



Barcelona BioMed Conference

Peptide engineering: Therapeutic peptides

October 26-28, 2009

Programme

Monday, October 26, 2009

8.00 Registration

9.00 Welcome by Joan J Guinovart, IRB Barcelona Director

Session I:

Chair: Ernest Giralt

9.15 - 9.50 Ernest Giralt

Institute for Research in Biomedicine (Barcelona, Spain)

New challenges in studying ligand-protein interactions

9.50 - 10.25 Samuel I. Stupp

Northwestern University (Evanston, IL, USA)

Bioactive Peptide Amphiphile Nanostructures for Regenerative Medicine

10.25 – 10.55 Coffee break and poster session

10.55 – 11.30 Joel P. Schneider

University of Delaware (Newark, DE, USA)

Syringe Deliverable Peptide Hydrogels as Delivery Vehicles

11.30 – 12.05 Les P. Miranda

Amgen, Inc. (Thousand Oaks, CA, USA)

Identification of Potent, Selective, and Metabolically Stable Peptide Antagonists to the Calcitonin Gene-Related Peptide (CGRP) Receptor with Improved Pharmacokinetics

12.05 - 12.30 Yossef Kliger

Compugen (Tel Aviv, Israel)

Peptides Modulating Conformational Changes in Secreted Chaperones:
from *In Silico* Design to Preclinical Proof of Concept

12.30 - 12.55 Motoyoshi Nomizu
Tokyo University of Pharmacy and Life Science (Tokyo, Japan)
Peptide-Chitosan Membranes Can Mimic Multi-functional Proteins

13.00 – 15.00 Lunch (FrescCo, C/ Carme, 16)

Chair: Claudio Toniolo
15.00 – 15.35 Claudio Toniolo
University of Padua (Padua, Italy)
Macrocyclization reactions and supramolecular chemistry with helical peptide substrates

15.35 – 16.10 Padmanabhan Balaram
Indian Institute of Science (Bangalore, India)
Title to be confirmed

16.10 – 16.40 Coffee break and poster session

16.40 - 17.15 Hiroaki Suga
University of Tokyo (Tokyo, Japan)
Ribosomal synthesis of natural product-like non-standard peptides

17.15 - 17.40 Ikuo Fujii
Osaka Prefecture University (Osaka, Japan)
Title to be confirmed

17.40 - 18.05 Maxim Ryadnov
University of Leicester (Leicester, UK)
Self-assembling peptide systems of de novo design

18.05 -20.00 Poster session and networking
20.00 Social event (Restaurant Txapela, C/ Passeig de Gràcia 8-10)

Tuesday, October 27, 2009

Session II:

Chair: Lila Gierasch

9.00 - 9.35 Lila Gierasch
University of Massachusetts (Amherst, MA, USA)
The Mechanism of Allostery in an Hsp70 Molecular Chaperone

9.35 - 10.10 Fernando Albericio
Institute for Research in Biomedicine (Barcelona, Spain)
Title to be confirmed

10.10 – 10.35 Christian Heinis

Ecole Polytechnique Federal de Lausanne (Lausanne, Switzerland)

Novel peptide macrocycle structures with high affinities and specificities for disease relevant targets

10.35 – 11.05 Coffee break and poster session

11.05 – 11.40 Yoon-Sik Lee

Seoul National University (Seoul, Korea)

Title to be confirmed

11.40 - 12.15 Christopher P. Holmes

Affymax Inc. (Palo, Alto, CA, USA)

Title to be confirmed

12.15 - 12.40 Itaru Hamachi

Kyoto University (Kyoto, Japan)

GPCR Imaging by Reactive Peptide Tag

12.40 - 13.05 Julio Camarero

University of Southern California (California, USA)

Biomimetic Approach for the bacterial synthesis of cyclotides

13.05 – 15.00 Lunch (Restaurant FrescoCo, C/ Carme, 16)

Chair: Shiroh Futaki

15.00 – 15.35 Shiroh Futaki

Institute for Chemical Research (Kyoto, Japan)

Physiological and non-physiological factors involved in the internalization of arginine-rich peptides

15.35 – 16.10 Annette G. Beck-Sickinger

University of Leipzig (Leipzig, Germany)

Neuropeptide Y Derived Molecules in Therapy and Diagnosis

16.10 – 16.40 Coffee break and poster session

16.40 - 17.15 Marcey L. Waters

University of North Carolina (Chapel Hill, NC, USA)

Controlling Form and Function in beta-Hairpin Peptides with Post-translational Modifications

17.15 - 17.40 M^a Ángeles Jiménez

Instituto Química Física Rocasolano. CSIC (Madrid, Spain)

Mimicking non-regular β -hairpins: VEGF and Vammin loop 3 analogues

17.40 - 18.05 Nuno Micaelo
Minho University (Braga, Portugal)
Peptide preorganization in protein binding: a molecular modeling study

20.30 – open end: Speakers dinner

Wednesday, October 28, 2009

Session III:

Chair: Anna Maria Papini

9.00 - 9.35 Anna Maria Papini
University of Florence (Florence, Italy)
Post-translationally modified peptides efficiently mimicking
neo-antigens: a challenge for theragnostics of autoimmune diseases

9.35 - 10.10 David Andreu
Universitat Pompeu Fabra (Barcelona, Spain)
The novel cell-penetrating peptide NrTP exquisitely targets
the nucleolus of tumor cells

10.10 – 10.35 Luca D. D'Andrea
Istituto di Biostrutture e Bioimmagini, CNR (Napoli, Italy)
Peptides modulators of VEGF-dependent angiogenesis

10.35 – 11.05 Coffee break and poster session

11.05 – 11.40 Shao Q. Yao
National University of Singapore (Singapore)
Peptide Microarrays and Their Applications in the Emerging Field of
Catalomics

11.40 - 12.15 Mazdak Radjainia
Instituion University of Auckland (Auckland, New Zealand)
Transmission electron microscopy and nuclear magnetic resonance
spectroscopy: Complementary tools for developing pharmaceutically
important polypeptides

12.15 - 12.40 Paula Dolores Raposinho
Instituto Tecnológico e Nuclear (Sacavém, Portugal)
Cyclic MC1 Receptor-Targeting Peptides Labeled with ^{99m}Tc for Melanoma
Imaging

12.40 - 13.05 Hisakazu Mihara

Tokyo Institute of Technology (Tokyo, Japan)

Control of Amyloidogenesis of Alzheimer's β - Peptide by Designed Peptides
and Proteins

13.05 Concluding remarks