Groups

Faculty of Biology

- **Prof. R. Baumeister**
  Bioinformatics and Molecular Genetics
  www.celegans.de
- **Prof. A. Becker,** Molecular genetics
  www.cebitec.uni-bielefeld.de/transcriptomics
- **Prof. W. Driever,** Developmental Biology
  www.biologie.uni-freiburg.de/data/bio1/driever
- **Prof. W. Hess,** Genetics
  www.cyanolab.de
- **Prof. T. Laux**
  Molecular Genetics and Biotechnology of Plants
  www.uni-freiburg.de/LauxLab
- **PD Dr. D. Lebiedz,** www.lebiedz.de
- **Prof. K. Palme,** Plant Physiology
  www.seemegrow.de/kunden/botanik/
  psf-plant-siences-freiburg.html
- **PD Dr. S. Rensing,** www.plantco.de/
- **Prof. R. Reski,** Plant Biotechnology
  www.plant-biotech.net

Faculty of Biology and MPI of Immunobiology

- **Prof. M. Reth,** www.rethlab.de

Faculty of Applied Sciences & Computer Sciences

- **Prof. R. Backofen,** www.bioinf.uni-freiburg.de

Faculty of Medicine

- **Prof. Th. Benzing,** www.benzinglab.org

Faculty of Mathematics and Physics

- **Prof. J. Timmer,** http://sysbio.uni-freiburg.de
- **Prof. P. Pfaffelhuber**
  http://omnibus.uni-freiburg.de/~pp131/

Contact

Scientific Advisory Board

- **Prof. Ruedi Aebersold,** ETH Zürich
- **Prof. Judith P. Armitage,** University of Oxford
- **Prof. Michael B. Yaffe,** MIT
- **Prof. Eric Westhof,** Université Louis Pasteur
- **Prof. Lothar Willmitzer,** MPI Golm
- **Prof. Boris N. Kholodenko,**
  Thomas Jefferson University
- **Prof. Peter E. Wellstead,**
  Hamilton Institute, Ireland

Project Coordinator

- **Prof. Wolfgang R. Hess**
  Phone: +49-(0)761-203-2796
  Fax: +49-(0)761-203-6996
  wolfgang.hess@biologie.uni-freiburg.de

Project Administrator

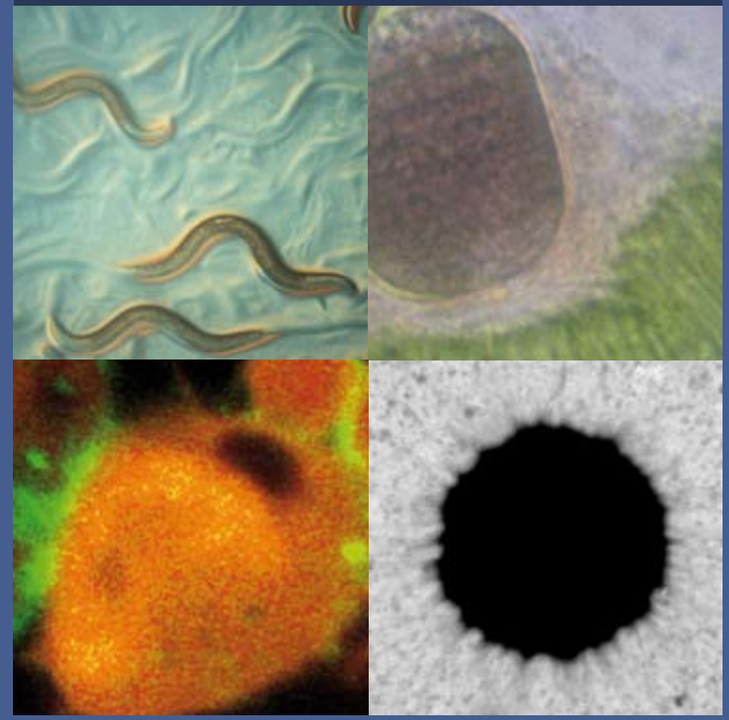
- **Dr. Sabine Stebel**
  Phone: +49-(0)761-203-2789
  Fax: +49-(0)761-203-6996
  sabine.stebel@biologie.uni-freiburg.de

Faculty of Biology
University of Freiburg
Schänzlestrasse 1
D-79104 Freiburg, Germany
www.frisys.de

FORSYS
Research Units for Systems Biology

frisys
freiburg initiative for systems biology

funded by
Bundesministerium für Bildung und Forschung



FRISYS

Freiburg Initiative for Systems Biology

frisys

FRISYS – Freiburg Initiative for Systems Biology

Scientific Concept

Since January 2007 the Freiburg Initiative for Systems Biology (FRISYS) is hosting one of the new FORSYS centers for Systems Biology, funded by the Federal Ministry of Education and Research of Germany.

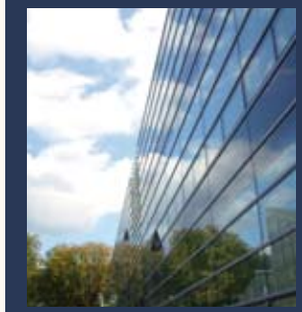
Several pro- and eukaryotic model organisms are targeted by the FRISYS research program. These organisms have been selected to cover phylogenetic key positions of the plant and animal realm such as cyanobacteria, the nitrogen fixing bacterium *Sinorhizobium meliloti*, the moss *Physcomitrella patens,* the angiosperm *Arabidopsis thaliana*, the invertebrate roundworm *Caenorhabditis elegans* and the vertebrate zebrafish (*Danio rerio*), and are complemented by work on mammalian cell and organ cultures.

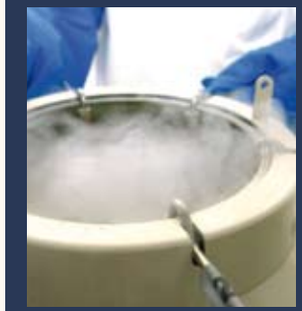
The overarching research topics comprise the analysis of kinase signaling networks in growth and differentiation, the impact of regulatory RNAs and the study of the transcriptional regulatory networks which control growth and differentiation in these organisms.

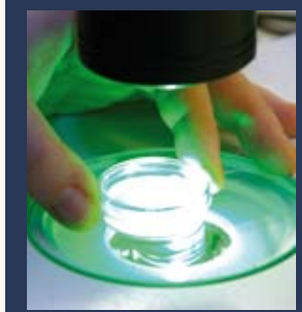
Infrastucture

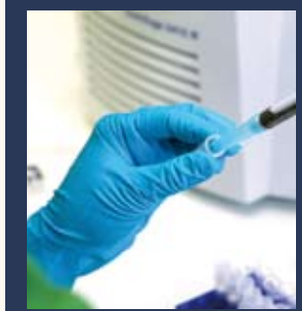
FRISYS is closely associated with the Freiburg Centre for Systems Biology (ZBSA). The ZBSA aids the joint work of dry and wet-lab scientists from the cooperating Faculties of Medicine, Biology, Informatics and Engineering, Mathematics and Physics by providing state-of-the-art laboratories in a single shared research building. In addition, it provides core facilities for genomics, proteomics and a life imaging center.

Systems Biology research within FRISYS is carried out by ten existing theoretical and experimental groups plus three newly established groups which are run by group leaders on tenure track professorships giving a long term perspective to these researchers.









M.Sc./Ph.D. Program

The long term aims of FRISYS are also dedicated to an international and bilingual educational concept.

Two specific tenure track lecturer positions have been established to promote a new interfaculty curriculum in Systems Biology at graduate and M.Sc. level.

In the first year of a two year Ph.D. education program biologists are taught Calculus and Dynamical Systems and the theoreticians will be taught selected topics from Cell Biology, Molecular Biology, and Biochemistry.

In the second year, joint courses in Systems and Control Theory, Mathematical Biology, Bioinformatics and Systems Biology are taught.

www.biologie.uni-freiburg.de/studium/mbsb.php