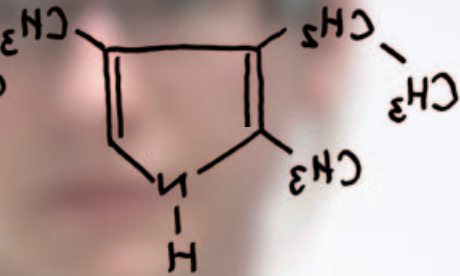
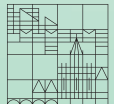


# KoRS-CB

## Training Program 2011



Universität  
Konstanz



## 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.

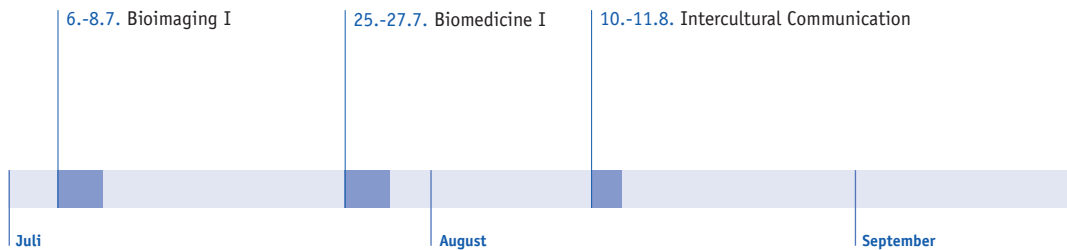
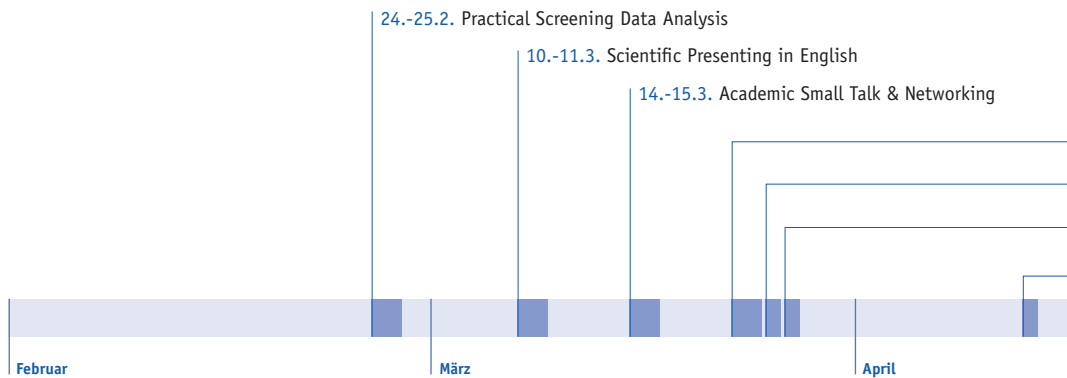
How to register:

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

## Overview

Area	Title	Date	Page
basic	Practical Screening Data Analysis	24.-25.2.	6
basic	Bioimaging I	6.-8.7.	13
basic	Computational Life Science	22.-24.9.	16
adv.	Drug Discovery & Development	21.-22.3.	9
adv.	Gene Expression & Protein Purification Strategies	12.4.	12
adv.	Biomedicine I	25.-27.7.	14
adv.	Proteomics	4.-6.10.	19
adv.	Determination of Macromolecular Structures	11.-14.10.	20
adv.	Combinatorial & High Throughput Technologies	24.-27.10.	22
adv.	Cutting Edge Mouse Genetics	26.-27.9.	17
TS	Scientific Presenting	10.-11.3.	7
TS	Academic Small Talk & Networking	14.-15.3.	8
TS	Job Application Training	24.3.	10
TS	Intercultural Communication	10.-11.8.	15
MC	Leadership for Future Leaders	25.3.	11
MC	Project Management for PhD Students	28.-29.9.	18
MC	PhD – and then? Successful Start in Science	20.-21.10.	21

# Timeline



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

Mai

Juni

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

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	<a href="http://www.chembiol.uni-konstanz.de/scientific-courses.html">http://www.chembiol.uni-konstanz.de/scientific-courses.html</a>

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	<a href="http://www.chembiol.uni-konstanz.de/transferable-skills.html">http://www.chembiol.uni-konstanz.de/transferable-skills.html</a>

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	<a href="http://www.chembiol.uni-konstanz.de/transferable-skills.html">http://www.chembiol.uni-konstanz.de/transferable-skills.html</a>



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	<a href="http://www.chembiol.uni-konstanz.de/scientific-courses.html">http://www.chembiol.uni-konstanz.de/scientific-courses.html</a>

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	<a href="http://www.chembiol.uni-konstanz.de/transferable-skills.html">http://www.chembiol.uni-konstanz.de/transferable-skills.html</a>

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	<a href="http://www.chembiol.uni-konstanz.de/transferable-skills.html">http://www.chembiol.uni-konstanz.de/transferable-skills.html</a>

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	<a href="http://www.chembiol.uni-konstanz.de/scientific-courses.html">http://www.chembiol.uni-konstanz.de/scientific-courses.html</a>

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	<a href="http://www.chembiol.uni-konstanz.de/scientific-courses.html">http://www.chembiol.uni-konstanz.de/scientific-courses.html</a>

25-27 July 2011

## 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 Trezn
Room	P 1122
Course Area	Advanced scientific course
Participants max.	15
Contact	Marcus Groettrup
Registration	<a href="http://www.chembiol.uni-konstanz.de/scientific-courses.html">http://www.chembiol.uni-konstanz.de/scientific-courses.html</a>

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 Brandstädter
Registration	<a href="http://www.chembiol.uni-konstanz.de/transferable-skills.html">http://www.chembiol.uni-konstanz.de/transferable-skills.html</a>

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	<a href="http://www.chembiol.uni-konstanz.de/scientific-courses.html">http://www.chembiol.uni-konstanz.de/scientific-courses.html</a>



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 knock 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 Knobloch, Gerald Mende
Room	M 901
Course Area	Advanced scientific course
Participants max.	15
Contact	Thomas Mayer
Registration	<a href="http://www.chembiol.uni-konstanz.de/scientific-courses.html">http://www.chembiol.uni-konstanz.de/scientific-courses.html</a>

28-29 September 2011

## 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 Brandstädter
Registration	<a href="http://www.chembiol.uni-konstanz.de/transferable-skills.html">http://www.chembiol.uni-konstanz.de/transferable-skills.html</a>

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	<a href="http://www.chembiol.uni-konstanz.de/scientific-courses.html">http://www.chembiol.uni-konstanz.de/scientific-courses.html</a>

11-14 October 2011

# Determination of Macromolecular Structures

## Content

This course will provide theoretical and practical information on structure determination of biomacro-molecules 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	<a href="http://www.chembiol.uni-konstanz.de/scientific-courses.html">http://www.chembiol.uni-konstanz.de/scientific-courses.html</a>

20-21 October 2011

## PhD – and then? Successful Start in Science



### Content

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	<a href="http://www.chembiol.uni-konstanz.de/transferable-skills.html">http://www.chembiol.uni-konstanz.de/transferable-skills.html</a>

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	<a href="http://www.chembiol.uni-konstanz.de/scientific-courses.html">http://www.chembiol.uni-konstanz.de/scientific-courses.html</a>

## 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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