## Ascona Workshop 2011

## Statistical Challenges and Biomedical Applications of Deep Sequencing Data

Centro Stefano Franscini, Monte Verità, Ascona, Switzerland, June 5 – 10, 2011 PROGRAM

Sunday, June 5		ARRIVAL and CHECK-IN
	18:00 – 19:00	Welcome drinks Dinner
	19:00	Dinner

Monday, June 6	9:15 – 9.30	Welcome	
	9:30 - 10.30	Michael Brudno	Discovering INDEL and Copy Number Genomic Variation from Paired-end Sequencing
	10:30 - 11:00	Coffee break	
	11:00 – 11:30	Margaret Taub	The Effects of Low-Level Choices on Detecting Genetic Variants with High-Throughput Se quencing
	11:30 – 12:00	Moritz Gerstung	A Test for Low-frequency Mutations in Ultra-deep Sequencing Data of Heterogeneous Tumors
	12:15	Lunch Unstructured time	
2	15:45 – 16:30	Coffee break	
	16:30 – 17.30	Ben Raphael	Characterization of Somatic Mutations in Cancer
	17:30 – 18:00	Daniel Stekhoven	Causal Gene Ranking
	18:00 – 18:30	Daniela Beisser	Robust Subnetworks: Computing Confidence Values for Functional Modules
	19:00	Dinner	

9:00 – 10:00 10:00 – 10:30	Chris Greenman Coffee break	Inferring the Evolution of Cancer Genomes
10:30 – 11.00	Irina Ostrovnaya	Statistical Challenges in Testing Clonal Relatedness of Tumors Using their Genomic Profiles
11:00 – 11:30	Kaspar Hansen	Analysis of Shotgun Bisulfite Sequencing of Cancer Samples
11:30 – 12:00	Volker Roth	HIV Haplotype Inference using a Constraint-based Dirichlet Process Mixture Model
12:15	Lunch Unstructured time	
15:00 – 16:00 16:00 – 16:30 16:30 – 18.30 19:00	Willi Gruissem  Coffee break  POSTER SESSION  Dinner	Integrating Leaf Growth and Circadian Regulation – A Systems Approach
	10:00 - 10:30 10:30 - 11.00 11:00 - 11:30 11:30 - 12:00 12:15 15:00 - 16:00 16:00 - 16:30 16:30 - 18.30	10:00 – 10:30

Wednesday, June 8	9:00 - 10:00 10:00 - 10:30 10:30 - 11:00	<b>John Marioni</b> <i>Coffee break</i> Simon Anders	The Regulation of Gene Expression Levels in Mammals  Statistical Methods for Comparative RNA-Seq Studies
	11:00 - 12:00	Wolfgang Huber	Applications to Transcriptomics – Characterisation and
	12:15 14:45	Lunch EXCURSION DINNER	Functions of Non-coding RNAs
	9:00 – 10:00	Amalio Telenti	Issues on the Joint Analysis of Two Genomes: the Viral Infection of the Cell
	10:00 - 10:30	Coffee break	
	10:30 – 11.00	Ingo Ruczinski	Some Study Designs to Improve Statistical Power in Association Tests for Rare Variants
	11:00 – 11:30	Brooke L. Fridley	Association Testing in Sequencing Studies: A Novel Framework
, June 9	11:30 – 12:00	Iuliana Ionita-Laza	A Unified Framework for the Statistical Analysis of Rare Variant Sequence Data, with Applications to Autism and Study Design
Thursday, June 9	12:15	Lunch Unstructured time	
	16:00 – 16:30	Coffee break	
	16:30 – 17.30	Mark Robinson	Integrative Analyses of Epigenome Sequencing Data
	17:30 – 18:00	Erik Van Zwet	The Effect of Prenatal Famine Exposure on DNA Methylation
	18:00 – 18:30 19:00	Discussion <i>Dinner</i>	
le 10	9:00 – 9:30	Edoardo Missiaglia	Measuring MicroRNA Expression by NGS
	9:30 – 10:00	Hubert Rehrauer	Normalization and Analysis of ChIP-seq of Histone Modifications that Cover Long Stretches and are Prevalent in the Genome
Jur	10:00 - 10.30	Coffee break	
Friday, June 10	10:30 – 11:30 11:30 – 12:00	<b>Philipp Bucher</b> <i>CSF Award</i>	What ChIP-Seq Data Tell Us About Gene Regulation
	12:00	Lunch	

DEPARTURE