

Welcome Address of the Jena Centre for Bioinformatics

The Jena Centre for Bioinformatics (JCB) is a competence network of about 25 research groups from different departments of the Friedrich Schiller University of Jena (FSU), the Leibniz-Institute for Natural Product Research and Infection Biology - Hans Knöll Institute (HKI), the Leibniz Institute for Age Research - Fritz Lipmann Institute (FLI), the Max Planck Institute for Chemical Ecology, the University of Applied Sciences Jena, the Albert Ludwigs University of Freiburg, and several companies: BioControl Jena GmbH, Clondiag Chip Technologies GmbH, and SIRS-Lab GmbH.

The objectives of the JCB network are to concentrate and encourage the interdisciplinary bioinformatics research in Jena, to interconnect theoretical and experimental research groups, and to inspire the development of new applications for bioinformatics and systems biology in different areas, e.g. medicine and biotechnology. The field of bioinformatics provides already valuable tools for many biological and medical disciplines and is an integral part of present-day biosciences.

The research activities within the JCB network cover diverse topics in the field of theoretical biosciences, joined by the focus on molecular communication processes. Close collaborations between the different groups characterise the work of the JCB. Main research areas are:

- Algorithms for computational biology and bioinformatics
- Analysis of biological networks; systems biology
- Data analysis and evaluation
- Databases and online tools
- Genome analysis and alternative splicing
- Protein-protein interactions
- Rheumatoid arthritis
- Structural biology

The JCB was founded in 2001 as a part of a funding initiative of the German Federal Ministry of Education and Research (BMBF) to intensify the Germany-wide research in bioinformatics. Within this funding programme, six bioinformatics centres in Germany were established: the “Berlin Center for Genome Based Bioinformatics” (BCB), the “Braunschweig Bioinformatics Competence Center” (Intergenomics), the “Cologne University Bioinformatics Center” (CU-BIC), the bioinformatics association of the University of Halle with the IPK in Gatersleben (BIC-GH), the “Jena Centre of Bioinformatics” (JCB), and the bioinformatics consortium at the Technical University of Munich (BFAM). These six centres were integrated in the “Network of Bioinformatics Competence Centers” (NBCC) and funded for five years by the BMBF with a total volume of 51.2 million Euro. In line with international projects, the JCB was involved in the Human Genome Project. The Department of Genome Analysis at the Fritz

Lipmann Institute (formerly IMB) in Jena participated in the sequence analysis of the human chromosomes 8 and X, and, moreover, in sequencing *Dictyostelium discoideum*.

An important part of the JCB's activities is the organisation of seminars and lectures with well-known invited speakers, for instance, Prof. Dr. Jason Papin (University of Virginia, USA), Prof. Dr. Eytan Ruppin (Tel-Aviv University, Israel), Prof. Dr. Friedrich Sriebe (University of Minnesota, USA), or Prof. Dr. Mike Steel (University of Canterbury, New Zealand). Moreover, several workshops and conferences take place every year, supported by or under the auspices of the JCB, such as the JCB workshop that is – due to the rising interest – already taking place twice a year here in Jena. Some activities are conducted in cooperation with the recently started conference series of the Jena Life Science Forum (JLSF). In line with the FORSYS initiative (Research Initiative in Systems Biology), the JCB is also involved in the organisation and the further development of Systems Biology in Germany. The FORSYS initiative is a research association that is responsible for coordination of scientific projects and for acquiring funding within thematically appropriate tenderings. The FORSYS initiative is co-editor of the journal “systembiologie.de”, a quarterly for systems biological research in Germany that is intended to bridge the gap between professional research and the interested public. If you would like to get more information about the JCB, please consult the corresponding website (<http://www.jcb-jena.de/>).

The JCB is pleased to support the Eleventh International Conference on Membrane Computing (CMC11) that will take place on 24-27 August 2010 at the Friedrich Schiller University of Jena. Having now for the first time the status of a conference, CMC11 aims to continue the successful tradition of 10 previous events of the International Workshop on Membrane Computing (WMC). It is intended to bring together researchers working in the young and very promising field of membrane computing and related areas, to enhance communication and cooperation. We thus wish all participants, guests, and friends a successful scientific event, many fruitful discussions in friendly atmosphere as well as numerous inspirations for future projects. Let us turn CMC11 into a major success and do not forget to enjoy the lovely “UniverCity” of Jena and its beautiful environment. Please feel free to communicate your impressions to your colleagues, students who might be attracted to come to Jena for studying bioinformatics, or potentially interested persons.

Cordial greetings
on behalf of the JCB



Jörn Behre
Gabi Escuela
Thomas Hinze
Thorsten Lenser
Stefan Schuster (JCB spokesman)

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