

**AESPIRE & Clinical Genomics Epigenetics**  
**Epigenetics & AI Meeting March 26-27 2026**  
**Hotel Ekoxen, Linköping**

**Day1: March 26<sup>th</sup> Program**

10:00	Arrival, coffee & registration
10:30	<b>Welcome &amp; orientation</b> Anita Öst, AESPIRE & Colum Walsh, Clinical Genomics
<b>Session 1: Forensics</b>	
Moderator: Daniel Kling, National Board of Forensics (RMV), Linköping	
10:40	<b>Forensic genetics &amp; epigenetics in the omics era (30min+5)</b> Manfred Kayser, Erasmus University, Netherlands
11:15	<b>Optimising the DNA-methylation age model for adolescents and young adults</b> Kristina Stenlökk, Oslo University Hospital (20min+5)
11:40	<b>Forensic epigenetic age estimation and the ForMAT project (20min +5)</b> Ana Freire-Aradas, University of Santiago de Compostela, Spain
12:05	Lunch [includes Planning session, Forensics group]
13:00	Introductory remarks: Start of Clinical Genomics cohosted workshop Colum Walsh, Clinical Genomics
<b>Session 2: Fertility</b> Moderator: Unn Kugelberg, BKV LiU	
13:05	<b>Sperm-borne RNAs as mediators of paternal effects: lesson from mammalian genetics and environmental exposures</b> Raffaele Teperino (30min+5)
13:40	<b>Small RNA and dietary programming</b> Anita Öst (15+5)
<b>Session 3: Rare disease</b> Moderator: Colum Walsh	
14:00	<b>X inactivation (20min+5)</b> Colm Nestor, BKV, LiU
14:30	<b>Longread sequencing in rare disease using PacBio (20min+5)</b> Somar Al-Walai, PacBio
14:55	<b>Methylation data from longread sequencing; helping to solve undiagnosed disease (15min+5)</b> Jesper Eisfeldt, SciLifeLab Karolinska Institute
15:15	Coffee break [includes Planning Session Small RNA group]
15:45	<b>Solving the unsolved: DNA methylation episignatures as rare disease biomarkers (30min+5)</b> Bekim Sadikovic, London Health Sciences Centre, Ontario [Digital]
16:25	<b>Epigenetic classifiers to diagnose leukemia (20min+5)</b> Olga Krali, Uppsala University & NGI
16:50	<b>AI for paediatric brain tumour classification on H&amp;E whole slide images (20min+5)</b> Iulian Tampu, IMT, LiU / Per Nyman Pediatric Oncology RÖ
17:10	Summary & Conclusion of Open session Day1
17:20	Check-in and free time [includes Planning Session Rare Disease group]
19:00	Dinner

**Day2: March 27<sup>th</sup>**

<b>Session 4: AI approaches</b>	
Moderator: Tohid Ardeshiri, TekFak, LiU	
08:05	<b>Explainable AI (20min+5)</b> Fredrik Heinz, IDA, TekFak, LiU
08:35	<b>Automation of AI tool choice (20min+5)</b> Mattias Tiger, IDA, TekFak, LiU
<b>Session 4: Cancer</b>	
Moderator: Martin Hallbeck / Linnéa Sandin	
09:00	<b>Longread sequencing in the diagnosis of pediatric tumors (25mins+5)</b> Frida Abel, Sahlgrenska Hospital, Gothenburg
09:30	<b>Methylation classifiers for CNS tumors (25min+5)</b> Skarphéðinn Halldórsson, Oslo University Hospital
10:00	<b>ONT sequencing applications in tumor biology (15mins+5)</b> Christos Coucoravas, Oxford Nanopore
<b>10:20</b>	Coffee break [includes Planning session Cancer group]
10:50	<b>cfDNA methylation profiling of metastases and relapses in solid tumors (20mins+5)</b> Subhayan Chattopadhyay / Julian Lidberg, Lund University
11:15	<b>Episignatures as a new tool to solve undiagnosed rare diseases (20mins+5)</b> Angelica Delgado Vega, Karolinska Institute [Digital]
11:45	<b>AIDx : promoting diagnostics and AI in Swedish Healthcare (20min +5)</b> René Kaden, Microbiology, Uppsala University Hospital & GMS
12:10	<b>PROMISE: Precision Omics Sweden (20min+5)</b> Tuuli Lappalainen, Royal Institute of Technology & NGI, Stockholm
<b>12:30</b>	Lunch [includes Planning session Cluster leads] (end of cohosted Clinical Genomics workshop)
<b>Session 5: Generating and leveraging large datasets</b>	
Moderator: Maria Lerm	
13:30	<b>Neural networks and autoencoders in building classifiers (20min+5)</b> David Martinez, LiU (15mins+ 5)
13:55	<b>The BrainChild project: improving outcomes for children with cancer (20min+5)</b> David Gisselsson Nord, Lund University Hospital [Digital]
14:20	<b>PredictMe: empowering patient choices with methylation analysis</b> Mika Gustavsson, TekFak, LiU (20mins+5)
15:00	<b>Concluding remarks for Open Session</b> Anita Öst AESPIRE, Colum Walsh Clinical Genomics
15:10	AESPIRE committee Planning session
16:30	Summary & Departure