

PROGRAM

Wednesday February 28th

8:00	Registration
8:45-9:00	Welcome and Introduction Prof. Annemieke Madder
9:15	Session 1 <i>Peptide materials and delivery</i> Chairman: Prof. José Martins
9:00-9:45 Plenary 1	Prof. M. Aguilar , Department of Biochemistry & Molecular Biology, Monash University, Australia Modular Design of Peptide-Based Materials for Tissue Regeneration
9:45-10:05 Oral 1	M. Mannes , Research Group of Organic Chemistry, Vrije Universiteit Brussel, Belgium Injectable peptide hydrogels for controlled drug release
10:05-10:25 Oral 2	J. Martin , Institute of Biomolecules Max Mousseron (IBMM), Montpellier, France Direct synthesis of peptide-modified silicone. A new way for bioactive materials
10:25-10:55	Coffee Break
10:55	Session 2 <i>Peptide discovery and medicinal chemistry</i> Chairman: Prof. Steven Ballet
10:55-11:40 Plenary 2	Dr. E. Valeur , Medicinal Chemistry, Cardiovascular and Metabolic Diseases, IMED Biotech Unit, AstraZeneca, Gothenburg, Sweden Drugging the 'undruggable': New Peptide-based Modalities in cardiovascular and metabolic diseases
11:40-12:00 Oral 3	M. Amoura , Laboratoire des Biomolécules, UMR 7203, Université Pierre et Marie Curie-Paris 6, CNRS, ENS, Paris, France Design and study of new cyclic cell-penetrating peptides
12:00-12:20 Oral 4	Dr. M. Sanchez-Navarro , Institute for Research in Biomedicine (IRB), Barcelona, Spain Modifying Fraxatin with blood-brain barrier peptide shuttles: paving the way towards protein replacement therapy
12:20-12:40 Oral 5	V. Ornelis , Organic and Biomimetic Chemistry Research Group, Ghent University, Belgium Detection and selective trapping of the Mycotoxins Beauvericin and Enniatins: a synthesis driven endeavour
12:40-13:45	Lunch Break and Poster Session 1 (odd numbers)

Session 2 Continued

13:45

Peptide discovery and medicinal chemistry
Chairman: Prof. Em. Dirk Tourwé

13:45-14:30
Plenary 3

Prof. K. Stromgaard, *Center for Biopharmaceuticals, Department of Drug Design and Pharmacology, University of Copenhagen*
Targeting Protein-Protein Interactions of Receptor Complexes

14:30-14:50
Oral 6

Dr. A. Knuhtsen, *School of Chemistry, University of Glasgow, United Kingdom*
Does secondary structure determine biological activity? A study of μ -Conotoxin KIIIA mimetics

14:50-15:10
Oral 7

T.M. Vishwanatha, *Centre de Biophysique Moléculaire, CNRS, UPR 4301, Orléans, France.*
Rational design of kisspeptin analogs for the control of reproduction

15:10-15:30
Oral 8

Ishwar Singh, *School of Pharmacy, University of Lincoln, United Kingdom*
Teixobactin and its simplified analogues, a new hope in antibiotic discovery

15:30-16:00

Coffee Break

Session 3

16:00

Peptide biology and pharmacology
Chairman: Prof. Annemieke Madder

16:00-16:20
Oral 9

C. Raaymakers, *Amphibian Evolution Lab, Biology Department, Vrije Universiteit Brussel, and Department of Pathology, Bacteriology, and Avian diseases, Faculty of Veterinary Medicine, Ghent University, Belgium*
Antimicrobial peptides in frog poison constitute a molecular toxin delivery system against predators

16:20-16:40
Oral 10

C. Struyfs, *Centre of Microbial and Plant Genetics, KU Leuven, Leuven and Department of Plant Systems Biology, VIB, Ghent, Belgium*
Study of the antifungal mode of action of plant defensins using single cell analysis

16:40-17:00
Oral 11

Prof. A.M. Lambeir, *Laboratory of Medical Biochemistry, University of Antwerp*
Exploring enzymatic mechanisms of proline specific peptidases using ITC

17:00-17:20
Oral 12

Prof. N.R. Thomas, *School of Chemistry, Centre for Biomolecular Sciences, University of Nottingham*
'Clickable' Recombinant Spider Silk and its Healthcare Applications

17:30

Reception

Thursday March 1st

8:15

Registration

8:30

Session 4

Peptide structure and function

Chairman: Dr. Mimoun Ayoub

8:30-9:15
Plenary 4

Prof. C. P.R. Hackenberger, *Humboldt Universität zu Berlin; Leibniz-Institut für Molekulare Pharmakologie (FMP)*

The power of chemoselectivity: functional peptide and protein-conjugates for proteomic and pharmaceutical research

09:15-9:35
Oral 13

E. Ottoy, *NMR and Structure Analysis Unit, Faculty of Science, Ghent University*

Full conformational characterization of novel fluorinated prolines

9:35-9:55
Oral 14

V. Declerck, *CP3A Organic Synthesis Group, ICMMO, Université Paris-Sud, Université Paris Saclay, Orsay, France*

C to N replacement in cyclic β -amino acids: a strategic tool for controlling helicity of β -peptides

9:55-10:15
Oral 15

N. Geudens, *NMR and Structure Analysis Unit, Faculty of Science, Ghent University*

Form and function: structural variations of natural cyclic lipopeptides

10:15-10:35
Oral 16

M. Silk, *Medicinal Chemistry, Monash Institute of Pharmaceutical Sciences, Melbourne, Australia*

The direct synthesis of cyclic D/L peptide nanotubes

10:35-11:05

Coffee Break

11:05

Session 5

Peptide synthesis and technology

Chairman: Prof. Gilles Subra

11:05-11:25
Oral 17

Dr. D. Ormerod, *Separation and Conversion Technology, Flemish Institute for Technological Research (VITO NV), Belgium*

The application of membrane technology to peptide synthesis

11:25-11:45
Oral 18

M. Schmidt, *EnzyPep B.V., Brightlands Campus, Geleen and Van't Hoff Institute of Molecular Sciences, University of Amsterdam, The Netherlands.*

Omniligase-1: a powerful tool for peptide head-to-tail cyclization

11:45-12:05
Oral 19

N. J. Mitchell, *School of Chemistry, University of Nottingham, United Kingdom*

Accelerated protein synthesis via one-pot ligation-deselenization chemistry

12:05-12:25
Oral 20

Prof. I. Dijkgraaf, *Department of Biochemistry, Maastricht University, Maastricht, The Netherlands*

Targeting cardiovascular disease using a tick-derived protein

12:25-13:30

Lunch Break and Poster Session 2 (even numbers)

Session 5 Continued
Peptide synthesis and technology
Chairman: Dr. Vincent Aucagne

- 13:30-14:15**
Plenary 5 **Prof. W.D. Lubell**, *Department of Chemistry, Université de Montréal, Montréal, Quebec, Canada*
Coming full circle from turn mimicry to cyclic peptidomimetics
- 14:15-14:35**
Oral 21 **Prof. D.V. Filippov**, *Leiden Institute of Chemistry, Leiden University, Leiden, The Netherlands*
Chemical approaches to mono-ADP-ribosylation of amino acids, peptides and proteins
- 14:35-14:55**
Oral 22 **Prof. S. Mangelinckx**, *Department of Green Chemistry and Technology, Ghent University, Ghent*
Cyclization of N-(3-hydroxyacyl)amino acids to 1,4-oxazepane-2,5-diones
- 14:55-15:15**
Oral 23 **S. Verlinden**, *Research Group of Organic Chemistry, Vrije Universiteit Brussel, Belgium*
The 1,3-diyne linker as a tunable tool for peptide secondary structure stabilization
- 15:15-15:35**
Oral 24 **Dr. G. Chaume**, *Laboratoire de Chimie Biologique (LCB), Université de Cergy-Pontoise, Cergy-Pontoise, France*
Homochiral versus heterochiral trifluoromethylated pseudoproline containing dipeptides: a powerful tool to switch the prolyl-amide bond conformation

15:35-15:50

Concluding Remarks
Prof. Annemieke Madder