

Conference Programme

Thursday 21 February

17:30 - 19:00 **Session 1 – Integrated Microfluidics**

17:30 ***Opening remarks***

17:45 **Jonathan Cooper**
TBC

18:30 **Andrew deMello**
TBC

19:00 **Group dinner reception**

Friday 22 February

09:00 - 10:30 **Session 2 – Droplet Microfluidics (1)**

09:00: **Daniel Chiu**
Droplet based microfluidic systems

09:45 **Charles Baroud**
Droplet manipulation using surface tension

10:05 **Vincent Labrot**
Droplet traffic in microfluidic network

10:30 - 12:30 **Beachside poster session**

12:30 - 16:00 **Lunch, networking and free time.**

16:00 - 17:30 **Session 3 – Microreactive Systems**

16:00 **Klavs Jensen**
Microfluidics accelerating chemical synthesis

16:45 **Tony Garcia**
Scalable Synthesis of Spherical Synthetic Opals

17:05 **David Sinton**
Quantum Dot Micelle Assembly with Microfluidics

17:30 - 18:00 **Networking and refreshments.**

- 18:00 - 19:30 Session 4 – Single Cell Analysis**
- 18:00 Norman Dovichi**
Chemical cytometry-the chemical analysis of single cells
- 18:45 Nimisha Srivastava**
High Throughput Single Cell Analysis for Monitoring Innate Immunity Pathways in Macrophage Cells
- 19:05 Paul Li**
Cancer Drug Research Using The Microfluidic Biochip: Single-Cell Chip And Dna Microarray Chip
- 19:30 Dine-around (choice of hotel restaurant)**

Saturday 23 February

- 09:00 - 10:30 Session 5 – Fabrication and Devices**
- 09:00 Harold Craighead**
TBC
- 09:45 Mohamed Abdelgawad**
Master-Printing: An Ultra-Rapid Prototyping Technique for Fabricating Microfluidic Devices
- 10:05 Howard Brockman**
A Renewable Microfluidic Sensor Platform for Flow Stream Monitoring
- 10:30 - 11:00 Networking and refreshments.**
- 11:00 - 12:30 Session 6 – Cellular Scale Engineering**
- 11:00 Davide Beebe**
High Throughput Microenvironments for Studying Cell Communities
- 11:45 Edmond Young**
Matrix-dependent adhesion of vascular and valvular endothelial cells in microfluidic channels
- 12:05 Xunli Zhang**
Microfluidic based lab-on-a-chip systems for single cells analysis
- 12:30 - 16:00 Lunch Networking and free time**
- 16:00 - 17:45 Session 7 – Theoretical Nanofluidics**
- 16:00 Nick Quirke**
Nanofluidics
- 16:45 Veronika Fekete**
Ultra-High Resolution Liquid Chromatography in 120 nm Deep 1-D Nanochannels.
- 17:05 Alexander Kobryn**
Hydrodynamic Boundary Conditions with Molecular Specificity from Molecular Theory of Liquids

17:30 - 18:00 Networking and refreshments

18:00 - 19:15 Session 8 - Small Volume Detection

18:00 Petra Schuille
TBC

18:45 Anita Jones
Quantitative Mapping of Microfluidic Temperature with Sub-Degree Resolution Using Fluorescence Lifetime Imaging Microscopy

19:15 Group Dinner

Sunday 24 February

09:00 - 10:30 Session 9 – Droplet Microfluidics (2)

09:00 Aaron Wheeler
Digital Microfluidics

09:45 Ansgar Huebner
Entrapping Droplets - A Compromise between High Throughput Analysis and Versatility

10:05 Alberto Fernandez-Nieves
Dripping, Jetting, Drops and New Materials

10:30 - 11:00 Networking and Refreshments

11:00 - 11:30 Session 10 – Electrokinetics

11:00 Joshua Edel
A Novel Approach for Optically Detecting DNA Translocation Events

11:45 Zuzana Demianova
Easy-To-Use Slab Gel Electrophoresis Chip for Protein Analysis and Diagnosis

12:05 Ruey-Jen Yang
Chaotic Mixing in a Microchannel Induced by Electroosmotic Recirculating Rolls

12:30 Lunch, networking and departure.
