



 **Hugo WIOLAND**

From France to Finland 

Project: **Actin cytoskeleton**

Research topic: **Biology**

Finnish Institution: **University of Helsinki**

French Institution: **Institut Jacques Monod, University of Paris**

Dates of mobility: **06/06/2022 to 10/06/2022**

Program: **Maupertuis Programme (Short Mobility)**

## PRESENTATION

[Hugo Wioland](#) carried out his PhD at the [University of Cambridge](#), in the lab of Ray Goldstein (DAMTP). He worked on the movement and self-organisation of suspensions of swimming bacteria. Hugo then obtained a postdoctoral grant from the [Fondation ARC](#) to join the lab of [Guillaume Romet-Lemonne](#) and [Antoine Jégou](#) at the [Institut Jacques Monod](#). The team studies the regulation of actin filament assembly, with an original approach that combines biochemistry (protein purification, in vitro assays) and biophysics (microfluidics, focus on mechanics). While straying at the Institut Jacques Monod, he started a new independent project on the role of tropomyosins in the differentiation on actin filament networks. Recently, he has been awarded an [ANR JCJC](#) funding to launch this project.

## ACTIVITIES IN FINLAND

During his stay, Hugo had the possibility to present his recent work, research interest and experimental techniques to the Lappalainen, [Poukkula](#), [Almeida-Souza](#) and [Vartiainen](#) labs. With members of the Lappalainen Lab, they exchanged and compared their most recent observations, and planned future experiments on tropomyosins, a family of proteins that attach along actin filaments and define their function. He also had long discussions with [Minna Poukkula](#) and [Leonardo Almeida-Souza](#), who lead two teams at [HiLIFE institute](#), and also work on actin.

Finally, Hugo with Tommy Kotila, PhD student in the Lappalainen lab, prepared and learnt how to purify tropomyosin 1.6, an important protein for his project.