PROGRAM

NORDIC
Biobank Conference

6–8 sept 2022

nbc.biobanksverige.se #nordicbiobank2022

Welcome to the Nordic Biobank Conference

– “Current trends and challenges in the Nordic countries”, 6–8 September 2022 in Gothenburg, Sweden.

The 1st Nordic Biobank Conference is a unique opportunity to meet representatives in the area of human biobanking as well as other scientific experts from healthcare, academia, and industry!

The aim of the conference is to share knowledge, create network opportunities, and encourage collaboration between the Nordic countries in the field of biobanking.

The conference is jointly organized by the Nordic countries, comprised of Denmark, Finland, Iceland, Norway and Sweden, and is hosted by Biobank Sweden with local project management by Biobank West.

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TATAA
BIOCENTER

6 September

8.30–12.00 LOKAL: J1

Course: Basic principles of biobanking (only in Swedish)

Kursen riktar sig till verksamhetschefer, forskare, doktorander, läkare, forsknings-sjuksköterskor, ny biobankspersonal, kvalitetsansvariga, forskningsstödjande personal och andra som kommer i kontakt med biobankning.

Kursansvarig

Kristina Lind, PhD, Biobank Väst, Göteborg, Sverige.

Schema

8.30–8.45	Välkommen och introduktion.
8.45–9.30	Introduktion till biobankning och svenska biobankslagen. *Kristina Lind, projektledare Biobank Väst.*
9.30–10.00	Etikprövning – hur fungerar det och vad bör man tänka på ur ett biobanksperspektiv. *Elin Stenfeldt, projektledare Biobank Väst.*
10.00–10.15	Fika
10.15–11.15	Biobanksansökan – tillgång till prov för forskning. *Elin Stenfeldt, projektledare Biobank Väst.*
11.15–12.00	Viktiga aspekter vid provtagning och provhantering för biobankning. *Kristina Lind, projektledare Biobank Väst.*
12.00–13.00	Förmiddagen avslutas med en lättare lunch.

11.30-18.00 ROOM: EXHIBITION HALL F

Registration

The conference registration desk is located inside the Exhibition Hall F, second floor, and is open during the hours of the conference.

12.00–13.00 ROOM: CONFERENCE LOBBY, SECOND FLOOR

Lunch: Workshop A and Course - Basic principles of biobanking

13.00–17.00 ROOM: R17+R18

Workshop A – Quality management- continuous improvement with customer needs (fitness for intended purpose) in mind

Working with quality management is not just documentation; its main pillar is to work in an environment of change and seek continuous improvement. How do we build our organization around quality and how do we find motivation within the organization to achieve higher quality? And who is quality for?

In this workshop, we will discuss how biobanks can work with continuous improvement, with customer needs (fitness for intended purpose) in mind, by giving examples from the implementation of ISO20387:2018 Biotechnology –Biobanking- General requirements for biobanking. By the end of the workshop, we aim to have status of where the Nordic countries are today, how we can collaborate, and which direction we would like to head.

Schedule

13.00–13.15	Introduction of the workshop and speakers. *Chair Karolin Bergenstråhle.*
13.15–13.45	The quality management system of the organization is never better than the operation mode of its management. *Lennart Gidlöf, Senior Consultant, Sustema, Sweden.*

13.45–14.15	Biobank customer's feedback and needs. Fit for purpose of biological material. *Liv Paltiel, Quality Manager at Department for Biobanks at FHI Folkehelseinstituttet, Norway.*
14.15–14.30	One way towards implementation. *Karina Lövstedt, Quality Manager at Biobank Väst, Sweden and Chair of Biobank Swedens Network for Implementation of ISO20387.*
14.30–14.45	Summary and introduction to the workshop format. *Chair Karolin Bergenstråhle.*
14.45–15.15	Coffee break in the Conference Lobby, second floor.
15.15–16.30	Workshop- participants are divided into groups to discuss topics of quality management and possible collaboration in the Nordic countries.
16.30–17.00	Conclusions from discussions in workshop.
17.00	End of workshop.

Organizers

- Karolin Bergenstråhle, Project Manager, Biobank Sweden, Sweden.
- Malin Åhsblom, Quality Coordinator, Uppsala Biobank, Sweden.

15.00–17.00 ROOM: R14

Workshop B – Automated storage solutions

For many biobanks, financing, and installation of automated storage solutions at ultralow temperatures have been a clear challenge. It can certainly boost the quality and through-put of biobank performances but has equally created frustrations and set-backs related to unstable operational situations.

What is the rational for the selected temperature for storage? Is – 80 still a challenge for the applied technologies? Is there a compelling scientific justification for choosing – 80 and not -70 and could a slight raise of temperature improve the operational stability.

Costly and unstable technological solutions have a clear effect on running costs and ultimately on biobank sustainability. What are the environmental issues to be considered?

In this workshop we will address these questions, both form a provider and a user perspective. We will also touch upon challenges with established stores in the Nordic countries, including services and maintenance during the recent pandemic.

Organizers

- Kristian Hveem, Professor, Norwegian University of Science and Technology, Head of Biobank Norway, Norway.
- Anne Jorunn Vikdal, Project Coordinator/Biomedical Laboratory Scientist, HUNT Biobank, Norwegian University of Science and Technology, Quality Manager, Biobank Norway, Norway.
- Vegard Marschhäuser, Project Manager HUNT Research Centre, Norwegian University of Science and Technology, Coordinator Biobank Norway, Norway.

Invited speakers

- Dean Montano, Azenta Life Science.
- Grace Abberley, Azenta Life Science.
- Lutz Doms, CEO, Askion GmbH.
- Axel Stamme, Sales Manager Sample Management, Hamilton Storage Germany GmbH.

15.00–17.00 ROOM: R11+R12

Workshop C – Education in biobanking

Education is important, in biobanking and everywhere else. In biobanking, much education and training take place in front of an instrument or freezer and is taught by the nearest co-worker or local super user. There are, however, also a number of courses for biobankers dealing with topics such as sample quality, ethical and legal perspectives, laboratory management and research perspectives. In this workshop we will hear from organizers of Nordic biobank courses and expand to European options.

Organizer

- Lasse Boding, PhD, Head of Coordinating Centre, Danish National Biobank. Statens Serum Institut, Denmark.

Invited speakers

- Lasse Boding, PhD, Head of Coordinating Centre, Danish National Biobank. Statens Serum Institut, Denmark. **Take home from the annual PhD course: Biobanking in the era of personalised medicine.**
- Tina Bossow, Consultant, Novo Nordisk, Denmark. **Experiences from Certificate – Principles in Biobanking, Luxembourg and Master of Science in Biobanking, University of Graz.**
- Solveig Kvam, Biobank1 St. Olavs hospital. **Experiences from Masters course and Continuing education in "Research Biobanking", Norwegian University of Science and Technology".**
- Linda Paavilainen, Project Coordinator, Uppsala Biobank, Sweden. **Course in biobank samples for medical research.**

17.30–19.00 ROOM: EXHIBITION HALL F

Mingle

Mingle sponsored by the City of Gothenburg & Region Västra Götaland and offers the opportunity for light refreshments. The mingle will be held within the Exhibition Hall F and is open for all registered participants. Pre-registration is mandatory.

City of Gothenburg

REGION VÄSTRA GÖTALAND

7 September

8.00–8.45 ROOM: EXHIBITION HALL F

Registration

The conference registration desk is located inside the Exhibition Hall F, second floor, and is open during the hours of the conference.

8.45–9.10 ROOM: F4+F5

Welcome and opening of the Nordic Biobank Conference

- Linda Paulson, Chair of Steering Committe, Head of Biobank West, Sahlgrenska University Hospital, Sweden.
- Lasse Boding, Member of Steering Committe, Head of Coordinating Centre, Danish National Biobank. Statens Serum Institut, Denmark.
- Representatives from Region Västra Götaland and City of Gothenburg. Annika Tännström, President of the Regional Council and Håkan Eriksson, Deputy Lord Mayor.
- Sonja Eaker Fält, Chair of National Advisory Board Biobank Sweden, Sweden.

9.10–9.50 ROOM: F4+F5

Very large-scale biobank projects, experiences from FinnGen

Keynote speaker

- Aarno Palotie, Professor, FinnGen, Finland.

FinnGen is a large public-private partnership aiming to collect and analyse genome and health data from 500,000 Finnish biobank participants by 2023. FinnGen aims on one hand

to provide novel medically and therapeutically relevant insights but also construct a world-class resource that can be applied for future studies.

As of May 2022, the Finnish biobanks have collected DNA samples from more than 530 000 possible FinnGen participants. From these, the FinnGen study produces comprehensive genome variant data using genome-wide genotyping and imputation that is based on a population specific sequencing imputation backbone. Using this strategy, variants can be reliably imputed down to very low frequency due to the strong bottleneck effect which the Finnish population has experienced.

9.50–10.30 ROOM: F4+F5

Cardiovascular discoveries and Covid at deCODE genetics

Keynote speaker

- Hilma Holm, Head of Cardiovascular at deCODE genetics, Iceland.

DeCODE genetics, a subsidiary of Amgen Inc., is a genetics research entity that was founded by Kári Stefánsson in Iceland in 1996. Leveraging the participation of more than half of the Icelandic population, detailed genealogical information on Icelanders in the Book of Icelanders, and large international collaborations, deCODE has contributed substantially to our current understanding of the human genome. Scientists at deCODE have discovered major characteristics of mutational processes that generate sequence diversity in the human genome, information that is of paramount importance both to medical genetics and to evolutionary studies. Scientists at deCODE have also discovered key genetic risk factors for rare and common diseases ranging from cardiovascular disease to cancer and have used these findings as tools to further our understanding of disease pathophysiology, including causality.

In 2016, the deCODE Health Study was launched, a prospective cohort study in Iceland with extensive phenotypic and genotypic information, facilitating further discoveries on the relationship between phenotypes and genotypes, including the identification of new syndromes. Following the initiation of the Covid pandemic, the deCODE Health Study was leveraged to investigate the health consequences of SARS-CoV-2 infection. In her talk, Hilma Hólm will provide examples of discoveries at deCODE relating to cardiovascular diseases and discuss the deCODE post-Covid study.

10.30–11.00 ROOM: EXHIBITION HALL F

Coffee break – Exhibition and Posters

11.00–12.30 ROOM: F4+F5

Symposium 1: Combining registries with biobank samples

Stored human biological material suitable for modern molecular analysis in combination with clinical and demographic registries are the most critical resources for research-based translation of advances in molecular biology and advanced technologies into improved human health. The in-depth characterization of human diversity as dictated by variation in the sequences of genomes is now possible on a population-scale. Coupled with longitudinal information about disease risk factors, etiological processes and outcomes, an unparalleled opportunity currently exists to optimize prevention, diagnosis, and treatment of many acute and chronic diseases.

Invited speakers

- 11.00–11.30 Bjarke Feenstra, Senior Scientist, Statens Serum Institut, Denmark. **Understanding health and disease by leveraging the potential of large national biobanks and health registries.**
- 11.30–12.00 Åke Lernmark, Senior Professor, Lund University, Sweden. **The TEDDY study – understanding diabetes in the young by combining big data and biobanking**.

Oral abstract presenters

- 12.00–12.15 Minttu Sauramo, Finnish Institute for Health and Welfare, Finland. **THL Biobank's Availability Service utilizes register data for focused responses on researchers' feasibility studies.**
- 12.15–12.30 Maria Wennberg, PhD, Umeå University, Sweden. **The Northern Sweden Health and Disease Study – Prospective blood samples and data from >140 000 individuals in Västerbotten county.**

Chair

- Lasse Boding, PhD, Head of Coordinating Centre, Danish National Biobank. Statens Serum Institut, Denmark.

12.30–14.00 ROOM: EXHIBITION HALL F

Lunch – Exhibition and Posters

14.00–15.30 ROOM: F3

Symposium 2a: Sample quality

During the sample quality session, the topics will include sampling techniques and the effect of sampling on sample quality, the impact of sample quality on false findings in research, and how to classify and control for sample quality which is “fit for purpose”.

Invited speakers

- 14.00–14.20 Anders Ståhlberg, Professor, Department of Laboratory Medicine, University of Gothenburg, Sweden. **Cell-free DNA analysis in blood plasma: preanalytical considerations and clinical applications.**
- 14.20–14.40 Anne Jorunn Vikdal, Quality Manager Biobank Norway and Project Coordinator HUNT Biobank – Norwegian University of Science and Technology, Norway. **The Trøndelag Health Study; HUNTing for good sample quality for over 30 years.**

Oral abstract presenters

- 14.40–14.50 Christoph Brochhausen, Professor, University Regensburg, Germany. **Structural and molecular quality of Tissue samples after 10 years storage under different protocols based on -80°C and liquid nitrogen.**
- 14.50–15.00 Anders Pedersen, PhD, University of Gothenburg, Sweden. **NMR as a general tool for assessing serum/plasma sample quality: identify sampling tube, sample integrity and other preanalytical characteristics.**

Panel discussion

- 15.00–15.30 Anne Jorunn Vikdal, Anders Ståhlberg, Christoph Brochhausen and Anders Pedersen. **Minimizing Sampling Bias – how to make samples usable in the long perspective and to avoid false positive and false negative findings.**

Chair

- Åsa Torinsson Naluai, Associate Professor, Sahlgrenska Academy at University of Gothenburg and Biobank West at Sahlgrenska University Hospital, Sweden.

14.00–15.30 ROOM: F4+F5

Symposium 2b: Legal and ethical perspectives

Biobank research brings a number of ethical and societal challenges such as finding appropriate avenues to inform participants about data and sample uses, involving participants in the research processes, and ensuring that participant trust and stakeholder engagement is maintained. In this session, particular focus will be put on some key ethical considerations in biobanking including and approaches for the ethically and legally robust sharing of data between Nordic countries.

Invited speakers

- 14.00–14.30 Ann M. Gronowski, PhD, Professor of Pathology & Immunology, and Obstetrics & Gynecology at Washington University School of Medicine in St. Louis, USA. **Ethical issues in Biobanking.**
- 14.30–15.00 Heidi Beate Bentzen, PhD, Researcher, University of Oslo, Norway. **Data sharing between countries.**

Oral abstract presenters

- 15.00–15.15 Janna Nissen, PhD, Copenhagen Hospital Biobank, Denmark. **Experience from information letter sent to 301.363 patients with a sample in The Copenhagen Hospital Biobank.**
- 15.15–15:30 Gesine Richter, University of Kiel, Germany. **Secondary research use of personal medical data: Patient attitudes towards data donation.**

Chair

- Isabelle Budin Ljøsne, PhD, Norwegian Institute of Public Health/Biobank Norway – CS2 ELSI, Norway.

15.30–16.00 ROOM: EXHIBITION HALL F

Coffee break – Exhibition and Posters

16.00–17.30 ROOM: F4+F5

Symposium 3a: Next generation biobanking

This session will address the topic from several angles. The current pandemic has shown that established biobanks may play a new and crucial role as an invaluable clinical platform for contingency studies of a new and life-threatening disease where valid prospective, population-based research is pivotal. We see an outline of a next generation biobanking contributing more directly and immediate to clinical translation of research.

Biobanks struggle with incomplete technical solutions and huge costs for automated storage at ultralow temperatures. Will new technologies markedly change the handling of biobank samples? Is Room Temperature Samples Storage (RTSS) the future solutions?

Invited speakers

- 16.00–16.30 Bart Wilkowski, PhD, IT Section Leader, Danish National Biobank, Statens Serum Institut, Denmark. **A decade of challenges with automated storage systems at ultra-low temperatures – are we better off without them?**
- 16.30–17.00 Thomas Illig, Professor, MD, PhD, Scientific Head of Hannover Unified Biobank, Head of Research of the Department of Human Genetics, Medizinische Hochschule Hannover, Germany. **Biobanking meets Omics.**

Oral abstract presenters

- 17.00–17.15 Christian Stephan, KAIROS – an IQVIA business, Germany. **Next Generation Biobanking: The Future of Personalized Medicine.**
- 17.15–17.30 Thorben Seeger, Lifebit Biotech Ltd, United Kingdom. **Delivery of Federated Trusted Research Environments for collaborative, secure analysis of distributed clinico-genomic data**.

Chair

- Anne Jorunn Vikdal, Project Coordinator/Biomedical Laboratory Scientist, HUNT Biobank, Norwegian University of Science and Technology, Quality Manager, Biobank Norway, Norway.

16.00–17.30 ROOM: F3

Symposium 3b: Biobank sustainability

Building up a sustainable biobank infrastructure includes challenges and opportunities. In this session we will discuss different strategies biobanks can adopt towards sustainable biobanking. Examples will be given of public-private partnerships, the creation of new resources to increase the value of the biobank and providing new types of research services. In addition, ways to advertise and present the biobank resources to the large research community will be explored.

Invited speakers

- 16.00–16.30 Johanna Mäkelä, Director of Research and Service at FINBB, Finland. **Fingenious – Your gateway to Finnish Biobanks and Biomedical Research.**
- 16.30–17.00 Kristian Hveem, Professor, Biobank Norway, Norway. **Sustainable biobanks – challenges and future perspectives.**

Oral abstract presenters

- 17.00–17.15 Linda Paavilainen, Project Coordinator, Uppsala Biobank, Sweden. **It's Imperative to be Intuitive – How to lower the threshold for access to samples.**
- 17.15–17.30 Niina Eklund, Finnish Institute for Health and Welfare, Finland. **High-quality health-research benefits from sustainable biobanking.**

Chair

- Kaisa Silander, THL Biobank, Research Manager, Finnish Institute for Health and Welfare, Finland.

18.30–

Conference dinner at Valands festvåning

The conference dinner will take place at Valands festvåning, a grandiose house dating from 1886. The house is located in the middle of the city at the parade street Avenyn. Dinner and entertainment will be provided. Pre-registration is mandatory.

Address: Valands festvåning, Vasagatan 41, Göteborg

8 September

8.15–8.25 ROOM: F4+F5

Welcome

- Linda Paulson, Chair of Steering Committe, Head of Biobank West, Sahlgrenska University Hospital, Sweden.
- Lasse Boding, Member of Steering Committe, Head of Coordinating Centre, Danish National Biobank. Statens Serum Institut, Denmark.

8.25–8.50 ROOM: F4+F5

Advancing biobanking in Europe – from community engagement to cross-country collaborations with Nordic biobanks

BBMRI-ERIC is the European research infrastructure for biobanking and biomolecular resources, established in 2013. Through our directory we enable access to 700 biobanks with 1800 collections, including cohorts in the areas of e.g. cancer, rare diseases, paediatrics, Covid-19 and infectious diseases across Europe. We are also bringing together researchers, biobankers, industry, and patients with the goal of boosting life science research.

To that end, we offer quality management services, support with ethical, legal, and societal issues, biobanking development and an online platform with tools for access, exchange, and analyses. BBMRI-ERIC is currently funded by 23 European countries and IARC/WHO.

With its vision for the 2022-2024 Work Programme, BBMRI-ERIC plans to intensify its engagement with the biobanking communities, as well as researchers, clinicians and other important actors, such as industry. While Finland, Sweden, and Norway are already on board of the BBMRI-ERIC community, the presentation will discuss the importance of reaching even deeper into the Nordic communities, and looking into possible ways of

further strengthening the collaboration with the BBMRI National Nodes, its biobanks and their stakeholders both, within BBMRI network specific activities and within common EU project activities. The presentation will address also the benefits for Denmark and Iceland potentially joining the BBMRI-ERIC community.

Invited speaker

- Jens K. Habermann, MD, PhD, Director General BBMRI-ERIC, Austria.

9.00–10.30 ROOM: F4+F5

Symposium 4a: The role of Nordic biobanks in pandemics

In this session different ways to utilize biobanks in Covid-19 research will be described, such as the collection of new samples to study long covid, linking genomic biobank data with hospital and register data to provide insight into disease development, and how the biobank infrastructure was harnessed to develop mass testing of Covid-19 in the population. These provide good examples for how biobank infrastructures can support the study of emerging pandemics.

Invited speakers

- 9.00–9.30 Markus Perola, Research Professor, THL Biobank, Finland. **Utilizing Finnish biobanks in Covid-19 research.**
- 9.30–10.00 Karina Meden Sørensen, Section Leader, Laboratory Manager, Statens Serum Institut, Denmark. **Using the Danish National Biobank infrastructure as a platform to develop mass testing of Covid-19 in the population.**

Oral abstract presenters

- 10.00–10.15 Trine Altø, HUNT Research Center and Biobank, Norwegian University of Science and Technology, Norway. **HUNT COVID – a prospective population study for pandemic surveillance.**
- 10.15–10.30 Elisabeth Norén, Biobank Sweden, Sweden. **National coordination of biobanking related to Covid-19.**

Chair

- Satu Koskela, PhD, Assoc. Professor, Finnish Red Cross Blood Service Biobank, Finland.

9.00–10.30 ROOM: F3

Symposium 4b: Good examples of biobank research

As biobanks can give researchers access to samples from a large number of people, they have become a very efficient and important resource in medical research. Thus, they are supporting cutting edge research in e.g. genomics and personalized medicine. The session will provide a broad perspective as well as specific examples on excellent research based on biobanks.

Invited speakers

- 9.00–9.30 Mark Divers, PhD, Director Karolinska Institutet Biobank, Sweden. **Biobanks make a difference: why Time magazine and Forbes got it right.**
- 9.30–10.00 Jonas Ghouse, MD, PhD, Laboratory of Molecular Cardiology, Copenhagen University Hospital, Denmark. **Use of genetic profiling of a large biobank combined with prescription patterns to discover genetic loci associated with adverse drug reactions.**

Oral abstract presenters

- 10.00–10.15 Jonna Clancy, FRC Blood Service Biobank, Finland. **Improving biobank collection usability by computational HLA and KIR typing methods.**
- 10.15–10.30 Margit Larsen, PhD, Copenhagen University Hospital, Denmark. **Large Scale Investigation of Biomarkers using MesoScale Discovery Platform.**

Chair

- Erik Sørensen, PhD, Operational Director Copenhagen Hospital Biobank Unit, Denmark.

10.30–11.00 ROOM: EXHIBITION HALL F

Coffee break – Exhibition and Posters

11.00–12.30 ROOM: F4+F5

Symposium 5a: Infrastructure

The infrastructure of Biobank Sweden aims to give Sweden the best prerequisites for healthcare and research within the biobank area, both national and international.

AstraZeneca's vision is a global biobank infrastructure with visibility, in full compliance with ethical and legal standards and rapid access to samples.

In this session we will also address the EU clinical trial regulation, which came into force in January 2022, and discuss some of the obvious possibilities and hidden obstacles in getting the much-needed infrastructure in place.

Invited speakers

- 11.00–11.30 Sonja Eaker Fält, PhD, Head of Biobank Sweden, Sweden. **Biobank Sweden, a national infrastructure with regional availability.**
- 11.30–12.00 Karin Gedda, PhD, Associate Director, AstraZeneca, Sweden. **Biobanking from a global perspective.**

Oral abstract presenters

- 12.00–12.15 Jock Nielsen, PhD, Copenhagen Hospital, Denmark. **Data management and design in Biobank-merging.**
- 12.15–12.30 Johanna Sandgren, Karolinska Institutet, Sweden. **The Swedish Childhood Tumor Biobank -A national sample-collection and genomic characterization initiative of pediatric solid tumors for research purpose.**

Chair

- Camilla Hildesjö, Med Lic, Custodian Biobank Östergötland, Regionalt biobankscentrum Linköping, Sweden.

11.00–12.30 ROOM: F3

Symposium 5b: Patient engagement and return of genomic data

Health care is moving towards patient-centered and precision medicine where biobanking-based research will play an important role. In this symposium we will discuss biobanking from the patient's perspective as perceived by a patient advocate and a genetic counsellor. Both have extensive experience in representing patient interest in an area of different stakeholders. We will address weaknesses in the legal framework and ethical dilemmas hindering optimal biobanking.

Traditionally, the role of patients has been as research study participants. But with the patient-centred healthcare, its more accepted to have them as collaborators in the study design, development, and governance of biobanks as well as for future strategies. Dynamic consent for empowerment of patients/participants will also be addressed.

Invited speakers

- 11.00–11.30 Vigdis Stefansdottir, PhD, University of Iceland, Iceland. **Recontacting, cascade and opportunistic testing. Sharing data and information with patients.**
- 11.30–12.00 Margareta Haag, Chair of the network against cancer, Sweden. **Patient partnership, a key to precision health.**

Oral abstract presenters

- 12.00–12.15 Anna Clareborn, Biobank Sweden, Sweden. Margareta Haag, Chair of the network against cancer, Sweden. Eskil Degsell, Vice president, Swedish Brain Tumour Association, Sweden. **Collaborating with Patients and Next of Kin: Towards a Culture of Equal Partnership.**
- 12.15–12.30 Shona Kerr, University of Edinburgh, United Kingdom. **Viking Genes: Return of actionable genetic research results to Scottish cohort participants.**

Chair

- Jón Jónsson, Professor, Landspitali – University of Iceland, Iceland.

12.30–13.30 ROOM: EXHIBITION HALL F

Lunch – Exhibition and Posters

13.30–15.00 ROOM: F4+F5

Symposium 6a: Digitalization

What can digitalization offer biobanks and biobank research? New ways to visualize vast amounts of data, explore different scenarios and obtain novel research ideas will be shown, including health register data and genomic data. In addition, developing digital services for biobank sample donors, built inside the hospital settings will be described. These include consent management and recontact of donors.

Invited speakers

- 13.30–14.00 Aki Lehto, ICT-Architect, Tampere University Hospital, Finland. **OmaTays – enabling digital consent interaction for Tampere Biobank.**
- 14.00–14.30 Toni Mikkola, Data Scientist, Tampere University Hospital, Finland. **Short introduction to unstructured patient records, – From regular expressions to text classification.**

Oral abstract presenters

- 14.30–14.45 Hanna Fransson, Biobank Sweden, Sweden. **National Biobank Register (NBR) – the regions' common IT system with data about samples kept in biobanks.**
- 14.45–15.00 Nina Krüger, Oslo University Hospital, Norway. **Development and implementation of electronic informed consent for cancer research.**

Chair

- Kimmo Savinainen, Deputy Head of Finnish Clinical Biobank Tampere, Tampere University Hospital, Finland.

13.30–15.00 ROOM: F3

Symposium 6b: Innovative technologies

New developments from all directions are transforming biobanking and making it possible to do so much more with samples and data that represent complex biology. This symposium will look at some examples of technology leaps that either build on biobanks or transform what they can do.

Invited speakers

- 13.30–14.00 Mattias Rantalainen, Lecturer Senior, Karolinska Institutet, Sweden. **The CHIME project – leveraging national registries and biobanks to develop AI-based solutions for cancer precision pathology.**
- 14.00–14.30 Päivi Östling, Researcher, Karolinska Institutet, Sweden. **Material flows needed for multi-onic and functional precision medicine.**

Oral abstract presenters

- 14.30–14.45 Jón Jónsson, Professor, Landspitali – University of Iceland, Iceland. **Evaluation of DNA damage in biosamples.**
- 14.45–15.00 Cindy Lawley, PhD, Olink, USA. **Proximity extension assay in combination with Next-Generation Sequencing for high-throughput proteome-wide analysis in large population health and biobank studies.**

Chair

- Mark Divers, PhD, Director, Karolinska Institutet Biobank, Sweden.

15.00–15.20 ROOM: EXHIBITION HALL F

Coffee break – Exhibition and Posters

15.20–16.05 ROOM: F4+F5

Panel discussion – Collaboration between Nordic Biobanks

Moderator

- Frida Lundmark, The Swedish Association of the Pharmaceutical Industry, LIF, Sweden.

Panel

- Sweden: Sonja Eaker Fält, Biobank Sweden.
- Norway: Kristian Hveem, NTNU, Biobank Norway.
- Denmark: Lasse Boding, Danish National Biobank.
- Finland: Marco Hautalahti, FINBB.
- Iceland: Jón Jónsson, University of Iceland.

16.05–16.15 ROOM: F4+F5

Closing remarks and the future of Nordic Biobank Conference

- Linda Paulson, Chair of Steering Committee, Head of Biobank West, Sahlgrenska University Hospital, Sweden.
- Lasse Boding, Member of Steering Committee, Head of Coordinating Centre, Danish National Biobank. Statens Serum Institut, Denmark.

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Biobanking and the next frontiers in medicine

Meet us in stand F01:02

Through its long-standing collaboration with the Institute for Molecular Medicine Finland (FIMM), Linde Healthcare has been able to develop its QI® Cryo solution for the safe cryogenic storage of biological samples – and by extension help enable pioneering medical research.

The Institute for Molecular Medicine Finland (FIMM) established its first centralised sample storage unit at the University of Helsinki in 2009. Starting with a capacity of 335,000 samples, today FIMM has 16 liquid nitrogen based freezers and capacity for over one million samples.

Tiina Vesterinen is laboratory coordinator at FIMM. She is also involved in a research group at the Helsinki University Hospital's pathology department, into rare cancers and neuroendocrine tumours. This involves extensive use tissue samples in Finnish biobanks.

"We use RNA sequencing, immunohistochemistry and artificial intelligence to find new diagnostic, predictive or prognostic biomarkers," she explains. With these biomarkers, we aim to better diagnose patients and personalise their treatment, as well as better estimate their prognosis."

Research such as this will become increasingly important as the population continues to age and more cancers appear. An aging population will also lead to an increase in cardiovascular diseases and different neurological disorders.

A vital component of any biobank is its cold storage system, as the temperature of the samples must not exceed -130°C. From the beginning, FIMM elected to work with Linde's liquid nitrogen and cryogenic technology.

"This is a much safer way of storing samples because you do not need to worry about losing electricity," explains Tiina. "If you have an electric freezer and the power is cut off, the samples will melt within 12 hours, but in liquid nitrogen-based freezer, we can keep them frozen for two weeks after the last nitrogen refill."

As an added safety margin, the solution provided by Linde provides temperatures as low as -190°C – a level not possible with electric freezers. There are also additional benefits compared to electricity including lower noise and energy consumption.

Over the course of its decade-long collaboration with FIMM, Linde has been able to develop and expand its offer into QI Cryo, a full turn-key solution for all cryogenic needs. This includes the design and installation of complete systems, as well as continued delivery of liquid nitrogen, training, technical support and advanced monitoring systems.

Holm & Halby
TIL LABORATORIER I UDVIKLING

BESØG VORES STAND
NR. F04:13

COLD STORAGE

Holm & Halby har gennem 35 år leveret løsninger til coldstorage - opbevaring, overvågning, automatisering og uddannelse.

Og her på Nordic BioBank Conference kan du opleve:

Haier

Haier fryserne
- danske biobankers foretrukne -86˚C fryser

eupry

Eupry
- fryseroverv̊agning når det er bedst

NYHED: CryoNoster
- et fuldautomatisk kryogen masselager til biobanker, hospitaler, biofarmaceutiske virksomheder og forskningsinstitutioner.
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Fryser førstehjælp seminar
- Lær at holde dine -80˚C frysere godt kørende

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Visit Stand F02-22 to learn more about the NEW Microlab® STAR™ Line

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We are a premium supplier of equipment and instruments for laboratories and hospitals in the Nordics.

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- Freezers, -86°C with and without compressors, -150°C box
- Cryogenic equipment:
  Liquid Nitrogen generators
  Storage tanks in vapour phase and liquid transport vessels
  Robotic system in liquid nitrogen vapour phase
- Safety cabinets, standard and custom made
- Local technical service, installation, maintenance and IQ/OQ
- And much, much more…

COME AND MEET WITH US IN STAND F02:06

For more info, contact us on
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or give us a call at
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BIOBANKING FOR PERSONALIZED MEDICINE – MORE THAN JUST STOCK LOGISTICS.

KAIROS
an IQVIA business

CentraXX Bio – Sample documentation often remains a static snapshot that concentrates primarily on the time of collection. The CentraXX research portal, on the other hand, provides all relevant patient/donor data continuously and links them in a meaningful and clear manner.

CentraXX not only facilitates the stock location-, and complete lifecycle management of all biospecimen in a biobank according to GcP, but also supports in establishing a research pipeline fed from several source systems (e.g., HIS, LIMS, etc.).

This pipeline can be used to identify patients more quickly for clinical trials, provide high-quality data for evidence-based studies, pre-populate eCRFs, and much more. And all the above can be achieved with CentraXX modules that integrate seamlessly. Therefore, CentraXX is a tool that does more for you than to manage your freezers.

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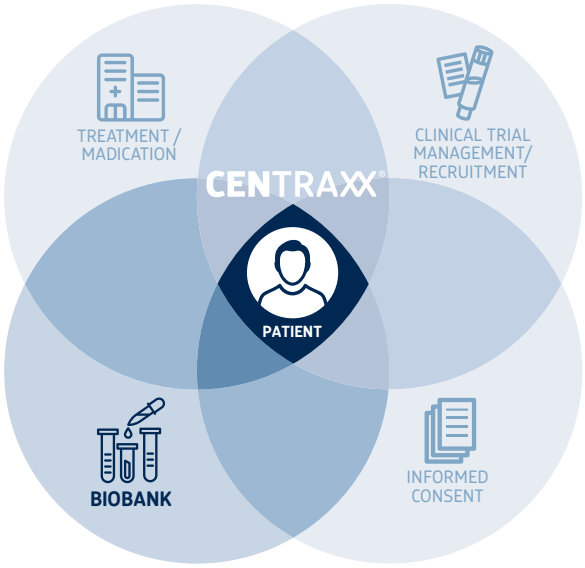

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Vi erbjuder kundanpassade lösningar för både manuella och automatiserade applikationsflöden riktade mot biobank och hanteringen runtomkring. I flödena kan vi erbjuda allt från rör för långtidsförvaring av prover (2D-märkta frysrör), skanners (läsare för 1D- och 2D-koder) till frysar (-20 till -150 grader) med anpassad inredning för optimerad lagring, kryokärl samt automatiserade vätskehanteringsapplikationer.

High-quality automation solutions for biobank sample purification, quantitation and qualification

Promega

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Our solutions

BD – The trusted name in biomarker stabilization

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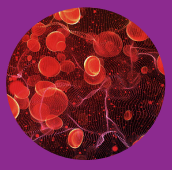
PAXgene® Blood RNA Tubes



PAXgene® Blood ccfDNA Tubes

Widerlab™ TII

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INNOVATION IN SAMPLE STORAGE

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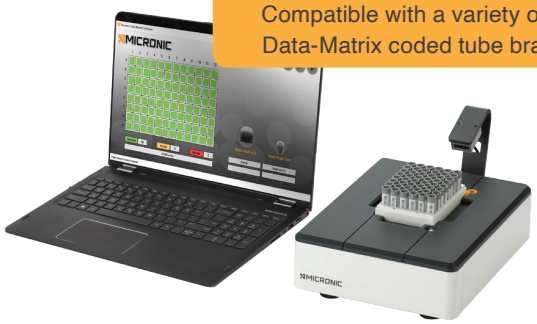

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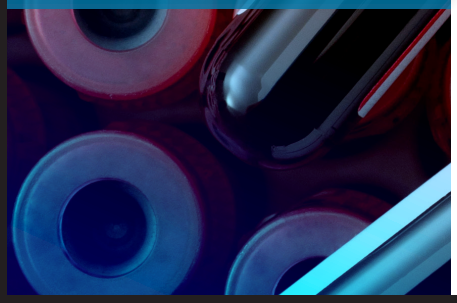
Facing an ever-increasing demand, biobanks empower clinical, pharmaceutical, and basic research to increase our understanding of complex diseases by delivering the right resources, to the right researcher, at the right time.



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Current trends and challenges in the Nordic countries
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BiO.Li.X!
AUTOMATED SAMPLE STORAGE

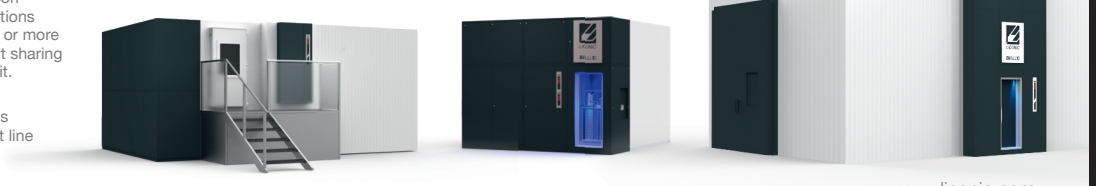
The Liconic BiOLiX FAB Line is now available as first of its kind hybrid system with multiple temperature storage spaces within one unit.

Biobanks have sometimes collections that need different storage conditions and at the same time face space constrains. As a solution to those requirements and limitations LiCONiC developed the system that incorporates two or more chambers with independent temperature setpoints but sharing same robotic handling assembly and built into one unit.

BiOLiX FAB as a hybrid version offers the same set of features and advantages as mono temperature models adding next level of flexibility to the well know product line challenging competition in the unprecedented way.

LiCONiC is driven by its position as the world's leading provider of a broad spectrum of off-the-shelf and custom made automated storage solutions for numerous applications: from providing incubation of plates and other labware within various climates and conditions to storing of the high value Biosamples and Compounds.

LiCONiC products are often integrated into large and complex systems. The universal user-friendly hardware and software interfaces make the integration of LiCONiC systems both simple and smooth.



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NORDIC Biobank Conference

6–8 sept 2022

The program does not include changes made after 1 September, 2022. For the most recent updates, please see the program on the conference web page: nbc.biobanksverige.se