

Beyond the Genome 2011 - Conference Program

Monday 19th September 2011

Genome Informatics Pre-Meeting

08:00-10:00 Registration and Breakfast

09.15 – 09.45 Sponsored technical presentation – Complete Genomics

10:00-10:30 Answering the demands of digital genomics
Mike Schatz, Cold Spring Harbour Laboratory, USA

10:30-11:00 Accelerating Research
Matt Wood, Amazon Web Services (AWS)

11:00-11:30 Coffee Break

11:30-12:00 Cloud-scale genomics: examples and lessons
Ben Langmead, John Hopkins University, USA

12:00-12:30 Transparent, accessible, reproducible analysis with Galaxy
James Taylor, Galaxy, USA

12:30-13:30 Lunch

13:30-14:00 High-quality draft assemblies of large and small genomes for massively parallel DNA sequence data
David Jaffe, The Broad Institute, USA

14:00-14:30 Heading for a full solution to now-generation bioinformatics
Yinguri Li, Beijing Genomics Institute, China

14:30-15:30 Hands on Session

15:30-16:00 Coffee Break

16:00-16:30 Informatics of Cancer Genomes
Lincoln Stein, Ontario Institute for Cancer Research, Canada

16:30-17:00 Concluding Talk
Mike Schatz, Cold Spring Harbour Laboratory, USA

17:00 - 17:30 Sponsored technical presentation – DNA Star

17:3 - 19:00 Drinks and Buffet

Tuesday 20th September 2011 –

Day 1: Cancer Genomics

- 08:00-09:30 Registration and Breakfast
- 09:30-10:15 A Glimpse at Tumor Genome Evolution
Elaine Mardis, Washington University in St Louis, USA
- 10:15–10:50 Characterizing triple-negative breast cancer tumors
Sam Aparicio, BC Cancer Agency, Vancouver
- 10:50-11:25 Comparative genomic analysis of mouse and human mammary tumors
Charles M. Perou, The University of North Carolina at Chapel Hill, USA
- 11:25-11:45 *Coffee Break*
- 11:45-12:20 Interrogating the Architecture of Cancer Genomes
Peter Campbell, The Wellcome Trust Sanger Institute, UK
- 12:20-12:40 Selected Short Talks
12:20 Prostate stem cell antigen (PSCA) and the risk of bladder cancer – linking genotypes and functional mechanisms
Adam Muny, National Institutes of Health, USA
12:30 On using optical maps for genome assembly
Henry Lin, University of Maryland, USA
- 12:40-14:00 Lunch
- 14.30 -15.00 Sponsored technical presentation – GENEWIZ
- 14:00-15:30 Poster Viewing
- 15:30-16:05 Genome-forward oncology: how do we get there?
Matthew Ellis, Washington University in St Louis, USA
- 16:05-16:25 Selected Short Talks
16:05 COSMIC: The catalogue of somatic mutations in cancer
Nidhi Bindal, The Wellcome Trust Sanger Institute, USA
- 16:15 A Genetic survival network for glioblastoma multiforme
Desmond J Smith, David Geffen School of Medicine, UCLA, USA

16:25-17:00 Are clinical genomes already becoming semi-routine for patient care?
Mark Boguski, Harvard Medical School, USA

17:00-18:30 Drinks Reception (delegates to make own arrangements for dinner)

17.00 – 17.30 Sponsored technical presentation – Halo Genomics

Wednesday 21st September 2011

Day 2: Exome Sequencing

09:00-10:00 Breakfast

09.15 – 09.45 Sponsored technical presentation – Caliper Life Sciences

10:00-10:45 Next Generation Human Genetics
Jay Shendure, UW Genome Sciences, USA

10:45-11:20 Analysis of 2,440 human exomes highlights the evolution and functional impact of rare coding variation
Tim O'Connor, UW Genome Sciences, USA

11:20-11:40 Coffee Break

11:40-12:15 Exome sequencing as a tool to discover genes for heart attack risk and blood lipids
Ron Do, Harvard Medical School, USA

12:15-13:15 Lunch

13:15-13:50 De novo mutations in mental retardation
Joris Veltman, Nijmegen Centre for Molecular Life Sciences

13:50-14:00 Selected Short Talk
Massively parallel sequencing identifies a previously unrecognized X-linked disorder resulting in lethality in male infants owing to amino-terminal acetyltransferase deficiency
Gholson J. Lyon, Childrens hospital of Philadelphia

14:00-14:35 Next-generation clinical sequencing in a children's hospital
Stephen Kingsmore, Children's Mercy Hospital in Kansas City, USA

14:35 -15:00 Coffee Break

15:00-17:00 Poster Session

17:00 Conference dinner and Washington tour by moonlight

Thursday 22nd September 2011

Day 3: Microbiome Genomics

09:00-10:00 Breakfast

10:00-10:45 Progress in understanding the human microbiome
Karen Nelson, J. Craig Venter Institute (JCVI), USA

10:45-11:20 Reconstructing microbial communities
Mihai Pop, University of Maryland, USA

11:20-11:40 Coffee Break

11:40-12:15 The Joint Center for Structural Genomics: Exploration of the Human Gut Microbiome
Ian Wilson, The Scripps Research institute, USA

12:15-14:00 Lunch

14:00-14:35 Comparative analysis of the vaginal microbiome in health and disease
Bryan White, University of Illinois, USA

14:35-15:10 NIAID, Genomics programs and global health
Maria Giovanni, National Institute of Allergy and Infectious Diseases, UK

15:10-15:45 Microbial reference genomes for human metagenomics
Sarah Highlander, Baylor College of Medicine, USA

15:45-16:05 Selected Short Talks

15:55 Microbial community function and biomarker discovery in the human microbiome

Nicola Segata, Harvard Medical School, USA

16:10 Systems biology of bacteriophage proteins and new dimensions of the virus world discovered through metagenomics

David Kristensen, National Institute of Health, USA

16:05-16:40 Metatranscriptomics of the human gut microbiome

Thomas Sicheritz-Ponten, Technical University of Denmark