Ascona Workshop 2015

Statistical Learning of Biological Systems from Perturbations

Conference Center Monte Verità, Ascona, Switzerland, May 31 – June 5, 2015 PROGRAM (last update 2015-05-29)

Sunday, May 31	15:00 – 19:00	ARRIVAL and CHECK-IN	
	18:00 – 19:00	Welcome drinks	
Sur	19:00	Dinner	
Monday, June 1	8:45 – 9.00	Welcome	
	9:00 – 10.00	Michael Boutros	Mapping genetic interactions across multiple phenotypes and signaling states
	10:00 – 10:30	Coffee break	
	10:30 – 11:00 11:00 – 11:30	Fabian Schmich Martin Pirkl	Deconvoluting off-target confounded RNA interference screens Modeling protein signaling pathways with Boolean Nested Effect Models
	11:30 - 12:00	Ke Yuan	Capturing rewiring events during network evolution underlying dynamic biological processes
	12:15	Lunch Unstructured time	
	15:30 – 16:30	Bernd Fischer	Inferring directional genetic interactions from combinatorial, multi-parametric data
	16:30 – 17:00	Coffee break	
	17:00 - 17:30 17:30 - 18:00 18:00 - 18:30	Jean Yee Hwa Yang Jack Kuipers Simon Anders Dinner	A multi-step classifier identifies cohort heterogeneity in cancers leading to improved accuracy of prognostic biomarkers Cancer progression with Bayesian inference for acyclic digraphs Genomics of ex-vivo drug sensitivity in primary tumour cells
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	9:00 – 10:00	Brenda Andrews	Genetic networks: general properties and complex phenotypes
	10:00 – 10:30	Coffee break	
	10:30 – 11.00	Alena van Bömmel	Inferring the underlying null model in three-way contingency tables with application to transcription factor co-occurrence
	11:00 – 11:30	Mohammad Sadeh	Estimating causal effect strength between chromatin modifiers and histone modifications
Tuesday, June 2	11:30 – 12:00	Chenchen Zhu	Multi-omics data Integration identifies causal mediators of global phenotypes
	12:15	Lunch Unstructured time	
	15:00 – 16:00	Anne Carpenter	Morphological profling for targeting diseases and characterizing compounds
	16:00 – 16:30	Coffee break	
	16:30 – 18:30	POSTER SESSION	
	19:00	Dinner	

	9:00 – 10:00	Roderick Beijersbergen	Pooled shRNA screening: from large scale perturbation to single genes as hits
Wednesday, June 3	10:00 – 10:30	Coffee break	
	10:30 – 11:00 11:00 – 12:00	Ivo Kwee Susan Holmes	Removing batch effects and unwanted variation in gene expression data using nearest-neighbour matched sampling Statistical challenges in the study of stability in the human microbiome
	12:15	Lunch	
	13:45	EXCURSION	Hike in the Verzasca Valley
	19:00	Dinner	Ristorante Grotto Broggini, Via S. Materno, 6616 Losone
	9:00 – 10:00	Achim Tresch	Factor graphs for the modeling of single cell time lapse movies
	10:00 – 10:30	Coffee break	
	10:30 - 11.00	Sven Bergmann	Fast and rigorous computation of gene and pathway scores from SNP-based summary statistics
	11:00 – 11:30	Daniel Marbach	Cell type-specific regulatory circuits reveal modules disrupted in complex diseases Multi-omics integration reveals local and distal genetic control of chromatin states and gene expression
e 4	11:30 – 12:00	Judith Zaugg	
Thursday, June 4	12:15	Lunch Unstructured time	
	16:00 – 16:30	Coffee break	
	16:30 – 17.30	George Michailidis	Reconstructing regulatory networks by combining perturbation screens and steady state
	17:30 – 18:00	Matthew McCall	
	18:00 – 18:30	Mattia Pelizzola	The epigenetic code: experimental and computational approaches to unravel the interplay between multiple epigenetic and regulatory layers
	19:00	Dinner	
Friday, June 5	9:00 – 10:00 10:00 – 10.30	Marloes Maathuis Dorothee Childs	Advances in causal inference with applications to systems biology Analysis of thermal proteome profiling experiments
	10:30 – 11.00	Coffee break	
	11:00 – 12:00	Lars Steinmetz	Systems genetics approaches to health and disease
	12:00 – 12:15	CSF Award	
	12:15	Lunch	
		DEPARTURE	