# **General Information**

Chairman of the Board: Prof. Dr. A. Pühler



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Executive Director: Dr. S. Weidner stefan.weidner@cebitec.uni-bielefeld.de

### Address:

**Bielefeld University** Center for Biotechnology (CeBiTec) Universitätsstrasse 27 33615 Bielefeld, Germany

→ www.cebitec.uni-bielefeld.de

# University Campus Plan

# **Universität Bielefeld**



# CeBiTec Center for Biotechnology

- Bioinformatics
- Genome Research and Systems Biology
- Biophysics and Nanoscience
- Biochemistry and Bioengineering
- Graduate Center
- Bioinformatics Resource Facility



**CeBiTec** 

# Center for Biotechnology CeBiTec

Chairman of the Board: Prof. Dr. A. Pühler, Executive Director: Dr. S. Weidner

Bioorganic Chemistry Cell Culture Technology ermentation Engineer

Cellular Genetics

Structural Biochemis

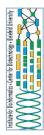
RNA-Based Regulation Systems Biology of Regular Networks

Technology Platform Genom

Graduate Center

Bioinformatics Resource Facility

# Institute for Bioinformatics (IfB)



The Institute for Bioinformatics (IfB) is a forum for communication and joint research in bioinformatics and biomathematics at Bielefeld University. The main tasks of the institute are the coordination of interdisciplinary research projects, the organisation of workshops and seminars, and the presentation of the activities and results of the involved research groups. The research units contributing to the IfB cover bioinformatics, practical computer science, medical informatics, genome informatics, biomathematics, neuroinformatics, and computational genomics.



Speaker: Prof. Dr. J. Stoye

# Institute for Genome Research and Systems Biology (IGS)



The Institute for Genome Research and Systems Biology (IGS) is a platform dedicated to support the development and implementation of joint research project at the Center for Biotechnology. The main objectives of the Institute are the coordination of interdisciplinary research projects, the organisation of workshops and seminars, and the presentation of activities and results of the research groups involved. The subjects covered by the research groups of the IGS range from genomics, transcriptomics, proteome and metabolome research to systems biology.



Speaker: Prof. D B. Weisshaar

# Institute for Biophysics and Nanoscience (BINAS)



The Bielefeld Institute for Biophysics and Nanoscience (BINAS) was founded in 2004 to centralize the activities of the Bielefeld University in the areas of nanoscience and biophysics. Nanoscience and biophysics belong to modern research areas relevant for information technology, biomedical optics and physical engineering, all critically relying on the fruitful cooperation between differnt classical disciplins. Therefore, successful work of BINAS bases upon a close interdisciplinary collaboration between scientists from the Faculties of Physics, Biology, Chemistry, and Technology of Bielefeld University.



Speaker: Prof. Dr. A. Gölzhäuser

# Institute for Biochemistry and Bioengineering (BioChemTech)



Biochemical research at BioChemTech includes scientific projects from the center of biochemistry, e.g. on structure and function of proteins, lipids and carbohydrates. Furthermore, biophysical chemistry, structural biochemistry, chemical biology and mass spectrometry introduce technological platforms to the BioChemTech. The activities in the area of biotechnology at BioChemTech comprise molecular, cellular, and bioprocess engineering - in particular, genetic engineering of recombinant proteins and plasmid DNA for medical purposes, including bioprocess development, large-scale production, downstream processing, and biocatalysis. BioChemTech has many interfaces for joint activities with scientists both from inside and ourside the CeBiTec.



Speaker: Prof. Dr. T. Noll

## **Graduate Center**

A Graduate Center comprising two different graduate programs is located at the CeBiTec:

The International NRW Graduate School in Bioinformatics and Genome Research is an educational institution devoted to top-level research in bioinformatics and molecular biology. The Graduate School offers a fast track, high-level PhD program in English language for students with excellent qualifications (www.cebitec.uni-bielefeld.de/gradschool).

The Graduate Cluster Industrial Biotechnology is a joined initiative of three CLIB2021 member universities and is thematically based on four technology platforms. At the CeBiTec the scientific branch "Polyomics" is realized, containing the disciplines genome- and post genome research. In this high-level PhD program post graduate positions in the field of industrial biotechnology will be offered to excellent candidates (www.graduate-cluster.net).



# **Bioinformatics Resource Facility** (BRF)

The Bioinformatics Resource Facility (BRF) provides general hardware and software support for all research groups of the CeBiTec



within genome and post genome projects. A high-performance compute cluster with more than 550 CPUs (more than 1150 CPU cores) and an overall capacity of 8.5 Teraflops is available for large scale computations like whole genome annotations or metagenome analyses. Within the last 10 years, the group has developed a complete software platform to systematically store and analyze all data sets from genomics, transciptomics, proteomics, and metabolomics. For all current research projects, an online disk storage capacity of 150 Terabytes is available and an overall backup and tape archive capacity of more than 300 Terabytes is provided to ensure long-term access to all valuable data sets.