

2017 NanoBioTech-Montreux

Monday, November 13, 2017

08:00 - 09:00	Registration	
Session M-1		Chair: Charles Baroud
09:00 - 09:05	Opening and Welcome	
09:05 - 09:45	Invited Keynote Lecture: Shuichi Takayama, Georgia Institute of Technology, USA <i>Micro- and Nanoscale Engineering of Chronic Diseases</i>	p.1
09:45 - 10:05	Roberta Menezes, University Paris Descartes & ESPCI, FR <i>Utilizing a Molecular Program for the Hypersensitive Detection of Nucleic Acids</i>	p.3
10:05 - 10:25	S��verine Le Gac, University of Twente, NL <i>Monitoring the respiratory activity of tumor spheroids in an integrated microfluidic device</i>	p.5
Coffee break		
Session M-2		Chair: Philippe Renaud
11:00 - 11:20	Yejin Lee, Seoul National University, KR <i>Microfluidics Sliding Asymmetric Bead Aggregation Assay for Immunodetection</i>	p.7
11:20 - 11:40	Junhong Yan, University of Technology Eindhoven, NL <i>Biomarker Monitoring by Particle Mobility Sensing</i>	p.9
11:40 - 12:20	Poster snapshots, session A1	
Lunch break at the hotel (included in the registration)		
Session M-3		Chair: S��verine Le Gac
14:00 - 14:20	Kevin Braeckmans, Ghent University, BE <i>Highly Controlled Delivery of Macromolecules and Contrast Agents in Living Cells by Laser-induced Vapour Nanobubbles</i>	p.11
14:20 - 14:40	Martina Viefhues, Bielefeld University, BE <i>Reaching for High Size Resolution Separation in DNA Dielectrophoresis</i>	p.13
14 :40 - 15 :00	Exhibitors presentations	
Coffee break		
Session M-4		Chair: Charles Baroud
16:00 - 16:30	Invited: Madhavi Krishnan, University of Zurich, CH <i>Measuring the Electrical Charge of a Macromolecule with Sub-elementary Charge Precision: 'Single-molecule Electrometry'</i>	p.15
16:30 - 17:00	Poster snapshots, session A2	
17:00 - 18:30	Poster Session A in the poster area / Exhibition Reception / drinks	
19:30	Gala Dinner at Hotel Eurotel (included in the registration)	

Tuesday, November 14, 2017

Session T-1		Chair: Severine Le Gac
09:00 - 09:40	Invited keynote lecture: Chaoyong Yang , Xiamen University, CHINA <i>Aptamer Functionalized Microfluidic Device for Synergistic Enrichment of Circulating Tumor Cells</i>	p.17
9:40 - 10:00	Anna Desalvo , University of Southampton, UK <i>Single T Lymphocytes Chemical and Biological Stimulation Using Microwell Arrays and Comparison with Bulk Population Responses</i>	p.19
10:00-10:30	Poster snapshots, session B1	
Coffee break		
Session T-2		Chair: Jonas Tegenfeldt
11:00 - 11:30	Invited: Luc Bousse , POC Medical Systems, USA <i>Challenges in the Commercialization of Microfluidic Devices</i>	p.21
11:30 - 11:45	Ali Fallah-Araghi , Novozymes, DK <i>Enzyme Evolution Using Droplet-based Microfluidics</i>	p.23
11:45 - 12:10	Herman Blok & Maximilien Guérin , Micronit, NL+ Fluigent, FR <i>Organ-on-a-Chip Technology Platforms – Integrated Solutions for new Markets</i>	p.25
12:10 - 12:25	Rena Akahori , Hitachi, Japan <i>Development of Solid-state Nanopore for DNA Sequencer with Active DNA Control Technique</i>	p.27
Lunch break at the hotel (included in the registration)		
Session T-3		Chair: Charles Baroud
14:00 - 14:30	Invited: David Juncker , McGill University, CA <i>May the Capillary Force Be with You: Empowering Bioassays, Tissue Engineering, and Diagnostic Tests</i>	p.29
14:30 - 14:50	Mélanie Hannebelle , EPFL, CH <i>Long Term, Correlative AFM and Fluorescence Imaging of Bacterial Growth and Division</i>	p.31
14:50 - 15:10	Annie Viallat , CNRS, FR <i>Red Blood Cells Dynamics in Biomimetic Submicron Splenic Slits</i>	p.33
Coffee break		
Session T-4		Chair: Philippe Renaud
16:00 - 16:30	Invited: Robert Holyst , Institute of Physical Chemistry PAS, Poland <i>Motion of Macromolecules Inside Cells</i>	p.35
16:30 - 17:00	Poster snapshots, Session B2	
17:00 - 19:00	Poster Session B in the poster area / Exhibition Reception / drinks	

Wednesday, November 15, 2017

Session W-1	Chair: Severine Le Gac
09:00 - 09:30 Invited: Kevin Dorfman , University of Minnesota, USA <i>Genome Mapping of DNA in Nanochannels: Bionanotechnology in the Service of Polymer Physics and Vice Versa</i>	p.37
09:30 - 09:50 Fredrik Westerlund , Chalmers University of Technology, SE <i>Affinity-based Optical DNA Mapping in Nanofluidic Channels: From Antibiotic Resistance Plasmids to the Human Genome</i>	p.39
09:50 - 10:10 Maria Antfolk , UCLA, University of Copenhagen, Lund University, SE <i>Droplet Microfluidic-produced Microparticle Gel Assemblies as Porous Scaffolds for Mesenchymal Stem Cell Proliferation and Differentiation</i>	p.41
Coffee break	
Session W-2	Chair: Charles Baroud
10:40 - 11:00 Mark Friddin , Imperial College London, UK <i>The Optical Assembly of Bilayer Networks for Bottom-up Synthetic Biology</i>	p.43
11:00 - 11:20 Arya Tavakoli , McGill University, CA <i>3D-Printed Capillary Circuits to Quantify Antibody Concentration from Human Serum Samples</i>	p.45
11:20 - 12:00 Plenary Invited Closing Lecture: Dermot Diamond , Dublin City University, IR <i>Creating Biomimetic Microfluidic Functions with Stimuli Responsive Materials</i>	p.47
12:00 - 12:20 Award ceremony for Poster Prizes and closing of the conference	

Thanks for your participation 😊

