

The DNAProteome: Recent Advances Towards Establishing the Protein-DNA Interaction Space Herbert Auer - Erich Grotewold

Monday, April 20th 2009

9:00 - 9:15 Welcome remarks

Session I: The *cis*-regulatory element landscape of eukaryote genomes

9:15 - 9:55 Gary Stromo, Washington University, St. Louis, USA

Prospects for a recognition code for DNA-protein interactions

9:55 - 10:35 Greg Wray, Duke University, Durham, USA

Changes in transcriptional regulation across the genome during human origins

10:35 - 11:05 Coffee break

11:05 - 11:45 Roderic Guigo CRG, Barcelona, Spain

The transcriptional complexity of the human genome: insights from next generation technologies

11:45 - 12:25 Jan Karlseder, Salk Institute, La Jolla, USA

DNA binding proteins and control of telomere length in mammals and *C. elegans*

12:25 - 12:50 Gerhard Mittler MPI of Immunobiology, Freiburg, Germany

The important contribution of quantitative proteomics for deciphering the gene-regulatory code of mammalian genomes

12:50 - 15:00 Lunch

Session II: Higher order structures in the protein-DNA space

15:00 - 15:40 Tom Gingeras, CSHL, Cold Spring Harbor, USA

New classes of functional short RNAs and chromosome-wide transcriptional networks

15:40 - 16:20 Rolf Ohlsson, Uppsala Universitet, Uppsala, Sweden

Novel techniques to analyse DNA and protein interaction in three dimensions

16:20 - 16:50 Coffee break

16:50 - 17:15 Ola Söderberg, Uppsala Universitet, Uppsala, Sweden

Detection of individual endogenous protein interactions *in situ* using *in situ* PLA

17:15 - 17:55 Vivian Cheung, University of Pennsylvania, Philadelphia, USA

Genetic mapping reveals regulatory landscape of human gene expression

17:55 - 20:00 Poster session and networking

Tue, April 21st 2009

Session III: Establishing gene regulatory networks

9:00 - 9:40 Mike Snyder, Yale University, New Haven, USA

Analysis of transcription factor function and regulatory networks in eukaryotes

9:40 - 10:20 Sarah Bray, University of Cambridge, Cambridge, UK

Decoding the Notch signal

- 10:20 - 10:45 **Albert Jordan**, CSIC, Barcelona, Spain
Depletion of human histone H1 variants uncovers specific roles in gene expression and cell growth
- 10:45 - 11:15 Coffee break
- 11:15 - 11:55 **Erich Grotewold**, Ohio State University, Columbus, USA
Systems approaches to unravel plant regulatory networks
- 11:55 - 12:35 **Duncan Odom**, Cambridge Research Institute, Cambridge, UK
The global control and evolution of transcription in mammalian tissues
- 12:35 - 13:00 **Leonid Mirny**, MIT, Cambridge, USA
Fundamentally different strategies of gene regulation revealed by analysis of binding motifs
- 13:00 - 15:00 Lunch
- Session IV: Genome-wide transcription factor location analysis**
- 15:00 - 15:40 **Joe Ecker**, Salk Institute, La Jolla, USA
Sequencing of Genomes, Epigenomes and Interactomes in Arabidopsis
- 15:40 - 16:20 **Bart Deplancke** EPFL, Lausanne, Switzerland
Novel genomic tools and resources for the systematic study of metazoan gene regulatory networks
- 16:20 - 16:50 Coffee break
- 16:50 - 17:30 **Thomas Graf**, CRG, Barcelona, Spain
- 17:30 - 18:10 **Eileen Furlong**, EMBL, Heidelberg, Germany
Transcription factor binding reveals spatial and temporal aspects of developmental networks
- 18:10 - 18:50 **Peggy Farnham**, UC Davis, Davis, USA
Genomic profiling reveals two classes of recruitment mechanisms for DNA binding factors
- 21:30 - open end: Speakers dinner

Wed, April 22nd 2009

Session V: Chromatin structure, histone and DNA modifications

- 9:00 - 9:40 **Dirk Schuebeler**, Friedrich Miescher Institut, Basel, Switzerland
Epigenetic determinants of genome function: insights from global analysis
- 9:40 - 10:20 **Robin Allshire**, University of Edinburgh, Edinburgh, UK
Synthetic heterochromatin, CENP-A chromatin and kinetochore assembly
- 10:20 - 10:45 **Federica Battistini**, University of Sheffield, Sheffield, UK
Sequence selectivity of DNA wrapping in the nucleosome
- 10:45 - 11:15 Coffee break
- 11:15 - 11:40 **Andrew Andrews**, Colorado State University, Fort Collins, USA
A coupled equilibrium approach to measuring nucleosome thermodynamics
- 11:40 - 12:20 **Saadi Khochbin**, Institut Albert Bonniot, Grenoble, France
Molecular basis of post-meiotic male genome reprogramming: essential role for histone hyperacetylation
- 12:20 - 13:00 **Manel Esteller**, IDIBELL-ICREA, Barcelona, Spain
Epigenomic and proteomic maps in health and disease
- 13:00 - 13:10 Closing remarks