

## Physics of biological morphogenesis:

Position for a **theoretical physicist** at the university of Geneva (Switzerland)



We offer several positions for outstanding, highly motivated, and creative theoretical physicists or applied mathematicians, at the postdoc or PhD student level, in the Salbreux group. Projects are at the interface of physics and biology and involve analytical theory, numerical simulations, and data analysis, in close collaboration with experimental groups. The successful candidates will investigate morphogenetic processes and self-organization at the level of cells and tissues in biological systems.

Candidates must have a PhD in theoretical physics or a related field (or a master's degree in physics for a PhD student position). Experience in statistical physics, soft matter physics, or non-linear dynamics is desirable. An expertise in biology is welcome but is not mandatory. The positions are for 3 to 5 years.

The University of Geneva (UNIGE) is world-renowned for its research and is among the top 1% best universities in the world. We offer an attractive research environment and salaries according to swiss standards.

<u>References:</u> Patterning and growth control *in vivo* by an engineered GFP gradient, Science, 2020; Mechanochemical Crosstalk Produces Cell-Intrinsic Patterning of the Cortex to Orient the Mitotic Spindle, Current Biology, 2020; Tissue curvature and apicobasal mechanical tension imbalance instruct cancer morphogenesis, Nature, 2019; Stability and Roughness of Interfaces in Mechanically Regulated Tissues, Phys Rev Lett, 2018, Mechanics of active surfaces, Phys Rev E, 2017; Active dynamics of tissue shear flow, New J. Phys, 2017, The Physical Basis of Coordinated Tissue Spreading in Zebrafish Gastrulation, Dev Cell, 2017.

## How to Apply

Candidates must send their application — in the form of a single PDF file including a brief letter of interest, a CV, as well as contact information of two to three persons of reference — to Prof. Guillaume Salbreux (guillaume.salbreux@unige.ch).