

Bioinformatics Graduate Program

5/8/14	Edward Trifonov Genome Diversity Center, Institute of Evolution, University of Haifa, Israel	Nucleosomes rediscovered. The strongest ones reside in centromeres. Host: Maxim Frank-Kamenetskii
5/1/14	Daniel Segre, PhD Associate Professor Bioinformatics Program, Department of Biology, Department of Biomedical Engineering and the Center for Synthetic Biology Boston University	Ecosystems Biology of Microbial Metabolism
4/24/14	Michael A. Fischbach, Assistant Professor Department of Bioengineering and Therapeutic Sciences University of California San Francisco	Insights from a global view of secondary metabolism: Small molecules from the human microbiota Mo Khalil http://www.fischbachgroup.org/michaelfischbach
4/17/14	Ned Wingreen Howard A. Prior Professor of the Life Sciences Department of Molecular Biology Princeton University	Why are chemotaxis receptors clustered but other receptors aren't? Pankaj Mehta http://www.princeton.edu/molbio/wingreenlab/research/
3/27/14	Sidharha Goyal Professor of Physics and Bioscience University of Toronto	Clonal structure of blood in primates is consistent with "neutral" dynamics Host: Pankaj Mehta

3/20/14	Erel Levine Assistant Professor of Physics Harvard University	Clash of populations: Host-Microbe Interactions in <i>C. elegans</i> Alex Lang, Mehta Lab https://www.physics.harvard.edu/people/facpages/levine
3/13/14	Kinga Hosszu & Cesar Berrios-Otero A Joint Presentation, Faculty of 1000	Sharing data and measuring research impact Host: Tom Tullius
2/27/14	Robert Hazen Research Scientist at the Carnegie Institution of Washington's Geophysical Laboratory Clarence Robinson Professor of Earth Science at George Mason University	The Co-Evolution of the Geosphere and Biosphere Scott Mohr http://hazen.gi.ciw.edu
2/20/14	Philippe Cluzel Gordon McKay Professor of Applied Physics Professor of Molecular and Cellular Biology Harvard University	Uncovering scaling laws to infer multi-drug response of resistant microbes and cancer cells Pankaj Mehta http://labs.mcb.harvard.edu/Cluzel/
2/6/14	Jané Kondev Professor of Physics Brandeis University	Action at a distance in the yeast nucleus Alex Lang, Mehta Lab http://www.brandeis.edu/dy
1/23/14	Zev Gartner, Assistant Professor Department of Pharmaceutical Chemistry University of California San Francisco	Building tissues to understand how tissues build themselves Mo Khalil http://gartnerlab.ucsf.edu/

Date	Speaker / Affiliation	Seminar Title
12/12/13	A.J. Marian Walhout Co-Director, Program in Systems Biology Professor, Program in Molecular Medicine University of Massachusetts Medical School Host: Trevor Siggers	Nutritional Regulatory Networks
12/5/13	Myles Brown, Professor, Department of Medicine Harvard Medical School Physician, Oncology, Brigham And Women's Hospital Professor of Medicine, Medical Oncology Dana-Farber Cancer Institute Host: Trevor Siggers	Genetics and Epigenetics of Hormone Dependence
11/21/13	Aik Choon Tan Associate Professor of Bioinformatics Program for the Evaluation of Targeted Therapy Division of Medical Oncology Dept. of Medicine, School of Medicine University of Colorado Host: Mark Kon	Translational Bioinformatics: Connecting Genes with Therapies
11/14/13	Stephen Michnick Integrated Genomics, University of Montreal Host: Pankaj Mehta	The hidden impulse of the incredible shrinking cell
11/7/13	Suzanne Gaudet Department of Cancer Biology Dana Farber Cancer Institute Department of Genetics, Harvard School of Medicine Host: Trevor Siggers	Leveraging cell-to-cell variability to understand TNF-induced transcription circuits

10/17/13	Dan Jarosz, Assistant Professor Chemical and Systems Biology Stanford School of Medicine Host: Mo Khalil	Environmentally regulated capacitors of evolutionary change
10/10/13	Marcus Noyes, Associate Research Scholar Lewis-Sigler Institute for Integrative Genomics Princeton Host: Mo Khalil	Comprehensive Screens and Computational Analysis of Cys2His2 Zinc Fingers Uncovers Complexities of DNA-Binding Specificity
9/12/13	Gregoire Altan-Bonnet, Computational Biologist Computational Biology Center Memorial Sloan Kettering Cancer Center	Computational modeling of error-correction through cell-to-cell communications in the immune system" Pankaj Mehta
2/21/13	Edward O'Brien, PhD NSF Postdoctoral Research Fellow Department of Chemistry, University of Cambridge	<i>Computational Biology Faculty Search Seminar</i> Understanding cotranslational protein folding at the molecular and cellular levels
2/14/13	Michael DeGiorgio, PhD NSF Postdoctoral Research Fellow Department of Integrative Biology, UC Berkeley	<i>Computational Biology Faculty Search Seminar</i> Using models of evolutionary history to understand human genetic variation
2/05/13	Sharon Aviran, PhD Assistant Researcher Center for Computational Biology, UC Berkeley	<i>Computational Biology Faculty Search Seminar</i> High-throughput RNA structure analysis from footprinting experiments
1/31/13	Kirill Korolev, PhD Pappalardo Postdoctoral Fellow, Physics Department, MIT	<i>Computational Biology Faculty Search Seminar</i> Ecology and evolution of cancerous tumors and expanding populations
1/24/13	Anshul Kundaje, PhD Research Scientist, Computational Biology Group, MIT	<i>Computational Biology Faculty Search Seminar</i> Heterogeneity and diversity of regulatory elements in the human genome
12/13/12	Mark Bathe Assistant Professor Biological Engineering MIT	Data-driven Physical Biology
12/06/12	Josh Shaevitz, Assistant Professor Physics and Genomics Princeton University	The biophysics of behavior from cellular patterns to animal movements

11/29/12	Arjun Raj, Assistant Professor Bioengineering University of Pennsylvania	Taking a picture of transcriptional activity along a single chromosome
11/15/12	Brian Athey, Chair Department of Computational Medicine and Bioinformatics University of Michigan Medical School	tranSMART: An Emerging Global Open Source Community for Data Sharing and Informatics Analysis
11/08/12	Alexandre V. Morozov Assistant Professor Department of Physics & Astronomy Rutgers University	Biophysical models of chromatin in yeast and <i>C. elegans</i>
11/01/12	Honghuang Lin Research Assistant Professor Boston University School of Medicine	A genetics approach to studying atrial fibrillation
10/25/12	Jason Bohland Assistant Professor Health Sciences Department Boston University	Data-driven studies of the large-scale molecular architecture of the mouse and human brain
10/18/12	Riccardo Papa Department of Biology University of Puerto Rico	The mesmerizing patterns of <i>Heliconius</i> butterflies wings
10/04/12	Trevor Siggers Assistant Professor of Biology Boston University	Importance of Protein Complexes in Gene Regulatory Logic
8/16/12	Yitzhak Pilpel Department of Molecular Genetics Weizmann Institute of Science Israel	Evolution of Gene Expression in Cancer and in Yeast
5/10/12	Nathaniel Cady, Assistant Professor College of Nanoscale Science & Engineering University at Albany	Mixed Signals: A systems approach to interrupting cellular signaling and behavior
5/3/12	Horacio Frydman, Assistant Professor Department of Biology & Associate Director, Vector Transmitted Infectious Diseases Core National Emerging Infectious Diseases Laboratories Institute, Boston University	From cellular mechanisms to evolutionary aspects of host-microbe interactions: the case of <i>Wolbachia</i> targeting stem cell niches

4/26/12	Katie Steiling, Assistant Professor of Medicine Boston University School of Medicine	Airway gene expression reflects a treatment-responsive COPD field of injury
4/19/12	Jennifer Reed, Assistant Professor Department of Chemical and Biological Engineering University of Wisconsin-Madison	Systems Approaches for Exploring and Exploiting Cellular Metabolism
3/22/12	Mark DePristo, Co-Director Genome Sequencing and Analysis Group Medical and Population Genetics Program Broad Institute	Under the hood of the 1000 Genomes Project
3/15/12	Manolis Kellis, Associate Professor Computer Science and Electrical Engineering Dept. MIT	Genomic and epigenomic signatures for interpreting complex disease
3/8/12	Zoltan Oltvai, Associate Professor of Pathology Assistant Director, Division of Molecular Diagnostics, University of Pittsburgh School of Medicine	The systems biology of cancer metabolism
3/1/12	Gustavo Stolovitzky, PhD IBM Computational Biology Center	Quantitative Predictive Modeling in Biological Research
2/23/12	Paul Francois, Assistant Professor of Physics McGill University	Physics of Evo-Devo
12/15/11	Eric Siggia, Professor Laboratory of Theoretical Condensed Matter Physics The Rockefeller University	Geometry, Epistasis and Developmental Patterning
12/8/11	Justin Kenney, Quantitative Biology Fellow Cold Spring Harbor Laboratory	Using deep sequencing to characterize the biophysical mechanism of a transcriptional regulatory sequence
12/1/11	John Higgins, Assistant Professor of Systems Biology Harvard University & MGH	Population Dynamics of Circulating Human Red Blood Cells in Health and Disease
11/17/11	Narenda Maheshri, Assistant Professor of Chemical Engineering MIT	A tale of two switches ... and targeted mutagenesis
11/10/11	Angela DePace, Assistant Professor Department of Systems Biology Harvard Medical School	Quantitative comparison of regulatory circuits across Drosophila species

10/27/11	Chris Gabel, Assistant Professor of Physiology and Biophysics BU School of Medicine	<u>Worm Neurosurgery</u> : Using femtosecond lasers to study neuronal damage in <i>C. elegans</i>
9/29/11	Sam Isaacson, Assistant Professor Department of Math and Statistics Boston University	Influence of Cellular Substructure on Gene Regulation and Expression
9/22/11	Junhyong Kim, Edmund J. and Louise W. Kahn Professor Department of Biology Co-Director, Penn Genome Frontiers Institute	Fuzzy thinking: single neuron variation in RNA state space
9/15/11	Martin Herbordt, Associate Professor Department of Electrical and Computer Engineering Boston University	Bio-Computing with Computational Accelerators
5/26/11	Alain Arneodo, PhD Laboratoire Joliot-Curie Laboratoire de Physique Ecole Normale Supérieure de Lyon	Replication domains are self-interacting structural chromatin units of human chromosomes
5/19/11	Xiaoxia Lin Assistant Professor of Chemical Engineering University of Michigan	Elucidating and Engineering Microbial Communities: Systems and Synthetic Biology Approaches
5/12/11	Jasmin Fischer, Ph.D. Microsoft Research Cambridge	Executable Biology: Successes & Challenges
5/5/11	Overview of the MGHPCC Research Computing Center	The Massachusetts Green High Performance Computing Center (MGHPCC) is a research computing data center that is being designed and built in Holyoke, MA by a collaboration comprising Boston University, MIT, Harvard, Northeastern, and University of Massachusetts, as well as the Commonwealth of Massachusetts

4/28/11	Ziv Bar-Joseph, Associate Professor Machine Learning Department and the Lane Center for Computational Biology School of Computer Science Carnegie Mellon University	Linking the Signaling Cascades and Dynamic Regulatory Networks Controlling Stress Response
4/20/11	Andrea De Martino, PhD Department of Physics (CNR-IPCF) Sapienza University of Rome	The free energy landscape of metabolism: the energy balance problem for reaction networks revisited
3/24/11	Douglas Densmore Richard and Minda Reidy Family Career Development Assistant Professor Department of Electrical Engineering Boston University	A Tool-Chain to Accelerate Synthetic Biological Engineering
3/10/11	Joao Xavier, Principal Investigator Program in Computational Biology Memorial Sloan Kettering Cancer Center	Conflict and cooperation in microbial pathogens
2/9/11	Pamela A. Silver, Professor Department of Systems Biology Harvard Medical School	Designing biological systems of health and sustainability
1/20/11	Pankaj Mehta, Assistant Professor Physics Department Boston University	Communication and collective behavior in unicellular organisms
12/16/10	Ran Kafri, Postdoctoral Research Fellow Kirschner/Lahav Laboratory Department of Systems Biology Harvard Medical School	Dynamics and regulation of protein mass production in cancer cells revealed by Ergodic Rate Analysis (ERA) of single cell immunofluorescence measurements
6/24/10	Mihai Pop, Assistant Professor Department of Computer Science and the Center for Bioinformatics / Computational Biology University of Maryland, College Park	Analyzing microbial communities through sequencing
6/22/10	Ichigaku Takigawa, PhD Institute for Chemical Research Kyoto University	Ranking metabolic pathways based on transcriptional co-regulation of enzyme-coding genes

5/21/10	John Spouge, MD, PhD Senior Investigator National Library of Medicine, NIH Adjunct Professor, BU Bioinformatics	A Rigorous Statistical Theory for Detecting Repeats in Biological Sequences
4/15/10	Nir Hacohen, PhD Center for Immunology and Inflammatory Diseases Harvard Medical School, Massachusetts General Hospital and the Broad Institute	Using RNAi to discover genes and networks of the immune system
3/25/10	Curtis Huttenhower, Assistant Professor of Computational Biology and Bioinformatics Department of Biostatistics Harvard School of Public Health	Supervised and unsupervised methods for large scale genomic data integration
3/18/10	Richard Lamont, Professor Department of Oral Biology College of Dentistry University of Florida	The Pathoecology of Porphyromonas gingivalis
3/11/10	Jin Billy Li Postdoctoral Fellow Harvard Medical School	Targeted Sequencing of Genomic and Transcriptomic Variations
3/4/10	Jonghwan Kim Postdoctoral Fellow Harvard Medical School	Transcriptional Regulatory Networks for Pluripotency of Embryonic Stem Cells
2/26/10	Trey Ideker Professor and Division Chief Medical Genetics University of California San Diego	Protein Network Based Biomarkers in Development and Disease
2/25/10	Jeffrey Chang Postdoctoral Fellow Institute for Genome Sciences & Policy Duke University	Genomic Strategies to Decipher the Complexity of Cancer
2/18/10	Eric Batchelor Postdoctoral Fellow Harvard Medical School	The ups and downs of p53: Analysis of p53 dynamics in response to DNA damage

1/21/10	Artem Barski Postdoctoral Fellow National Heart, Lung and Blood Institute NIH Maryland	ChIP-Seq, poised Genes and T cell memory
12/10/09	Luis Carvalho, Asst. Professor Dept. of Mathematics and Statistics Boston University	Centroid estimation for high-dimensional discrete inference with applications in computational biology
11/19/09	Gyan Bhanot, Professor Department of Molecular Biology and Biochemistry Department of Physics and BioMaPS Institute Rutgers University	A simple method for identifying dysregulated mRNA targets of microRNA in cancer with application to ccRCC
11/5/09	Thomas Kepler, Professor Laboratory of Computational Immunology Duke University	The Dynamics of T-Cell Receptor Repertoire Diversity Following Thymus Transplantation for DiGeorge Anomaly
10/29/09	Jingdon Tian, Assistant Professor Department of Biomedical Engineering Institute for Genome Sciences and Policy Duke University	Enabling Efficient Design, Construction, and Optimization of Synthetic BioSystem
10/15/09	Arnie Levine, Professor Institute for Advanced Study Princeton	The Evolution of the p53 Family of Genes
9/17/09	Yoav Freund, Professor UC San Diego	Applications of Machine Learning in Bio-Informatics