

Elite Study Program in Macromolecular Science

Module

M024 Bayreuther Strukturtage

July 27-29, 2011

Schloss Thurnau, Germany



Prof. Paul Rösch (Universität Bayreuth)

PD. Stephan Schwarzinger (Universität Bayreuth)

Summer term 2011

The module consists of two parts:

I. Participation at the conference “Bayreuther Strukturtage” (July 27-29, 2011) Schloss Thurnau

The conference “Bayreuther Strukturtage” is organized by the Research Center for Biomacromolecules in cooperation with the ENB International Graduate School “Lead Structures of Cell Function”. The central topic of the conference in this year is: “Biological Networks in Health and Disease”.

Many diseases are associated with proteins and their diverse interactions:

- ✓ proteins in signaling pathways
- ✓ protein-protein interactions
- ✓ protein-nucleic acid interactions

The understanding of molecular mechanisms of these interactions, for example in neuronal signaling, in mitosis, in virus proliferation or during prokaryotic transcription, is the basis for drug development. Structural information of involved proteins provides deeper insights into protein structure-function relationships. At the conference in different sessions (see time-table) speakers will talk about their specific field of interest within the topics:

- ✓ pharmaceutical chemistry
- ✓ transcription
- ✓ structure and infection

The techniques used for these studies ranges from classical structure determination methods like NMR (Nuclear Magnetic Resonance spectroscopy) and X-ray crystallography over optical spectroscopy to a variety of biochemical assays.

A broad range of interesting topics and techniques is granted by speakers from Germany as well as from the USA. The talks are specially designed for the desires and needs of students. Furthermore, the conference aims to give students an overview over different topics and methods they can choose for master or PhD thesis. Plenty of time for the direct contact with the speakers is granted.

II. Seminar on scientific topics covered by the conference

After the conference students should give a seminar dealing with a topic of the conference. In interdisciplinary groups of two persons, students will prepare the seminar together. The overall time of the seminar including a short discussion should not be longer than 30 minutes. Grades for this module will be based on the seminar presentation.

Further Information:

I. Registration

The conference is free for “Macromolecular Science” students. Students should register as soon as possible by writing an email to: Olivia Spiegelhauer (Olivia.Spiegelhauer@uni-bayreuth.de) and Monika Birkelbach (enb.macromolecularscience@uni-bayreuth.de).

III. Accommodation

Attendees and speakers will be accommodated directly at the conference location "Schloss Thurnau" or in guesthouses near the conference locations, basically in double bedrooms.

IV. Program "Strukturtage Bayreuth"

Time	Wednesday 27.07.2011	Thursday 28.07.2011	Friday 29.07.2011
		Breakfast	Breakfast
8:30 – 10:30		Session Transcription I	Session Structure and Infection
10:30 – 11:00	Arrival Registration	Coffee break	Coffee break
11:00 – 12:30		Student talks	Student talks
12:30 – 14:00	Lunch Opening	Lunch	Lunch
14:00 – 15:30	Session Pharmaceutical Chemistry	Session Transcription II	END
15:30 – 16:00	Coffee break	Coffee break	
16:00 – 17:00	Student talks	Session Transcription II	
17:00 – 18:00	Poster Session I	Poster Session II	
18:00	Dinner	Dinner	

A more detailed timetable will be available in a few weeks.