EUROPE BIOBANK WEEK 2019 ABSTRACT SUBMISSION GUIDELINES

Europe Biobank Week 2019 will be held on 8-11 October at the Music- and Conference Center (MuK) in Lübeck, Germany. In preparation for the conference, over 20 session topics have been identified that:

1. address best practices for core components of biobanking; or
2. serve as "hot topic" sessions that will provide the latest perspectives on key issues confronting our profession.

With this call for abstracts, we are now looking for your input as participants in these sessions. Our goal is to provide our conference attendees with the best content possible for each and every one of these topics.

SESSION FORMATS

The Europe Biobank Week 2019 Organizing Committee invites the submission of abstracts under the following presentation formats:

- **Oral presentations** – the familiar presentation session consisting of about 10 minute speeches, followed by questions and discussion.
- **Poster presentations** – structured as an academic presentation but with creative visuals of your research and/or organizational processes presented on a poster board.

Abstracts should be submitted electronically, in English only and not surpass 250 words. Submissions should be divided into sections such as:

- Introduction – summarizing the background/ problem
- Material & methods used to obtain and analyze the data
- Results or findings from your work
- Discussion and conclusion that will help others in their work

Please follow the instructions on the abstract form carefully, making sure to select one of the available formats, depending on your preference. The Scientific Committee reserves the right to assign your submission to a different type of presentation than your preference if deemed appropriate.

As terms and conditions of your participation in the conference, kindly note the following:

- No travel/ accommodation allowances are provided to speakers.
- **Presenters are expected to register for the conference; registration fee is not waived.**
- In some cases, in order to provide our attendees with a broad range of perspectives, the Scientific Committee reserves the right to limit the number of presentations chosen from a single affiliation.
- Presentations from sponsors/ exhibitors are welcome; however, companies are asked to respect the scientific nature of this meeting and not to promote their products and services during their presentation (except the *Pitch Your Innovative Idea* session).

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ABSTRACT TOPICS

Submitters are invited to propose abstracts for the below mentioned session topics.

2: Environment, Biodiversity and Human Health (*posters only*)

The relationship between environmental health, socio-economic living conditions, individual behavior and public health is very complex. To obtain a better understanding of this, human biomonitoring data are collected and used as science-based evidence to underpin measures for safeguarding environmental quality and to minimize the adverse effects of environmental stressors. Biomonitoring, the monitoring of chemicals in humans and the environment, serves as the basis for a wide range of political decisions and regulation measures in the field of human and environmental health.

Biobanks play a key role in assessing environmental healthiness and for human biomonitoring activities, since they can provide high-quality environmental and human samples with associated data. Hence, the aim of this session is to highlight the general value of biobanks for human & environmental biomonitoring by providing insights into the latest research results and initiating a joint discussion on how established and internationally distributed biobanks can work together, how samples can be shared, and how to create the greatest possible knowledge by collaborating to monitor pollution- and lifestyle-associated diseases.

3A: Pre-Analytic Impact on Sample Quality – Means & Measures

The emerging ISO standards for the pre-analytical handling of samples in biobanking give hope that sample quality can be much better maintained and documented. The aim of the session is to focus on the problem of reproducibility by examining where in modern biobanking variability occurs and how we can diminish these issues in the future in order to drive the quality of the biobank samples forward and to be ready for the demand for high-quality samples for all novel technologies.

3B: Academic-Industrial Partnerships for a Healthier World

In order to advance research and development, there is a need for collaborations between academia, industry, government agencies, and private partners. These consortia have the potential to solve major medical and public health issues, if they can set terms and goals that reward all parties. In this session, we will focus on the potential and obstacles of academic-industrial partnerships by showcasing examples such as public-private partnerships, IMI projects, Expert Centers, and more.

3C: Rare Diseases: The Next Big Step

Biobanking is highly critical to advance research in rare diseases. The aim of the session is to showcase how obstacles are overcome for rare disease cohorts, despite rarity and diversity.

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3D: Wildlife Biobanking to Preserve Biodiversity of Endangered Species

This session will showcase and discuss (i) the role of biobanks in new conservation strategies for saving extremely endangered species from extinction and (ii) biobanks as new source for studying evolutionary traits on the cellular level in different species and their biomedical potential for developing new treatment strategies for example against cancer, diabetes or cardiovascular diseases.

4A: Harmonisation and Standardisation: What Is Needed, What Is Possible?

Implementation of the newly published CEN technical specifications and the new ISO standards on biobanks (ISO TC276), which describe requirements of standardization and documentation, is a crucial step toward better reproducibility of results. In this session we will discuss the opportunities of these standards and the hurdles to overcome when implementing these standards. We also highlight implementation programs or projects as examples of how to put these standards into practice.

4B: Oxford Style Debate *(interactive session; no abstract submission)*

4C: IT Solutions for Data and Sample Sharing

To make the samples of biobanks visible to the research community, biobank IT solutions such as catalogues are built. However, many questions remain as to how one can build IT solutions that are fit for purpose for the demanding needs of future research. How do you build IT solutions that are interoperable with other existing IT solutions? Which minimal data should be included? How can you improve the design and implementation of your catalogue? In this session, experiences from IT solutions established in different geographical regions, networks, and consortia, and their utility will be presented. The discussions will include how the IT solutions are (or are not) operating to provide visibility and facilitate utility of available samples and data for research.

4D: Zoo Biobanking To Preserve & Protect Endangered Species

Zoos play a fundamental role in protecting and preserving endangered species. Particularly, zoological research centers address genetics, animal behaviour, animal welfare, veterinary medicine and animal morphology, among other topics. Hereby, biobanks enable local and international collaborative research projects addressing sample quality, traceability, transparency and exchangeability. This session will showcase successful zoological research projects while indicating current and future challenges and discussing possible solutions.

5A: 500 Days into the GDPR

This session focuses on the implications of the General Data Protection Regulation (GDPR) for our biobanking community, especially the impact of the national derogations and the intrinsic issues faced by biobanks and research in relation to the requirements of data processing, including transnational transfer, transfer to third countries, and secondary use of

data. We welcome presentations that highlight the challenges and solutions (best practices) implementing the legal requirements.

5B: Quality Assessment and Management of Samples

Quality assessment and management of samples is a critical aspect in biobanking, since consistent quality of biospecimens is necessary to generate reliable data for basic and clinical research. This session will aim to provide up-to-date approaches to assess the quality of your samples and examples of quality management programs available to support this.

5C: Is Your Biobank Healthy?

How do you create and sustain a healthy biobank? In this session we present and discuss how you can improve the financial, operational and social sustainability of biobanks.

5D: TMF Satellite Meeting *(TMF e.V. satellite session; no abstract submission)*

6: Biobanking for Precision Medicine (*posters only*)

Biobanks are essential for scientific breakthroughs in precision medicine leading to new treatments. Precision medicine research is based on the analysis of samples with clinical data – and, because the associations are often weak, we need these samples in large quantities. The implication is clear: if more, well-characterized, high-quality samples are available through biobanks, the faster research will advance and impact upon the faster delivery of precision healthcare today. The systematic collection of human samples of high quality is a key element for the success of future treatments. Furthermore, biobanks are already part of molecular tumor board process chains thus improving patient treatment individually. During this session, we will show examples and discuss how biobanks can facilitate and improve precision medicine now and in the future.

7A: How do Biobanks Support Clinical Trials & Precision Medicine?

The quest to personalized medicine leads to very complicated scientific questions in clinical trials, demanding even further refinement of corresponding clinical information. Having good samples and data for translational research is fundamental to personalized medicine. Fit for purpose biobanks can drive efficient, effective and high-quality delivery of new medicines, improving the health of people around the world. In this session, we will showcase how biobanks can support clinical trials to find answers needed to make precision medicine available for all patients.

7B: Quality Assessment & Management of Data

If we want researchers to be able to produce reliable findings, we need to make sure that they have access not only to high-quality samples but also to associated high-quality data. In this session we will present the state-of-the-art in data quality: the definition of data quality, the dimensions of data quality, and quality management systems for achieving or describing the aspired data quality characteristics.

7C: Cryobiology – What Biobankers Should Know *(GDK e.V. satellite session; no abstract submission)*

7D: Maintenance of High Plant Tissue Viability - Challenges in the Quality Management of Plant Biobanks

Plant biobanks, such as in vitro gene banks, plant cryobanks, seedbanks for crops and wild species, field gene banks and collections of plant cell cultures and algae, preserve valuable genetic resources. To maintain high quality and viability of plant tissues are the major challenges. The presentations in the sessions will focus on challenges, milestones and critical aspects of the quality management of plant genetic resources.

8A: Hospital-Based Biobanks

Hospital-based biobanks collect biological material of healthy and/or diseased people and associated data. Implementing biobanks into clinical routine is challenging due to many different requirements but offers tremendous possibilities for clinical trials and precision medicine. By integrating health datasets available in the hospitals, biobanks can raise the value of their data while opening new paths and potential for research. In this session, we will show examples from a variety of hospital-based biobanks throughout the world, the difficulties they are facing and the opportunities that these biobanks offer on the road to personalized medicine.

8B: Novel Molecular & Medical Imaging Technologies in Biobanking

Biobanks exceedingly extend their repertoire by characterizing biosamples through molecular imaging technologies and by implementing medical imaging data. This session will showcase and discuss the future impact and role of micro- / nanoscopy techniques and medical imaging for biobanks now and in the future. Molecular imaging technologies will include e.g., high-throughput tissue microarrays, live-cell microscopy, Total Internal Reflection Fluorescence (TIRF)-Microscopy, Stimulated Emission Depletion (STED)-nanoscopy, and Atomic Force Microscopy (AFM). Medical imaging tools will compromise a wide range of state-of-the-art clinical applications, e.g. Radiography, MRI, PET, SPECT, CT, and Magnetic Particle Imaging.

8C: IVD, GMP & Cell Therapies: New Service Opportunities for Biobanks?

Cell therapies and/or gene therapies used in regenerative-, inflammatory-, autoimmune-, and/or oncology medicine require high-quality samples, standardizedd processing and secure sample and data logistics – fundamental assets of state-of-the-art biobanks. Similar requirements come with the new IVD regulations and confront (companion) diagnostic companies with new challenges. Overall, clinical applications afford higher regulatory levels than for research purposes and entail e.g., accreditations and GMP conformity. We invite you to showcase biobanks applying cell/gene therapies and to discuss future opportunities for biobanks through GMP and IVD regulations.

8D: Introduction of Modern Technologies to Preserve Crops and Endangered Plant Species Efficiently

Plant biobanks are responsible for the maintenance of plant genetic diversity. The high variability within the species limits the possibility to apply standardized methods known from industry and agriculture, such as harvest, cleaning and controlling processes. Modern technologies, such as imaging technologies and machine learning approaches may face the challenge of the phenotypic variability of the different species. The presentations in the sessions will focus on present and modern technologies and methodologies which increase the efficiency of processes and the quality of biobank material.

9A: Ethics Café: What Now? *(interactive session; no abstract submission)*

The format of an Ethics Café provides an opportunity to share views on specific topics in an informal setting. Consequently, no powerpoints allowed. The debate is kick-started by a provocative statement or engaging talk. The audience is invited to share thoughts and provide new insights for an ultimately thought-provoking dialogue.

9B: Museum Biobanking to Preserve and Protect Cultural Heritage

Museums prepare, digitise, analyse and interpret natural history materials reflecting the entire biodiversity from Earth and space. Biobanking has become an integral part of this endeavour. Successful projects will be highlighted and future challenges and possible solutions discussed.

10A: Future-Proof Sample and Data Access

How do biobanks govern sample and data access? The critical role of biobank access committees will be showcased, whether that is related to the scientific assessment of the research or the ethics review.
These are committees that are charged to ensure that samples and data are shared for sound scientific research.
This session is also open to other relevant ELSI issues related to sample and data access including the potential of stakeholder engagement in both the setup of a research project, and also in the conduct of the research project itself, such as the return of results of these research projects.

10B: Population Biobanks – What Can We Learn from Large Cohort Studies in Diverse Populations?

Revealing the impact of different lifestyles, environments and genetic predispositions in diverse populations can help to improve disease prevention, risk prediction, and precision medicine. A fundamental role is played by prospective biobank studies that thoroughly characterize large numbers of healthy individuals and monitor their health/disease status over time. Success stories, pitfalls, and opportunities will be highlighted while emphasizing international collaborations to bring population-based biobanking to the next level.

10C: Biobanks Driving Artificial Intelligence for a Healthier World

The amount of data we collect, generate and store is rapidly increasing due to new technologies (genomics, proteomics, etc.) that produce big data along with the large population cohorts, and global collaborations. In this session, we aim to highlight cohorts that generate big data, the methods/techniques (including but not limited to artificial intelligence) used to analyze the big data associated with these studies as well as concepts on how biobanks can either support or benefit from artificial intelligence.

10D: Becoming a Biobanker: Yes We Can!

Becoming a Biobanker is dedicated to showcasing educational programs and courses for biobankers. Understand which international or European courses are being offered and discuss challenges and opportunities in a biobanker's career.

11A-C: Pitch Your Innovative Idea

Pitch your innovative idea in 3 minutes. These could be cutting-edge ideas, products, or solutions that could impact samples, biobankers, researchers and patients, and eventually add to a healthier world. The floor is open for all stakeholders, from biobankers to vendors, from researchers to patients.

IMPORTANT DATES

Deadline	Action	STATUS
30 May	**Abstract Submission Deadline**	☐
June	**Notification of Acceptance**	☐
12 July	**Early Bird Registration Deadline**	☐

ABSTRACT REVIEW & NOTIFICATION OF ACCEPTANCE

The Scientific Committee will review the abstracts according to the relevance to the session topic and select the most appropriate ones.

All abstract submitters should be prepared to present the abstract as an oral or poster presentation.

Authors of abstracts selected for poster presentation will be required to print (based on official dimensions) and set up their poster in a dedicated area at the conference venue. Each poster session will comprise guided poster tours per topic: two poster chairs per topic will walk along the posters together with the attendees of that particular poster session. The poster presenter is asked to join the guided poster tour and present his/her poster to the chairs and audience at the designated slot. For each poster, 1.5 minutes presentation and 1.5 minutes discussion time are foreseen. Poster chairs will rate the posters of their session and propose the top three ranked for overall poster prize selection.

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