

# 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*  
**Valteri 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 Chair Wilhelm Foundation – the Undiagnosed

### 10:35-11:30 Coffee break

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

*Chairs: Anna Lyander, Malin Melin*

- 11:30-12:00 Keynote: *Sequencing technologies now and in the future*  
**Lars Feuk**, Platform Director, National Genomics Infrastructure
- 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**, Uppsala University

**12:20-14:00 Lunch**

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

*Chairs: Paula Mölling, Valtteri Wirta*

14:00-14:30 *Honorary Keynote: With a mission to fight a pandemic outbreak: Lessons learned?*

**Lars Engstrand**, Professor, Karolinska Institutet

14:30-14:50 *Nationwide multicentre study evaluating Nanopore sequencing for bacterial 16S rRNA-species identification*

**Sofia Brunet**, PhD student, Sahlgrenska University Hospital

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 1**

*Chair: Colum Walsh*

*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, Linda Köhn*

16:30-16:45 Roche Diagnostics Scandinavia AB

16:45-17:00 *Take the leap into multiomics with Illumina innovation*

**Filip Stern**, Executive Sales Specialist, Illumina – North

17:00 -17:15 Nanopore

17:15 - 17:30 Integrated DNA technologies

**17:30 Welcome drink followed by dinner**

**April 11**

**9:00-9:30 Keynote 2**

*Chair: Lucia Cavalier*

*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, Julia Bräunig*

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**

**11:20-12:40 Session 5: Diagnostic Analytics and Informatics**

*Chairs: Lars Palmqvist, Marcela Dávila*

11:20 -11:50 Keynote: *Dynamic digital twins for personalised early diagnostics and therapeutics*  
**Mikael Besson**, 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**

**14:00-15:20 Session 6: The future of genome-based diagnostics and medicine**

*Chairs: Lucia Cavellier, Thoas Fioretos*

14:00-14:30 Keynote 3: *Implementing genomic medicine at a national level*  
**Matt Brown**, CSO Genomics England; UK (**online**)

14.30-15.00 Panel discussion

**15:00-15:20 Concluding remarks**

**Colum Walsh**, incoming Platform Director Clinical Genomics

**15:20 Coffee and end of conference**