



BBMRI-ERIC

Biobanking and
BioMolecular resources
Research Infrastructure

The challenges of Personalised Medicine: Contributions from the Research Infrastructures

EMA, London 15 June 2016

www.bbmri-eric.eu

Medical Research Infrastructures



eatris



CORBEL

Executive Board (ExecB)

The Executive Board is the ultimate decision-making body of the consortium. In addition, it shall ensure the alignment of the project with the **BMS RI Strategy Board** (the collaborative group of BMS RI directors or coordinators). Therefore, the Executive Board consists of one member nominated by each participating BMS RI (Representing Party).

Current members: project coordinator (Niklas Blomberg, ELIXIR)
project co-coordinator (Jan-Eric Litton, BBMRI)
Giovanni Migliaccio (EATRIS)
Jacques Demotes (ECRIN)
Ilaria Nardello (EMBRC)
Philip Gribbon (EU-OPENSREEN)
Jan Ellenberg (EuroBioImaging)
Michael Raess (INFRAFRONTIER)
Susan Daenke (Instruct)
Richard Kitney (ISBE)
Erko Stackebrandt (MIRRI)



CORBEL shared services for life-science

Coordinated Research Infrastructures Building Enduring Life-science Services

CORBEL is an initiative of eleven new biological and medical research infrastructures (BMS RIs), which together will create a platform for harmonised user access to biological and medical technologies, biological samples and data services required by cutting-edge biomedical research. CORBEL will boost the efficiency, productivity and impact of European biomedical research.

Individually, the services offered by the BMS RIs are critical to their own user communities.

Collectively, through CORBEL, they will be transformative across the range of life-science disciplines: from generation of knowledge at the bench to patient treatment at the bedside.

ES

FICE

UPCOMING EVENTS

29. - 30. June 2016
Workshop "Accelerating innovation by Expert Centres"

support

needs

13. - 16. September 2016
Europe Biobank Week

All News and Events...

LINKS

- twitter.com/corbel_eu
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Challenges in the Personalised Medicine identified by PerMed consortium

1. Public engagement & citizen/patient involvement
2. Integration of Big Data and ICT solutions
3. Translation basic to clinical research and beyond
4. New innovations to the market
5. Shaping up the healthcare

Ref. PerMed: Shaping Europe's Vision for Personalised Medicine – Strategic Research and Innovation Agenda (SRIA)

Relevant RIs to PM



BBMRI

- Biobanking and Biomolecular resources Research Infrastructure



ELIXIR

- European Life Science Infrastructure for Biological Information



EATRIS

- European Advanced Translational Research Infrastructure in Medicine



ECRIN

- European Clinical Research Infrastructures Network



ISBE

- Infrastructure for Systems Biology - Europe

Research Infrastructures' contributions to Personalised Medicine



1. Public engagement & citizen/patient involvement

- **BBMRI-ERIC**
 - Joint forces for engagement with the Patient Advocacy Organisations
- **ECRIN-ERIC**
 - Optimising the re-use of clinical trial data through standardised access procedures
 - Operational support to assess the effectiveness, safety and cost of PM

2. Integration of Big Data and ICT solutions

- **BBMRI-ERIC**
 - Involvement in Big Data initiatives (e.g. Biobank Cloud)
- **ELIXIR**
 - **Services:**
 - Archive for secure storage of human genotypic and phenotypic data
 - Registry for analysis tools
 - Catalogue of databases
 - Beacon service (for identifying datasets of interest)
 - Data management (e.g. secure archives)
 - Enables storage, copying, transfer and access of data

2. Integration of Big Data and ICT solutions

- ISBE
 - Multiscale modeling
 - understanding and predicting processes that occur at different levels of the biological continuum
 - Big Data
 - Multimodality imaging & standards (DICOM)
 - Supporting an effective pathway from data to model

3. Translation basic to clinical research and beyond

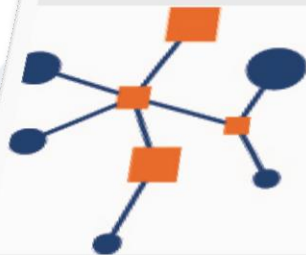
- **BBMRI-ERIC**
 - Biological sample & health data
 - Supporting and facilitating FAIR access
 - Quality → reproducibility (ISO/TC 276, ISO/TC 212)
- **ECRIN-ERIC**
 - Common tools for multinational trials:
 - Disease stratification and taxonomy
 - Post-marketing follow-up observational studies
- **EATRIS**
 - Services:
 - Validation of biomarkers
 - Predictive in vitro/ in vivo models → reducing late stage failures
 - In vivo imaging-enabled drug development

4. New innovations to the market

- **BBMRI-ERIC**
 - Bringing together the expertise of many disciplines for biobanks and biomolecular resources to benefit health
- **EATRIS-ERIC**
 - Improving innovation capacity
 - Establishing public-private/ public-public collaborations
 - Support for research funders in project selection
 - Support in design and validation of novel tools (e.g. models for more predictive drug screening)
 - MoU with national regulatory agencies → research to access advice for complex cases
 - Educational curricula and workshops in translational medicine
- **ECRIN-ERIC**
 - Operational support for registration of clinical trials evaluating the efficacy and safety of PM strategies

5. Shaping Sustainable Healthcare

- ECRIN-ERIC
 - Optimising the use of healthcare data and cohort data to conduct clinical trials
 - Improving the transfer of electronic healthcare data from healthcare to cohorts, and from cohorts to clinical trials



BBMRI-ERIC
gateway for health

Thank you!
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