

# PSL-Qlife Quantitative Biology Spring School 2025, March 31st – April 4th

## Cell Dynamics in Developmental Systems

Monday, March 31<sup>st</sup>

8:45 – 9:00 am Welcome Coffee  
Room 305

9:00 – 9:20 am  
**Yohanns Bellaïche & Patrick Chamay**  
Introduction  
Room 306

9:20 - 10:30 am  
**Kate Mc Dole**  
TBA  
Room 306

10:30 - 11:00 am Coffee break – Room 305

11:00 - 12:00 am  
**Jean-Yves Tinevez**  
TBA  
Room 306

12:00 – 1:15 pm Lunch - Room 305

1:15 - 2:00 pm  
**Student presentations (Flash talks)**  
Room 306

2:00 - 5:30 pm  
Digital workshop  
**Cellular Segmentation Tools for Developmental Biology with Artificial Intelligence**  
Jean Yves Tinevez  
Minh-Son Phan  
Gaëlle Letort  
Room 321

2:00 - 5:30 pm  
Digital workshop  
**Image Analysis using Deep Learning**  
Emmanuel Faure  
Room 313

5:30 - 6:00 pm Coffee break – Room 305

6:00 - 7:00 pm  
**Pavel Tomancak**  
TBA  
Room 306

Tuesday, April 1<sup>st</sup>

8:45 - 9:00 am Morning Coffee  
Room 305

9:00 – 10:15 am  
**Lorette Noiret**  
Introduction to Single-Cell RNA-Seq: Analysis and Applications  
Room 306

10:15 – 10:45 am Coffee break – Room 305

10:45 – 12:00 am  
**Stein Aerts**  
TBA  
Room 306

12:00 - 1:30 pm Lunch - Room 305

1:30 – 5:00 pm  
Digital workshop  
**Single-cell seq analysis pipeline**  
Lorette Noiret  
Nathalie Lehmann  
Syrine Bouallegue  
Room 321

1:30 – 5:00 pm  
Digital workshop  
**Single-cell seq analysis pipeline**  
Lorette Noiret  
Nathalie Lehmann  
Syrine Bouallegue  
Room 313

5:00 – 5:30 pm Coffee break – Room 305

5:30 - 6:30 pm  
**James Briscoe**  
TBA  
Room 306

7:30 pm  
**Faculty dinner**

Wednesday, April 2<sup>nd</sup>

8:45 - 9:00 am Morning Coffee  
Room 305

9:00 - 10:15 am  
**Florence Cavalli**  
Full transcriptome spatial transcriptomics and its application to cancer  
Room 306

10:15 - 10:45 am Coffee break – Room 305

10:45 - 12:00 am  
**Thierry Voet**  
TBA  
Room 306

12:00 - 1:30 pm Lunch - Room 305

1:30 - 5:00 pm  
Digital workshop  
**Spatial transcriptomics at a subcellular resolution**  
Vincent Laville  
Lieng Taing  
Room 321

1:30 - 5:00 pm  
Digital workshop  
**Spatial transcriptomics for cancer reasearch**  
Florence Cavalli  
Lucie Gaspard-Boulinç  
Room 313

5:00 - 5:30 pm Coffee break – Room 305

5:30 - 6:30 pm  
**Alessandro De SImone**  
TBA  
Room 306

6:30 pm- 8:30 pm  
**Poster session I  
Wine & Cheese** Room 305 ?

Thursday, April 3<sup>rd</sup>

8:45 - 9:00 am Morning Coffee  
Room 305

9:00 - 10:15 am  
**Hervé Turlier**  
TBA  
Room 306

10:15 - 10:45 am Coffee break – Room 305

10:45 - 12:00 am  
**Geneviève Dupont**  
Minimal models of gene regulatory networks underlying mammalian development  
Room 306

12:00 - 1:30 pm Lunch - Room 305

1:30 - 5:00 pm  
Digital workshop  
**Modeling and inference of tissue mechanics**  
Hervé Turlier  
Room 321

1:30 - 5:00 pm  
Digital workshop  
**Modeling of minimal gene regulatory networks**  
Geneviève Dupont  
Didier Gonze  
Room 313

5:00 - 5:30 pm Coffee break – Room 305

5:30 - 6:30 pm  
**Edouard Hannezo**  
Robustness of morphogenesis via mechanical feedbacks  
Room 316

6:30 pm – 8:30 pm  
**Poster session II  
Cocktail** Room 306

Friday, Friday April 4<sup>th</sup>

8:45 - 9:00 am Morning Coffee  
Cafeteria

9:00 – 10:15 am  
**Patrick Lemaire**  
Digital ascidian embryos: natural variation and the logical rules of animal embryogenesis  
Favard Room

10:15 - 10:45 am Coffee break – Cafeteria

10:45 – 12:00 am  
**Adrien Leroy**  
TBA  
Favard Room

12:00 - 1:30 pm Lunch - Room 305

1:30 - 5:00 pm  
Digital workshop  
**Exploring Cell Fate Decisions by Integrating Morphogenetic and Gene Expression Data**  
Patrick Lemaire  
Nassif Saab  
Room 321

1:30 - 5:00 pm  
Digital workshop  
**Identifying Regulators of Tissue Dynamics via Spatial Transcriptomics**  
Adrien Leroy  
Rémi Pigache  
Room 313

5:00 - 5:30 pm Coffee break – Room 305

5:30 – 6:00 pm  
**Closing remarks**  
Room 306