



**19th Chromosome-Centric
Human Proteome Project
Symposium**

2018 June 16-17
Santiago de Compostela

EUPA 2018



Organized by
Fernando J. Corrales, Concha Gil and Young-Ki Paik.

19th C-HPP Symposium

June 16-17 2018

Santiago de Compostela, Spain

Venue: Faculty of Medicine, University of Santiago de Compostela: In the heart of the old city, close to Hotel Monumento San Francisco (EuPA meeting venue).



Saturday, June 16th

8:00h-8:20h Registration.

8:20h-8:30h Welcome Message. **Fernando J. Corrales.**

8:30h-9:00h The Human Proteome Project. **Gil Omenn.**

9:00h-9:20h C-HPP: Progress Update and Future Direction: **Young-Ki Paik** (C-HPP Chair).

9:20h-11:00h **MP success and new strategies** **Red team (Chris Overall).**

- neXt-MP50 Challenge: Update (20 min). **Chris Overall.** Canada Research Chair in Protease Proteomics and Systems Biology. Life Sciences Institute. Canada.
- Update on the deciphering of the testicular germ cell proteome (20 min). **Charles Pineau.** Research Director Inserm. Rennes, France.
- The proteome of human cerebrospinal fluid and the identification of missing proteins (10 min). **Charlotte Macron.** Nestlé Institute of Health Sciences SA. Lausanne, Switzerland.
- Short oral C-HPP group 2 (10 min). **Christoph Borchers.** UVic–Genome BC Proteomics Centre
- New Workflow for Identification of Native Peptides in Urine: From sample preparation and Ion mobility TOF MS to Bioinformatics (10 min). **Tadashi Yamamoto.** Biofluid Biomarker Center, Niigata University, Japan.
- Identification of missing proteins in mesenchymal stem cells derived from fat tissue and umbilical cord (10 min). **Miguel Marcilla.** National Center of Biotechnology-CSIC. Madrid, Spain.
- Sensitivity and specificity of mass-spectrometric proteomic technologies as factors determining the prospects for the CHPP project (10 min). **Alexander Archakov.** Institute of Biomedical Chemistry, Moscow, IBMC.
- Discussion (10 min).

11:00h-11:30h Coffee break.

11:30h-13:30h Bioinformatics, **Green team (Lydie Lane).**

Update on the Status of Target Proteins --MPs, uPE1, smORFs, lncRNAs and others.

- Introduction (10 min). **Lydie Lane**. SIB-Swiss Institute of Bioinformatics.
- Re-using and integrating public proteomics data to improve our knowledge of the human proteome (20 min). **Juan A. Vizcaino**. ProteomeXchange. EMBL-EBI.
- Keynote presentation 2 (20 min). **Jong Shin Yoo**. Korea Basic Science Institute.
- Assessment of sample preparation bias in mass spectrometry-based proteomic (20 min). **Peter Horvatovich**. University of Groningen, The Netherlands.
- Discussion (50 min).

13:30h-15:00h Lunch break.

15:00h-17:00h neXt-CP50 Challenge: functional annotation, **Blue team (Young-Ki Paik).**

- Proteomics and metabolomics signatures of Zika congenital syndrome (20 min). **Gilberto Doman**. Institute of Chemistry, Universidade Federal do Rio de Janeiro.
- Combining bioinformatics and experimental methods to discover the function of poorly characterized human proteins - lessons from the CALIPHO project (20 min). **Lydie Lane**. SIB-Swiss Institute of Bioinformatics, University of Geneva, Switzerland.
- Action plan to decipher functions of Chr18 encoded proteins in the frame of neXt-CP50 Challenge (15 min). **Elena Ponomarenko**. Department for Bioinformatics. Institute of Biomedical Chemistry, Moscow, IBMC ·
- Short oral C-HPP group 3 (15 min). **Andrea Urbani**. University of Rome "Tor Vergata"
- Deciphering Functional roles of missing proteins by Comprehensive integration of affinity proteomics, MS/MS & RNA-sequencing datasets in Chronic Lymphocytic Leukemia tumor B cells and healthy B cell subpopulations in the context of the Chromosome-Centric Human Proteome Project (10 min). **Manuel Fuentes**. Center for Cancer Research, University of Salamanca-CSIC.
- Discussion (40 min)

17:00h-19:00h C-HPP EC meeting.

EuPA and C-HPP dinner.

Sunday, June 17th

9:00h-10:45h Young Investigators session.

- Proteogenomics: Combining Next Generation Sequencing and Mass Spectrometry in *Candida albicans* (12+3 Q&A min). **Mónica Franch**. National Center of Biotechnology-CSIC. Madrid, Spain.
- Speaker 2 (12+3 Q&A min). **Seul-Ki Jeong**. YPRC. Yonsei Proteome Research Center. Seoul, Korea.
- Differential Immune Recognition of the *Candida albicans* yeast and Hyphal cell surface Proteomes in invasive Candidiasis (12+3 Q&A min). **Aida Pitarch**. Complutense University of Madrid, Spain.
- Identification and characterization of missing proteins from human chromosome 9 (12+3 Q&A min). **Yong-In Kim**. Korea Research Institute of Standards and Science.
- Proteins Involved in RNA Splicing, Proteins synthesis and apoptosis are differentially abundant in Macrophages after interacting with *Candida albicans* (12+3 Q&A min). **Catarina Oliveira**. Complutense University of Madrid, Spain.
- Speaker 6 (12+3 Q&A min). **Heeyoun Hwang**. Korea Basic Science Institute, KBSI.
- Gene Editing for neXt-CP50 and neXt-MP50 challenges (12+3 Q&A min). **Katerina Poverennaya**. Institute of biomedical chemistry, Moscow, Russia.

10:45h-11:15h Coffee break

11:15h-13:30h Long-term plans and directions for C-HPP (Young-Ki Paik, Christoph M. Overall).

- Re-structuring C-HPP Teams for Phase II (2019-)
- Strategies for the identification of MPs (Using info available on public proteome databases, proteogenomics, proteoforms, small ORFs, etc.).
- Strategies for the functional annotation of Dark Proteome (MPs, uPE1, smORFs and lncRNA proteins) (Russian team proposal, and others).
- Synergies and interactions across C-HPP and B/D-HPP groups (samples, data sharing...).
- Other issues

13:30h-14:00h Next C-HPP meetings and other business.

- 2018 JPR SI Update Christoph M. Overall.
- 2018 HUPO Congress Workshop Plans Young-Ki Paik.
- 2019 C-HPP Workshop Plans in St. Malo (Charles Pineau).