Guillaume Jacquemet

Group Name: Cell Migration Lab

Unit: Cell Biology and Biochemistry

University: Åbo Akademi University

Research Projects

- The role of filopodia during breast cancer progression
- Cancer cell communication via filopodia trans- endocytosis
- Deciphering the mechanisms of pancreatic cancer metastasis
- The role of mechanosensitive calcium channels in melanoma
- The role of TLNRD1 in endothelium homeostasis
- Democratising deep learning for microscopy with ZeroCostDL4Mic

Special Methodologies & Techniques

- Microscopy (super-resolution microscopy, live imaging, traction force microscopy)
- Image analysis, deep learning and computer vision
- Cell and molecular biology
- Mass spectrometry (identification of protein-protein interactions using pull-downs and biotinylation-based strategy)
- Zebrafish embryo to study cancer biology
- Flow and perfusion chambers

Selected Publications

- MYO10-filopodia support basement membranes at preinvasive tumor boundaries. Dev Cell. 2022; 57 (20), 2350-2364. E7. DOI: 10.1016/j.devcel.2022.09.016
- TrackMate 7: Integrating state-of-the-art segmentation algorithms into tracking pipelines. Nat. Methods. 2022; 19,829832. DOI: 10.1038/s41592-022-01507-1
- Democratising Deep Learning for Microscopy with ZeroCostDL4Mic. Nat Commun. 2021; 4:15;12(1):2276. DOI: 10.1038/s41467-021-22518-0

Lab Website: https://cellmig.org/

Christian Pansch-Hattich

Unit: Marine Biology

University: Åbo Akademi University

Jessica Rosenholm

Unit: Pharmacy

University: Åbo Akademi University