

Workshop

Basic Bioinformatics Skills

Organizer

CUBiDA (Core Unit Bioinformatik, Datenintegration und Analyse) at the Universitätsklinikum Erlangen

Instructors

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Outline

This workshop modules provides participants with an overview of essential bioinformatics skills, gain practical tips on getting started with a bioinformatics project, and learn about good practices for performing data analysis and sharing results. The workshop also includes hands-on sessions to explore and understand the command line interface and basic file operations in RStudio.

Outcome

At the end of the workshop, participants will be able to navigate the Linux environment in the terminal and feel comfortable when working with bioinformatics software.

Number of participants

5 to 15

Target audience

This workshop module is designed for researchers who are new to Bioinformatics and intend to use the command-line interface for their analysis.

Starting in 2026, attendance at this workshop will be a prerequisite for other CUBiDA workshops, unless participants can demonstrate equivalent prior knowledge.

Prerequisites

There are no prerequisites for this module.

Teaching format

The workshop will comprise a mix of interactive lectures with short hands-on exercises. Computers with preinstalled software and data will be provided to all participants. During the workshop, we will also give you access to all our teaching materials, including a software environment which can be executed on your computer.

Provisional workshop schedule

DAY 1	
8:30 am-4:30 pm	Introduction to Bioinformatics. Setting up and managing a Bioinformatics project. The Unix Shell. Basic command-line skills. Basic regular expressions. Managing and interacting with processes. Working with Streams and Redirection. The Unix pipe. Retrieving Bioinformatics Data. Basic introduction to RStudio and the RStudio terminal. Reproducible Bioinformatics research. Using code as documentation. Markdown for project notebooks.

Questions

Please, contact us at mik-cubida@uk-erlangen.de.