



#### **■ THE AUSTRIAN NODE**

of the European Biobanking and BioMolecular resources Research Infrastructure BBMRI-ERIC

#### BACKGROUND

# The impact of biobanks, biospecimens and data

Much of our current knowledge in medicine is based on the systematic investigation of biospecimens and associated medical data.

Therefore, biospecimens such as tissues, blood, cells or biomolecules (e.g. RNA or DNA) are important resources for biomedical research leading to a better understanding of diseases, prevention of disease, development of new diagnostics and therapies particularly in the context of personalized medicine.

Biobanks all over the world collect, process, and store biological resources and related medical, health, lifestyle and imaging data and provide them to scientists in order to support them in their research activities. In this way biobanks contribute to the improvement

of human health. Scientists often need to combine the relevant biospecimens and data from different biobanks in order to reach statistically significant sample numbers.

Thus access to and interoperability of biobanks need to be assured for further exploration of these bioresources.





The availability and exploration of these resources for biomedical research needs to be assured."

Kurt Zatloukal, BBMRI.at Director & Coordinator of BBMRI-ERIC in its preparatory phase

#### BACKGROUND

# **European research** infrastructures

European Member States and the European Commission jointly developed a strategy to identify fields of science in which Europe should join forces to establish common research infrastructures.

The European Strategy Forum for Research Infrastructures (ESFRI) highlighted the need for a biobanking research infrastructure, which led to the establishment of BBM-RI-ERIC, the European research infrastructure for biobanking and biomolecular resources. Research infrastructures provide access to cutting edge resource technologies and knowledge, and are characterized by scientific excellence, pan-European scope, long-term sustainability and global relevance.

BBMRI-ERIC – The European research infrastructure for biobanking and biomolecular resources was established under the legal entity European Research Infrastructure Consortium (ERIC) in 2013 and is as of January 2016 owned and jointly operated by 18 member states and 1 intergovernmental organization (i.e. IARC/WHO).

BBMRI-ERIC has its headquarters in Graz, Austria. Through the National Node BBMRI.at Austria is involved in BBMRI-ERIC.

MembersObservers



Who we are

Klagenfurt

BBMRI.at – the Biobanking and BioMolecular resources Research Infrastructure Austria – is the Austrian national node of the European biobanking research infrastructure BBMRI-ERIC.

BBMRI.at comprises Austrian biobanks, biomolecular resources, biocomputing and sample storage infrastructure complemented by scientific, technical, ethical and legal expertise.

With its partner universities and biobanks BBMRI.at establishes and further develops the Austrian biobanking research infrastructure and integrates it into BBMRI-ERIC.

BBMRI.at started operation in Dec. 2013 and is funded by the Federal Ministry of Science, Research & Economy (GZ 10.470/0016-II/3/2013).

**PARTNERS** 

Vienna

BBMRI.at Coordination
BBMRI-ERIC Headquarters

**Medical University of Graz** with the Biobank Graz

**Medical University of Vienna** with the Meduni Wien Biobank

University of Veterinary Medicine, Vienna with the VetCore & VetBiobank

University of Vienna

Medical University of Innsbruck with the MUI Biobank

Alpen-Adria University Klagenfurt

Paracelsus Medical University, Salzburg with their biobank

# WHAT WE WANT TO ACHIEVE

#### 01 ESTABLISH

a state-of-the-art biobanking research infrastructure in Austria

#### **02 INTEGRATE**

Austria's biobanks into the European infrastructure BBMRI-ERIC

#### **03 STRENGTHEN**

Austria's international position as a competent partner in medical research and development, and enhance its competences in biobanking and related research

#### **04 IMPROVE**

interoperability by harmonizing sample, data, and quality management in Austrian biobanks

#### **05 FACILITATE**

the access to high quality biospecimens and data of Austrian biobanks at the national and international levels

#### **06 SUPPORT**

Austrian biobanks and associated scientists to participate in international research programmes

#### **07 CONSIDER**

ethical, legal and social issues within BBMRI.at and its compliance with (inter)national requirements

#### ACTIVITIES

# What we do to achieve our goals

## Developing Austria's biobanking research infrastructure

Integration of biobanks of Austrian universities into a national research infrastructure which is linked to BBMRI-ERIC.

Implementation of a joint infrastructure for the management of biospecimen-related medical data.

Representation of Austria on an international level in the biobanking community and within BBMRI-ERIC.

#### Why?

- ... to strengthen Austria's international position as a competent partner for biobanking and related research.
- ... to provide access to biospecimens and data of the highest and internationally harmonized quality.



# Harmonizing Sample, Quality and Data Management

Harmonization of preanalytical sample management in Austrian biobanks according to norms of the European Committee for Standardization (CEN) and ISO standards.

Development of an online self-assessment tool for biobanks to check conformity with CEN norms.

Harmonization of quality management with all Austrian biobanks working according to ISO 9001, using harmonized standard operating procedures (SOPs) and conducting mutual internal audits.

Development of a searchable online catalogue of Austrian biobanks providing data about their biospecimen collections and samples.

#### Why?



BBMRI.at

- ... to provide access to standardized, high quality biospecimens and associated data.
- ... to publicly visualize which resources are available for researchers.
- ... to facilitate the access to biospecimens and data.

www.bbmri.at

# Considering ethical, legal and social issues (ELSI) and engaging with Austrian citizens

Hosting of Citizen Expert Panels in which citizens, patients and experts discuss their perceptions, opinions and attitudes towards biobanking.

Design and publication of an information brochure for citizens/ patients about biobanks together with European patients' advocacy groups.

#### Why?

- ... to foster public engagement and to make aims and meanings of biobanking transparent.
- ... to comply with international and national ethical, legal and social requirements.

## Facilitating access to and cooperation with Austrian biobanks

Creation of a common template for a biospecimen Material Transfer Agreement (MTA) to improve access for academic and industrial researchers to Austrian biobanks and medical knowledge.

Integration of the pharmaceutical and biotech industry by inviting them into a Translational Science Forum that advices BBMRI.at on scientific and strategic issues.

Setting up of a metabolic disease biobank by integrating biospecimens with patient phenotyping data to provide a best-practice example for researchers.

Development of a mobile App for bedside documentation of biospecimens and patient phenotypes.

#### Why?

- ... to enhance Austria's role in the rapidly developing biobanking field.
- ... to contribute to the advancement in biospecimen-based health care research and innovation by supporting academia and industry.



BBMRI.at Biomaterial MTA



#### ■ GOVERNANCE STRUCTURE

## People and organisation

#### **National Node Director & Coordination Office:**

Kurt Zatloukal (MUG) Cornelia Stumptner (MUG)

#### **Work Package Leaders:**

Georg Göbel (MUI) WP1: Standardization and harmonization of sample management

Johann Eder (AAU)
WP2: Standardization and

WP2: Standardization and harmonization of data management and biobanking catalogue

Oswald Wagner (MUV)
WP3: Quality management
Anna Durnová (LSGI)

WP4: ELSI and public engagement

Michael Trauner (MUV)

WP5: Impact on academic research

Christine Ruckenbauer Ingrid Walter (VetMed)

WP6: Impact on translational research and

innovation

Kurt Zatloukal (MUG)

WP7: Coordination of the national network and operation of the National Node BBMRI.at

#### **Local Biobank Coordinators:**

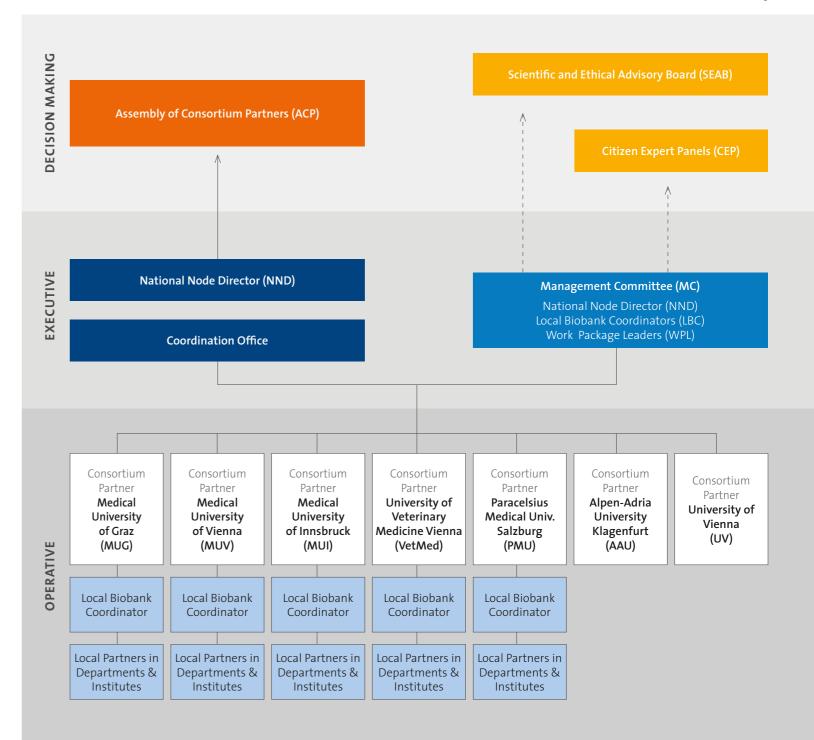
Berthold Huppertz, *Biobank Graz (MUG)* Helmuth Haslacher, Thomas Perkmann *MedUni Wien Biobank (MUV)*  Georg Göbel, Johannes Zschocke MUI Biobank (MUI) Ingrid Walter VetBioBank (VetMed) Tbd: PMU Biobank (PMU)

#### Assembly of Consortium Partners Representatives:

Caroline Schober-Trummler (MUG)
Christine Bandtlow, Gustav Fraedrich (MUI)
Michaela Fritz (MUV)
Otto Doblhoff-Dier (VetMed)
Johann Eder (AAU)
Ulrike Felt (UV)
Eva Rohde (PMU)

#### Scientific and Ethical Advisory Board:

Peter Swetly, AT (Research, industry)
Georges Dagher, FR (Research, biobanking)
Ruth Chadwick, UK (Ethics)
Peter Dabrok, DE (Ethics)
Christiane Druml, AT (Ethics)
Andreas Scheil, AT (Legal issues, data protection)
Nikolaus Zacherl, AT (Legal issues, intellectual property, industry)
Renate Skledar, AT (Patient advocacy)
Markus Pasterk, AT (BBMRI-ERIC)



### **Contact**

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#### **Contributions:**

We want to thank all BBMRI.at members for their contribution.



















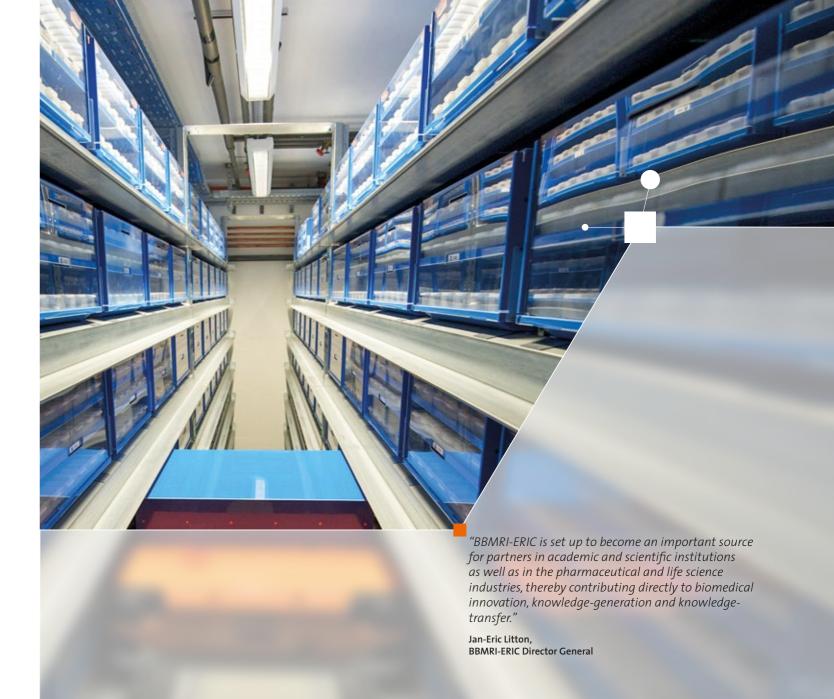
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