

# Annual Symposium of the Center for Computational, Evolutionary and Human Genomics

### MONDAY, FEBRUARY 29

8:00 – 9:00 AM Breakfast and Check-in

#### SESSION ONE

9:00 – 9:15 AM	Marcus Feldman // Opening Remarks
9:15 – 9:40 AM	Shripad Tuljapurkar // Finding the E in Heritability
9:40 – 10:05 AM	Christina Curtis // Quantifying and predicting tumor evolutionary dynamics
10:05 - 10:20 AM	Arbel Harpak // Effects of mutation rate and epistasis on the distribution of allele
	frequencies in humans
10:20 – 10:40 AM	
10:40 – 11:30 AM	Christine Kenneally // Keynote: The Invisible History of the Human Race
11:30 - 12:30 PM	Lunch

#### SESSION TWO

12:30 – 12:55 PM	Mattias Jakobsson // The genomic footprints of Neolithic Europeans
12:55 – 1:20 PM	Molly Przeworski // Of mice, men and birds: Recombination with and without PRDM9
1:20 – 1:35 PM	Hugo Hilton // What functional factors underlie the adaptive introgression of archaic
	immune system genes into modern humans?
1:35 – 1:55 PM	Coffee Break
1:55 – 2:20 PM	Tandy Warnow // Genome-scale estimation of the Tree of Life
2:20 – 2:35 PM	Kelley Harris // The genetic cost of Neanderthal introgression
2:35 - 3:00 PM	Panel Discussion: Building a Career in Academia

#### SESSION THREE

3:00 - 3:25 PM	John Novembre // Testing directional selection on polygenic traits using ancient DNA
3:25 - 3:50 PM	Yaniv Erlich // Genetic media
3:50 - 4:05 PM	Avanti Shrikumar // Not just a black box: Interpretable deep learning for genomics and
	epigenomics
4:05 – 4:25 PM	Coffee Break
4:25 - 4:50 PM	Martin Blaser // Role of the early life microbiota in metabolic and immunological
	development
4:50 - 5:05 PM	Ben Callahan // Improving the accuracy and resolution of microbiome analysis
5:05 - 6:30 PM	Poster Session and Reception

# TUESDAY, MARCH 1 8:00 – 9:00 AM | Brea

8:00 - 9:00 AM	Breakfast and Check-in
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9:00 – 9:25 AM	Rasmus Nielsen // The genetic basis of physiological adaptation in humans
9:25 – 9:50 AM	Dana Pe'er // Finding structure in single cell transcriptomics
9:50 – 10:05 AM	Can Cenik // Integrative analysis of RNA, translation and protein levels reveals distinct
	regulatory variation across humans
10:05 – 10:25 AM	Coffee Break
10:25 - 10:50 AM	Nicholas Katsanis // One plus one equals zero
10:50 – 11:15 AM	Hunter Fraser // Pooled ChIP-seq identifies QTLs affecting transcription factor binding and histone modification
11:15 – 11:30 AM	Linda Szabo // Statistical discovery of circular and linear RNA splicing
11:30 – 12:55 PM	Lunch presented by SAP Personalized Medicine

#### SESSION FIVE

12:55 – 1:20 PM	Michael Eisen // What makes an enhancer an enhancer?
1:20 – 1:35 PM	Patrick Dolan // Dissecting population structure and fitness in adapting dengue virus
	populations
1:35 - 1:55 PM	populations Coffee Break
1:55 – 2:20 PM	Tadashi Fukami // Nectar microbes: Towards the genomics of community assembly
2:20 – 2:35 PM	Dvir Aran // Systematic pan-cancer analysis of tumour purity
2:35 – 3:00 PM	Panel Discussion: Opportunities and Challenges Starting a Genomics Company

#### SESSION SIX

Uma Ramakrishnan // Genetic and genomic data identify population units for wild tigers
in the Indian subcontinent
Nicole King // Choanoflagellate colonies, bacterial signals, and animal origins
Trevor Martin // Coordinated evolution of gene expression across 309 marine microbial
species
Coffee Break
Stephen Palumbi // Personalized medicine for corals during climate change
Ryan Haasl // Real-time invasion dynamics and genetics of Japanese hop (Humulus
japonicus) along its frontal wave of expansion in southwestern Wisconsin
Cody M. Sam // Closing Remarks

## WEDNESDAY, MARCH 2

9:30 – 11:15 AM AncestryDNA Seminar: Genomics at Scale (Registration required)