

# Wahlfach Medicine and Bioinformatics

In an age of ever-increasing amounts of data, such as genomic sequencing data, it is essential that physicians acquire the skills to correctly understand and analyze large biomedical data sets.

In our elective, participants will learn the following:

- the current state-of-the-art of single-cell genomics and data analysis,
- commonly used and available bioinformatics tool and
- how to efficiently and successfully learn and implement these methods.

In interactive workshops, we will learn the R programming language and consequently apply it to actual examples from various research projects.

After completing our course you will be able to implement the above-mentioned methods into your doctoral thesis or into other types of medical research. A better understanding of bioinformatics tools and methods and how to apply them to routine medical practice will help future physicians to enhance patient care through improved diagnostic solutions and more effective therapeutic targeting.

The course will be graded based on the evaluation of each participant's active engagement during the workshop.

Prior knowledge of programming is not required.

The elective will be performed in English.

## Participants

All students of the 1st medical study section