

SciLifeLab Clinical Genomics 10th Anniversary Symposium

“Genomic technologies transforming precision diagnostics”

April 10-11, 2025

Venue: Conference Centre Wallenberg, Medicinaregatan 20A, Gothenburg

April 10

8:30-10:35 Introduction Session

8:30-9:00 Coffee and Registration

9:00-9:05 *Welcome address*

Thoas Fioretos, outgoing Platform Director Clinical Genomics

9:05-9:35 *10 years with Clinical Genomics: Changing the landscape of genome-based precision diagnostics*

Valter Wirta, Platform Scientific Director, Clinical Genomics Stockholm

9:35-10:05 *SciLifeLab: Enabling Scientific Discovery Through Cutting-Edge Infrastructure*

Annika Jenmalm Jensen, Infrastructure Director SciLifeLab

10:05-10:35 *My diagnostic odyssey: Why is a correct diagnosis important for the patient?*

Helene Cederroth, Founder and Chair Wilhelm Foundation

10:35-11:30 Coffee break

11:30-12:40 Session 1: Current and emerging next-generation sequencing technologies

Chairs: Anna Lyander, CG Stockholm, and Malin Melin, CG Uppsala

11:30-12:00 *Keynote: Sequencing technologies now and in the future*

Lars Feuk, Platform Co-Director, National Genomics Infrastructure - Uppsala

12:00-12:20 *Nucleic acid analysis in cancer management using liquid biopsies*

Anders Ståhlberg, Professor, University of Gothenburg

12:20-12:40 *Rapid diagnosis of leukemic aberrations using nanopore sequencing*

Tatjana Pandzic, Clinical Laboratory Geneticist, Uppsala University

12:20-14:00 Lunch

14:00-15:10 Session 2: Genomics for pathogen detection and pandemic preparedness

Chairs: Paula Mölling, CG Örebro, and Valtteri Wirta, CG Stockholm

14:00-14:30 *Keynote: With a mission to fight a pandemic outbreak: Lessons learned?*
Lars Engstrand, Professor, Karolinska Institutet, Stockholm

14:30-14:50 *Nationwide multicentre study evaluating Nanopore sequencing for bacterial 16S rRNA-species identification*
Sofia Brunet, PhD student, Sahlgrenska University Hospital, Gothenburg

14:50-15:10 *Integrative Outbreak Simulation: A One Health Approach for Enhanced Pandemic Preparedness*
René Kaden, Associate Professor, Akademiska sjukhuset, Uppsala

15:10-16:00 Coffee break

16:00-16:30 Keynote

Chair: Colum Walsh, CG Linköping

Genomic Medicine Sweden: Impacting Swedish Precision Medicine

Richard Rosenquist, Director Genomic Medicine Sweden (online)

16:30-17:30 Session 3: Advancing Genomics: Insights from Industry Leaders

Chairs: Ka-Wei Tang, CG Gothenburg, and Linda Köhn, CG Umeå

16:30-16:45 *Roche Sequencing Solutions - Introducing Sequencing by Expansion*
Joel Jonasson, Commercial Specialist, Sequencing, Roche Diagnostics Scandinavia

16:45-17:00 *Take the leap into multiomics with Illumina innovation*
Filip Stern, Executive Sales Specialist, Illumina – North

17:00 -17:15 *What You're Missing Matters: Catching the Unnoticed with Nanopore Sequencing*
Christos Coucoravas, Field Application Scientist, Oxford Nanopore Technologies, Nordics

17:15 - 17:30 *Unlocking new insights in oncology research with AMP technology*
Moa Persson, NGS Clinical Sales Specialist, Integrated DNA technologies, Archer

17:30 Welcome drink followed by dinner

April 11

9:00-9:30 Keynote

Chair: Lucia Cavelier, outgoing co-Platform Director Clinical Genomics
Genomics technologies that will shape the future of precision diagnostics
Joakim Lundeberg, Professor, KTH Royal Institute of Technology, Stockholm

9:30-10:40 Session 4: Translational Single cell and Spatial Omics

Chairs: Anna Hagström, CG Lund, and Julia Bräunig, CG Lund

9:30-10:00 *Keynote: What can we learn from the human cell atlas?*
Olli Dufva, Postdoctoral fellow, Wellcome Sanger Institute, UK

10:00-10:20 *Mapping ex vivo drug responses in single cells*
Jessica Nordlund, Associate Professor, Uppsala University

10:20-10:40 Molecular understanding of response to immune checkpoint blockade in melanoma
Göran Jönsson, Professor, Lund University

10:40-11:20 Coffee

11:20-12:30 Session 5: Diagnostic Analytics and Informatics

Chairs: Lars Palmqvist, CG Gothenburg, and Marcela Dávila, CG Gothenburg

11:20 -11:50 *Keynote: Dynamic digital twins for personalised early diagnostics and therapeutics*
Mikael Bensson, Principal Researcher, Karolinska Institutet, Stockholm

11:50-12:10 *Digital Biology: Large-Scale Integration of Biomedical Data To Decipher Biology and New Treatments*
Araz Rawshani, Associate Professor, University of Gothenburg

12:10-12:30: *AI in Clinical Bioinformatics*
Marcin Kierczak, NBIS expert, Uppsala University

12:30-14:00 Lunch

14:00-14:30 Keynote

Chairs: Lucia Cavelier, outgoing co-Platform Director CG, and Thoas Fioretos, outgoing Platform Director CG
Implementing genomic medicine at a national level
Matt Brown, CSO Genomics England; UK (online)

14.30-15.00 Panel discussion

Clinical Genomics: Challenges, opportunities, and the next decade

Mikael Benson, Lucia Cavelier, Helene Cederroth, Lars Feuk and Thoas Fioretos

Moderator: Colum Walsh

15:00-15:10 Concluding remarks

Colum Walsh, incoming Platform Director Clinical Genomics

15:10 Coffee and end of conference