

# EINLADUNG

Kolloquium  
Sommersemester 2024

**Marie Breau**

Laboratoire de Biologie du Développement  
Institut de Biologie Paris Seine

hält am Dienstag den **02.07.2024**, um 13:00 Uhr, am Campus  
Riedberg, Biologicum, **Hörsaal 1 (-1.202)** einen Vortrag über:

**“Mechanical interactions between tissues during the morphogenesis of the zebrafish olfactory placode”**

Neuronal circuit assembly requires neuronal migration and axon/dendrite growth, which are believed to be primarily guided by chemical cues. Yet the movement of neurons and their protrusions is influenced by mechanical cues, whose functions have started to be studied in vitro, but remain largely unexplored in vivo. During development, neurons are embedded in neuroepithelia or neuronal clusters (placodes, ganglia) which undergo morphogenetic reorganisation in coordination with surrounding tissues. These adjacent tissues can exert pushing or pulling forces on the neuronal cell bodies or their growing protrusions, thus influencing the final position of the neurons, but also their morphology and connectivity. Conversely, growing neurons or groups of neurons may influence the morphogenesis of nearby tissues through the transmission of forces. I will present how we investigate the role and mechanisms of this kind of tissue-tissue mechanical interplay using as a model the zebrafish olfactory circuit, which develops in the olfactory placode in a superficial location allowing easy live imaging and mechanical perturbations.



Einladende: Prof. Dr. Virginie Lecaudey

