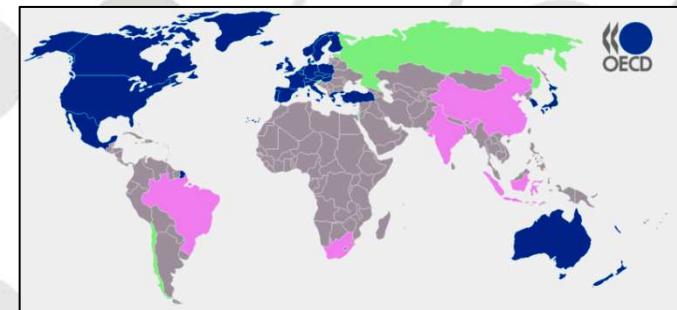
(public) Expert Centres as Highways for International Research Collaborations



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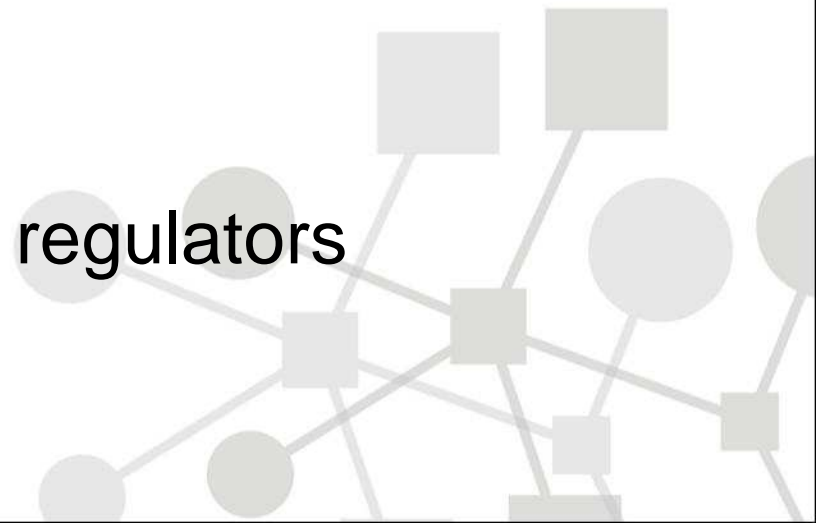


OECD GBRCN



Why is there a Need for Trans-Atlantic Policy Support?

- Global socio-economic impact beyond research
- Increasing role of collaborative pre-competitive research
- Repositioning of intellectual property
- Privacy – data protection
- Biosecurity
- Standardization
- Biomarker/drug approval by regulators



MARCH 27, 2009

Annual Special Issue

TIME

**10
IDEAS
CHANGING
THE WORLD
RIGHT NOW**

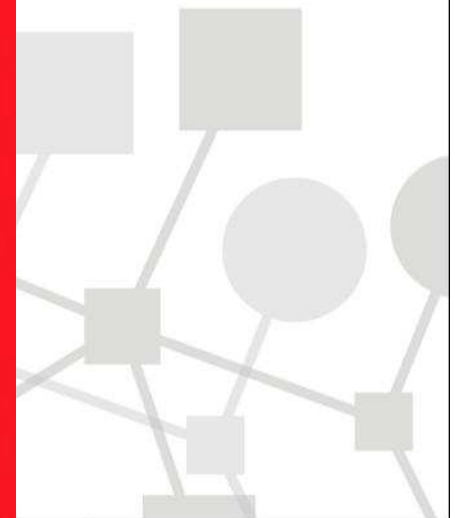
The global economy is being remade before our eyes. Here's what's on the horizon

- WHY YOUR JOB IS YOUR MOST VALUABLE ASSET
- REPURPOSING THE SUBURBS
- SURVIVAL-STORE SHOPPING
- BIOBANKS: SAVING YOUR PARTS
- NEED LAND? RENT A COUNTRY
- THE NEW CALVINISM
- ECOLOGICAL INTELLIGENCE
- AMORTALITY: FOREVER YOUNG
- AFRICA: OPEN FOR BUSINESS
- REINVENTING THE HIGHWAY



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The BBMRI Team: WP Leaders and Chairs

Coordination/Executive Mgmt.

**K. Zatloukal, AT; E. Vuorio, FI
M. Yuille, UK; M Pasterk, FR**

Population-based Biobanks:

**L. Peltonen+, FI/UK; M. Perola, FI
A. Metspalu,EE**

Disease-oriented Biobanks:

E. Wichmann, GER, T Meitinger, GER

Biomolecular Resources:

U. Landegren, SE; M. Taussig, UK

Databases & Biocomputing:

J-E Litton, SE

Ethical, Legal and Societal Issues:

A. Cambon-Thomsen, FR

Funding and Financing:

**G. Dagher, FR; J. Ridder, NL
C. Brechot, FR;**

Governance Council Chair:

L. Peltonen+; E. Vuorio, FI

Advisory Board Chair:

G-J van Ommen, NL

Coordination Board Chair:

K. Zatloukal, AT

Stakeholder Forum Chair:

M. Griffith, IR

53 Participants (6 Ministries, 18 Funding Organizations)

222 Associated Organizations 33 Countries

Thank you

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