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)

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)
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