

XVIII Iberian Peptide Meeting

Full Program

PL Plenary Lecture	52+6 min
KN Keynote	25+4 min
ST Short Talk	12+3 min
CT Company Talk	12+3 min
FT Flash Talk	3+1 min

Monday 27/11

12h00

Registration

14h00

Opening remarks

14h10

PL1 Maria Luisa Mangoni Sapienza University of Rome
Esc peptides for novel therapeutics against Pseudomonas aeruginosa lung and ocular surface infections: beyond antimicrobial activity

Chair: Rosario González-Muñiz

15h10

- ST1** Helena S. Azevedo I3S, Universidade do Porto
Peptide building blocks to recreate basement membranes and develop in vitro BBB models
- ST2** Douglas V. Laurents IQF Blas Cabrera, CSIC
Design principles for polyproline II helix peptides
- CT1** Karin Rustler Iris Biotech
Novel protecting groups for side chain functional groups of amino acids
- FT1** Marco Cavaco Instituto de Medicina Molecular
The use of a selective, nontoxic dual-acting peptide for breast cancer patients with brain metastasis
- FT2** Pedro M. Alves I3S, Universidade do Porto
Dual-effect chitosan nanoparticles with conjugated pro-angiogenic and antimicrobial peptides

16h10

Coffee break & Posters

17h00

- ST3** Adam Carrera-Aubesart Universitat Pompeu Fabra
Topoisomers of a snake venom-derived antimicrobial peptide: lessons from in vivo studies
- ST4** Bruna Costa I3S, Universidade do Porto
The Dhvar5-nanogels performance in combating orthopedic device-related infections
- CT2** Alexandre Broges PARALAB-Bio
Pushing the boundaries in biomolecular interaction analysis with the WAVEsystem
- FT3** Sofia A. Martins C2TN, Instituto Superior Técnico, Universidade de Lisboa
Bone-seeking peptides targeting the RANK-TRAF6 interface for bone metastases theranostics
- FT4** Ana S. Silva-Herdade Instituto de Medicina Molecular
Bioactive peptides in functional foods can mitigate stress behaviors in zebrafish (Danio rerio)

Chair: Manuel N. Melo

18h00

19h00

Welcome cocktail

Tuesday 28/11

9h00	KN1 Javier Montenegro CiQUS, Universidad de Santiago de Compostela <i>Supramolecular peptide assemblies for membrane transport and biomimetic systems</i>	Chair: Helena S. Azevedo		
9h30	ST5 Octavio L. Franco Universidade Católica de Brasília <i>In silico optimization of antimicrobial peptide enables the development of bioinspired products</i> ST6 Joana Calvário ITQB NOVA <i>Investigating amino acid enrichments and patterns: understanding biases in liquid-liquid phase separation</i> CT3 Luísa Aguiar Gyros Protein Technologies <i>An automated peptide synthesis and purification platform to overcome operational complexity</i> FT5 Christine Cruz-Oliveira Instituto de Medicina Molecular <i>Targeting arboviral infections in the central nervous system with peptide-porphyrin conjugates</i> FT6 Fernando Neiva Nunes ITQB NOVA <i>Room for improvement in the initial Martini 3 parametrization of peptide interactions</i>			
10h30	Coffee break & Posters			
11h30	ST7 Vera Neves Faculdade de Medicina, Universidade de Lisboa <i>Peptide Shuttles to improve therapeutic action in the central nervous system</i> ST8 Salvador Ventura Universitat Autònoma de Barcelona <i>Exploiting α-helical peptides to block and unveil the structure of α-synuclein toxic oligomers</i> ST9 Jorge H. Fernandez Universidade Estadual do Norte Fluminense <i>Targeting integrin-mediated cell adhesion: unveiling the anti-metastatic potential of A9(x) cyclic peptides</i> ST10 Michael Timme University of Osnabrueck <i>Structural and topological determinants of Hexokinase-VDAC interaction</i> ST11 Beatriz L. Pires-Lima LAQV-REQUIMTE <i>Synthesis of pyridine-based melanostatin derivatives</i> FT7 José M. Coelho Instituto de Medicina Molecular <i>Antibiofilm effect of synthetic antimicrobial peptides on Gram-positive and Gram-negative bacteria</i>		Chair: João Calamba Correia	
13h00	Lunch			
14h30	PL2 Norbert Sewald Bielefeld University <i>Cytotoxic peptides and conjugates for tumour targeting</i>			Chair: Paula Gomes
15h30	ST12 Akhilesh Rai CNC, Universidade de Coimbra <i>Multifunctional antimicrobial coatings to prevent peri-implantitis</i> ST13 Ana Salomé Veiga Faculdade de Medicina, Universidade de Lisboa <i>Activity and mode of action of pepRF1, a new CXCR4-targeted HIV inhibitor</i> ST14 Lorenzo Cianni University of Antwerp <i>Exploring targeted autophagy modulation in pursuit of precision therapeutics for cancer and atherosclerosis</i> FT8 Catarina S. Lopes Instituto de Medicina Molecular <i>$\alpha_3\beta_3$ integrin peptide inhibitors impact on fibrinogen-erythrocyte binding</i> FT9 Cátia Rosa C2TN, Instituto Superior Técnico, Universidade de Lisboa <i>Design of novel peptides to target the intracellular G protein-dopamine receptor type 2 (D2R) interface</i>			
16h30	Coffee break & Posters			
17h30	ST15 María Angeles Jiménez IQF Blas Cabrera, CSIC <i>Understanding protein interactions using NMR studies of peptide models</i> ST16 Ana Gomes LAQV-REQUIMTE <i>Peptide-based therapeutics towards the topical treatment of skin infections</i> ST17 Álvaro de la Cruz Instituto de Química Médica, CSIC <i>Design and synthesis of novel hemagglutinin fusion peptide inhibitors of H1N1 influenza virus</i> ST18 Rita Melo C2TN, Instituto Superior Técnico, Universidade de Lisboa <i>In silico approach for the design of peptides targeting the RANK-TRAF6 interaction</i>	Chair: Nuno C. Santos		
18h30				
20h30	Meeting dinner			

Wednesday 29/11

9h00 **KN2** Diana Lousa ITQB NOVA
Fusion peptides: Scenes from the lives of key players in viral infections

9h30 **ST19** Maria C. Lucana Institut Químic de Sarrià, Universitat Ramon Llull
BrainBike peptidomimetic enables efficient transport of antibody derivatives across brain endothelium

ST20 Sónia Gonçalves
Conjugation of nanostars with PaMAP1.9 to improve its anticancer activity

ST21 Miguel Maldonado
Novel leishmanicidal compounds as potent dimerization disruptors of LiTryR

FT10 Beatriz Vieira-da-Silva Instituto de medicina Molecular
Unravelling the factors that govern the ability of antiviral peptide-porphyrin conjugates to translocate the blood-brain barrier

Chair: Maria Angeles Jiménez

10h30 **Coffee break & Posters**

11h30 **ST22** Diego Núñez-Villanueva Instituto de Química Médica, CSIC
A diastereopure azepane quaternary amino acid as effective inducer of β -turns and 3_{10} -helices

ST23 Sara C. Silva-Reis LAQV-REQUIMTE
Insights on the influence of proline residue on the biological effects of glypromate bioconjugates

ST24 Ana Alcalde-Ordóñez CIQUS, Universidad de Santiago de Compostela
Selective cleavage of DNA replication foci in mammalian cells by Cu^{II} peptide helicates

ST25 Ana C. Borges-Araújo ITQB NOVA
Study of alamethicin pore formation in lipid membranes using the Martini 3 coarse-grained force field

ST26 Rúben D. M. Silva C2TN, Instituto Superior Técnico, Universidade de Lisboa
Evaluating the activity of CXCR4 and D2R-targeting peptides using the TRUPATH platform

ST27 Ana Rita Ferreira LAQV-REQUIMTE
What can an ionic liquid do for the bioactivity of antimicrobial peptides? The case of W-BP100

Chair: Miguel A. R. B. Castanho

13h00 **Closing remarks**

13h15 **Lunch**

**Attendance must be confirmed at registration time*

Poster list

(Posters P1 through P10 listed as Flash Talks FT1 through FT10)

P11 Anu Ploom University of Tartu
Kinetic study of aza-amino acid incorporation into peptide chain: Impact of steric effect of the side chain

P12 Axel Sarmiento Fuentes CIQUS, Universidad de Santiago de Compostela
Chemically fueled droplets for out-of-equilibrium sequence-specific RNA binding

P13 Carlos Cuadros-Higuera Instituto de Química Médica, CSIC
A "difficult sequence" cardiovascular peptide. Optimizing synthesis and purification

P14 Carmen González-González CIQUS, Universidad de Santiago de Compostela
Single α -helical peptide with conductive and fluorescence properties

P15 Carolina C. Buga Instituto de Medicina Molecular & ITQB NOVA
Molecular insights into membrane fusion mediated by the parainfluenza fusion peptide

P16 David Q. P. Reis ITQB NOVA
Peptide-based coacervates as catalytic microreactors

P17 Eduardo F. Vicente Universidade Estadual de São Paulo
Structural modifications of the antimicrobial peptide Ctx(Ile²¹)-Ha generate more potent peptide analogues with improved biological activities for animal production applications

P18 Patricia Sanmiguel CIQUS, Universidad de Santiago de Compostela
Helix-like peptides approach to three-way-junction binding

P19 Renato B. Pereira LAQV-REQUIMTE
Synthesis and antibacterial activity of Trichoderma longibrachiatum longibramide E analogs

P20 Ricardo Ferraz LAQV-REQUIMTE
Peptides derived from pet food protein ingredients: from proteomics to in vitro bioactivity profiling