

## Final Program SMILS 2019

### June 4<sup>th</sup>

10.00 - 10.30 Registration and fika

10.30 - 10.45 Introduction

#### Session 1, Chair: Fredrik Westerlund

10.45 - 11.30 Andrew deMello - Optofluidic systems for high-throughput biological experimentation

11.35 - 11.50 Zhenhua Liu - Droplet dilution unit operation including bead washing using integrated acoustophoresis

11.55 - 12.10 Mahdi Rezaayati Charan - Iso-acoustic focusing for flow cytometry and cell isolation

12.10 - 13.30 Lunch

#### Session 2, Chair: Caroline Adiels

13.30 - 14.15 Sabrina Leslie - Deconstructing biology with simple single-molecule imaging: Controlling conformation, confinement, and concentration

14.20 - 14.35 Quentin Lubart - A high-throughput multi-channel fluorescence-based flow nanometry for accurate determination of size, emission intensity and molecular colocalization

14.40 - 14.55 Qitao Hu - Multiplexed analysis of molecular and elemental ions using nanowire transistor sensors

15.00 - 16.30 Fika and posters

#### Session 3, Chair: Andreas Dahlin

16.30 - 17.15 Johan Elf - Genome-scale single molecule biophysics

17.20 - 17.35 Robin Öz - A nanofluidic device for real-time visualization of DNA-protein interactions on the single DNA molecule level

17.40 - 17.55 Barbora Spackova - Nanofluidic sensor for single molecule detection

18.00 - Buffet dinner

### June 5<sup>th</sup>

#### Session 4, Chair: Maria Tenje

09.00 - 09.45 Sindy Tang - Microfluidic tools for single-cell wound repair studies.

09.50 - 10.05 P. Micaela Mafla-Endara - A window to the underground - Exploring soil bacteria, fungi and microorganisms through micro-engineered chips

10.05 - 10.30 Fika

#### Session 5, Chair: Håkan Jönsson

10.30 - 10.45 Amin Kazemzadeh - The challenges and the future of the centrifugal microfluidics

10.50 - 11.05 Emre Iseri - Microfluidic sample digitization for medical applications

11.10 - 11.25 Bao Dang Ho -Electrokinetic deterministic lateral displacement

11.30 - 11.45 Timothy Robson - Plasmonic nanopores with polymer brushes

11.50 - 12.10 FluiCell-Advancing Bioprinting to the Level of Individual Cells

12.10 - 13.30 Lunch

**Session 6, Chair: Per Augustsson**

13.30 - 14.15 Severine le Gac - Organ-on-a-chip platforms for nanomedicine screening and assisted reproductive technologies

14.20 - 14.35 Philip Dalsbecker - Towards a 3D liver mimicry: the microfluidic liver-on-a-chip

14.40 - 14.55 Martin Schappert - Automated microfluidic production of 3D micro tissue for precision medicine

15.00 - 15.10 Concluding remarks and SMILS 2020 announcement

15.10 - 15.30 Fika

15.30 - 16.30 Women forging a future in Science and Engineering – Panel discussion