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**SATURDAY, 15 NOVEMBER 2008**

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- 13:00 - 15:00 Registration (Operon Foyer)
- 15:00 – 15:05 Welcome address
- Session I: Genome control I**  
**Chair: Frank Holstege**
- 15:05 – 15:35 Eran Segal  
*Weizmann Institute, REHOVOT, Israel*  
**Distinct modes of regulation by chromatin encoded through nucleosome positioning signals**
- 15:35 – 16:05 Tim Hughes  
*University of Toronto, TORONTO, Canada*  
**Protein-nucleic acid interactome mapping**
- 16:05 – 16:35 Eileen Furlong  
*EMBL Heidelberg, HEIDELBERG, Germany*  
**Developmental networks in cis: Can we decipher the code?**
- 16:35 – 16:50 Caroline Friedel  
*LMU Munich, MUNICH, Germany*  
**A conserved role of RNA half-life in mice and men**
- 16:50 – 17:20 Coffee break
- 17:20 – 17:50 Martha Bulyk  
*Harvard Medical School, Boston, MA, United States of America*  
**High-resolution DNA binding specificity profiles of transcription factors and cis regulatory codes in DNA**
- 17:50 – 18:05 Nick Luscombe  
*EMBL-EBI Hinxton, HINXTON, CAMBRIDGE, United Kingdom*  
**Genomic analysis of a ubiquitous small-molecule second messenger signalling system in Bacteria**
- 18:05 – 18:35 Richard Young  
*Whitehead Institute for Biomedical Research, CAMBRIDGE, United States of America*  
**Transcriptional circuitry and epigenetic reprogramming in stem cells**
- 19:00 – 22:00 Dinner & Drinks (Canteen)

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**SUNDAY, 16 NOVEMBER 2008**

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**Session II: Genome control II****Chair: Eileen Furlong**

- 09:00 – 09:30 Ewan Birney  
*EMBL-EBI Hinxton, HINXTON, CAMBRIDGE, United Kingdom*  
**Ensembl and ENCODE, understanding our genome**
- 09:30 – 09:45 Michael Wilson  
*Cambridge Research Institute, CAMBRIDGE, United Kingdom*  
**Tissue-specific transcription is directed by genome sequence in mice carrying human chromosome 21**
- 09:45 – 10:15 Marian Walhout  
*University of Massachusetts, WORCESTER, MA, United States of America*  
**Gene-centered transcription regulatory networks**
- 10:15 – 10:30 Esti Yeger-Lotem  
*Whitehead, MIT, BROOKLINE, MA, United States of America*  
**Bridging the gap between high-throughput genetic and transcriptional data reveals cellular pathways responding to alpha-synuclein toxicity**
- 10:30 – 11:00 Coffee break
- 11:00 – 11:30 Patrick Lemaire  
*IBDML, MARSEILLE, France*  
**Of gene regulatory networks and the control of cell shape in early ascidian embryos**
- 11:30 – 11:45 Eric Bonnet  
*Ghent University / VIB, GENT, Belgium*  
**MicroRNA module network inference from expression data**
- 11:45 – 12:15 Frank Holstege  
*University Medical Centre Utrecht, UTRECHT, Netherlands*  
**Understanding regulatory circuitry through expression-profile phenotypes**
- 12:30 – 14:00 Lunch (Canteen)
- 14:00 – 15:30 **Poster Session I: A – L (Poster Tent)**

### Session III: Variation, phenotype and disease

**Chair: Judith Boer**

- 15:30 – 16:00 Lars Steinmetz  
*EMBL, HEIDELBERG, Germany*  
**A high-resolution map of crossovers and gene conversion across the yeast genome**
- 16:00 – 16:30 Edwin Cuppen  
*Hubrecht Institute and University Medical Center Utrecht, UTRECHT, Netherlands*  
**Exploring the effect of structural variation in genomes on phenotypic diversity**
- 16:30 – 16:45 Stig Omholt  
*CIGENE (Centre for Integrative Genetics), AAS, Norway*  
**Allele interaction motifs reveal gene regulatory architecture**
- 16:45 – 17:15 Ritsert Jansen  
*University of Groningen, HAREN, Netherlands*  
**Genetical genomics: a combination of genetic variation with genomic profiling to reconstruct molecular networks**
- 17:15 – 17:45 Coffee break
- 17:45 – 18:15 Emmanouil Dermitzakis  
*The Wellcome Trust Sanger Institute, HINXTON, CAMBRIDGE, United Kingdom*  
**Population genetics and genomics of human gene expression**
- 18:15 – 18:30 Boris Lenhard  
*University of Bergen, BERGEN, Norway*  
**Disease susceptibility variants mapping within long-range regulatory domains of transcription factor genes**
- 18:30 – 19:00 Peer Bork  
*EMBL Heidelberg, HEIDELBERG, Germany*  
**Integrating molecular and metadata in two diverse biological systems: The human body and the ocean**
- 19:00 – 20:30 Dinner (Canteen)
- 20:30 – 22:00 Cheese and wine reception (Operon Foyer)

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**MONDAY, 17 NOVEMBER 2008**

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**Session IV: Protein function & regulatory networks I****Chair: Michel Werner**

- 09:00 – 09:30 Marc Vidal  
*Dana-Farber Cancer Institute, BOSTON, United States of America*  
**Interactome networks and human disease**
- 09:30 – 09:45 Patrick Cramer  
*University of Munich - Gene Center Munich, MÜNCHEN, Germany*  
**Structure-system correlations identify gene regulatory modules**
- 09:45 – 10:15 Brenda Andrews  
*University of Toronto, TORONTO, Canada*  
**Deciphering cellular networks and pathways using yeast functional genomics**
- 10:15 – 10:30 Roded Sharan  
*Tel Aviv University, TEL AVIV, Israel*  
**Using protein networks to elucidate cellular phenotypes**
- 10:30 – 11:00 Coffee break
- 11:00 – 11:30 Michael Boutros  
*German Cancer Research, HEIDELBERG, Germany*  
**Dissection of synthetic interaction networks by RNAi**
- 11:30 – 11:45 Rune Linding  
*Institute of Cancer Research, LONDON, United Kingdom*  
**Molecular logic gates and network medicine**
- 11:45 – 12:15 Roger Brent  
*University of California at Berkeley, BERKELEY, CA, United States of America*  
**Quantitative single cell physiological and genetic study of signal control in yeast pheromone response system reveals conserved systems level cell signaling behaviors and general regulatory mechanisms**
- 12:30 – 14:00 Lunch (Operon Foyer)
- 14:00 – 15:30 **Poster Session II: M – Z (Poster Tent)**

**Sessions V: Protein function & regulatory networks II**

**Chair: Anne-Claude Gavin**

- 15:30 – 16:00 Ruedi Aebersold  
*ETH Zurich, ZURICH, Switzerland*  
**Proteome biology**
- 16:00 – 16:30 Sarah Teichmann  
*MRC, CAMBRIDGE, United Kingdom*  
**Evolution of protein complexes and protein interaction networks**
- 16:30 – 16:45 Finn Kirpekar  
*University of Southern Denmark, ODENSE, Denmark*  
**Identification of RNA by RNA mass mapping**
- 16:45 – 17:15 Nevan Krogan  
*University of California, San Francisco, SAN FRANCISCO, CA, United States of America*  
**Functional insights from genetic and protein-protein interaction map**
- 17:15 – 17:45 Coffee break
- 17:45 – 18:15 Giulio Superti-Furga  
*CeMM Center for Molecular Medicine of the Austrian Academy of Sciences, VIENNA, Austria*  
**Molecular machines, molecular networks and the mechanism of action of drugs**
- 18:15 – 18:30 Inna Lavrik  
*German Cancer Research Center, HEIDELBERG, Germany*  
**Dynamics within the CD95 death-inducing signaling complex decide life and death of cells**
- 18:30 – 19:00 Edison Liu  
*Genome Institute of Singapore, SINGAPORE*  
**To be confirmed**
- 19:30 – 23:00 **Gala Dinner and Party (Castle of Schwetzingen)**

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**TUESDAY, 18 NOVEMBER, 2008**

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**Sessions VI: Systems****Chair: Marc Vidal**

- 09:30 – 10:00 Luis Serrano  
*CRG, BARCELONA, Spain*  
***In vivo* analysis and computer simulations of Ras-Raf structure-based design mutant complexes with changed kinetic properties and affinities**
- 10:00 – 10:30 Steve Oliver  
*University of Cambridge, CAMBRIDGE, United Kingdom*  
**Functional genomic and genetic approaches to the systems biology of the eukaryotic cell**
- 10:30 – 10:45 Stein Aerts  
*VIB, University of Leuven, LEUVEN, Belgium*  
**Functional identification of regulatory interactions through a pipeline of genetic perturbations, microarray experiments, motif predictions, and *in vivo* reporter assays in *Drosophila***
- 10:45 – 11:15 Coffee break
- 11:15 – 11:45 Michael Snyder  
*Yale University, NEW HAVEN, CT, United States of America*  
**Analysis of genomes and regulatory networks in eucaryotes**
- 11:45 – 12:00 Marcelo Rivas Astroza  
*Pontificia Universidad Católica de Valparaíso, VALPARAÍSO, Chile*  
**Minimization of the regulatory adjustment for the prediction of cellular metabolic flux distribution after gene knockout**
- 12:00 – 12:30 Jussi Taipale  
*University of Helsinki, HELSINKI, Finland*  
**Systems biology of cancer**
- 12:30 Boxed lunch (Operon Foyer)
- 13:00 Bus to Frankfurt Airport (from EMBL Operon)

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**EMERALD Workshop: “Microarray Data Quality And Systems Biology”**

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- 13:00 – 13:45 John Quackenbush Dana-Farber, Harvard, US  
**Keynote lecture**
- 13:45 – 13:55 Martin Kuiper, NTNU, Norway  
**The Emerald project**
- 13:55 – 14:25 Chris F. Taylor, EBI, UK  
**MIBBI: Minimum Information for Biological and Biomedical Investigations**
- 14:25 – 14:55 Marc Salit, NIST, USA  
**Standards**
- 14:55 – 15:15 Coffee break
- 15:15 – 16:00 Misha Kapushesky, EBI, UK  
**Data quality and network inference**
- 16:00 – 16:30 Audrey Kauffmann, EBI, UK  
**The Bioconductor package "arrayQualityMetrics" for producing quality metrics, diagnostic plots and reports – application to the ArrayExpress database**
- 16:30 – 17:00 Wolfgang Huber, EBI, UK  
**Metrics: use cases, case studies, and new directions**