

# 7<sup>th</sup> National Peptide Symposium

## May 30<sup>th</sup> - 31<sup>st</sup>, 2005, BioCity, Turku

**Mauno Koivisto Center, Tykistökatu 6, Turku**

FIPS7 is organized by the peptide division of the Finnish Biobio Society in collaboration with the Finnish Graduate School Network in Life Sciences. Symposium is intended for scientist from different disciplines interested in peptide chemistry and use of peptides in chemical, biological and biomedical research. FIPS7 is supported by the National Graduate School in Informational and Structural Biology and Finnish pharmaceutical and diagnostics companies and Peptide Division/Finnish Biobio Society.

Symposium offers a forum for young scientist to introduce their own works in poster session. ALL REGISTRATIONS and submission date of POSTER ABSTRACTS is online until May 19<sup>th</sup> at: [www.biobio.org/peptide](http://www.biobio.org/peptide)

### MONDAY, May 30<sup>th</sup>

**Session 1:** Synthetic chemistry  
Structure

**Chairs:** Jorma Hermonen  
Jari Hovinen

9:00 Jorma Hermonen  
9:15 Harri Lönnberg, University of Turku  
10:00 Pasi Virta, University of Turku  
10:20 Anne Leppänen, University of Helsinki

Opening words  
Peptide conjugates for drug discovery and diagnostics  
Solid phase synthesis of lactam bridged peptides  
Chemoenzymatic synthesis of glycosulfopeptides: towards understanding the molecular basis of glycan-protein interactions in leukocyte trafficking

#### 10:50 Coffee brake

11:10 Juha Rouvinen, University of Joensuu  
11:40 Pasi Soininen, University of Kuopio

Three-dimensional structure of hydrophobin, an amphiphilic protein  
Characterization of ligand binding with NMR

#### 12:00 Lunch

**Session 2:** Analytical chemistry:  
Bioinformatics  
Proteomics  
Arrays  
Libraries

**Chairs:** Ale Närvänen  
Hilkka Lankinen

13:00 Olli Pentikäinen, Åbo Akademi University  
13:45 Luke Jeffery, University of Helsinki  
14:15 Marc Baumann, University of Helsinki  
14:45 Hilkka Lankinen, University of Helsinki

Structural basis for molecular recognition in ionotropic glutamate receptors  
GoCore: Pattern extraction and visualization tools for 2-dimensional protein sequence alignments  
Bioinformatics in proteomics  
Protein interaction analytics and peptide arrays

#### 15:10 Coffee brake

15:30 Ale Närvänen, University of Kuopio  
16:00 Petri Kouvonen, Turku Centre for Biotechnology, Proteomics and Mass Spectrometry Unit  
16:30 Manna Kaartinen, Mannionic Oy  
16:50 Peptide division/Board meeting

MSMS analysis of the peptide libraries  
Mass spectrometers for different proteomic projects

iTRAQ™ in proteomics

#### 18:00 Dinner

### TUESDAY, May 31<sup>st</sup>

**Session 3:** Pharmaceuticals,  
diagnostics &  
biological systems:  
Bioactive peptides

**Chairs:** Mirja Salkinoja-Salonen  
Per Saris

9:00 Siegfried Wurster, Juvantia  
9:30 Jukka Jolkkonen, University of Kuopio  
10:00 Per Saris, University of Helsinki

Superagonism and desensitization on peptide receptor  
Beta-amyloid accumulation in the rat brain following stroke  
Detection and quantification of nisin, a peptide used as a food additive

#### 10:30 Coffee brake

10:50 Jouni Jokela, University of Helsinki  
11:20 Auli Paananen, University of Helsinki  
11:40 Maija Vihinen-Ranta, University of Jyväskylä

Discovery of rare and highly toxic microcystins from lichen-associated cyanobacterium Nostoc sp. strain IO-102-1.  
The influence of two environmental peptides, valinomycin and cereulide to human NK cells  
Internalization of TAT-Streptavidin fusion Proteins into Mammalian Cells

#### 12:00 Lunch

**Session 4:** Pharmaceuticals,  
diagnostics &  
biological systems:  
Targeting  
Imaging  
De novo design

**Chairs:** Marc Baumann  
Erkki Koivunen

13:00 Erkki Koivunen, University of Helsinki  
13:30 Pirjo Laakkonen, University of Helsinki  
14:00 Kalevi Kairemo, CTT Cancer Targeting Technologies Oy

Peptide-mediated delivery of therapeutic and imaging agents into mammalian cells  
Peptides in cancer  
*In vivo* imaging by phage display peptides targeting activated leucocytes

#### 14:30 Coffee brake

14:50 Aki Koivistoinen, Karyon™ targeting agents  
15:20 Can Hekim, University of Helsinki  
15:50 Kalle Saksela, University of Helsinki

Characterization of Thx-1, a non-small cell lung cancer targeting peptide  
Development of peptides to prostatic proteases with phage-display  
Mapping of cellular protein interaction networks via phage-display of the human SH3 proteome

**Organizers:**

**In collaboration with:**

Peptidijaos  
Peptide division  
Societas Biochemica, Biophysica et Microbiologica Fennica

CTT  
Cancer Targeting Technologies

AB Applied Biosystems



PerkinElmer  
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TARGETING THE CURS

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