Wed Aug 11, 2010

17:00 - 19:00 Registration

Where: Reception desks - Floor 0

Thu Aug 12, 2010

08:00 - 18:00 Registration

Where: Reception desks - Floor 0

08:45 - 09:00 Conference Welcome

Where: Auditorium I - Floor 0

09:00 - 10:00 KEYNOTE: Isaac Kohane

Where: Auditorium I - Floor 0

Description:

Preventing the incidentalome and personalizing medicine through instrumentation of the healthcare enterprise

10:00 - 10:20 Paper Presentation

Where: Auditorium I - Floor 0

Description:

HLA type inference via haplotypes identical by descent. Manu Setty, Alexander Gusev and Itsik Pe'er

10:20 - 10:40 Paper Presentation

Where: Auditorium I - Floor 0

Description:

The Clark Phase-able Sample Size Problem: Long-range Phasing and Loss of Heterozygosity in GWAS. Bjarni Halldorsson, Derek Aguiar, Ryan Tarpine and Sorin Istrail

10:40 - 11:00 Break

Where: Main hall - Floor 1

11:00 - 11:20 Highlights Presentation

Where: Auditorium I - Floor 0

Description:

Deciphering the Swine-flu pandemics of 1918 and 2009. Richard Goldstein, Mario dos Reis, Asif Tamuri and Alan Hay

11:20 - 11:40 Paper Presentation

Where: Auditorium I - Floor 0

Description:

Admixture Aberration Analysis: Application to mapping in admixed population using pooled DNA. Sivan Bercovici and Dan Geiger

11:40 - 12:00 Paper Presentation

Where: Auditorium I - Floor 0

Description:

Subnetwork State Functions Define Dysregulated Subnetworks in Cancer. Salim A. Chowdhury, Rod K. Nibbe, Mark R. Chance and Mehmet Koyuturk

12:00 - 13:30 Lunch

Where: Espaço Tejo Restaurant

13:30 - 14:30 KEYNOTE: Mona Singh

Where: Auditorium I - Floor 0

Description: Towards the dynamic interactome

14:30 - 14:50 Paper Presentation

Where: Auditorium I - Floor 0

Description:

An Algorithmic Framework for Predicting Side-Effects of Drugs. Nir Atias and

Roded Sharan

14:50 - 15:10 Paper Presentation

Where: Auditorium I - Floor 0

Description:

Algorithms for Detecting Significantly Mutated Pathways in Cancer. Fabio Vandin,

Eli Upfal and Benjamin Raphael

15:10 - 15:30 Paper Presentation

Where: Auditorium I - Floor 0

Description:

Extracting between-pathway models from E-MAP interactions using expected

graph compression. David Kelley and Carl Kingsford

15:30 - 15:50 Break

Where: Main hall - Floor 1

15:50 - 16:10 Paper Presentation

Where: Auditorium I - Floor 0

Description:

Incremental Signaling Pathway Modeling by Data Integration. Geoffrey Koh, David

Hsu and P. S. Thiagarajan

16:10 - 16:30 Paper Presentation

Where: Auditorium I - Floor 0

Description:

Simultaneous Identification of Causal Genes and Dys-regulated Pathways in

Complex Diseases. Yoo-Ah Kim, Stefan Wuchty and Teresa Przytycka

16:35 - 18:30 SPECIAL PANEL: Genomics in Medicine

Where: Auditorium I - Floor 0

Description:

SPECIAL PANEL: Genomics in Medicine (Isaac Kohane - Moderator). Confirmed

participants: Chris Bakal, Simon Kasif, David Gifford, Doron Lancet, Klaus Lindpainter and Eitan

Rubin

18:30 - 20:00 Reception

Where: Main hall - Floor 1

19:00 - 20:30 Poster Session A

Where: Poster area - Floors 0 and 1

Fri Aug 13, 2010

09:00 - 09:20 Paper Presentation

Where: Auditorium I - Floor 0

Description:

Gapped Spectral Dictionaries and Their Applications for Databases Searches of Tandem Mass Spectra. Kyowon Jeong, Sangtae Kim, Nuno Bandeira and Pavel Pevzner

09:20 - 09:40 Paper Presentation

Where: Auditorium I - Floor 0

Description:

Proteome Coverage Prediction for Integrated Proteomics Datasets. Manfred Claassen, Ruedi Aebersold and Joachim M. Buhmann

09:40 - 10:00 Paper Presentation

Where: Auditorium I - Floor 0

Description:

Hierarchical Generative Biclustering for MicroRNA Expression Analysis. José Caldas and Samuel Kaski

10:00 - 10:20 Break

Where: Main hall - Floor 1

10:20 - 11:20 KEYNOTE: David Bartel

Where: Auditorium I - Floor 0

Description: MicroRNAs and other small regulatory RNAs

11:20 - 11:40 Paper Presentation

Where: Auditorium I - Floor 0

Description:

Discovering Regulatory Overlapping RNA Transcripts. Timothy Danford, Robin

Dowell and David Gifford

11:40 - 12:00 Paper Presentation

Where: Auditorium I - Floor 0

Description:

Time and space efficient RNA-RNA interaction prediction via sparse folding. Raheleh Salari, Mathias Mohl, Sebastian Will, S. Cenk Sahinalp and Rolf Backofen

12:00 - 13:30 Lunch

Where: Espaço Tejo Restaurant

13:30 - 14:30 KEYNOTE: Norbert Perrimon

Where: Auditorium I - Floor 0

Description: Global analyses of signal transduction pathways

14:30 - 14:50 Highlights Presentation

Where: Auditorium I - Floor 0

Description:

Allegro: Analyzing expression and sequence in concert to discover regulatory

programs. Ron Shamir, Yonit Halperin, Chaim Linhart and Igor Ulitsky

14:50 - 15:10 Highlights Presentation

Where: Auditorium I - Floor 0

Description:

A Self-Regulatory System of Interlinked Signaling Feedback Loops Controls Mouse Limb Patterning. Felix Naef, Rolf Zeller, Jean-Denis Benazet and Mirko Bischofberger

15:10 - 15:30 Highlights Presentation

Where: Auditorium I - Floor 0

Description:

Automated High-Dimensional Flow Cytometric Data Analysis. Saumyadipta Pyne, Xinli Hu, Kui Wang, Elizabeth Rossin, Tsung-I Lin, Lisa Maier, Clare Baecher-Allan, Geoffrey McLachlan, Pablo Tamayo, David Hafler, Philip De Jager and Jill Mesirov

15:30 - 15:50 Break

Where: Main hall - Floor 1

15:50 - 16:10 Paper Presentation

Where: Auditorium I - Floor 0

Description:

Predicting nucleosome positioning using multiple evidence tracks. Sheila Reynolds, Zhiping Weng, Jeff Bilmes and William Stafford Noble

16:10 - 16:30 Paper Presentation

Where: Auditorium I - Floor 0

Description:

SubMAP: Aligning metabolic pathways with subnetwork mappings. Ferhat Ay and

Tamer Kahveci

16:35 - 18:00 SPECIAL PANEL: Regulatory RNAs

Where: Auditorium I - Floor 0

Description:

SPECIAL PANEL: Regulatory RNAs (David Bartel - Moderator). Confirmed

Participants: Cecilia Arraiano, Jan Gorodkin, Philipp Kapranov and Norbert Perrimon

18:00 - 19:00 Business Meeting

Where: Room 1 - Floor 0

18:30 - 20:00 Poster Session B

Where: Poster area - Floors 0 and 1

Sat Aug 14, 2010

09:00 - 10:00 KEYNOTE: Philipp Kapranov

Where: Auditorium I - Floor 0

Description:

Direct sequencing of DNA and RNA using Helicos Single Molecule Sequencing to unravel biological questions

10:00 - 10:20 Paper Presentation

Where: Auditorium I - Floor 0

Description:

naiveBayesCall: An efficient model-based base-calling algorithm for high-throughput sequencing. Wei-Chun Kao and Yun S. Song

10:20 - 10:40 Paper Presentation

Where: Auditorium I - Floor 0

Description:

Poisson Margin Test for Normalisation Free Significance Analysis of NGS Data. Adam Kowalczyk, Justin Bedo, Thomas Conway and Bryan Beresford-Smith

10:40 - 11:00 Break

Where: Main hall - Floor 1

11:00 - 11:20 Paper Presentation

Where: Auditorium I - Floor 0

Description:

A novel abundance-based algorithm for binning metagenomic sequences using I-tuples. Yu-Wei Wu and Yuzhen Ye

11:20 - 11:40 Paper Presentation

Where: Auditorium I - Floor 0

Description:

Genovo: De Novo Assembly For Metagenomics. Jonathan Laserson, Vladimir Jojic and Daphne Koller

11:40 - 12:00 Paper Presentation

Where: Auditorium I - Floor 0

Description:

Pathway-Based Functional Analysis of Metagenomes. Sivan Bercovici, Itai Sharon, Ron Pinter and Tomer Shlomi

12:00 - 13:30 Lunch

Where: Espaço Tejo Restaurant

13:30 - 13:50 Paper Presentation

Where: Auditorium I - Floor 0

Description:

Accurate estimation of expression levels of homologous genes in RNA-seq experiments. Bogdan Pasaniuc, Noah Zaitlen and Eran Halperin

13:50 - 14:10 Paper Presentation

Where: Auditorium I - Floor 0

Description:

Inference of Isoforms from Short Sequence Reads. Jianxing Feng, Wei Li and Tao Jiang

14:10 - 14:30 Paper Presentation

Where: Auditorium I - Floor 0

Description:

IDBA - A Practical Iterative de Bruijn Graph De Novo Assembler. Yu Peng, Henry C. M. Leung, SM Yiu and Francis Chin

14:30 - 14:50 Paper Presentation

Where: Auditorium I - Floor 0

Description:

Seed design framework for mapping AB SOLiD reads. Laurent Noé, Marta Gîrdea and Gregory Kucherov

14:50 - 15:10 Paper Presentation

Where: Auditorium I - Floor 0

Description:

Compressing genomic sequence fragments using SlimGene. Christos Kozanitis,

Chris Saunders, Semyon Kruglyak, Vineet Bafna and George Varghese

15:10 - 15:30 Paper Presentation

Where: Auditorium I - Floor 0

Description:

MoGUL: Detecting Common Insertions and Deletions in a Population. Seunghak

Lee, Eric Xing and Michael Brudno

15:30 - 15:50 Break

Where: Main hall - Floor 1

15:50 - 16:50 Selected Poster Presentations

Where: Auditorium I - Floor 0

Description:

Daniela Nitsch, Joana P. Gonçalves, Fabian Ojeda and Yves Moreau. Prioritizing Candidate Genes by Network Analysis of Differential Expression using Machine Learning Approaches Marina Sirota, Marc A. Schaub, Serafim Batzoglou, William H. Robinson and Atul J. Butte. Autoimmune Disease Classification by Inverse Association with SNP Alleles Ewa Szczurek, Florian Markowetz, Irit Gat-Viks, Przemyslaw Biecek, Jerzy Tiuryn and Martin Vingron. Gene regulation re-wired upon DNA damage. Michael Schnall-levin, Yong Zhao, Norbert Perrimon and Bonnie Berger. Evidence for Widespread microRNA Targeting in Drosophila Coding Regions Nuno Mendes, Ana Freitas, Ana Vasconcelos, Marie-France Sagot. CRAVELA: a framework to identify and evaluate miRNA regulatory modules Glenn Lawyer, Andre Altmann, Alexander Thielen and Thomas Lengauer. Mutational pathways to reverse transcriptase inhibitor resistance in HIV

16:50 - 17:00 Leave for Activities and Banquet (Oceanarium)

Sun Aug 15, 2010

09:00 - 10:00 KEYNOTE: Cecilia Arraiano

Where: Auditorium I - Floor 0

Description: Post-transcriptional control of gene expression: RNA dictates the rules!

10:00 - 10:20 Paper Presentation

Where: Auditorium I - Floor 0

Description:

On the Genealogy of Asexual Diploids. Fumei Lam, Charles H. Langley and Yun S.

Song

10:20 - 10:40 Paper Presentation

Where: Auditorium I - Floor 0

Description:

Generalized Buneman pruning for inferring the most parsimonious multi-state phylogeny. Navodit Misra, Guy Blelloch, R Ravi and Russell Schwartz

10:40 - 11:00 Break

Where: Main hall - Floor 1

11:00 - 11:20 Paper Presentation

Where: Auditorium I - Floor 0

Description:

Alignment-Free Phylogenetic Reconstruction. Constantinos Daskalakis and

Sebastien Roch

11:20 - 11:40 Highlights Presentation

Where: Auditorium I - Floor 0

Description:

Genomic DNA k-mer spectra: Models and modalities. Benny Chor, David Horn,

Yaron Levy, Nick Goldman and Tim Massingham

11:40 - 12:00 Highlights Presentation

Where: Auditorium I - Floor 0

Description:

Distinguishing direct versus indirect transcription factor-DNA interactions. Raluca

Gordan, Alexander Hartemink and Martha Bulyk

12:00 - 13:30 Lunch

Where: Free choice (see program for suggestions)

13:30 - 13:50 Paper Presentation

Where: Auditorium I - Floor 0

Description:

A new algorithm for improving the resolution of cryo-EM density maps. Michael

Hirsch, Bernhard Schoelkopf and Michael Habeck

13:50 - 14:10 Paper Presentation

Where: Auditorium I - Floor 0

Description:

Towards Automated Structure-based NMR Assignment. Richard Jang, Xin Gao and

Ming Li

14:10 - 14:30 Paper Presentation

Where: Auditorium I - Floor 0

Description:

A Markov Random Field Framework for Protein Side-Chain Resonance Assignment.

Jianyang Zeng, Pei Zhou and Bruce Donald

14:30 - 14:50 Break

Where: Main hall - Floor 1

14:50 - 15:10 Paper Presentation

Where: Auditorium I - Floor 0

Description:

Cactus Graphs for Genome Comparisons. Benedict Paten, Mark Diekhans, Jian Ma,

Bernard Suh and David Haussler

15:10 - 15:30 Paper Presentation

Where: Auditorium I - Floor 0

Description:

Leveraging Sequence Classification by Taxonomy-based Multitask Learning. Christian Widmer, Jose Miguel Leiva-Murillo, Yasemin Altun and Gunnar Rätsch

15:30 - 15:50 Paper Presentation

Where: Auditorium I - Floor 0

Description:

Dense Subgraphs with Restrictions and Applications to Gene Annotation Graphs. Barna Saha, Allison Hoch, Samir Khuller, Louiqa Raschid and Xiao-Ning Zhang

15:50 - 16:20 Awards Ceremony

Where: Auditorium I - Floor 0

16:20 - 16:20 Conference Adjourns

Where: Auditorium I - Floor 0