

Tuesday, November 12, 2024

<i>Session T-1</i>		<i>Chair: Séverine Le Gac</i>
9:00- 9:30	Poster snapshots, Session C	
09:30 - 10:00	Invited: <i>Nicole Pamme, Stockholm University, SE</i> <i>Taking the chip out of the lab - from point-of-care diagnostics in resource limited settings to in-the-field analysis with citizens</i>	T1
10:00 - 10:20	Luca Potenza, University of Warsaw, PL <i>Passive droplet microfluidic platform for high-throughput screening of microbial proteolytic activity.</i>	T2
10:20 - 10:40	Anuj Tiwari, University of Exeter, UK <i>Automated screening of polymicrobial communities and bacteria-phage interactions in microdroplets using image-based AI tools</i>	T3
Coffee break		
<i>Session T-2</i>		<i>Chair: Jonathan West</i>
11:10 - 11:30	Alexander Grünberger, KIT, DE <i>Bioprocess microfluidics: More than miniaturisation of bioprocesses?!</i>	T4
11:30 - 11:50	David Dannhauser, University of Naples, IT <i>Tumor cell detection at the single-cell level without previous knowledge</i>	T5
11:50 - 12:20	Poster snapshots, Session D	
Lunch break at the hotel (included in the registration)		
<i>Session T-3</i>		<i>Chair: Bastien Venzac</i>
14:00 - 14:20	David Fernandez Rivas, University of Twente, NL <i>Inertial Ballistic Microfluidics as Empathic Entrepreneurial Engineering platform for Biomedical and Engineering Applications</i>	T6
14:20 - 14:40	Kerem Kaya, KTH Royal Institute of Technology, SE <i>Microfluidic Platform for Freely Programmable Matter</i>	T7
14:40 - 15:00	Sadaf Pashapour, IMSEAM, Heidelberg University, DE <i>Thermally controlled microactuators as new tools for reconfigurable microfluidics</i>	T8
Coffee break		
<i>Session T-4</i>		<i>Chair: Charles Baroud</i>
16:00 - 16:30	Poster snapshots, Session E	
16:30 - 17:00	Invited: <i>Rémi Dangla, Stilla Technologies, FR</i> <i>Pushing the boundaries of multiplexing in digital PCR: from 2-plex to 100-plex panels, an on-going 10 years journey by Stilla Technologies</i>	T9
17:00 - 19:00	Posters session in the poster area / Exhibition Reception / drinks	

Wednesday, November 13, 2024

<i>Session W-1</i>		<i>Chair: Jonas Tegenfeldt</i>
09:00 - 09:20	Myriam Cubizolles, CEA Leti, FR <i>Sample to results food allergen detection with an integrated platform for simultaneous microfluidic qPCR and ELISA on-site analysis</i>	<i>W1</i>
09:20 - 09:40	Maria Tenje, Uppsala University, SE <i>Microstructured hydrogels for organ-on-chip applications</i>	<i>W2</i>
09:40 - 10:00	Gloria Porro, EPFL, CH <i>Self-contained Microsystem for Rapid One-step Quantification of Multiple Kidney Function Biomarkers in Mouse Samples</i>	<i>W3</i>
Coffee break		
<i>Session W-2</i>		<i>Chair: Charles Baroud</i>
10:40 - 11:00	Mohammad Asghari, ETH Zürich, CH <i>Engineering T cell function via mechanical compression through microfluidic constraints</i>	<i>W4</i>
11:00 - 11:20	Jack Stubbs, University of Southampton, UK <i>Droplet microfluidics for time-resolved serial crystallography</i>	<i>W5</i>
11:20 - 12:00	Invited Keynote Closing Lecture: Matthias Lutolf, IHB Roche & EPFL, CH <i>Engineering organoids for real-world applications in Pharma R&D</i>	<i>W6</i>
12:00 - 12:15	Award ceremony for Poster Prizes and closing of the conference	

Poster session A - Monday, November 11, 2024					
	Last name	First name	Institution		Title of abstract
A2	Quacquarelli	Federica	Lund University	SE	<i>Optimized organoid-derived small intestinal epithelial cell adhesion and growth for organs-on-a-chip applications</i>
A3	Bütün	Ismail	Sabancı University	TR	<i>Optimization of Asymmetrical Helix Micromixers by Utilizing Deep Learning Approach</i>
A4	Le Goas	Marine	Université Paris Cité	FR	<i>On-chip model of mucociliary clearance for the design of new drug formulations aimed at respiratory diseases</i>
A5	Rembotte	Leon	CRPP, CNRS & Université de Bordeaux	FR	<i>Pheno-morphological screening and acoustic sorting of multicellular aggregates with drop microfluidics</i>
A6	Valderas Gutierrez	Julia	Lund University	SE	<i>Highly curved lightguiding nanowires for the study of model lipid membranes</i>
A7	Krivankova	Jana	Inst. of Analytical Chemistry, CAS	CZ	<i>Absolute nanoparticle quantification and massively parallel spectroscopy for droplet microfluidics</i>
A8	Saateh	Abtin	EPFL	CH	<i>Long-term and continuous plasmonic oligonucleotide monitoring enabled by regeneration approach</i>
A9	Moreno Fina	Martina	Fundacio Eurecat	ES	<i>Non-Invasive Printed Electronic Device for Enhanced Monitoring of Organ-on-Chip Culture Media Parameters</i>
A10	Gholizadeh	Ali	University of Liège	BE	<i>Modular centrifugal microfluidics for sample preparation</i>
A11	Rousseau	Fanny	CEA	FR	<i>Microfluidic strategies for the controlled generation of hybridoma cells and monoclonal antibodies.</i>
A12	Pirim	Feyza	TU Delft	NL	<i>Biodegradable 1D magnetic actuators for cardiac cells mechanical stimulation in organ-on-chip platform</i>

Posters without snapshot presentation :

A13	Li	Fan	ETH Zürich	CH	<i>A fluidic device for continuous on-line inductive sensing of proteolytic cleavages</i>
A14	Kumari	Monika	Indian Institute of Technology, Jammu	IN	<i>Design of compact and low-cost blood plasma separation device from whole blood exploiting the biophysical effects</i>
A15	Bui	Cat-Vu H.	ETH Zürich	CH	<i>Nano-volcano electrodes post-fabricated on CMOS microelectrode arrays: towards large-scale intracellular neural interfaces</i>
A16	Ferreira	Daniela Filipa Cardoso	NOVA University Lisbon	PT	<i>Nanoheaters for spatial-temporal control of gene delivery triggered by mild hyperthermia</i>
A17	Potejanasak	Potejana	School of Engineering, University of Phayao	TH	<i>Fabrication of Au-Pd bimetallic nano-islands by thermal dewetting process for LSPR plasmonic sensing</i>

Poster session B - Monday, November 11, 2024

	Last name	First name	Institution		Title of abstract
B1	Peytral-Rieu	Olivia	LAAS-CNRS	FR	<i>Miniature microwave sensor suitable for real-time dielectric analysis of multicellular spheroids</i>
B2	Sampaio da Silva	Claudia	CSEM	CH	<i>Electrical impedance spectroscopy platform for label-free characterization of microtissues with facing electrodes</i>
B3	Akbar	Farzin	TU Dresden	DE	<i>Self-sufficient Electrochemomechanical Systems</i>
B4	Juskova	Petra	ETH Zürich	CH	<i>Individuals in community: Exploring heteroresistance in combined bacterial populations</i>
B5	Colombo	Federico	IMSEAM, Heidelberg University	DE	<i>Mechanical Stimulation of 3D Multicellular Systems printed via Two- Photon Polymerization</i>
B6	Del Giovane	Stefano	CSEM	CH	<i>A simplified CRISPR-based assay for monoclonal antibody quantification at the point-of-care</i>
B7	Parent	Caroline	Institut Curie	FR	<i>Drug screening on cancer spheroids in droplet microfluidics</i>
B8	Turato (pres. J. Tegenfeldt)	Enrico	Lund University	SE	<i>Laminar to elastic-turbulent transition for PEO in micropillar arrays</i>
B9	Raza	Sada	Institute of Phys. Chemistry, PAS	PL	<i>Unveiling the Potential of Mixed-Ligand Nanoparticles: Targeted Bacteriophage Inactivation</i>
B10	Mesic	Ana	ENS Paris Saclay	FR	<i>Multicellular 3D in vitro liver model on chip for drugs hepatotoxicity screening</i>
B11	Bali	Nesrine	NTNU	NO	<i>Kinetically Controlled Loading of Hydrophilic Iron Oxide Nanoclusters in Hydrophobic Polymeric Nanoparticles through Flash Nanoprecipitation</i>
B12	Honrado	Carlos	International Iberian Nanotechnology Laboratory	PT	<i>Isolation and analysis of extracellular vesicles DNA for the evaluation of microsatellite instability in endometrial cancer</i>

Posters without snapshot presentation :

B13	Curé	Guilhem	Institut Curie-Centre de Recherche-UMR 168	FR	<i>Detection of iron oxide nanoparticle biotransformations in human stem cells</i>
B14	Renaud	Fabrice	University of Lausanne & CHUV	CH	<i>Human bone marrow on a chip to decipher the biomechanical regulation of bone marrow adipocytes at homeostasis and in disease states</i>
B15	Oliveira	Beatriz	NOVA University Lisbon	PT	<i>Shrinking the gap in cancer research: Novel thermosensitive polystyrene device for cell culture and gene silencing assays</i>
B16	Duan	Yangyu	Eindhoven University of Technology	NL	<i>Microfluidic Mixing Induced by a Magnetic Artificial Cilium in a Closed Chamber</i>

Poster session C - Tuesday, November 11, 2024

	Last name	First name	Institution		Title of abstract
C1	Osaid	Mohammad	KTH Stockholm	SE	<i>Enhanced Bacterial Separation from Blood Through Automated Repeated Filtration in a Centrifuge</i>
C2	Esteves	Ana Margarida	Iberian Nanotechnology Laboratory	PT	<i>Single cell-derived breast cancer spheroids for real-time growth and secretomic studies</i>
C3	Dubrova	Anastasiia	Institut Curie	FR	<i>Tumor-on-chip model to decipher the effect of nanoparticle-mediated photothermia on tumor microenvironment of pancreatic ductal adenocarcinoma (PDAC)</i>
C4	Davila Martinez	Sergio	Lund University	SE	<i>Development of a small-intestine-on-a-chip device through viscous finger patterning methodology</i>
C5					
C6	Prudhomme	Marc	FEMTO-ST	FR	<i>Acoustic sensing of bioanalytes with functionalized microbubbles</i>
C7	Kutucu	Ceren	Delft University	NL	<i>A biodegradable optical filter and photodetector for monitoring oxygen in living tissues</i>
C8	Tan	Jiayi	EPFL	CH	<i>Nanoplasmonic Single-Tumoroid Microarray for Real-Time Secretion Analysis</i>
C9	Apra	Elena	Delft University	NL	<i>A Biodegradable, Magnetically Actuated Micropump for Peripheral Nerve Implants</i>
C10	Weisova	Julie	Inst. of Analytical Chemistry, CAS	CZ	<i>Synthesis and absolute quantification of photon upconversion nanoparticles for microfluidics</i>
C11	Kaminski	Bartosz	Inst. of Physical Chemistry	PL	<i>Illuminating Antimicrobial Defense: Quantum Dot Hydroxyapatite Nanoparticles with Light Sensitivity and Antimicrobial Properties</i>
C12	Humblot	Vincent	Institut FEMTO-ST,CNRS, UFC	FR	<i>Development of a generic biointerface for in flow detection of pathogenic bacteria</i>

Posters without snapshot presentation

C14	Cristofori	Micaela Siria	EPFL	CH	<i>One-step multi-marker immunoassay system for the evaluation of preterm birth risk in vaginal secretions</i>
C15	Zwengelstein	Thibaut	FEMTO-ST	FR	<i>Development of a specific microfluidic biosensor for the detection of pathogenic bacteria</i>

Poster session D - Tuesday, November 11, 2024

	Last name	First name	Institution		Title of abstract
D1	Kaiser	Luna	CNRS, Univ. Paris Cité	FR	<i>Pathfinding strategy of Candida albicans hyphae in a network of obstacles</i>
D2	Luk	Nicole Sui Man	Uppsala University	SE	<i>Acoustic fluid manipulation via two-photon-printed resonant microstructures</i>
D3	Aslan	Mahmut Kamil	ETH Zürich	CH	<i>Deep learning-based blood smear scanning system for automated white blood cell classification</i>
D4	Kleinknecht	Dominic	Hahn-Schickard	DE	<i>Towards multiplex and multianalyte electrochemical detection on universally modified carbon electrodes for integrated molecular diagnostic tests</i>
D5	Catucci	Domenico	CNRS, Univ. Paris Cité	FR	<i>Deformation under flow and morphological recovery of glioblastoma cell nuclei: role of microtubule acetylation</i>
D6	Nooranian	Samin	University of Oulu	FI	<i>An in vitro model for heterogenous oxygen flux in capillaries using microfluidic chip</i>
D7	Dumas	Simon	LAAS-CNRS	FR	<i>Multimodal Bead Extraction in Droplet Microfluidics for Single-Cell Multiomics</i>
D8	Johansson	Sofia	Uppsala University	SE	<i>Droplets on high-density micro-electrode arrays</i>
D10	Hammink	Esmay	Leiden Univ. medical Center	NL	<i>Evaluating insulin detection with graphene sensors using QCM-D</i>
D11	Clément	Blandine	ETH Zürich	CH	<i>A compartmentalized culture of human nociceptors and keratinocytes to model peripheral pathophysiological conditions in vitro</i>
D12	Miguélez	M. Henar Marino	KTH Royal Institute of Technology	SE	<i>Culture-free rapid isolation and detection of bacteria from whole blood at clinically relevant concentrations</i>

Posters without snapshot presentation :

D13	Majumder	Rajib	Adamas University	IN	<i>Plant extracts mediated synthesis of Silver Nanoparticles (AgNPs): Evaluation of in vitro antimicrobial efficacy towards nanomedicine toolbox</i>
D15	Rosenberg	Nadia	EPFL	CH	<i>Droplet-microfluidic-based drug screening of primary cancer cell towards precision oncology and drug development</i>
D16	Nogueira	Catarina	INL	PT	<i>Single-cell bacterial encapsulation via droplet microfluidics for quantitative detection of Klebsiella pneumoniae in magnetoresistive sensors</i>

Poster session E - Tuesday, November 11, 2024

	Last name	First name	Institution		Title of abstract
E1	Salmon	Hugo	Université Paris Cité	FR	<i>Re-usable micromilled thermoplastic microfluidic device for formation of colorectal cancer tumor spheroids</i>
E2	Mello	Eleonora	University of Salento-CNR Nanotec	IT	<i>Development of intestinal in vitro models as precision medicine platforms for metabolic diseases</i>
E3	Sun	Yiqing	Eindhoven University of Technology	NL	<i>Optimization of the net flow generated by artificial cilia performing tilted conical motion</i>
E4	Abdolahimzadeh	Seyedamirhosein	University of Oulu	FI	<i>Microfluidic Electro-Viscoelastic Separation of Submicron Particles</i>
E5	Golestaneh	Shameem	Imperial College London	UK	<i>Development of lab-on-chip technologies for frontier Agri-tech assays</i>
E6	Barwig	Chantal	Institute for Molecular Systems EngineeringS	DE	<i>Bistable Multi-Stimuli Responsive Microactuators for Dynamic Microfluidics</i>
E7	Coricciati	Chiara	University of Salento-CNR Nanotec	IT	<i>Development of physiologically relevant in vitro human liver models as platforms for investigating metabolic diseases</i>
E8	Ryser	Till	EPFL	CH	<i>Electrorotation of single cells for the analysis of membrane damage induced by the neurotoxic protein alpha-Synuclein</i>
E9	Sagot	Matthieu	LAAS-CNRS	FR	<i>Clip-chips: 3D printed microfluidic and characterization modules for cell culture applications</i>
E10	Devamoglu (Pres. S. Le Gac)	Utku	University of Twente	NL	<i>Impact of cellular and microenvironmental factors on 3D vascularization in organ-on-bhip models</i>

Posters without snapshot presentation :

E11	Hollmann	Lina	Karlsruhe Institute of Technology	DE	<i>Establishing microsystems for whole-cell bioproduction processes: Chances and challenges</i>
E12	Grothe	Hanna Rosmarie	ETH Zürich	CH	<i>Self-referencing aptamer modified double-pore nanopipettes for neurotransmitter measurement</i>
E13	Aspert	Théo	EPFL	CH	<i>Development of a microphysiological model of Catheter-Associated Urinary Tract Infection</i>
E14	Carvalho	Carla	INL-International Iberian Nanotechnology laboratory	PT	<i>A magnetic-based electrochemical system for rapid detection of Klebsiella in whole blood</i>
E15	Tanriverdi	Selim	KTH Royal Institute of Technology	SE	<i>Sheathless Particle Focusing for High-Resolution Particle Separation in Elasto-Inertial Microfluidics</i>