KoRS-CB
Training Program 2011
How many courses do I have to take?

**TOTAL:** 4 courses out of 3 areas within 3 years

**AREAS:**
- Basic scientific courses
- Advanced scientific courses
- Transferable skills / Management courses

Which courses shall I take?

This depends on your educational background and your research interests and should be discussed with your Thesis committee.

How to register:

Please enrol via Doodle by using the link at the end of each course description on the respective website.
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**Timeline**

- **24.-25.2.** Practical Screening Data Analysis
- **10.-11.3.** Scientific Presenting in English
- **14.-15.3.** Academic Small Talk & Networking
- **6.-8.7.** Bioimaging I
- **25.-27.7.** Biomedicine I
- **10.-11.8.** Intercultural Communication
21.-22.3. Drug Discovery & Development in the Pharmaceutical Industry

24.3. Job Application Training

25.3. Leadership for Future Leaders

12.4. Gene Expression & Protein Purification Strategies

22.-24.9. Computational Life Science

26.-27.9. The Power of Cutting Edge Mouse Genetics

28.-29.9. Project Management for PhD Students

4.-6.10. Proteomics

11.-14.10. Determination of Macromolecular Structures

20.-21.10. PhD – and then? Successful Start in Science

24.-27.10. Combinatorial & High Throughput Technologies

Mai

Juni

Oktober

November
24-25 February 2011

Practical Screening Data Analysis

Content

We will introduce KNIME, an open source data analytics framework together with extensions that allow to process screening data, such as activity information or cell assay images. The course consists of lectures with extensive hands-on sessions. After successful attendance participants should be able to use KNIME to process and analyse their own data independently.

Lecturer: Michael Berthold, Martin Horn, Thorsten Meinl
Room: Z 613
Course Area: Basic scientific course
Participants max.: 15
Contact: Michael Berthold
Registration: http://www.chembiol.uni-konstanz.de/scientific-courses.html
10-11 March 2011

Scientific Presenting in English

Content

If you would like to learn how to give successful presentations in English, this workshop is for you! A central theme is revising basic techniques of presenting, and strengthening the awareness of how we “come across” to our audience. Practical exercises and peer reviews will help to improve academic language. A lively and dynamic workshop that now will take place for the third time within our course program.

Lecturer     Millie Baker
Room         Y 310
Course Area  Transferable skills
Participants max. 10
Contact      Heike Brandstädter
Registration http://www.chembiol.uni-konstanz.de/transferable-skills.html
14-15 March 2011

Academic Small Talk and Networking

Content

Whether at conferences, job interviews, departmental events, hosting guest academics or simply during everyday life at university, being able to socialize and network in English are increasingly useful skills! They can help you form future work partnerships, be accepted into specific academic communities, and even be instrumental in obtaining the job you want. This two day seminar will provide the opportunity for young academics to develop an awareness of their ‘academic identity’, whilst practicing the skills and language of English small talk and networking.

Lecturer
Millie Baker

Room
Y 310

Course Area
Transferable skills

Participants max.
10

Contact
Heike Brandstädter

Registration
http://www.chembiol.uni-konstanz.de/transferable-skills.html
**21-22 March 2011**

**Drug Discovery and Development in the Pharmaceutical Industry**

**Content**

The discovery and development of novel medicines is a highly complex, cost intensive and failure-prone industry branch. In a two days course participants will obtain an introduction and insight into all parts of drug development – from implementation of a therapeutic vision until launch and post-marketing commitments of a new drug life cycle. Lectures will be given by Nycomed experts in particular fields of expertise accompanied by hands-on exercises/group works.

**Lecturer**  
Mathias Schmidt et al. (Nycomed)

**Room**  
Nycomed, Byk-Gulden-Str. 2

**Course Area**  
Advanced scientific course

**Participants max.**  
40

**Contact**  
Mathias Schmidt (Nycomed)

**Registration**  
http://www.chembiol.uni-konstanz.de/scientific-courses.html
24 March 2011

Job Application Training

Content

How do I write a winning application? What is important in an interview session? What to do in an assessment centre? The one day job application training helps from the very first steps of an application to the right behaviour in an assessment-centre. These questions are in the focus of this training. Practical exercises out of an assessment-centre are also included as well as feedback and time for personal questions of the participants.

Lecturer
Andreas Ploch

Room
Y 310

Course Area
Transferable skills

Participants max.
12

Contact
Heike Brandstädter

Registration
http://www.chembiol.uni-konstanz.de/transferable-skills.html
25 March 2011

Leadership for Future Leaders

Content

Whether you are aiming at a career in academia or industry this one day module is for you. It provides a general insight into actual leadership tools. The theoretical aspects of leadership are combined with case studies. The course helps avoiding typical mistakes in leadership situations and gives an overview on situations, instruments and personal factors to successfully lead co-workers. Discussions with and questions from participants around leadership and their experiences will enhance the course.

Lecturer
Andreas Ploch

Room
Y 310

Course Area
Management course

Participants max.
12

Contact
Heike Brandstädter

Registration
http://www.chembiol.uni-konstanz.de/transferable-skills.html
12 April 2011

Gene Expression and Protein Purification Strategies

Content

This one day course will treat the following topics within two half-day sessions of each lecturer:

- Introduction into recombinant gene expression
- Diverse expression systems (Bacteria, yeast, Baculo virus)
- Cloning strategies
- Tagging and affinity purification of recombinant proteins

Lecturer: Elke Deuerling, Thomas Mayer
Room: L 601
Course Area: Advanced scientific course
Participants max.: no restriction
Contact: Thomas Mayer
Registration: http://www.chembiol.uni-konstanz.de/scientific-courses.html
6-8 July 2011

Bioimaging I

Content

This three day course will provide the following themes by lectures, demonstrations, and hands-on:

- Theory and practice of fluorescence and confocal microscopy
- Spinning-disk and total internal reflection microscopy

Lecturer: Elisa May, Daniela Hermann
Room: L 914, L 933
Course Area: Basic scientific course
Participants max.: 9
Contact: Elisa May
Registration: http://www.chembiol.uni-konstanz.de/scientific-courses.html
Biomedicine I

Content

This course will provide theoretical and practical information on flow cytometry and fluorescence activated cell sorting and can be attended by students with no previous experience in flow cytometry. The participants will learn about the principles of flow cytometry, the property of fluorophores, and possible applications. The Cellquest™ and FACSDiva™ software as well as FACScan™, FACScalibur™, LSRII and FACSaria™ instruments will be introduced. In addition, every participant will perform experiments in the laboratory.

Lecturer: Marcus Groettrup, Christof Hauck, Marcel Leist, Uwe Speck, Roman Trenz
Room: P 1122
Course Area: Advanced scientific course
Participants max.: 15
Contact: Marcus Groettrup
Registration: http://www.chembiol.uni-konstanz.de/scientific-courses.html
10-11 August 2011

Intercultural Communication

Content

Because of its great success this practice- and applications-oriented workshop is offered in 2011 for the third time. It addresses a problem often under-estimated in scientific education: how to combine a conceptual understanding of the impact of key cultural issues on scientists’ approach to discussing the facts, defining and solving problems, and providing leadership and supervision in the international workplace, with concrete skills training.

Lecturer: Alexia Petersen
Room: Y 310
Course Area: Transferable skills
Participants max.: 12
Contact: Heike Brandstädtter
Registration: http://www.chembiol.uni-konstanz.de/transferable-skills.html
22-24 September 2011

Computational Life Science

Content

Within three days, this basic scientific course comprises the following topics, hereby using teaching modules as well as demos and hands-on:

- Sequencing
- Trees and Next Generation Sequencing
- Molecular Structure Analysis and Docking

Lecturer

Michael Berthold, Martin Horn, Dorit Merhof, Thorsten Riess

Room

Z 613

Course Area

Basic scientific course

Participants max.

15

Contact

Michael Berthold

Registration

http://www.chembiol.uni-konstanz.de/scientific-courses.html
26-27 September

The Power of Cutting Edge Mouse Genetics

Content

In this course the latest developments in the field of mouse genetics will be taught. The principles and theory of generating transgenic mice, knock out mice, or kick in mice will be covered, and practical examples from ongoing studies will be presented by internal and external experts. Both constitutive and inducible approaches will be introduced and the power of mouse genetics for monitoring gene expression and visualizing rare population of cells in mice will be outlined.

Lecturer: Thomas Brunner, Jörg Fehling, Klaus-Peter Knobeloch, Gerald Mende
Room: M 901
Course Area: Advanced scientific course
Participants max.: 15
Contact: Thomas Mayer
Registration: http://www.chembiol.uni-konstanz.de/scientific-courses.html
Project Management for PhD Students

Content

Project management will help Ph.D. students to structure and plan their doctoral thesis. It will support them in controlling the progress of their work, managing risks and creating highly valuable results at the end. In this course you will learn about the basic ideas and processes of project management and how to apply them to your own thesis. You will be able to structure and control your work, thus producing a successful outcome of the whole scientific process. The two day seminar is followed by a one day guidance session (approx. 5 months later).

Lecturer: Karen Dittmann
Room: V 901
Course Area: Management course
Participants max.: 12
Contact: Heike Brandstäddter
Registration: http://www.chembiol.uni-konstanz.de/transferable-skills.html
4-6 October 2011

Proteomics

Keywords

This three day course comprises morning lectures and hands-on experiences in the afternoon, hereby treating the following topics:

- Intro: proteomics workflow, mass spectrometers, ESI-/MALDI-ionisation, mass analyzers
- ESI-MS and MALDI-MS practice
- Sample preparation - theory and practice
- LC-MS and fragmentation techniques - theory and practice
- Special applications (SILAC, ICAT, protein quantification)

Lecturer Andreas Marquardt
Room L 602 / Lab
Course Area Advanced scientific course
Participants max. 10
Contact Andreas Marquardt
Registration http://www.chembiol.uni-konstanz.de/scientific-courses.html
Determination of Macromolecular Structures

Content

This course will provide theoretical and practical information on structure determination of biomacromolecules by NMR spectroscopy and X-ray crystallography. The sessions will cover the following topics:

- NMR spectroscopy: the resonance phenomenon, chemical shift, scalar and dipolar coupling, principles of resonance assignment, overview on biomolecular NMR spectroscopy
- X-ray crystallography: diffraction theory, structure solution methods, how to judge structural information

Lecturer: Kay Diederichs, Heiko Möller, Wolfram Welte
Room: L 601 / L 1201
Course Area: Advanced scientific course
Participants max.: 15
Contact: Diederichs, Möller, Welte
Registration: http://www.chembiol.uni-konstanz.de/scientific-courses.html
Contents

Starting in science there exist a great variety of career possibilities nationally and internationally: at universities, research institutions, administrations and political organizations up to a career in industry or as entrepreneur. Which way to go? How can I develop my career goal oriented? Which strategies can I use? How can I utilize my scientific results economically? The participants get an overview about national and international career possibilities. They gain insights into the basics of patent utilization, licences, funding possibilities, and the start of an entrepreneurship aside the academic career or full time.

Lecturer: Wilma Simoleit
Room: Y 310
Course Area: Management course
Participants max.: 12
Contact: Heike Brandstädter
Registration: http://www.chembiol.uni-konstanz.de/transferable-skills.html
24-27 October 2011

Combinatorial and High Throughput Technologies

Content

This four day course will be divided into the following topics which will be taught by the respective lecturers day by day:

- Combinatorial Chemistry
- Nucleic Acids: In-Vitro Selection & Screening Applications
- Directed Protein Evolution
- Combinatorial Chemistry

Lecturer: Jörg Hartig, Thomas Mayer, Andreas Marx, Valentin Wittmann
Room: V 901
Course Area: Advanced scientific course
Participants max.: 15
Contact: Thomas Mayer
Registration: http://www.chembiol.uni-konstanz.de/scientific-courses.html
Preview 2012

Several courses offered in 2011 will also take place in 2012. In addition we provide the following courses and workshops:

- From Genes to Proteins
- Natural Products and Biopolymers
- Bioconjugation Chemistry
- Biomedicine II
- Extramural Funding in Science

Contact

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