



France-Bioimaging Annual Meeting 2023

Multiscale mechanobiology of cells and cell systems

December 13th-14th, 2023

Venue: Centre de Biologie Intégrative (CBI), Toulouse

Wednesday, December 13th, 2023

08:30 - 12:00	<p>Visit of the Toulouse node</p> <ul style="list-style-type: none"> 📍 Meeting point: CBI (<i>Université Paul Sabatier, 118 Route de Narbonne, Toulouse</i>) from 8:30 to 9:00 Core facilities visits from 9:00 to 12:00 <ul style="list-style-type: none"> - METI (electron microscopy) - CMEAB (electron microscopy) - LITC CBI (light microscopy) - RESTORE site dentaire (light microscopy) - I2MC (light microscopy & cytometry) - IPBS (cytometry) <p>Description of the core facilities available here</p>
12:00 - 13:00	<p>Registration Booth & Lunch</p> <ul style="list-style-type: none"> 📍 Meeting point: CBI (<i>Université Paul Sabatier, 118 Route de Narbonne, Toulouse</i>) - Salle de conférence
13:00 - 13:10	Opening day 1 FBI & Noeud Toulouse - Edouard Bertrand & Olivier Gadal
13:10 - 13:30	France-Bioimaging: Latest news and opportunities - Edouard Bertrand
13:30 - 13:50	Toulouse node - Olivier Gadal
13:50 - 14:10	Alsace node - Yves Mely & Bertrand Vernay
14:10 - 14:50	<p>2023 activities & outcomes from the mission officers of France-Bioimaging Pt1</p> <ul style="list-style-type: none"> ● Mission Tech Transfer - Etienne Henry (10') ● Mission Data - Emmanuel Faure et al. (20')
14:50 - 15:20	Coffee break / poster session
15:20 - 16:00	<p>2023 activities & outcomes from the mission officers of France-Bioimaging Pt2</p> <ul style="list-style-type: none"> ● Mission Formation - Fabrice Cordelières (10') ● Mission Intégration - Cédric Matthews (10') ● Mission Inter-Infrastructures - Jean Salamero (10')
16:00 - 16:30	Opportunities from Euro-Bioimaging - Marianna Poli (EuBI Communication officer)

16:30 - 17:30	Round-table on “Sharing good practices for Technological WGs management”
17:30 - 17:45	Wrap-up of day 1
18:30	Toulouse guided tour
20:00	Dinner  Le Rowing Club, 19 Allée Alfred Mayssonnie, Toulouse

Thursday, December 14th, 2023

08:15 - 08:30	Registration Booth
08:30 - 08:45	Opening day 2 - Bertrand Bénazéraf (<i>Heterogeneity and Plasticity in Vertebrate Morphogenesis Team, CBI, CNRS</i>)
<i>Multiscale mechanobiology of cells and cell systems</i>	
08:45 - 09:15	S1 Opening Keynote Speaker: Virgile Viasnoff (<i>Joint CNRS/NUS lab BioMechanics of cell contacts UMI 3639</i>) - Controlling and imaging organoids grown in biofunctionalized scaffolds
Session 1- Selected talks 15' & 5' Chair: Thomas Mangeat	
09:15 - 09:35	Divyendu Kishore Valappil (RESTORE - CNRS) - A new approach to line scanned Brillouin microscopy
09:35 - 09:55	Jules Edwards (LAAS - CNRS) - Lymphatic-vessel-on-a-chip: dynamic response to growth factors in native and fibrotic tissues
09:55 - 10:15	Simon Labouesse (CBI) - FAST RIM, Super-resolution microscopy for live biological imaging
10:15 - 10:45	<i>Coffee break / poster session</i>
10:45 - 11:15	S2 Opening Keynote Speaker: Jérôme Solon (<i>Biophysics of Morphogenesis Laboratory, Biofisika Institute CSIC-UPV/EHU</i>) - On the control of tissue mechanics during morphogenesis: How to seal epithelial gaps
Session 2- Selected talks 15' & 5' Chair: Corinne Lorenzo	
11:15 - 11:35	Tatiana Merle (CBI) - Impact of compressive stress on cell and tissue dynamics
11:35 - 11:55	Javier Rey Barroso (IPBS - CNRS) - Compression Force Microscopy: a simple method to investigate the mechanics of phagocytosis
11:55 - 12:15	Justine Creff (CBI) - “Cracking” the gut epithelium: using 2D intestinal organoids to study impact of cell heterogeneity
12:15 - 13:30	<i>Group Photo Lunch / poster session</i>
13:30 - 14:00	Pitches “FBI tools for the community” (tech transfer projects)

	<ul style="list-style-type: none"> • Icy@FBI: Leveraging the Icy platform to transfer research in image-processing to biological users within FBI and beyond - Jean-Yves Tinevez (Bioimage Informatics) (6') • BIC HCS SMLM: Tech transfer of a single-molecule-based high-content screening platform to the Bordeaux Imaging Center - Christel Poujol (Bordeaux) (6') • Virtual Microscopy: from microscope to virtual reality - Tao Laurent (Montpellier) (6') • POLARIMAGING: Polarized microscopy modalities for molecular organization imaging - Julien Savatier (Marseille) (6') • RIM-Ouest: Random Illumination Microscopy transfer in Rennes - Nina Soler (Rennes) (2') • FBI-MIN: Implementation of a RASTMIN/p-MINFLUX microscope - Emmanuel Margeat (Montpellier) (2') • Side C.A.R.S.: A stand-alone temporal synchronization module for enabling CARS microscopy with an advanced laser scanning two photon microscope - Elric Esposito (Paris) (2') • UV_FLIM NA: Microscope for live cell imaging of fully functional nucleic acids by Fluorescence Lifetime Imaging Microscopy coupled to Ultra-Violet excitation - Yves Mely (Strasbourg) (2') 	
14:00 - 15:00	France-Biolmaging technological working groups <i>Parallel sessions</i> WG1c: Multiscale & correlative microscopies (<i>Salle de Conférence NLD</i>) WG1d: Tissue microscopies, new contrasts & preclinical applications (<i>Salle visio IBCG</i>) WG2a: High content screening & Intelligent imaging (<i>Salle Bibliothèque IBCG</i>) INFRATECH Plant Imaging (<i>Salle de Conférence NLD</i>) INFRATECH Organoids & regenerative medicine (<i>Salle modulable 2</i>) Mechanobiology (<i>Salle Réunion IBCG</i>)	FBI-AS Open desk session 1 for Toulouse Node users <i>(Salle modulable 1)</i>
15:00 - 15:30	Coffee break / poster session	
15:30 - 16:40	FBI-AS: Introduction + Open desk session 2 online live	
16:40 - 17:10	FBI technological working groups: wrap-up of the parallel sessions and perspectives Session chairs + Edouard Bertrand	
17:10 - 17:30	Prizes, Wrap-up & Farewell	