



**WELLCOME
GENOME
CAMPUS**

**ADVANCED
COURSES AND
SCIENTIFIC
CONFERENCES**

Genome Informatics

19-22 September 2016

**Wellcome Genome Campus Conference Centre,
Hinxton, Cambridge, UK**

Conference Programme

Monday, 19 September

- | | |
|---------------|--|
| 13:00 – 14:50 | Registration with lunch |
| 14:50 – 15:00 | Welcome and Introductions |
| 15:00 – 16:20 | Session 1: Personal and Medical Genomics
<i>Session chairs: Jessica Chong & Meromit Singer</i> |
| | 15:00 Transforming gene discovery by radically open data sharing
<i>Jessica Chong</i>
<i>University of Washington, USA</i> |
| | 15:20 Selected short talk |
| | 15:40 Selected short talk |
| | 16:00 Selected short talk |
| 16:20 – 17:00 | Afternoon Tea |
| 17:00 – 18:20 | Session 1 continued |
| | 17:00 Identifying novel drivers of CD8 "exhaustion" in tumors
<i>Meromit Singer</i>
<i>Broad Institute, USA</i> |
| | 17:20 Selected short talk |
| | 17:40 Selected short talk |
| | 18:00 Selected short talk |
| 18:20 – 19:00 | Drinks reception |
| 19:00 | Dinner |

Tuesday, 20 September

- | | |
|---------------|--|
| 09:00 – 10:20 | Variant Discovery and Genome Assembly
<i>Session chairs: Jared Simpson & Alicia Oshlack</i> |
| | 09:00 Analysis methods for nanopore sequencing data
<i>Jared Simpson</i>
<i>Ontario Institute for Cancer Research, USA</i> |

	09.20 Selected short talk
	09.40 Selected short talk
	10.00 Selected short talk
10:20 - 11:00	Morning Coffee
11:00 – 12:20	Session 2 continued
	11:00 Finding cryptic variants using assembled data <i>Alicia Oshlack</i> <i>Murdoch Childrens Research Institute, Australia</i>
	11.20 Selected short talk
	11.40 Selected short talk
	12:00 Selected short talk
12:20 - 14:00	Lunch
14:00 – 15:20	Session 3: Epigenomics and Non-Coding Genome <i>Session chairs: Katie Pollard & Anshul Kundaje</i>
	14:00 Decoding enhancer function with machine learning <i>Katie Pollard</i> <i>University of California San Francisco, USA</i>
	14:20 Selected short talk
	14:40 Selected short talk
	15:00 Selected short talk
15:20 – 16:00	Afternoon Tea
16:00 – 17:20	Session 3 continued
	16.00 Interpretable, integrative deep learning frameworks for regulatory genomics and epigenomics <i>Anshul Kundaje</i> <i>Stanford University School of Medicine, USA</i>
	16:20 Selected short talk
	16:40 Selected short talk
	17:00 Selected short talk
17:20 – 18:20	Keynote Lecture <i>Session chair:</i>
	Translating the Cancer Genome: computational tools inform therapeutic decisions <i>Elaine Mardis</i> <i>Washington University School of Medicine, USA</i>
18:20 – 19:30	Drinks reception and Poster session I (Odd numbers)
19:30	Dinner

Wednesday, 21 September

09:00 – 10:00

Keynote Lecture

Session chair:

New Genome Reference Structures
Richard Durbin
Wellcome Trust Sanger Institute, UK

10:00 – 11:20

Session 4: Data Curation and Visualization

Session chairs: Kim Pruitt & Alex Bateman

10:00 NCBI Graphical Display Tools – Hidden in Plain Sight
Kim Pruitt
National Institutes of Health, USA
10:20 Selected short talk
10:40 Selected short talk
11:00 Selected short talk

11:20 - 11:50

Morning Coffee

11:50 – 13:10

Session 4 continued

11:50 Biocuration at EBI
Alex Bateman
EMBL-EBI, UK
12.10 Selected short talk
12.30 Selected short talk
12.50 Selected short talk

13:10 – 14:30

Lunch

14:30 – 15:50

Session 5: Transcriptomics, Alternative Splicing and Gene Predictions

Session chairs: Davis McCarthy & Chloe Villani

14:30 Understanding transcriptional regulation in human induced pluripotent stem cells from population and single-cell data
Davis McCarthy
EMBL-EBI, UK
14:50 Selected short talk
15:10 Selected short talk
15:30 Selected short talk

15:50 – 16:30

Afternoon Tea

16:30 – 17:50

Session 5 continued

16:30 Dissecting the human immune system in health and disease: insights from unbiased genomics strategies
Chloe Villani
Broad Institute, USA
16:50 Selected short talk
17:10 Selected short talk
17:30 Selected short talk

17:50 – 19:00 **Drinks reception and Poster session II** (Even numbers)

19:00 **Conference Dinner**

Thursday, 22 September

09:00 – 10:20 **Session 6: Comparative, Evolutionary, and Metagenomics**
Session chairs: Curtis Huttenhower & Alicia Martin

09:00 Functional profiling of metagenomes, metatranscriptomes and
 strains in the next stages of the NIH Human Microbiome
 Project

Curtis Huttenhower

Harvard School of Public Health, USA

09:20 Selected short talk

09:40 Selected short talk

10:00 Selected short talk

10:20 - 11:00 **Morning Coffee**

11:00 – 12:20 **Session 6 continued**

11:00 Fine-scale identity-by-descent and birth records in Finland
 provide insights into recent population history

Alicia Martin

Massachusetts General Hospital, USA

11:20 Selected short talk

11:40 Selected short talk

12:00 Selected short talk

12:20 – 13:30 **Lunch**

13:30 **Close of conference,**
coaches depart to Cambridge, Stansted and Heathrow airports