

Date & Time	Sessions / Events	Location	
Monday, November 14th	8:00 - 8:45	Registration & Welcome Coffee	Salle Polyvalente
	8:45 - 9:00	Opening Remarks by Martin Gijs & Johan Auwerx	Salle Polyvalente
		<b>Chair:</b> Martin Gijs - EPF Lausanne, Switzerland	
		<b>Session 1.1: Phenotyping</b>	
	9:00 - 9:35	<b>Deep Phenotyping Enabled by Microfluidics and High-Throughput Quantitative Microscopy - Nano-Tera Lecture.</b> Hang Lu (School of Chemical & Biomolecular Engineering, Georgia, USA)	Salle Polyvalente
	9:35 - 10:10	<b>The many scales and dimensions of an animal's adaptation to a changing environment.</b> Erel Levine (Harvard, University, USA)	Salle Polyvalente
	10:10 - 10:30	Coffee break & Poster Inspection	Salle Polyvalente
		<b>Chair:</b> Hang Lu - School of Chemical & Biomolecular Engineering, USA	
	10:30 - 11:05	<b>Microfluidic Platforms for the Exploration of Living Organisms: Cells, Plants and Animals.</b> Andrew deMello (ETH Zürich, Switzerland)	Salle Polyvalente
	11:05 - 11:40	<b>Perturbations to worm sleep, weak and strong.</b> David Biron (The University of Chicago, Illinois, USA)	Salle Polyvalente
	11:40 - 12:10	<b>Discussion topics session 1.1 (H. Lu, E. Levine, A. deMello &amp; D. Biron)</b>	Salle Polyvalente
	12:10 - 14:00	Lunch	Restaurant Parmentier
		<b>Chair:</b> Andrew deMello - ETH Zürich, Switzerland	
		<b>Session 1.2: Imaging Techniques</b>	
	14:00 - 14:35	<b>Advanced image analysis tools for microscopy.</b> Michaël Unser (EPF Lausanne, Switzerland)	Salle Polyvalente
	14:35 - 15:10	<b>Agarose hydrogel microchambers to study sleep in <i>C. elegans</i>.</b> Henrik Bringmann (Max Planck Institute for Biophysical Chemistry, Goettingen, Germany)	Salle Polyvalente
	15:10 - 15:30	Coffee break & Poster Inspection	Salle Polyvalente
		<b>Chair:</b> Michaël Unser - EPF Lausanne, Switzerland	
	15:30 - 15:55	<b>Microfluidic long term immobilization, enabling <i>C. elegans</i> developmental studies at the subcellular level.</b> Simon Berger (ETH Zürich, Switzerland)	
15:55 - 16:20	<b>Behavioural study and <i>in vivo</i> brain imaging of associative learning in the larvae of the marine annelid worm <i>Platynereis</i>.</b> Thomas Chartier (EMBL Heidelberg, Germany)	Salle Polyvalente	
16:20 - 16:50	<b>Discussion topics session 1.2 (M. Unser, H. Bringmann, S. Berger &amp; T. Chartier)</b>	Salle Polyvalente	

Date & Time	Sessions / Events	Location	
Tuesday Morning, November 15th		<b>Chair:</b> Shawn Lockery - Institute of Neuroscience, University of Oregon, USA	
		<b>Session 2.1: High-throughput techniques</b>	
	9:00 - 9:35	<b>Integrated optical and microfluidic platforms for high-throughput whole-animal screening - Nano-Tera Lecture.</b> Adela Ben-Yakar (University of Texas, Austin, USA)	Salle Polyvalente
	9:35 - 10:10	<b>High-throughput imaging of <i>C. elegans</i> aging in the WorMotel.</b> Christopher Fang-Yen (University of Pennsylvania, USA)	Salle Polyvalente
	10:10 - 10:30	Coffee break & Poster Inspection	Salle Polyvalente
		<b>Chair:</b> Adela Ben-Yakar - University of Texas, USA	
	10:35 - 11:10	<b>High throughput Calcium imaging: A novel approach for genetic and drug screening in <i>C. elegans</i>.</b> Nikos Chronis (College of Engineering, University of Michigan, USA)	Salle Polyvalente
	11:10 - 11:35	<b>All-around size-dependent sorting of <i>C. elegans</i> nematodes through an flexible microfluidic filter structure.</b> Li Dong (EPF Lausanne, Switzerland)	Salle Polyvalente
	11:35 - 12:00	<b>Discussion topics session 2.1 (A. Ben-Yakar, Ch. Fang-Yen &amp; N. Chronis)</b>	Salle Polyvalente
12:00 - 14:00	Lunch	Restaurant Parmentier	

Date & Time	Sessions / Events	Location
<b>Tuesday Afternoon, November 15th</b>	<b>Chair:</b> Nikos Chronis - College of Engineering, University of Michigan, USA	
	<b>Session 2.2: Neurobiology</b>	
	14:00 - 14:35 <b>A microfluidics platform to study nervous system function and movement in <i>C. elegans</i>.</b> Bhagwati Gupta (Dept. Biology, McMaster University, Hamilton, Canada)	Salle Polyvalente
	14:35 - 15:10 <b>Microenvironments to Probe Neuronal Functions in <i>C. elegans</i> and Zebrafish.</b> Sreekanth Chalasani (Salk Institute, California, USA)	Salle Polyvalente
	15:10 - 15:30 Coffee break & Poster Inspection	Salle Polyvalente
	<b>Chair:</b> Bhagwati Gupta - Dept. Biology, McMaster University, Canada	
	15:30 - 16:05 <b>Olfactory signal processing in small circuits.</b> Aravinthan Samuel (Dept of Physics & Center for Brain Science, Harvard University, Cambridge, USA)	Salle Polyvalente
	16:05 - 16:30 <b>Neural oscillations code chemical gradients and are sensitive to the 2nd derivative of the gradient.</b> Alon Zaslaver (The Hebrew University of Jerusalem, Israel)	Salle Polyvalente
	16:30 - 17:00 <b>Discussion topics session 2.2 (B. Gupta, S. Chalasani, A. Samuel &amp; A. Zaslaver)</b>	
18:00 - 23:00 Visit & Symposium Banquet at Olympic Museum in Lausanne	Olympic Museum	

Date & Time	Sessions / Events	Location
<b>Wednesday, November 16th</b>	<b>Chair:</b> Johan Auwerx - EPF Lausanne, Switzerland	
	<b>Session 3.1: Physiology and Development Studies</b>	
	9:00 - 9:35 <b>Neuroendocrine regulation of aging and metabolism - Nano-Tera Lecture.</b> Andrew Dillin (University of California, USA)	Salle Polyvalente
	9:35 - 10:10 <b>Microfluidic <i>C. elegans</i> Development Studies from the Embryonic Stage.</b> Matteo Cornaglia (EPF Lausanne, Switzerland)	Salle Polyvalente
	10:10 - 10:30 Coffee break & Poster Inspection	Salle Polyvalente
	<b>Chair:</b> Andrew Dillin - University of California, USA	
	10:35 - 11:10 <b>Microfluidic devices for electrophysiological measures of disease, aging, and their amelioration in <i>C. elegans</i>.</b> Shawn Lockery (Institute of Neuroscience, University of Oregon, USA)	Salle Polyvalente
	11:10 - 11:45 <b>Using Microfluidic approaches to study <i>C. elegans</i> ' Cognitive, Reproductive, and Physical Age-Related Declines.</b> Coleen Murphy (Princeton University, New Jersey, USA)	Salle Polyvalente
	11:45 - 12:15 <b>Discussion topics session 3.1 (A. Dillin, M. Cornaglia, S. Lockery &amp; C. Murphy)</b>	Salle Polyvalente
	12:15 - 12:30 Concluding Remarks & Best Poster Award	Salle Polyvalente
12:30 Lunch	Restaurant Parmentier	