# **Education & Training**

The FGCZ offers practical courses from experimental design to sample preparation to data analysis

### **Genomics Course**

- -4 day course with the focus on Genomic DNA
- -Library preparation
- -Sequencing on NGS technologies
- -Data analysis

# Metagenomics Course

- -4 day course with the focus on microbial communities
- -Library preparation
- -Sequencing on NGS technologies and single molecule sequencing
- -Data analysis

#### **Metabolomics Course**

- -4 day course on MS-based metabolomics from theory to practice
- -Metabolite extraction
- -MS-acquisition
- -Data analysis

### **Combined-Omics Course**

- -5 day course from transcriptome to proteome
- -Comparative RNA-sequencing
- -Comparative protein profiling
- -Combined data analysis

# **Transcriptomics Course**

- -4 day course with the focus on RNA
- -Library preparation
- -Sequencing on NGS technologies
- -Data analysis

## **Microarrays**

- -2 day course for beginners in collaboration with Schott/Nexterion
- -Theory of intermolecular interactions, surface chemistry, protocol development, dyes and applications
- -Practical problems and pitfalls of the technology
- -Microarray slide production and processing (demonstration)

## **Bioinformatics Training**

- -2 day course What To Do with My Data?
- a- Introduction to RNA-seq data analysis
- b- Introduction to variant analysis using NGS

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