Connecting the Precision Medicine ecosystem to optimise patient access and advance real-world implementation

40+ expert speakers including:

Richard Rosenquist Brandell, Professor of Clinical Genetics, Karolinska Institutet
Bettina Lundgren, CEO, Danish National Genome Centre
Joni Komulainen, Senior Ministerial Adviser, Ministry of Social Affairs Finland
Kari Stefansson, CEO and Founder, deCODE Genetics
Grethe Synnøve Foss, Project Manager, Norwegian Strategy for Personalised Medicine at the Directorate for Health and Care
Professor Dame Sue Hill, Chief Scientific Officer for England and Senior Responsible Officer for Genomics, NHS England and NHS Improvement
Paul Franks, Scientific Director in Clinical Science, Novo Nordisk Foundation
Seppo Vainio, Professor, Director, Biocentre Oulu, Borealis Biobank of Northern Finland, Faculty of Biochemistry and Molecular Medicine, University of Oulu

Sponsors:

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Welcome to Nordic Precision Medicine Forum 2022

Since 2016, this conference has brought together the leading experts from government, industry, technology, research and healthcare to share learnings to help advance the implementation of Precision Medicine. We can’t wait to return in 2022!

With continued high-levels of investment, rich biobank and cohort data – as well as a solid commitment from Governments to lead the field of Precision Medicine in the Nordics – the region continues to flourish and excel to move Precision Medicine from the bench, to the patient.

Since our last meeting in 2019, there is much to talk about, with scientific breakthroughs across Precision Oncology and rare diseases leading the field. However as with any transformation of this scale – there is much still to be done to seize the full potential and opportunity.

With a focus on strategy, innovation, real-world implementation, research and discovery, the Nordic Precision Medicine Forum is your chance to unite with colleagues across the ecosystem to discuss how to increase patient access and enable implementation into every day, routine medical practice. Join us for 2 days to step back and reflect, to collaborate and learn – and get inspired!

Key themes for 2022 include:

- Large-scale clinical trials and how these are supporting next-generation developments in the Nordics
- Advancing the application of multi-omics – from the lab and into practice
- Technology advances in machine learning and AI and how that is advancing Big Data analysis
- Next thinking to take Precision Medicine beyond genomics
- IVDR implementation and managing the roll-out for the Nordics genetic testing market
- Integrated approaches to delivering the real-world implementation of Precision Medicine in the hospital
- Unblocking data legislation barriers to enable secondary-use of patient data
- Novel approaches to biomarker discovery
- And much more!
5 reasons to join us in Stockholm 27-28 April 2022

1. Pick and choose from 35+ sessions and access a wide-range of case studies, research projects, novel applications, policy developments and innovative thinking.

2. Access senior influencers, project leaders and change-makers from across the region – all in one place – for a networking and collaboration opportunity like no other.

3. Share your insights and be part of the conversation through panel discussions, Q&A sessions and small-group discussions throughout the programme.

4. Put your questions to 40+ top experts from across the Nordics ranging from government, industry, technology, research and healthcare.

5. Whatever your contribution to advancing Precision Medicine, walk away with new ideas and connections to inspire your next project, solve critical challenges and be a part of shaping the future.
Day 1 – Wednesday 27 April 2022

10.00 Registration
10.30 Opening remarks from the Chair
Richard Rosenquist Brandell, Professor of Clinical Genetics, Karolinska Institutet

DELIVERING THE VISION

10.45 Nordics Update
State of the nation: Implementation progress report from across the Nordics
- From bench to patient: Reviewing progress across Nordics countries
- What have been the lessons to date: What works, what doesn’t, where have been the most interesting results?
- How are countries collaborating on a Nordic level?
- Contrasting bottom-up vs top-down approaches

Bettina Lundgren, CEO, Danish National Genome Centre
Kari Stefansson, CEO and Founder, deCODE Genetics
Grethe Synnøve Foss, Project Manager, Norwegian Strategy for Personalised Medicine at the Directorate for Health and Care

12.00 Keynote
From research to regular use: Establishing the NHS Genomic Medicine Service
This session will look at one of the most advanced Precision Medicine programmes in the world and share behind-the-scenes insights into the practical steps taken - at both a national and local level – to unlock large scale implementation.

Professor Dame Sue Hill, Chief Scientific Officer for England and Senior Responsible Officer for Genomics, NHS England and NHS Improvement

12.40 Lunch
13:20 Panel Discussion
Precision Medicine beyond genomics
With progression in multi-omics stalling and the cost-benefit analysis not always adding up, in this discussion we’ll review how to take Precision Medicine beyond genomics in practice. We’ll also explore the development and application of functional analysis and how this is being used as a precision medicine tool alongside genomic-focused approaches to improve targeted drug development and accelerate clinical implementation.

Paul Franks, Scientific Director in Clinical Science, Novo Nordisk Foundation, Henrik Ullum, CEO, Statens Serum Institute

14.20 Presentation
Working with Government to create an implementation roadmap in Sweden
- Working as an ecosystem to set out to Government the specific requirements for full implementation
- Establishing milestones and priorities to deliver on the vision of Precision Medicine in the next 5 years
- Accelerate and move forwards: Next steps to build the infrastructure for patient access

Frida Lundmark, Policy Manager, Lif

14:50 Refreshments & Networking
**TECHNOLOGY & INNOVATION - WORKSHOPS**

**15.20 Workshops**

These focused, interactive sessions give you the opportunity to discuss a key topic of interest to you in a more participative format. Each session will be led by a facilitator who will lead the discussion and encourage maximum debate and sharing of ideas.

**Break-out 1**
Interrogating large datasets through AI and ML. Explore new algorithms and developments in AI and ML to assess variants across large population cohorts – essential for Precision Medicine in complex diseases.

**Break-out 2**
Comprehensive genomic profiling – in practice. How to simultaneously assess multiple biomarkers in numerous tumor types with a single NGS assay. US insurance companies are now paying for it – how can we make this a reality for the Nordics countries?

**Break-out 3**
CRISPR and homologous recombination repair and efficiency

**Break-out 4**
Decision support tools for real-world implementation of multi-omics. With progression in multi-omics stalling and the cost-benefit analysis not always adding up, how can decision support tools help doctors use complex data in decision making and further the value of multi-omics in Precision Medicine.

**Break-out 5**
Sequencing analysis of whole exome tumor DNA and RNA

**Break-out 6**
Preparing the supply chain for precision medicine manufacturing at scale

**Break-out 7**
Accessing funding mechanisms to advance health innovation. Explore how to take advantage of national and international funding schemes as well as Public-Private Partnerships & collaborations. Merike Leego, Innovation Manager, EIT Health Scandinavia

**Break-out 8**
Sequencing analysis of whole exome tumor DNA and RNA

**Break-out 9**
Preparing the supply chain for precision medicine manufacturing at scale

**Break-out 10**
Accessing funding mechanisms to advance health innovation. Explore how to take advantage of national and international funding schemes as well as Public-Private Partnerships & collaborations. Merike Leego, Innovation Manager, EIT Health Scandinavia

**NEXT GENERATION TESTING & CLINICAL TRIALS**

**14.00 Exploring the opportunity for large-scale trials across the Nordics:**
Reviewing IMPREs and InPreD
- Working across public sector and industry to transition from clinical trials to routine practice
- Developing the diagnostics infrastructure to widen access across the population
- Achieving national harmonisation through an ecosystem approach
- Advancing clinical implementation of Precision Medicine

**Jutta Heix, Head of International Affairs, Oslo Cancer Cluster**
**Åslaug Helland, Professor, University of Oslo**

**17.40 Close of Day 1**
Followed by complimentary networking drinks reception
Day 2 – Thursday 28 April 2022

08.30 Welcome refreshments and networking

09.00 Opening remarks from the Chair
Richard Rosenquist Brandell, Professor of Clinical Genetics, Karolinska Institutet

ENABLING PATIENT ACCESS

09.05 Patient Story
Improving quality of life through Precision Medicine
As we start Day 2 of the conference with a focus on enabling patient access and facilitating clinical implementation, let’s reflect on the real difference Precision Medicine is making to the lives of everyday people.
Margareta Haag, President, Nätverket mot Cancer

09.30 Panel Discussion
How are health economies adapting to facilitate patient access?
• Developing a functioning precision medicine strategy that works for society
• Precision public health and ensuring health equity
• Contrasting variations in approaches to reimbursement
• National vs regional approaches – how will we best break down the barriers to achieve clinical implementation
• Is the progress enough?
Prof Markus Perola, Research Professor and Head of the Genomics and Biomarkers Unit, University of Helsinki and Research Professor at National Institute of Health and Welfare (THL)

10.10 Presentation
Regulatory frameworks and systems to enable data sharing across the ecosystem
• Perspective 1: Establishing regulations to enable secondary use of health and social care data
• Perspective 2: Examining why data regulations remain a challenge – and next steps
Joni Komulainen, Senior Ministerial Adviser, Ministry of Social Affairs Finland
Sophia Pagil, Lawyer, Genomic Medicine Sweden

10.40 Refreshments & Networking

RESEARCH & DISCOVERY – TRACKS
These break-outs offer the opportunity to explore the latest developments in clinical research and developments taking place across the Nordics region. Pick and choose the sessions most relevant to your work. Presentations are designed to be short to inspire thinking and new ideas.

Track A – Exploring Precision Health

11.10 Adapting approaches to R&D for complex diseases
Tuuli Lappalainen, Director of the National Genomics Infrastructure (NGI), SciLifeLab

11:30 Prevention and early therapy of rheumatoid arthritis
Per-Johan Jakobsson, Head of Rheumatology Division, Karolinska Institute

11:50 Using genomic data to identify high-risk cohorts for breast cancer
Neeme Tõnisson, Professor, Tartu University

12:10 Panel Q&A

Track B – Advancing Multi-Omics

11.10 Advancing the application of state-of-the-art proteomics in Precision Medicine
Maria Pernemalm, Assistant Professor, Karolinska Institutet

11:30 Advancing novel molecular digital biosensors to monitor population wellness and deliver personalised, proactive treatment
• Finding new ways to reduce co-morbidities and manage future pandemics
• Optimising the role of home-based diagnostics, wearables and remote monitoring for data capture
• Collecting clinical grade DNA, RNA, protein and metabolite samples - including info of viruses, bacteria etc.
Seppo Vainio, Professor, Director, Biocentre Oulu, Borealis Biobank of Northern Finland, Faculty of Biochemistry and Molecular Medicine, University of Oulu

11:50 Combining genomics, proteomics and metabolomics

12:10 Panel Q&A
12:30 Lunch

Break into tracks

Track C – Biomarker Discovery

13:30 Novel diagnostic and prognostic biomarkers in solid tumours
Tobias Sjöblom, Professor, Department of Immunology, Genetics and Pathology & Director, Research Infrastructure, Uppsala University & Sweden Biobank

14:10 Advancing novel molecular digital biosensors to monitor population wellness and deliver personalised, proactive treatment
- Finding new ways to reduce co-morbidities and manage future pandemics
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- Collecting clinical grade DNA, RNA, protein and metabolite samples - including info of viruses, bacteria etc.

Seppo Vainio, Professor, Director, Biocentre Oulu, Borealis Biobank of Northern Finland, Faculty of Biochemistry and Molecular Medicine, University of Oulu

14:30 Panel Q&A

OR

Track D – Data-Driven Precision Medicine

13:30 Leveraging digital genetic information to study genetic variation in populations and better understand reasons for illness and health
Kristian Hveem, Professor in Clinical Epidemiology and Medicine, Norwegian University of Science and Technology (NTNU)

13:50 Integrating AI-driven image analysis into Precision Medicine
Mattias Rantalainen, Associate Professor, Karolinska Institute

14:10 Optimising the value of integrated datasets and biobank registries for clinical studies
Andres Metspalu, Head of the Estonian National Biobank, University of Tartu

14:30 Panel Q&A

14:50 Refreshments & Networking

REAL-WORLD IMPLEMENTATION

15:00 Presentation
Ensuring quality control and patient safety in Precision Medicine
- Why are we generating variations in different healthcare systems?
- Looking at Precision Medicine from the patient safety perspective
- Developing Variant Exchange for sharing of clinical genomic data to improve diagnostic yield and quality assurance

Dr Sharmini Alagaratnam, Principal Researcher, Precision Medicine Research Programme, DNV GL.
Guro Meldre Pederson, Innovation Lead Digital Health, DNV GL

15:35 Presentation
Taking an integrated approach within the hospital – to deliver Precision Medicine at scale
To achieve real-world implementation of Precision Medicine, it is important to work from within the hospital. Traditional ways of working do not always support implementation goals – with challenges including reimbursement, governance and outcomes measurement. So how do we embed Precision Medicine into everyday healthcare practice? In this session we'll explore a case study experience at Karolinska which attempted to trial new ways of working, to break down silos between specialties, taking an integrated patient-centred approach.

Anna Wedell, Professor, Karolinska

16:05 Panel Discussion
Establishing the Big Data infrastructure to deliver Precision Medicine
- Integrating a plethora of datasets for ease of use
- Where will big data be housed and managed: Centralised vs decentralised models?
- Funding the high-performance computing and data infrastructure requirements
- Handling sensitive data and managing data security

Olli Kallioniemi, Director of Science for Life Laboratory, Professor of Molecular Precision Medicine, Karolinska. Leon Charl du Toit, Section Leader, University Centre for Information Technology (USIT)

16:40 Closing remarks from the Chair

16:50 Conference close
Who attends the Nordic Precision Medicine Forum?

This event brings together a delegation from across the Nordics and beyond, with representation from all areas of the ecosystem.

Access ideas, projects and research from across the Nordics

Delegates join this event from Sweden, Denmark, Iceland, Finland, Norway and Estonia – with some delegates also joining from across Europe to see the latest developments taking place in the region.

“...a great event which surpassed my expectations; one of the best conference I have been to for years”

Network and collaborate with the organisations leading the field

Past attendees include:
- Karolinska Institutet
- Amgen AB
- Institute for Molecular Medicine Finland (FIMM)
- Bayer AS
- Aarhus University Hospital
- Lund University
- DNV GL
- KTH Royal Institute of Technology
- Swedish Pharmaceutical Society
- University of Copenhagen
- Bristol-Myers Squibb
- Aalborg University
- Danish National Genome Center
- Illumina
- Novartis
- University of Bergen
- Linköping University
- Rigshospitalet
- Thermo Fisher Scientific

“if we can convert even half of our leads into sales this will make it a massive success. A must attend”

Unite with the community driving forwards Precision Medicine

“..very difficult to improve on the experience”

*TO VIEW THE LASTEST AGENDA AND TO REGISTER VISIT PRECISIONMEDICINEFORUM.COM