Genomic Medicine

PhD block course for the PhD Program Molecular and Translational Biomedicine November 27 – December 1 2017 in Zurich

Student Exercise 8

E Papalexi, R Satija. Single-cell RNA sequencing to explore immune cell heterogeneity. Nat Rev Immunol, 2017.

doi: 10.1038/nri.2017.76

Assignment:

- 1. Read the paper and discuss it in your group.
- 2. Prepare a 10 min presentation of the paper.
- 3. Compile a list of tissues (or cell populations) for which scRNA-seq appears relevant for the pathology of a disease. For one instance:
 - a. Explain the connection to disease
 - b. Sketch the scRNA-seq experiment to be done
 - c. Discuss how limitations in experimental design, cell isolation, amplification, and data analysis affect your chances of impacting diagnostics or treatment of the disease.

After your presentation there will be a discussion of 10-15 min.

Note: All time limits are sharp – we will interrupt you.