

Imaging mass cytometry data analysis

Nils Eling

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Chapter 1

Prerequisites

Chapter 2

Introduction

Introduction to imaging mass cytometry

Chapter 3

Read the data

Overview on how to read in pre-processed data.

Chapter 4

Image and cell-level quality control

Overview on possible quality indicators

Chapter 5

Clustering approaches

5.1 Rphenograph

5.2 Shared nearest neighbour graph

5.3 FlowSOM

Chapter 6

Classification approaches

6.1 Manual labelling of cells

6.2 Training a classifier

6.3 Classification of new data

Chapter 7

Visualizing the images

Using the `cytomapper` package.

Chapter 8

Visualizing single-cell data

Using the `dittoSeq` package.

Chapter 9

Performing spatial analysis

9.1 Interaction analysis

Based on Denis' and Vitos work

9.2 Spatial domains

Based on Tobis work