

# Programme

## Day 1 Wednesday , March 22

9.30 - 10.00 Registration

### MEETING ROOM 1

10.00 - 13.00 Extended Core Management  
Group meeting

12.30 - 14.00 Registration

13.00 - 14.00 Lunch

### MARIANO GAGO AUDITORIUM

14.00 - 14.15 Welcome  
Frederico Silva and Mário Barbosa, i3S Director

14.15 - 14.30 Overview

Patrick England, France

14.30 - 15.00 **KEYNOTE with the support from Bionavis**

Surface Plasmon Resonance and Optofluidics  
Characterization of Extracellular Vesicles

Fredrik Höök, Sweden

### SESSION 1 MEMBRANES: LIPIDS, PROTEINS AND BEYOND

15.00 - 15.05 Nicolas Mignard, Wyatt Technologies

15.05 - 15.20 Building Bridges with Biophysics: antimicrobial  
peptides as new antibiotic paradigm - bridging  
biophysical approaches to their pathogen effects.

Margarida Bastos, Portugal

15.20 - 15.35 Interactions of amyloid oligomers with lipid  
membranes: Implications for cytotoxicity

Rima Budvytyte, Lithuania

15.35 - 15.50 Real-time characterization of interactions between  
proteins and lipidic membranes: a 15 year overview  
of biosensor-based methods and applications

Patrick England, France

15.50 - 15.55 David Witte, NanoTemper Technologies GmbH

15.55 - 16.30 Coffee Break

16.30 - 17.00 **Flash communications**

Christine Ebel, France  
Bárbara Gomes, Portugal  
Marcin Makowski, Portugal  
Milos Mojovic, Serbia  
Marjetka Podobnik, Slovenia  
Tina Daviter and Tom Jowitt, UK

17.00 - 17.15 Conformational changes governing dengue virus  
capsid protein function and its inhibition by pep14-23

Nuno C. Santos, Portugal

17.15 - 17.30 Membrane physics behind bacterial cell membranes  
and their interactions with antimicrobial peptides  
characterized by electrochemical methods

Kaori Sugihara, Switzerland

18.00 - 19.30 Separate Workgroup meetings  
WG1 - Meeting room C  
WG2 - Auditorium Mariano Gago  
WG3 - Meeting room D  
WG4 - Auditorium Corino de Andrade  
WG5 - Meeting room A  
WG6 - Meeting room F  
WG7 - Meeting room G

18.00 - 19.30 **Poster session 1**

# Day 2 Thursday, March 23

## SESSION 2 STRUCTURE AND DYNAMICS

### MARIANO GAGO AUDITORIUM

- 9.00 - 9.15** Protein dynamics probed by site-directed spin labeling EPR: towards in cell studies.  
Valérie Belle, France
- 9.15 - 9.30** From single living cells to tissues: bio-mechanical and bio-chemical analysis by simultaneous  $\mu$ -Brillouin and  $\mu$ -Raman spectroscopies  
Silvia Caponi, Italy
- 9.30 - 9.45** Structural Basis of Mitochondrial Dysfunction in Response to Cytochrome c Phosphorylation at position 48  
Irene Díaz-Moreno, Spain
- 9.45 - 9.50** Attila Aranyos, Pall ForteBio LLC
- 9.50 - 10.20** **KEYNOTE with the support from Malvern**  
Viscosizer TD: From Proceedings of the Royal Society in the 1950s to advancing novel biophysical measurement capabilities for biologics in the twenty-first century.  
David Goodall, UK
- 10.20 - 11.00** Coffee Break
- 11.00 - 11.15** Protein quality control by infrared spectroscopy: towards high throughput with Infrared imaging of high density protein microarrays  
Erik Goormaghtigh, Belgium

- 11.15 - 11.30** The role of active site flexible loops in catalysis and of zinc in conformational stability of *Bacillus cereus* 569/H/9 b-lactamase

André Matagne, Belgium

- 11.30 - 12.00** STSM grantees communications  
Sebastien Brule, France  
Nerijus Karalius, Lithuania  
Ondrej Skorepa, Czech Republic  
Maria Sunnerhagen (on behalf of Alexandra Ahlner), Sweden  
Levente Szekeres, Hungary

- 12.00 - 13.00** Lunch

## SESSION 3 INTERACTION ANALYSIS

- 13.00 - 13.15** Protein-Protein and Protein-DNA interactions by SwitchSENSE: comparison with other approaches

Paloma Fernández-Varela, France

- 13.15 - 13.30** What does make an amyloid toxic: morphology, structure or interaction with membrane?

Sophie Lecomte, France

- 13.30 - 13.45** Elucidating protein-polymer interactions using QCM-D and MP-SPR

Iliane Rafaniello, Spain

- 13.45 - 13.50** Hanna Mueller-Landau, Dynamic Biosensors GmbH

- 13.50 - 14.20** **KEYNOTE with the support from Beckman-Coulter**

Measuring Interactions in the Solution Phase: Adding a Spectral Dimension to Analytical Ultracentrifugation

Borries Demeler, USA

**14.20 - 14.35** Precision of the isothermal titration calorimetry technique and a database of protein–ligand binding enthalpies, entropies, Gibbs energies, and crystallographic structures for drug design

Daumantas Matulis, Lithuania

**14.35 - 14.50** MST as a standard tool in modern drug discovery operations

Alexey Rak, France

**14.50 - 15.30** Coffee Break

**15.30 - 16.00** **Flash communications**

Francesca Cutruzzolà, Italy  
Nadica Ivošević DeNardis, Croatia  
Vaněk Ondřej, Czech Republic  
Marcelo T. Augusto, Portugal  
Clare Stevenson, UK

**16.00-16.15** **KEYNOTE**

Quality management for Research Infrastructures and their platforms

Auriane Denis-Meyere, France

**16.30 - 18.00** **Poster session 2**

**17.30 - 19.00** Full Management Committee meeting

**19.00** Hop on Charter Bus at i3S entrance

**20.00** Dinner

## Day 3 Friday, March 24

**9.00 - 10.00** Separate Workgroup meetings

WG1 - Meeting room C  
WG2 - Auditorium Mariano Gago  
WG3 - Meeting room E  
WG4 - Auditorium Corino de Andrade  
WG5 - Meeting room A  
WG6 - Meeting room F  
WG7 - Meeting room 2

**10.00 - 10.30** Coffee Break

**MARIANO GAGO AUDITORIUM**

**10.30 - 13.00** Plenary with all Working Groups and Closing.