



ENCODE 2015

Research Applications and Users Meeting

Bolger Center
Potomac, Maryland

June 29 – July 1, 2015

AGENDA

Monday, June 29th (Day 1)

- 7:00 – 8:20 a.m. *Breakfast* (Osgood building dining room)
- 7:30 a.m. Registration / Information desk open (outside Franklin Ballroom)
- 8:30 - 9:00 a.m. **Introduction to ENCODE Data** (Franklin Ballroom)
Welcome
Overview of ENCODE data types
Mike Pazin, NHGRI
- 9:00 - 9:45 a.m. **Keynote Lecture** (Franklin Ballroom)
Data Integration: Genome x Transcriptome x EMR
Nancy Cox, Vanderbilt University
- 9:45 - 10:05 a.m. *Coffee break*
- 10:05 - 12:05 p.m. **Scientific Session 1: Common Disease** (Franklin Ballroom)
An Epigenomic Basis for Insulin Resistance
Evan Rosen, Harvard Medical School
Identifying Dysregulated Genes in Autoimmune Disease
Chris Cotsapas, Yale Medical School
Enhancers: Regulatory Control Elements in Health and Disease
J. Wesley Pike, University of Wisconsin
Mapping the Epigenetic Basis of Kidney Disease
Katalin Susztak, University of Pennsylvania
- 12:15 - 1:30 p.m. *Lunch* (Osgood building dining room)

Monday, June 29th (Day 1, cont'd)

- 1:30 – 3:30 p.m. **Workshop Session 1: Online Resources and Tools** (Franklin Ballroom)
ENCODE Data Portal: Demo & Hands-on Tutorial
Eurie Hong, Stanford University
ENCODE Data in the UCSC Browser: Demo & Hands-on Tutorial
Pauline Fujita, University of California, Santa Cruz
- 3:30 - 3:50 p.m. *Coffee Break*
- 3:50 - 5:50 p.m. **Workshop Session 2: Online Resources and Tools** (Franklin Ballroom)
ENCODE Data in ENSEMBL Browser: Demo & hands-on Tutorial
Emily Perry, European Bioinformatics Institute
Tools for annotating genetic variants: Demo & hands-on Tutorials
Emily Perry, European Bioinformatics Institute
Jill Moore, University of Massachusetts Medical School
- 6:00 - 7:15 p.m. *Dinner* (Osgood building dining room)
- 7:30 – 8:30 p.m. **Lightning talks I** (Franklin Ballroom)
9 talks (6 minutes each total) selected from abstracts
- 8:30 - 10:00 p.m. **Welcome Reception and Posters** (Pony Express Patio)
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Tuesday, June 30th (Day 2)

- 7:00 – 8:20 a.m. *Breakfast* (Osgood building dining room)
- 8:30 – 9:15 a.m. **Keynote Lecture** (Franklin Ballroom)
Selection and Function of Signal-Dependent Enhancers
Christopher Glass, University of California San Diego
- 9:15 - 10:15 a.m. **Scientific Session 2: Cancer, Regulation, and Mutation** (Franklin Ballroom)
Cancer, Genetic Predispositions, and Chromatin Architecture
Mathieu Lupien, University of Toronto
Mining the genome to understand epigenetic abnormalities in cancer
and enhance development of new therapeutic approaches
Stephen Baylin, Johns Hopkins University
- 10:15 - 10:35 a.m. *Coffee break*

Tuesday, June 30th (Day 2, cont'd)

- 10:35 - 12:05 p.m. **Scientific Session 2: Cancer, Regulation, and Mutation cont'd**
- Reconstructing cancer stem cells from their chromatin landscapes
Bradley Bernstein, Harvard Medical School
 - Epigenetic control of genetics: The impact of epigenome on mutation
Shamil Sunyaev, Harvard Medical School
 - Inference of 3D Regulatory Interactions from 2D Genomic Data
Katherine Pollard, Gladstone Institutes, UCSF
- 12:15 - 1:30 p.m. *Lunch* (Osgood building dining room)
- 1:30 - 3:30 p.m. **Workshop Session 3: ENCODE Uniform Processing Pipelines**
- Uniform processing pipelines: Demo & Hands-on tutorials
J. Seth Strattan and Ben Hitz, Stanford University
- 3:30 - 3:50 p.m. *Coffee break*
- 3:50 - 5:50 p.m. **Workshop Session 4: Advanced Analysis Tools**
- Advanced analysis approaches and tools: Hands-on tutorials
(Moderated by Feng Yue, Penn State University)
 - ENCODE Encyclopedia and Factor Book
Michael Pucaro, University of Massachusetts
 - ENCODE Element Browser and 3D Genome Browser
Yanli Wang, Penn State University
 - Chromatin Mark Segmentation: ChromHMM Tutorial
Luca Pinello, Dana-Farber Cancer Institute
 - Tutorial: Visualizing ENCODE Data with Self Organizing Maps (SOMs)
Camden Jansen, University of California, Irvine
- 6:00 - 7:15 p.m. *Dinner*
- 7:30 – 8:30 p.m. **Lightning talks II** (Franklin Ballroom)
- 9 talks (6 minutes each, w/o questions) selected from abstracts
- 8:30 – 10:00 p.m. **Wine and Cheese Reception with Posters** (Pony Express patio)
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Wednesday, July 1st (Day 3)

7:30 – 8:50 a.m. *Breakfast* (Osgood building dining room)

9:00 – 11:30 a.m. **Scientific Session 3: Integrative analysis and Mouse ENCODE**

Title TBD

Stephen Chanock, National Cancer Institute

Revisiting the human and mouse transcriptomes

Tom Gingeras, Cold Spring Harbor Laboratories

10:00 – 10:30 a.m. *Coffee break and time for checkout*

Integrative Analysis of Human and Mouse Regulomes

John Stamatoyannopoulos, University of Washington

Title TBD

Richard Myers, Hudson Alpha Institute

11:30 - 12:30 p.m. **Wrap up: Feedback from participants on ENCODE Resources and Outreach** (Franklin Ballroom)

Elise Feingold, NHGRI

Dan Gilchrist, NHGRI

Mike Pazin, NHGRI

12:30 p.m. *Adjourn*
