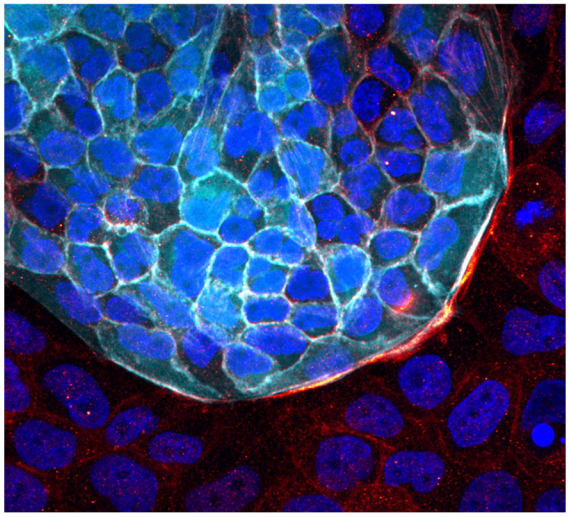
Postdoc offer on cell and tissue mechanics

Ladoux-Mège Team, Paris

A 3 years founded post-doctoral position is open in the Ladoux-Mège Lab (http://ladoux-mege-lab.cnrs.fr), Institut Jacques Monod (https://www.ijm.fr), Université Paris Cité- CNRS.

Project: Mechanical constraints, force transmission and mechanotransduction play an essential role in multicellular living organisms. This mechanical coupling which enables cells to sense, signal, and respond to physical changes in the environment, has however been largely understudied in the context of tissues homeostasis and self-renewal. In this context, the candidate will study the interplay between mechanical forces, cell extrusion and collective cell dynamics in epithelia. Intestinal organoids have been proven to capture essential features of the intestinal epithelium such as crypt folding, tissue compartmentalization and self-renewal. He (She) will investigate specific mechano-transduction processes that link mechanical stresses and cell behaviors.



Environment: The Ladoux-Mege team is composed of scientists with various expertise that cover a large range of disciplines including cell biology, surface chemistry and biophysics. Integrating mechanics, engineering and cell signaling approaches across scales, the team aim at understanding the physical principles and molecular mechanisms that control collective cell behaviors.
Institut Jacques Monod with its a multidisciplinary environment is one of the main centers of basic research in biology in France. The Institut Jacques Monod offer state-of-the art instrumentation and expertise in the fields of flow cytometry, electron and photonic microscopy, proteomics.

Profile: The candidate should have a PhD in Cell Biology or developmental Biology with possible a prior experience in microscopy and quantitative imaging. The successful candidate is expected to work in an interdisciplinary and international environment.

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Application: (CV + 2 reference letters) before 2023/07/31