

Bioinformatics & Scientific Computing

What we do

We offer data analysis services and scientific software development for academic research groups and industrial research laboratories. Our wide range of services provides help to understand and exploit the large-scale data sets generated in modern biological and biomedical research. As a “knowledge hub” our facility also offers training, consultation and help-desk for all Vienna Biocenter (VBC) researchers in the fields of biostatistics, programming and bioinformatics.

Bioinformatics data analysis

Novel, large-scale measurement techniques are used routinely in bio- and medical sciences. To fully harness the power of these techniques and translate these large data sets to information, the data need to be managed and analyzed. Accordingly, the cutting-edge bioscience has become data and computing intensive. Our mission is to develop advanced analysis tools and implement novel approaches for the analysis of high-throughput data sets with special focus on next-generation sequencing (NGS).

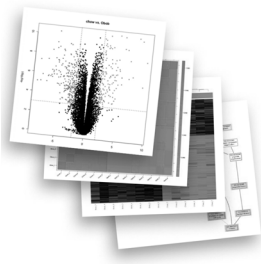
Biological Experiments Engineering

We help you to implement your next biological experiments, working together with you from an idea about a new experimental protocol or improvement to a solid solution and implementation. In projects of short to medium duration (from 3-6 weeks) we develop hardware and write the software that is needed to control experiments.

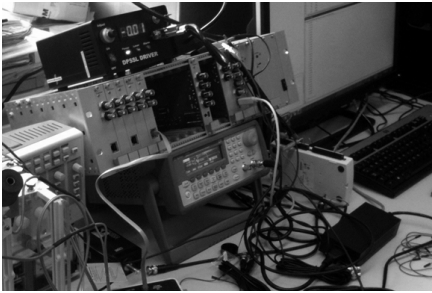
Data management and processing

Our data management and processing service provides software solutions that help you to make effective use of your research data and translate your results into new information and insights. The tools we can create for you include: scien-

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biocomp@vbcf.ac.at



We develop advanced analysis tools, pipelines and implement novel approaches for the analysis of high-throughput biological data sets.



Estimating in vivo behavior dependent neuronal activity by measuring GFP fluorescence in specific neuronal populations.



A work-log and phenotype annotation tool for a genome-wide screen to analyze brat xxxlR double knockdown in drosophila fly lines, that allows the scientists to easily track their progress in the screening process.



Regularly giving training courses in biostatistics, computing skills and bioinformatics data analysis.



tific data management, automated analysis and reporting, laboratory information systems.

Training and consultation

State-of-the-art biological experiments are getting more and more complex and require sophisticated data analysis techniques. The BioComp facility is dedicated to help researchers with courses and advice on computational issues they may encounter during their work.

Services and Methodologies Provided

We provide services in the following areas:

- Advanced data analysis tools using machine learning and data mining approaches
- Downstream level bioinformatics support for NGS data
- Software solutions for biomedical image and video analysis
- Hardware-related programming for experimental assays
- Custom-made laboratory data management tools and processing (LIMS)
- Training and consultation in bioinformatics, statistics and programming

Contact and Location

Bioinformatics & Scientific Computing Vienna Biocenter Core Facilities (VBCF)

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