

Joint BSPR/EBI Conference 2010
Proteomics: From Qualitative to Quantitative
Wellcome Trust Conference Centre, Cambridge UK, 13th – 15th July 2010

Final Programme (16th June 2010)

Tuesday 13th July 2010

08:30-10:00 Registration / Poster Setup / Coffee

10:00-10:15 Welcome on behalf of BSPR (Walter Kolch, President, BSPR)
Welcome on behalf of EBI (Henning Hermjakob, EMBL-EBI)

Keynote Lecture 1
Chaired by Walter Kolch

10:15-11:00 Ruedi Aebersold (Institute of Molecular Systems Biology,
Switzerland)
Mapping and measuring proteomes

11:00-11:30 Tea / Trade Exhibition

Session 1: Protein Dynamics
Chaired by Andy Pitt

11:30-12:00 Matthias Selbach (Max Delbrück Centre for Molecular Medicine,
Germany)
Genome-wide analysis of protein and mRNA half-lives reveals
dynamic properties of mammalian gene expression

12:00-12:15 Adam Byron (University of Manchester, UK)*
Quantitative proteomic analysis of integrin adhesion complex
dynamics

12:15-12:30 Julio Saez-Rodriguez (Harvard Medical School, USA)
Comparative logical models of signaling networks in normal and
transformed hepatocytes derived from phosphoproteomic data

12:30-14:30 Buffet Lunch / Trade Exhibition

Poster Session I

12:30-14:30 Authors of even-numbered posters in attendance
Poster judges: Chris Sutton, Kathryn Lilley, Manuel Mayr

BSPR AGM

13.45-14:15 BSPR Annual General Meeting (James Watson Pavilion)

Session 2: Plant Proteomics
Chaired by Kathryn Lilley

- 14:30-15:00 Michel Zivy (UMR de Génétique Végétale, France)
A proteomics approach of maize responses to drought stress
- 15:00-15:15 Sylvain Bischof (ETH Zurich, Switzerland)
Chloroplast proteome analysis: New insights into intracellular trafficking
- 15:15-15:30 Ayesha Tahir (INRA, France)
Proteomic analysis of wheat kernel tissues during grain development
- 15:30-16:00 Waltraud Schulze (Max-Planck-Institute for Plant Physiology, Germany)
15N metabolic labeling as a tool to study nutrient-induced signaling processes in Arabidopsis
- 16:00-16:30 Tea / Trade Exhibition

Session 3: Animal Proteomics
Chaired by Josie Beeley

- 16:30-17:00 Ingrid Miller (University of Veterinary Medicine, Austria)
IPG-DALT and more
- 17:00-17:15 Javier Barallobre-Barreiro (CHU a Coruna, Spain)
High-throughput proteomic analysis of cardiac extracellular matrix after ischemia-reperfusion: new roles for known proteins?
- 17:15-17:30 Shaukat Malik (M.A Jinnah University, Pakistan)
Comparative homology modeling of human rhodopsin with several templates of bovine rhodopsin
- 17:30-18:00 Eموke Bendixen (University of Aarhus, Denmark)
Farm animal proteomics - from a systems biology view

Honorary Membership Lecture
Chaired by Mike Dunn

- 18:00-18:30 Angelika Goerg (Technical University Munich, Germany)
A life with gels: From ultrathin gels to IPG-Dalt
- 18:30-20:00 Drinks Reception / Trade Exhibition
(Sponsored by Thermo Fisher Scientific)
- 20:00 Dinner (Residential delegates only)

Wednesday 14th July 2010

Keynote Lecture 2 ***Chaired by Mike Dunn***

09:00-09:45 Rob Beynon (University of Liverpool, UK)
Quantitative proteomics: What's the point?

Session 4: Quantitation by Labelling ***Chaired by Mike Dunn***

09:45-10:15 Phillip Wright (University of Sheffield, UK)
Can we live with iTRAQ?

10:15-10:30 Sarah Martin (University of Edinburgh, UK)*
Quantitative Proteomics and Flux Analysis using Metabolic Labelling:
Studies of the Unicellular Alga *Ostreococcus tauri*

10:30-10:45 Kelly McMahon (University of Bradford, UK)
A comparison of proteins and their expression levels within different
regions of multi-cellular spheroids (MCTS)

10:45-11:30 Coffee / Trade Exhibition

Session 5: Advances in Bioinformatics ***Chaired by Henning Hermjakob***

11:30-12:00 Hanno Steen (Children's Hospital Boston, USA)
New strategies for the identification of co-regulated proteins

12:00-12:30 Amos Bairoch (Swiss Institute of Bioinformatics, Switzerland)

12:30-12:45 Daniel Rios (EMBL-EBI, UK)
Interactive and computational access to proteomics data in the
PRIDE (PRoteomics IDentifications) database

12:45-13:00 Henning Hermjakob (EMBL-EBI, UK)
PSICQUIC - A common query interface for interaction databases

13:00-14:30 Buffet Lunch / Trade Exhibition

Poster Session II

13:00-14:30 Authors of odd-numbered posters in attendance
Poster judges: Chris Sutton, Kathryn Lilley, Manuel Mayr

Session 6: Protein Interactions

Chaired by Judit Nagy

- 14:30-14:45 Gavin Wright (Wellcome Trust Sanger Institute, UK)
Large-scale detection of low affinity extracellular protein interactions
- 14:45-15:00 Alex Jones (The Sainsbury Laboratory, UK)
Moving from identification to quantification of phosphorylation events
in plant-pathogen interactions
- 15:00-15:30 Bettina Warscheid (University Duisburg-Essen, Germany)
Accurate Characterization of the Intricate Membrane Protein
Interaction Network of Yeast Peroxisomes via Quantitative MS and
Statistics
- 15:30-16:00 Akhilesh Pandey (Johns Hopkins University, USA)
- 16:00-16:30 Tea / Trade Exhibition

Session 7: Modern Array Technologies

Chaired by Rainer Cramer

- 16:30-17:00 Dolores Cahill (University College Dublin, Ireland)
Applications of protein arrays in discovery of novel protein-protein
interactions and high throughput validation using SPR
- 17:00-17:30 Eckhard Nordhoff (Ruhr-University Bochum, Germany)
Development of biomarker-protein chips for the diagnosis of
neurodegenerative disorders

Plenary Lecture

Chaired by Rainer Cramer

- 17:30-18:15 Cathy Costello (Boston University School of Medicine, USA)
HLA-DR presented peptides in synovia of patients with rheumatoid
arthritis or antibiotic-refractory Lyme disease
- 18:15-20:00 Drinks Reception / Trade Exhibition
- 20:00 Conference Dinner
(By ticket only)

Thursday 15th July 2010

Keynote Lecture 3
Chaired by Robin Wait

09:00-09:45 Benjamin A. Garcia (Princeton University, USA)
Next generation proteomic approaches for understanding the histone code

Session 8: Label-free Quantitation
Chaired by Robin Wait

09:45-10:15 David O'Connor (University of Southampton, UK)
Biological insights from large-scale protein copy number measurements

10:15-10:30 Sebastian Wiese (University Duisburg-Essen, Germany)
Study of Protein Localization by Quantitative MS Applied to Mammalian Peroxisomes

10:30-10:45 Dario Di Silvestre (Institute for Biomedical Technologies-CNR, Italy)
User-friendly bioinformatics tools for handling proteomics data in biomarker discovery and cluster analysis

10:45-11:30 Coffee / Trade Exhibition

Session 9: Clinical Proteomics
Chaired by Roz Banks

11:30-11:45 Marie-Claude Djidja (Institute of Cancer Research, UK)*
MALDI-Mass Spectrometry Imaging of Hypoxia and metastasis-associated proteins combined with quantitative MS

11:45-12:00 Thomas Hiemstra (University of Cambridge, UK)
Exclusion List for Uromodulin Improves Depth of Coverage of Human Urinary Proteins Identified by LC-MS/MS

12:00-12:30 John Semmes (Eastern Virginia Medical School, USA)
Combining proteomics-based strategies to maximize biomarker discovery

12:30-12:45 Rosalind Jenkins (University of Liverpool, UK)
The penicillin adductome in drug-induced allergic reactions

12:45-13:00 Richard Kay (Quotient Bioresearch Ltd, UK)
Development of an LC-MS/MS method to quantify plasma concentrations of the wild type and Marburg I variants of Factor VII-activating protease

13:00-14:15 Buffet Lunch / Trade Exhibition

Closing Session
Chaired by David O'Connor

14:15-14:25 **Prize Awards**

Poster Prize

Sponsored by the Royal Society of Chemistry journal Molecular BioSystems and presented by Dr Michael Smith (Deputy Editor)

Early Stage Career Investigator Award

Announcement of MJ Dunn Fellows and BSPR Fellowships

Keynote Lecture 4
Chaired by David O'Connor

14:25-15:10 John Yates III (Scripps Research Institute, USA)
Using mass spectrometry to understand protein misfolding diseases

15:10-15:15 Closing remarks: David O'Connor

15:30 Buses depart to Stansted / Cambridge

Note: * Indicates oral communications entered for the Early Stage Career Investigator Award. Judges :Rainer Cramer, Andy Pitt, Henning Hermjakob