

## Details

### Core Unit Systems Medicine (SysMed)

The Core Unit Systems Medicine is a facility of the medical faculty of the University of Würzburg and the Interdisciplinary Center for Clinical Research (IZKF) of the University Hospital of Würzburg. The CU Systems Medicine enables researchers to apply high-throughput technologies for tackling systems biological and systems medical questions. Currently, the CU Systems Medicine consists of established sub-units for support and execution of diverse genomic analyses - particularly "next-generation sequencing" - and associated bioinformatic data analysis. Key activities of the CU Systems Medicine comprise basic research-oriented functional genomics research projects as well as medically-oriented projects. A particular focus of the CU Systems Medicine lies on development and application of highly parallel molecular single-cell analyses. Further sub-units, in particular for the support of systems biological data analyses and modelling using integration of various data sets (diagnostic markers, proteomic or metabolomic data sets) are in preparation.

**Address:** Josef-Schneider-Straße 2 (Gebäude D15)  
97080 Würzburg  
Bayern  
Deutschland  
[To website](#)

### Host Institution

**Universität Würzburg**

Sanderring 2  
97070 Würzburg  
Bayern  
Deutschland

<http://www.uni-wuerzburg.de/startseite/>

**Interdisziplinäre Zentrum für Klinische Forschung (IZKF), Würzburg (Geschäftsstelle)**

Beethovenstraße 1a/1. OG  
97080 Würzburg  
Bayern  
Deutschland

### Scientific Domain

**Primary Subjects:**

- Biology
- Medicine

**Secondary Subjects:**

- Agriculture, Forestry, Horticulture and Veterinary Medicine
- Chemistry

### Category

Genomic, Transcriptomic, Proteomics and Metabolomics Facilities

### Scientific Services

We offer scientific services in the area of "omics" technologies, in particular genomics. This includes analyses of various nucleic acids and of chromatin modifications as well as interactions of nucleic acids and proteins. Our methodological spectrum for services comprises presently: Next generation sequencing or highly parallel sequencing methods (based on Illumina technologies). Single cell genomics (based on our technological developments) Bioinformatics support for primary and secondary analyses of genomics data sets. Data integration.

## Scientific Equipment

- Illumina sequencers (especially NextSeq 500 and NextSeq 2000)
- Affymetrix GeneChip Fluidik Station 450
- Agilent 2100 Bioanalyzer
- Thermo Qubit 2.0 Fluorometer
- Thermo NanoDrop 2000
- Various further instruments for sample preparation (qPCR etc.)
- BD Biosciences FACS Aria III

## Keywords

- DNA sequencing
- RNA expression analysis
- Single cell analysis
- Next Generation Sequencing
- Illumina
- Bioinformatics

## Networks

### Users per annum

**Internal Users:** 86

**External Users in total:** 26

**External Users:** 14

**External Users in the EU:** 6

**External Users outside of EU:** 6