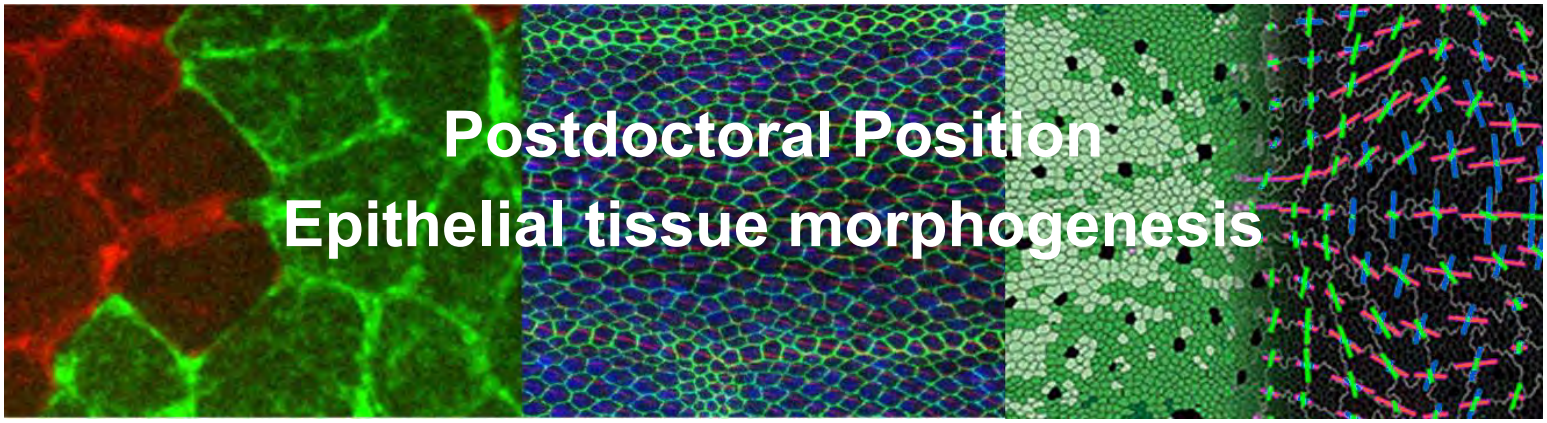

Postdoctoral Position
Epithelial tissue morphogenesis

Our team, “Polarity Division and Morphogenesis”, addresses emerging questions in the field of epithelial tissue development focusing on both genetic and mechanic regulations (website). In this context, we are looking for a highly motivated postdoctoral fellow to explore the mechanisms of cell division, mechano-sensing and morphogenesis in *Drosophila* using state-of-the art imaging methods, optogenetics, spatial transcriptomics and force measurements.

Our environment

Our interdisciplinary team is part of the Institut Curie, which hosts more than 80 research teams and is an ideal and challenging environment for any candidate who is deeply interested in cell and developmental biology and physics. In addition, the Institut Curie is ideally located in the centre of Paris with a large international community of students and scientists, providing a wonderful scientific and social environment.

We offer

A three-year contract.
A highly multidisciplinary research team (biology, physics and biostatistics) with access to state-of-the-art microscopy equipment and core facilities.
A large set of training opportunities to broaden your skills.

How to apply

Please send a motivation letter, a CV with a list of publications, a summary of past research, and contact information of at least two references to yohanns.bellaiche@curie.fr. Selected candidates will be invited for an interview in Paris. Applications will be reviewed as received.

Key publications

1. Villedieu A, Alpar L, Gaugué I, Joudat A, Graner F, Bosveld F, Bellaïche Y. Homeotic compartment curvature and tension control spatiotemporal folding dynamics. ***Nat Commun***. 2023 **14**:594.

2. di Pietro F, Herszterg S, Huang A, Bosveld F, Alexandre C, Sancéré L, Pelletier S, Joudat A, Kapoor V, Vincent JP, Bellaiche Y. 2021. Rapid and robust optogenetic control of gene expression in *Drosophila*. ***Dev Cell***. 56. 3393-3404.e7.

3. López-Gay JM, Nunley H, Spencer M, di Pietro F, Guirao B, Bosveld F, Markova O, Gaugue I, Pelletier S, Lubensky DK, Bellaïche Y. 2020. Apical stress fibers enable a scaling between cell mechanical response and area in epithelial tissue. ***Science.*** 370:eabb2169.

4. Pinheiro D. Hannezo E, Herszterg S, Bosveld F, Gaugue I, Balakireva M, Wang Z, Cristo I, Rigaud SU, Markova O, Bellaïche Y. 2017. Transmission of cytokinesis forces via E-Cadherin dilution and actomyosin flows. ***Nature.*** 545:103-107***.***

5. Bosveld F, Markova O, Guirao B, Martin C, Wang Z, Pierre A, Balakireva M, Gaugue I, Ainslie A, Christophorou N, Lubensky DK, Minc N, Bellaïche Y. 2016. Epithelial tricellular junctions act as interphase cell shape sensors to orient mitosis. ***Nature***. 530:495-8. PMID 26886796