

## **Next-Generation Diagnostics - 21 September 2016 (Aula Medica, Karolinska Institutet)**

8.00-8.30	Registration	
8.30-8.40	Welcome	
<b>Session I: Introducing novel technologies into healthcare (chair Lars Engstrand)</b>		
8.40-9.00	Introduction to Science for Life Laboratory	Olli Kallioniemi, SciLifeLab, Stockholm
9.00-9.20	Mission of Next-Generation Diagnostics Platform	Richard Rosenquist, Uppsala University
9.20-9.50	Broad scale implementation of next-generation sequencing in healthcare	Clare Turnbull, Queen Mary University of London
9.50-10.20	Coffee	
10.20-10.50	Proximity extension assays for biomarker discovery	Agneta Siegbahn, Uppsala University
10.50-11.20	Multiplex protein analysis of biomarkers in atherosclerosis	Jan Nilsson, Lund University
<b>Session II: Moving whole exome/genome sequencing into diagnostics (chairs Ann Nordgren &amp; Tommy Martinsson)</b>		
11.20-11.50	Clinical next-generation sequencing: state-of-the-art and beyond	Marcel Nelen, Radboud University, Nijmegen
11.50-12.20	Large-scale human and microbial WGS for clinical applications	Valtteri Wirta, SciLifeLab, Stockholm
12.30-13.30	Lunch	
13.30-14.00	Clinical whole-genome sequencing unravels disease-causing genes	Anna Wedell, Karolinska Institutet
14.00-14.30	Ethical issues with whole-genome sequencing: where do we stand?	Heidi Howard, Uppsala University
<b>Session III: NGS strategies in cancer diagnostics (chairs Johan Botling &amp; Thoas Fioretos)</b>		
14.30-15.00	Breast cancer genetics: impact on diagnostics and prediction	Serena Nik-Zainal, Wellcome Trust Sanger Institute
15.00-15.30	The MSK-IMPACT initiative in prospective clinical cancer genomics: the first 10,000 patients	Mark Ladanyi, Memorial Sloan-Kettering Cancer Center
15.30-16.00	Coffee	

16.00-16.30  
16.30-17.00

NGS-based diagnostics in hematological malignancies  
Individualized therapy in hematological malignancies:  
a system medicine approach

Torsten Haferlach, MLL Laboratory, Munich  
Caroline Heckman, FiMM, Helsinki

**Session IV:**  
17.00-17.30

**Novel biomarkers & molecular tools (chair: Agneta Siegbahn & Åke Borg)**  
Protein profiling reveals consequences of lifestyle choices  
on predicted biological aging  
Innovative molecular tools for future diagnostics

Ulf Gyllensten, Uppsala University  
Ulf Landegren, Uppsala University

17.30-18.00

Concluding remarks