

Vilamoura Proteo

2nd Joint Meeting of Spanish, French
and Portuguese Proteomics Societies



Scientific Programme

May 11th – 13th, 2022

Portugal

Wednesday, May 11th

12.30 **Registration**

13.30 **Welcoming Session**

Francisco Amado PROCURA president

Montserrat Carrascal SEProt president (SPS)

Franck Vandermoere FPS president

Dina Simes meeting chair

Nuno Ferreira Bicho vice-rector for Research and Culture at University of Algarve

Proteomics methodology

I CHAIRS: Montserrat Carrascal / Francisco Amado

13.50 Symposium 0

Pseudoscience and denialism in times of pandemic

Daniel Closa (IIBB-CSIC-IDIBAPS, Barcelona, Spain)

14.30 Symposium I

Quantitative proteoform profiling of intact human protamines in normozoospermic infertile patients.

Marina Gay (IRB Barcelona, Spain)

15.10 **Coffee break sponsored by UNICAM + Poster session I**

II CHAIRS: Franck Vandermoere / Fernando Corrales

15.40 Symposium II

Proteoforms and their expanding role in biomedical research

Julia Chamot Rooke (Institut Pasteur, Paris, France)

16.20 Symposium III

Tackling cancer mechanisms with spatially resolved proteomics

Isabelle Fournier (PRISM Lab, University of Lille, France)

Oral Communications

CHAIRS: Deborah Penque / Elsa Lamy

17.00 Parkinson's disease plasma biomarkers: from translational research to alternative proteomics approaches

Bruno Manadas (CNC-UC, Coimbra, Portugal)

17.15 Proteomics and mass spectrometry imaging study of three-dimensional cell culture of breast tumor

Antonella Raffo-Romero (PRISM Lab, University of Lille, France)

- 17.30 Sub optimal 15N metabolic labelling in plant: A new way to perform large scale protein turnovers determination using the experimental isotopic distribution.
Willy V. Bienvenut (GQE - IDEEV, Université Paris-Saclay, France)
- 17.45 Innovative multiplex proteotyping of microbial isolates
Madisson Chabas (CEA, LI2D, Montpellier University, France)
- 18.00 **COMPANY TIME by Cellenion** - The cellenONE state of the art technology for single cell proteomics & sample preparation
- Flash Oral Communications**
- 18.15 Absolute quantitative proteomics using the total protein approach to identify novel clinical immunohistochemical markers in renal neoplasms
Hugo Santos (BIOSCOPE Group, NOVA University of Lisbon, Portugal)
- 18.20 High-throughput and high-sensitivity biomarker monitoring in body fluid by faims-enhanced fast lc surequant™ is targeted quantitation
Ulrich auf dem Keller (DBB, Technical University of Denmark, Denmark)
- 18.25 Compared dia-pasef and prm-pasef approaches for the absolute quantification of 500 human plasma proteins in colon cancer plasma samples.
Pierre-Olivier Schmit (Bruker France SAS, Wissembourg, France)
- 18.30 Metaproteomics analysis of gut microbiota: different processing methods allow the detection of specific phyla
Carmen García-Durán (DMP, FF, Universidad Complutense de Madrid, Spain)
- 18.35 Undiscovery of regulators of senescence-associated secretory phenotype mediated by small extracellular vesicles
Juan Fafián Labora (GITCMR, FCS, CICA, Universidade da Coruña, Spain)
- 18.40 S-nitrosoproteomics defines a key mechanism of exercise-induced cardioprotection
Béatrice Alpha-Bazin (LI2D, DMTS/CEA-INRAE, Univ Paris-Saclay, France)
- 18.45 Protein correlation profiling re-defines the protein composition of extracellular vesicles.
Julia Morales-Sanfrutos (Spanish National Cancer Research Centre - CNIO, Spain)
- 18.50 Application of 2D DIGE to study the effect of ageing on the myofibrillar sub-proteome of horse meat
Miguel Angel Sentandreu (IATA, CSIC, Spain)
- 18.55 Relationship between salivary proteome and xerostomia symptoms
Laura Carreira (MED- MIA, University of Évora, Portugal)
- 19.00 Circulating proteins associated with response and resistance to neoadjuvant chemotherapy in her2-positive breast cancer
María del Pilar Chantada Vázquez (HULA, CHUS, Spain)
- 19.05 Discussion
- 19.15 **Cocktail reception**

Thursday, May 12th

I Proteomics applications and Mixomics

CHAIRS: Bruno Manadas / Ángel García

- 8.30 Symposium IV
Kinase signalling circuits in health and disease
Pedro Beltrão (*IMSB, ETH Zurich, Switzerland*)
- 9.10 Symposium V
How proteomics and advanced mass spectrometry are reshaping what we can learn about paintings, objects and cultural heritage
Caroline Tokarski (*Inst. of Chemistry, BMNO, University of Bordeaux, France*)
- 9.50 Symposium VI
Evasion of cellular anti-viral defences deciphered by TAILS N-terminomics analysis of SARS CoV-2CLpro substrates in COVID-19
Christopher Overall (*CBR, University of British Columbia, Canada*)
- 10.30 **Coffee break sponsored by UNICAM + Poster session II**
- 11.00 **COMPANY TIME by Bruker:** Reaching maturity: latest developments in 4D proteomics
Pierre-Olivier Schmit

Oral Communications

CHAIR: Hugo Osório

- 11.30 Proteomic profiling of farmed gilthead seabream skin mucus stress response: a biomarker discovery study
Cláudia Raposo de Magalhães (*CCMAR, Universidade do Algarve, Portugal*)
- 11.45 Glycoproteogenomics characterization of the CD44 splicing code in bladder cancer towards precision oncology
José Alexandre Ferreira (*CI-IPOP, Portuguese Oncology Institute of Porto, Portugal*).
- 12.00 Quantitative proteomics analysis of aryl-hydrocarbon receptor-interacting protein reveals a novel protein able to regulate tumorigenic and metastatic properties of colorectal cancer cells driving liver metastasis
Guillermo Solís Fernández (*MIPD, FS, Belgium /UFIEC, Instituto de Salud Carlos III, Spain*)
- 12.15 Proteomic profiling of ascending aortic VSMC reveals alterations in DNA machinery and cell cycle dysregulation in thoracic aortic aneurysm associated with bicuspid aortic valve
A. Martín-Blazquez (*IIS-Fundacion Jimenez Diaz, Immunology, Spain*)

12.30 - 14.30 **LUNCH BREAK**

II Proteomics applications and Mixomics

CHAIR: Melisande Blein-Nicolas

- 14.30 Symposium VII
MaxQuant 2.1.1: Efficient and accurate DDA and DIA-based computational proteomics
Juergen Cox (Max Planck Institute of Biochemistry, Germany)
- 15.10 Symposium VIII
Antigen discovery for development of personalized cancer immunotherapy
Michal Bassani (Ludwig Institute for Cancer Research Lausanne, Switzerland)
- 15.50 **Coffee break + Poster session III**
- Oral Communications**
- CHAIRS: Carla Viegas / Cristina Ruiz**
- 16.30 Looking for new plasma biomarkers of Non-Alcoholic Fatty Liver Disease (NAFLD) progression using discovery and targeted proteomics
David Pérez (Univ. Grenoble Alpes, INSERM, CEA, France)
- 16.45 Identification of novel dysregulated proteins and amyloid- β plaques interactors associated to Alzheimer's disease by proteomics
Ana Montero-Calle (UFIEC, Instituto de Salud Carlos III, Spain)
- 17.00 Differences and similarities on metabolic response to pH by commensal and pathogenic *Staphylococcus epidermidis* strains
Elisabete Morais (ITQB, Universidade Nova de Lisboa, Portugal)
- 17.15 SARS-CoV-2 natural immunity to vaccine-induced immunity: systematic evaluation of humoral response by multipronged functional proteomics approaches
Manuel Fuentes (CIC-IBMCC, USAL-CSIC, IBSAL. Cancer Research Center-IBMCC. University of Salamanca-CSIC, Spain)
- 17.30 Exploiting glycoengineered simple cells and bioinformatics-assisted glycoproteomics for bladder cancer targets prioritization
Marta Relvas-Santos (Research Center of IPO-Porto and FS-UP, Portugal)
- 18.00 **COMPANY TIME by Resyn Biosciences: Hybrid-DIA acquisition strategy combines targeted and discovery proteomics - Jesper Olsen**
- Flash Oral Communications**
- 18.15 Extensive energy metabolism reprogramming and pathways of neurodegeneration induced by the Inhalation of ultrafine particulate matter revealed by label-free absolute quantitative proteomics
Gonçalo Martins (BIOSCOPE Group, NOVA University of Lisbon, Portugal)
- 18.20 Proteomics analysis of $\Delta Np73$ effectors identifies proteins associated with lymphangiogenesis, vasculogenesis and metastasis in colorectal cancer
María Garranzo-Asensio (UFIEC, Instituto de Salud Carlos III, Spain)
- 18.25 Mass-spectrometry based proteomics applied to the conservation of the Iberian lynx (*Lynx pardinus*)
Guadalupe Gómez-Baena (DBBM, FV-Universidad de Córdoba, Spain)

- 18.30** Association between calcific aortic valve disease and coronary artery disease: importance of the albumin redox state
Tamara Sastre-Oliva (DVP, Hospital Nacional de Paraplejicos, Spain)
- 18.35** Tailored proteomic pathway analysis for monitoring of bladder cancer patients
Luís B. Carvalho (BIOSCOPE Group, NOVA University of Lisbon, Portugal)
- 18.40** Metabolic dyshomeostasis induced by SARS-CoV-2 structural proteins reveals immunological insights into viral olfactory interactions
Mercedes Lachén-Montes (Navarrabiomed, UPNA, and NIHR, Spain)
- 18.45** Sex-dependent molecular changes in the olfactory tract in Alzheimer's and Parkinson's diseases
Paz Cartas-Cejudo (Navarrabiomed, Universidad Pública de Navarra, Spain)
- 18.50** Platelet lipidome fingerprint of obese patients: new assistance to characterize platelet dysfunction in obesity
Sara Troitiño (CIMUS, Universidade Santiago de Compostela, and IDIS, Spain)
- 18.55** Transposable element-derived peptides are preferentially presented on HLA-A3 and HLA-A11 molecules
Yago A. Arribas (Institut Curie, PSL University, France)
- 19.00** DeST: Deep Semantic Tagger
Francisco M. Couto (LASIGE, Faculdade de Ciências, Universidade de Lisboa, Portugal)
- 19.05** Discussion
- 20.00** **Conference Dinner** (optional, subject to registration and payment)

Friday, May 13

Advances in Proteomics

CHAIR: Dina Simes

- 8.30** Symposium IX
High-throughput phosphoproteomics to analyze cell signaling networks in health and disease.
Jesper Olsen (University of Copenhagen, Denmark)
- 9.10** Symposium X
A travel guide to metaproteomics with tips for the study of the most complex samples
Jean Armengaud (CEA, France)
- 9.50** **Coffee break + Poster session IV**

Oral Communications

CHAIRS: Mariette Matondo / Ana Varela Coelho

- 10.20 The ghost proteome an hidden vision of the protein landscape
Tristan Cardon (Univ. Lille, PRISM, France).
- 10.35 The proteome of urinary extracellular vesicles reveals early sub-clinical cardiorenal risk in hypertensive subjects
Miriam Anfaíha-Sanchez (IIS-Fundación Jiménez Díaz Hospital, Spain)
- 10.50 Does diabetes mellitus change the protein pattern in patients with aortic stenosis?
Nerea Corbacho-Alonso (DVP, Hospital Nacional de Paraplejícos, Spain)
- 11.05 The histone methyl transferase dot11 regulates chromatin reorganization and mitochondrial activity, and interacts with the pyruvate dehydrogenase complex in differentiating male germ cells
Delphine Pflieger (Univ. Grenoble Alpes, Inserm, CEA, IRIG-BGE, France)
- 11.20 **COMPANY TIME by Sciex:** Maximizing the performance of the ZenoTOF 7600 system for protein ID and quant

Flash Oral Communications

- 11.50 Finding biomarkers in thyroid cancer lesions: a mixomics approach
Margarida Coelho (CNC and Cell Biology, FST, University of Coimbra, Portugal)
- 11.55 Mass spectrometry-based proteomic and metabolomic profiling of serum samples for discovery and validation of tb diagnostic biomarkers
Ana Varela Coelho (ITQB, Universidade Nova de Lisboa, Portugal)
- 12.00 Spatial proteomic analysis of isogenic metastatic colorectal cancer cells reveals key dysregulated proteins associated with lymph node, liver, and lung metastasis
Rodrigo Barderas (Chronic Dis. Programme, UFIEC, Instituto de Salud Carlos III, Spain)
- 12.05 Huntacyl: altered dynamics of acylations of histone h3 lysine 27 (h3k27): a mechanism contributing to transcriptional dysregulation in huntington's disease?
Hassan Hijazi (EDyP, University Grenoble Alpes, France)
- 12.10 Proteomic and phosphoproteomic characterization of molecular mechanisms underlying progressive familial intrahepatic cholestasis type 3
Laura Guerrero (Centro Nacional de Biotecnología CNB-CSIC, Spain)
- 12.15 Proteomics analysis of gastric cancer patients with diabetes mellitus
Hugo Osório (i3S, Ipatimup and Faculty of Medicine, University of Porto, Portugal)
- 12.20 Discussion
- 12.30 **Closing Session/Awards**

14.00 – 17.00 **C-HPP Satellite Workshop on “Accelerating the HPP Grand Challenge”, organised by the Chromosome-centric Human Proteome Project**

See the C-HPP Satellite Workshop agenda here: <https://www.hupo.org/News/12690881>