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• Prof. W. Driever, Developmental Biology
  www.biologie.uni-freiburg.de/data/bio1/driever
• Prof. W. Hess, Genetics
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• PD Dr. D. Lebedz, www.lebedz.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
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Faculty of Biology and MPI of Immunobiology
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Faculty of Applied Sciences & Computer Sciences
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Faculty of Medicine
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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.

Infrastructure

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