Summer School Medicinal Chemistry - 2005

of the Asia Link Medicinal Chemistry Network

at the Shanghai Institute of Organic Chemistry (SIOC)

Natural Products and Peptides
as Lead Structures for Drugs

Programme

Saturday, 24.9.2005

Arrival of European participants

Sunday, 25.9.2005

Time

2 pm  Welcome address (Prof.´s Dawei Ma, König, EU Representative)

Training Session 1: Carbohydrates and glycoconjugates

2.30 pm  Prof. Horst Kunz, University of Mainz (Germany)
          Carbohydrates as stereodifferentiating tools in chemical synthesis and
          synthetic components of biologically selective glycoconjugates

4.00 pm  Coffee break

Training Session 2: Industrial case study I

4.30 pm  Prof. Eckhard Ottow, Schering AG
          Research at Schering AG - An Introduction and
          Natural Products - Challenges and Opportunities

7 pm  Schering-Dinner at the Hope Hotel
Monday, 26.9.2005

**Time**

**Training Session 3: Neuropeptide Y**
8.30 am  Dr. Chiara Cabrele, University of Regensburg (Germany)
Neuropeptide Y Analogs: Tools for Receptor Characterization and Tumor Diagnostic/Therapy

9.15 am  Prof. Armin Buschauer, University of Regensburg (Germany)
N\textsuperscript{G}-Acylated argininamides: high affinity NPY Y\textsubscript{1} receptor antagonists, putative prodrugs and pharmacological tools

10.00 am Coffee break

**Training Session 4: Synthesis of biologically active compounds I**
10.30 am  Prof. Pat Guiry, University College Dublin (Ireland)
Studies in the Synthesis and Biological Activity of Lipoxin Analogues

11.15 am  Prof. Zhu-Jun Yao, SIOC (China)
Understanding and Development of Nature’s Creation by Chemistry

12.00  Lunch break at SIOC

**Training Session 5: Synthesis of biologically active compounds II**
2.00 pm  Dr. Neil Thomas, University of Nottingham (United Kingdom)
Design, Synthesis and Evaluation of Inhibitors of Mycobacterium Tuberculosis cell wall biosynthesis

**Training Session 6: Industrial case study II**
2.45 pm  Dr. Peter Raddatz, Merck KGaA (Germany)
Case study: Factor Xa inhibitors, a novel approach in the oral treatment of thrombosis and An Introduction of Merck KGaA

3.30 pm  Coffee break

**Training Session 7: Scientific presentation training**
4.00 pm  Short oral presentations of selected posters (Chair: Prof. König)

6 - 8 pm Posters at the SIOC (with beer and finger food)

Tuesday, 27.9.2005

**Time**

**Training Session 8: Physical methods part 1; Hydrogen bonds in Peptide Structures and Foldamers**
8.30 am  Prof. Burkhard König, University of Regensburg (Germany)
From Hydrogen Bonds to Peptide β-sheet recognition

9.15 am  Prof. Zhan-Ting Li, SIOC (China)
Foldamers: new motifs, molecular recognition and others
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10.00 am Coffee break

Training Session 9: Synthesis of biologically active compounds III
10.30 am Dr. Weng C Chan, University of Nottingham (United Kingdom)
  Competitive AgrC antagonists as staphylococcal quorum sensing inhibitors

11.15 am Prof. Dawei Ma, SIOC (China)
  Synthetic studies toward antitumor and anti-inflammatory marine cyclic peptides

12.00 Lunch break at SIOC

Training Session 10: Industrial case study III
2 pm Dr. Klaus Paulini, Zentaris
  Peptide based therapeutics for the treatment of benign and malignant tumors

Training Session 11: Synthesis of biologically active compounds IV
2.45 pm Prof. Kaixian Chen, Shanghai Institute of Materia Medica (China)
  Drug discovery via virtual screening and molecular modelling

3.30 pm Prof. Lin Guoqiang, SIOC (China)
  Studies on the synthesis and bio-screening of the natural products-originated compounds

4.15 pm Coffee break

Training Session 12: Industrial case study IV
4.45 pm Dr. Ulrich Stilz, Sanofi-Aventis
  The Metabolic Syndrome: Pathophysiology and Approaches for Disease Intervention.

5.30 pm Visit of the SIOC labs and facilities (Chair: Prof. Dawei Ma)

7.30 pm Sanofi-Aventis Dinner at Dynasty Restaurant

Wednesday, 28.9.2005

Time
Training Session 13: Industrial case study V: Development of agrochemicals
8.30 am Dr. Axel Kleemann, BASF AG
  Innovation in Agrochemical Research

Training Session 14: Physical methods part 2;
Luminescent probes in bioanalytics
9.15 am Prof. Achim Wagenknecht, University of Regensburg (Germany)
  Detection of single nucleotide polymorphisms in DNA by fluorescence assays
10.00 am Coffee break

**Training Session 15: Natural products based on $\gamma$-butyrolactones and furans**

10.30 am Prof. Oliver Reiser, University of Regensburg (Germany)
*Diversity oriented strategies to $\gamma$-butyrolactone natural products*

11.15 am Prof. Henry Wong, Chinese University Hong Kong
*Total synthesis of naturally occurring molecules using furans as starting materials*

12.00 am Lunch break at SIOC

**Training Session 16: Industrial case study VI**

2 pm Dr. Rene Lattmann, Novartis Pharma (Switzerland)
*Discovery of ICL670 (Exjade®), an orally active iron chelator*

**Training Session 17: The take home message**

2 pm Prof. Hugo Kubinyi, University of Heidelberg (Germany)
*New Strategies in Drug Discovery*

4 pm Good bye

We thank our industrial partners, industrial participants and our sponsors for their support: