

## 5<sup>th</sup> workshop in *Mechanobiology and Physics of Life* in Lyon

Monday June 27<sup>th</sup>, 2022, Amphi Mérieux, ENS de Lyon

### SCIENTIFIC PROGRAM

<b>09h00-09h15</b>	Welcome, coffee
<b>09h15-9h25</b>	Opening
	<b>Session "Pathologies and cancer 1"</b>
<b>09h25-10h10</b>	<b>Keynote: Gaëlle Recher</b> <i>Confined 3D cell culture used for both investigating cell self-organisation and engineering modular tissue units, (LP2N, Institut d'Optique d'Aquitaine,)</i>
<b>10h10-10h25</b>	<b>Pauline Bregigeon</b> <i>Microfluidic system for culture, monitoring and electroporation of spheroids based on a hydrogel scaffold (Ampère, ECL, Lyon)</i>
<b>10h25-10h40</b>	<b>Léa Chazot-Franguiadakis</b> <i>Nanofluidique pour l'étude du transport de particules virales (LPENSL, Lyon)</i>
<b>10h40-10h55</b>	Poster teaser 1/2
<b>10h55-11h25</b>	Coffee break
	<b>Session "Pathologies et Cancer 2"</b>
<b>11h25-11h40</b>	<b>Malèke Mouelhi</b> <i>Long-term nuclear regulation of cancer cells under confinement (ILM, Lyon)</i>
<b>11h40-11h55</b>	<b>Léa Barral</b> <i>Impairment in mechanotransduction pathways, a key for AML Chemoresistance (CRCL, Lyon)</i>
<b>12h55-12h10</b>	<b>Fabien Delebosse</b> <i>Characterization of the mechanical properties of lung adenocarcinoma (CEA, Grenoble)</i>
<b>12h10-12h15</b>	Idylle-labs presentation
<b>12h15-12h30</b>	Poster teaser 2/2
<b>12h30 -14h15</b>	Lunch and Poster session
	<b>Session "Subcellular and Cellular mechanics"</b>
<b>14h15-14h30</b>	<b>Sigolène Lecuyer</b> <i>Substrate stiffness impacts early biofilm formation by modulating bacterial surface motility (LPENSL, Lyon)</i>
<b>14h30-14h45</b>	<b>Delphine Débarre</b> <i>Mechanical regulation of cell adhesion to a soft wall under flow (LiPhy, Grenoble)</i>
<b>14h45-15h00</b>	<b>Sylvain Monnier</b> <i>Probing cell crowding in cells and tissues with Brillouin light scattering (ILM, Lyon)</i>
<b>15h00-15h30</b>	Coffee break
	<b>Session "From cells to tissue and development"</b>
<b>15h30-15h45</b>	<b>Benoit Landrein</b> <i>The mechanics of seed size control in plants (RDP, Lyon)</i>
<b>15h45-16h00</b>	<b>Vincent Mirouse</b> <i>WAVE regulatory complex facilitates cell rearrangements through the generation of a protrusive F-Actin subpopulation at tricellular junctions. (iGReD, Clermont-Ferrand)</i>
<b>16h00-16h15</b>	<b>Jocelyn Etienne</b> <i>Friction when changing neighbours: adhesion-regulated junction slippage controls cell intercalation dynamics in living tissue (LiPhy, Grenoble)</i>
<b>16h15-17h00</b>	<b>Keynote: Julien Derr</b> <i>Plant morphogenesis: motions, growth and mechanics (RDP, ENS de Lyon)</i>
<b>17h00-17h15</b>	Poster prices and closing remarks