Master Thesis: Single Cell Transcriptome Analysis of Nasal Epithelial Cells

Background

Human nasal epithelium is grade by the recent events surrounding CoVID-19. Specifically, the nasal tissue is generally considered to be one of the entry points for the SARS-CoV-2. The effects of the virus on these cell types is not completely illuminated. With single cell RNA sequencing, it is possible to study the transcriptome of these tissues while maintaining heterogeneity within and effects on the different cell types.

Description

Single cell suspensions of epithelial tissue are available and will be used to create a single cell RNA sequencing library. After external sequencing of the libraries, the data will be processed and analyzed according to the latest methods.

Your Tasks

- Prepare single cell suspensions for single cell library
- Constructing the single cell library
- Constructing & improving analysis on best practices for data analysis
- Analyse and interpret the resulting

Requirements

- Interest or knowledge in bioinformatic science
- Interest or knowledge in molecular biology & immunology

Bei Interesse melden Sie sich bei
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