



Universität Regensburg



## 5<sup>th</sup> Summer School Medicinal Chemistry at the University of Regensburg

organized by

**Graduiertenkolleg (Research Training Group) GRK 760**  
**“Medicinal Chemistry: Molecular Recognition – Ligand Receptor Interactions”**

**September 13-15, 2010**  
Lecture Hall H36 (Physics Building)

The Research Training Group (Graduiertenkolleg) Medicinal Chemistry (GRK 760) invites Ph.D. students, diploma/master students as well as young scientist at the beginning of their career in academic or industrial drug research to participate in the 5<sup>th</sup> Summer School Medicinal Chemistry at the University of Regensburg.

Leading scientists from academic institutions and pharmaceutical companies will present innovative ideas, modern methods and strategies, best practices as well as case studies in the field of Medicinal Chemistry. Main topics are:

- ***G-protein-coupled receptors***
- ***Enzymes as drug targets***
- ***Drug design / Computer-aided methods***
- ***Hot topics in drug research***

Additionally, the participants are invited to present their scientific results on posters. A limited number of authors will be selected to give an ultra-short oral presentation (5 min, 2-3 slides) of the results shown on the posters ('oral poster presentation'). Language of the meeting is English.

### Programme

#### Monday, Sept 13, 2010

13.00 h	Welcome Prof. Dr. Armin Buschauer
	<b>Opening lecture</b>
13.10 – 14.10 h	Prof. Dr. Peter Seeberger Max-Planck-Institut für Kolloid- und Grenzflächenforschung, Potsdam, D <i>Carbohydrates – using the “undruggable” for diagnostics and vaccines</i>
	<b>G-protein-coupled receptors</b>
14.10 – 15.10 h	Prof. Dr. Gebhard F. X. Schertler Paul Scherrer Institute, Villigen, CH <i>Structure of G protein-coupled receptors (GPCRs): Implications for ligand binding and activation</i>

Coffee break

15.40 – 16.40 h Prof. Dr. Rob Leurs  
VU University Amsterdam, NL  
*Fragment based discovery of H<sub>4</sub> receptor antagonists*

16.40 – 17.40 h Prof. Dr. Peter Gmeiner  
University of Erlangen, D  
*Tailor-made GPCR ligands as molecular probes*

*Coffee break*

### ***Medicinal Chemistry of natural products***

18.00 – 19.00 h Prof. Dr. Gunda I. Georg  
University of Minnesota, MN, USA  
*Synthesis and evaluation of phenanthropiperidine alkaloids for anticancer activity and CNS side effects*

19.00 – 19.30 h Oral poster presentation

19.30 h Poster session / Beer and pretzel

## **Tuesday, Sept 14, 2010**

### **Enzymes as drug targets**

08.30 – 09.30 h Prof. Dr. Stefan Laufer  
University of Tübingen, D  
*Eicosanoids and cancer-chemoprevention: cox, lox and beyond*

09.30 – 10.30 h Prof. Dr. Rolf W. Hartmann  
Saarland University, Saarbrücken, D  
*Target identification, hit discovery and lead optimization in the field of endocrinology and intracrinology*

*Coffee break*

11.00 – 12.00 h Prof. Dr. Martin Schneider  
Bayer Schering Pharma AG, Berlin, D  
*A case study: From research to market - Xarelto, a new anti-thrombotic principle*

12.00 – 12.30 h Oral poster presentation

*Lunch break*

### **Drug design / Computer-aided methods**

13.45 – 14.45 h Dr. Gerhard Hessler  
Sanofi-Aventis D GmbH, Frankfurt/M., D  
*Fragment-based lead discovery: Different perspectives*

14.45 – 15.45 h 14.45 Prof. Dr. Alexander Dömling  
University of Pittsburgh, PA, USA  
*ANCHOR SEARCH: Web-based tool for the design of protein protein interaction antagonists*

15.45 – 16.00 h Oral poster presentation

*Coffee break*

16.30 – 17.30 h Dr. Michael Thormann  
Origenis GmbH, Martinsried, D  
*Quantum-chemical computation of compound properties, bioisosterism and protein ligand interactions*

17.30 – 18.30 h Prof. Dr. Klaus-Jürgen Schleifer  
BASF SE, Ludwigshafen, D  
*Challenges in agrochemicals design*

18.30 – 18.45 h	Oral poster presentation
18.45 – 20.00 h	Poster Session
20.00 h	Barbecue at the University of Regensburg

### Wednesday, Sept 15, 2010

#### Hot topics in drug research

08.30 – 09.45 h	Dr. Ralph Lipp Lilly Research Laboratories, Indianapolis, IN, USA <i>A holistic look at developability of new chemical entities</i>
9.45 – 10.45 h	Prof. Dr. Oliver Werz University of Tübingen, D <i>Gender: The forgotten aspect in drug development</i>
<i>Coffee break</i>	
11.15 – 12.15 h	Prof. Dr. Roland Seifert Medical School of Hannover, D <i>Drugs for orphan diseases</i>
12.15 – 13.15 h	Prof. Dr. Hugo Kubinyi University of Heidelberg, D <i>ADME problems? Rescue your candidate</i>
13.15 h	Concluding remarks

#### Registration

Registration fee:	participants from academic institutions	50 Euro
	industrial participants	250 Euro

**Early registration** including application for funding: before June 30, 2010

**Late registration:** until August 31, 2010

For **online registration**, please, visit our website: <http://www.medicinal-chemistry.de>, then use link to 'Summer School 2010'.

#### Scientific contributions, preparation and submission of abstracts

The participants (registration required) are invited to present posters (maximum poster size: 'A0 oversize', 90 cm width x 120 cm height).

**Online abstract submission is required before July 31, 2010.**

#### Preparation of the abstracts:

Please visit the summer school website for download of a template. Abstracts must be submitted in English and formatted as follows:

- Paper format: DIN A4, 21 cm x 29.7 cm, portrait format; white paper
- Upper margin: 5.8 cm; lower margin: 7.3 cm; left and right margin: 4.0 cm each
- Font size not smaller than 12 pt
- Top: title (first letter upper case, then lower case); next line: authors (name, followed by initials of first name(s)); next line: affiliation and address; next line: empty; abstract (text)

#### Payment

By bank transfer (free of bank commission) to the following account:

Universitaet Regensburg  
account number 1279276  
Bayerische Landesbank Muenchen, BLZ 700 500 00  
BIC/SWIFT: BYLA DE MM  
IBAN: DE42700500000001279276  
subject: 7207078 Summer School, registration fee

A printable invoice will be available upon online registration. Fees are due at the time of registration. If fees are paid in advance, but after August 31, 2010, we kindly ask participants

to show proof of payment when claiming their tickets and congress papers at the registration desk. Credit cards will be **not** accepted.

### **Fellowships**

Limited funds are available for participants from abroad who will need financial aid to cover a part of their expenses. In this case a poster presentation is required. Please send applications to the office (address see below).

### **Accommodation**

Reservations for accommodation can be made through the **Regensburg tourist office**:

Phone: +49-(0)941-5073411; Fax: +49-(0)941-5071919;

<http://www.regensburg.de>; e-mail: [tourismus@regensburg.de](mailto:tourismus@regensburg.de)

### **Organisation**

Graduiertenkolleg / Research Training Group GRK 760 'Medicinal Chemistry'

[www.chemie.uni-regensburg.de/GK/MedChem/en/index.html](http://www.chemie.uni-regensburg.de/GK/MedChem/en/index.html)

Prof. Dr. Armin Buschauer  
University of Regensburg  
Institute of Pharmacy  
D – 93040 Regensburg  
Germany

Phone: +49-(0)941-9434827

Fax: +49-(0)941-9434820

e-mail: [armin.buschauer@chemie.uni-regensburg.de](mailto:armin.buschauer@chemie.uni-regensburg.de)

### **Contact:**

Office Summer School 2010  
Karin Reindl, Martina Wechler  
Pharm./Med. Chemistry II  
Institute of Pharmacy  
University of Regensburg  
D – 93040 Regensburg  
Germany

Phone: +49-(0)941-9434823;

Fax: +49-(0)941-9434820

e-mail: [summer.school@chemie.uni-regensburg.de](mailto:summer.school@chemie.uni-regensburg.de)