

## **Developments in epidemiology and biomarker research** **A life-course perspective**

**Time:** Thursday March 21<sup>st</sup> 2019, start 10:00, end Friday March 22<sup>nd</sup> 2019 at 12:00 p.m.

**Place:** “Lilla Aulan” Lecture Hall, Jan Waldenströms gata 2-5, Skåne University Hospital (SUS), Malmö, Sweden

**Organisers:** The Strategic Research Area (SRA) Epidemiology for Health (EpiHealth) at Lund and Uppsala Universities in collaboration with OLINK Proteomics AB, Uppsala, Sweden

**Symposium secretariat and enquiries:** Ms. Camilla Key (+46 (0)40-33 23 01), mail: [camilla.key@med.lu.se](mailto:camilla.key@med.lu.se)

**Symposium details and final registration:** <https://www.olink.com/epihealth-2019/>

**Costs:** Free registration with no fee. Travel and accommodation is covered for lecturers and chair persons, participants have to finance travel and accommodation themselves or by support from SRA EpiHealth or their universities.

Registration is also mandatory for the March 21<sup>st</sup> evening buffet dinner!

**Transport communications:** Train station “Triangeln” is close to SUS, and it connects also with trains from the Copenhagen Airport. Airport buses from Sturup outside Malmö stop at “Södervärn” bus terminal, with 10 minutes’ walk to the hospital.

**Posters:** please send abstract for poster to Peter Nilsson ([peter.nilsson@med.lu.se](mailto:peter.nilsson@med.lu.se)) no later than March 1<sup>st</sup> 2019. Best posters will be awarded with a poster prize.

### **Scientific Committee Chair**

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## Programme

### Thursday 21<sup>st</sup> March

09:00 Registration and coffee

10:10 **Welcome and introduction** (Peter M Nilsson, SRA EpiHealth, Malmö, and Hanna Mann, OLINK Proteomics AB, Uppsala)

10:10 **Session 1. Technological developments, Big Data, and bioinformatics**  
Chair: Lars Lind, Uppsala

**A Systems biology/Multi-omics strategy to understand biology and drive precision medicine** (AnnaLotta Schiller, Uppsala) – 10 min

**Big Data and cohort collaboration** (Johan Sundström, Uppsala) – 20 min

**Value of pQTL studies to maximize understanding of biological mechanisms and create a foundation for Precision Medicine** (Anders Mälarstig) – 20 min

**Opportunities and challenges with data analysis in biomarker research** (Markus Sällman-Almén, Uppsala) – 20 min

**State-of-the-Art 1: Biomarkers in cardiovascular research - An update 2019**  
(Lars Wallentin, Uppsala) – 30 min

12:00-13:00 LUNCH and posters

13:00 **Session 2. Biomarker panel applications in cohorts**  
Chair: Jan Nilsson, Malmö

**CVD biomarker panels in Uppsala cohorts and EpiHealth** (Lars Lind, Uppsala) – 20 min

**Biomarker discoveries in MDC** (Gunnar Engström, Malmö) – 20 min

**Biomarkers and drug development** (Olle Melander, Malmö) – 20 min

**Proteomics in the national post-myocardial infarction SWEDEHEART-BIOBANK linked to national registers** (David Erlinge, Lund) – 20 min

**Biomarker discoveries in MPP** (Martin Magnusson, Malmö) – 20 min

**Biomarkers in a cohort from South Africa** (Amra Jujic, Malmö) – 20 min

15:00 COFFEE and posters

15:30-17:00 **Session 3: Early life programming of adult health and disease**  
Chair: Anna Rignell-Hybom, Lund

**Update on the importance of early life programming** (Peter M Nilsson, Malmö) – 20 min

**The Medical Birth Register of Sweden** (Karin Källén, Lund) – 20 min

**Parent-of-origin effects and fetal programming for risk of diabetes** (Rashmi Prasad) – 20 min

**Stereotypic immune system development in newborn children** (Petter Brodin, Stockholm) – 20 min

**Prematurity and adult health** (Kristina Sundquist, Malmö) – 20 min

17:00-17:25 Selected poster presentations (short oral communication)  
Chair: Peter M Nilsson

17:25 Summary (Peter M Nilsson, Hanna Mann)

17:30 End of symposium

18:00-20:30 Buffet dinner at CRC, Malmö (pre-registration is mandatory)

## **Friday 22<sup>nd</sup> March**

08:30-10:00 **Session 4: Gene-Nutrition and microbiota interaction**  
Chair: Ulf Riserus, Uppsala

**Microbiota in cardiometabolic disease** (Marju Ohro-Melander, Malmö) – 20 min

**Diet-microbiota patterns in a population-based study** (Louise Brunkwall, Malmö) – 20 min

**Novel Metabolome and Proteome derived biomarkers of type 2 diabetes and their association with food and lifestyle** (Rikard Landberg, Uppsala) – 20 min

**Probiotics in Prevention of Allergy among Children - Insights from the ProPACT study** (Melanie Rae Simpson, Trondheim) – 20 min

10:00-10:30 COFFEE and posters

10:30-12:00 **Session 5. Precision medicine and biomarker use**  
Chair: Karl Michaelsson, Uppsala

**Mendelian Randomization analysis to assess causality in proteomics studies** (Tove Fall, Uppsala) – 20 min

**Cancer discoveries and treatment targets** (Karin Jirstrom, Lund) – 20 min

**The Danish experience** (Michael H Olsen, Odense) – 20 min

**State-of-the-Art 2: Drug discoveries built on precision medicine** (Mark Caulfield, London) – 30 min

12:00 End of symposium. Poster Prize. Summary and Farewell (Peter M Nilsson)

12:15 Lunch, grab and go

13:00-15:00 Meeting with the Board of SRA EpiHealth. Jan Waldenströms gata 15, Conference room, 5<sup>th</sup> floor, SUS, Malmö