



Postdoctoral position in cell division during epithelial morphogenesis IBDM, Marseille, France

We are looking for a motivated postdoctoral fellow to join our team “E2M- Epithelial monolayer morphogenesis” at the Institut de Biologie du Développement de Marseille (IBDM), Marseille, France. Our research work focuses on dissecting the mechanisms that control cell division and tissue arrangement in mammalian epithelium, using the intestinal tissue and organoids as models. Located on the campus of Luminy in Marseille, the IBDM is one of the main public centers for fundamental research in Cell and Developmental Biology and offers a state-of-the-art field of research (<https://www.ibdm.univ-amu.fr/>). In addition, the campus provides a multidisciplinary research environment notably with the presence of the Turing Centre for Living Systems (CENTURI, <https://centuri-livingsystems.org/>), as well as access to different experimental approaches through our labs, departments and core facilities to ensure the successful development of the research.

The applicant should be a researcher holding a PhD degree in cell and/or developmental biology, with no or maximum 2 years of experience. The candidate should have solid experimental skills, notably expertise in live cell imaging and high resolution imaging, as well as a strong interest in cytoskeleton biology. The applicant should be highly motivated, curious and enthusiastic.

The position is available from October 1st, 2023. Initial funding for 12 months is available. Candidates are expected to have a competitive track record to apply to external follow-up funding. Interested candidates should send their CV including research interests and contact details of two referees in a single PDF file to delphine.delacour@univ-amu.fr. Priority will be given to applications received before end of July.

Selected publications from the group:

- Saleh J, Fardin MA, Barai A, Soleilhac M, Frenoy O, Gaston C, Ciu H, Dang T, Gaudin N, Vincent A, Minc N* and Delacour D*. Length-limitation of astral microtubules orients cell divisions in intestinal crypts. *Developmental Cell*, in press. Posted on *BioRxiv* doi: <https://doi.org/10.1101/2022.09.02.506333>
- Guevara A, Soleilhac M, Minc N and Delacour D. Regulation and functions of cell division in the intestinal tissue. *Seminars in Cell and Developmental Biology* (2023) , S1084-9521(23)00004-6.
- Xi W, Saleh J, Yamada A, Mercier B, Dang T, Janel S, Soleilhac M, Wu H, Tomba C, Romagnolo B, Lafont F, Mège RM, Chen Y and Delacour D. Modulation of designer biomimetic matrices for optimized intestinal epithelial cultures. *Biomaterials* (2022), 282:121380.
- Gaston C, De Beco S, Doss B, Pan M, Gauquelin E, D'Alessandro J, Lim CT, Ladoux B and Delacour D. Spatio-temporal modulation of cortical RhoA zone conditions epithelial organization. *Nature Communications* (2021), 12:2226.
- Steinway SN, Saleh J, Kim DH* and Delacour D*. Microphysical models of the human intestine and gut microbiome in health and diseases. *Frontiers in Bioengineering and Biotechnology* (2020), 8:1-17.
- Salomon J, Gaston C, Magescas J, Duvauchelle B, Campeotto F, Canioni D, Sengmanivong L, Mayeux A, Michaux G, Poirier F, Minc N, Schmitz J, Brousse N, Ladoux B, Goulet O and Delacour D. Contractile forces at tricellular contacts modulate epithelial organization and monolayer integrity. *Nature Communications* (2017), 8:13998.

