

# Master project 2020-2021

### **Personal Information**

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**Group** Lab for Prediction of Cell Systems Dynamics

#### Project

## Computational systems biology

#### **Project Title:**

Studying cell dynamics by combining live imaging and single-cell RNA-seq

#### **Keywords:**

Single cell, RNA sequencing, Optical microscope, Technology development, Challenge,

#### **Summary:**

As part of the internship, the student will use our developed single-cell picking system, which combines live imaging and single-cell whole gene expression analysis, to study molecular mechanisms of cell dynamics in a cell population, e.g., cell activation, differentiation, or cell-cell interaction, related to the immune system, cancer, or organoids.

### Expected skills::

High motivation and good social manners

#### Possibility of funding::

To be discussed

#### Possible continuity with PhD::

To be discussed

#### **Comments:**

Good opportunity for those who want to try both experiments and computational analyses