Second RECOMB Satellite Conference on **Bioinformatics Education**

May 22-23, 2010 Calit2 Auditorium, Atkinson Hall, University of California, San Diego http://casb.ucsd.edu/bioed10/index.html

The goal of the meeting is to showcase best practices of teaching bioinformatics ideas to biology undergraduates, to discuss existing challenges in bioinformatics education (with an emphasis on undergraduate education), and to promote collaborations between educators towards developing a stable bioinformatics curriculum reflecting the 21st century bioinformatics. The meeting will also showcase selected bioinformatics research projects conducted by undergraduate students.



Jeff Elhai Virginia Commonwealth

Humans, Computers, and the Route to Biological Insights: Regaining Our Capacity for Surprise



Ricardo González Méndez University of Puerto Rico Assisting Bioinformatics Efforts at Minority Institutions: Efforts and Outcomes of an NIH-Funded Program



Dan Gusfield UC Davis



Russell Schwartz Carnegie Mellon Principles of Genetic Regulatory Network Inference

Transcriptional Regulatory Circuits: predicting

Aviv Regev

Broad Institute

Ron Shamir

Tel Aviv University

numbers from alphabets



Why Algorithmic Efficiency Matters in Bioinformatics: An Introduction to Dynamic Programming in Sequence Alignment



David Haussler UC Santa Cruz Rearranging Genes

Eugene Koonin



Adam Siepel Cornell Genomic Archaeology: Extracting Ancient Human History from Genome Sequences by Computer

From DNA Chips to Cancer Treatment

Bahar Taneri Eastern Mediterranean University Is There Room for Ethics Within Bioinformatics Education? A Survey Of Ethics Components Within **Bioinformatics Curricula**



Ran Libeskind-Hadas Harvey Mudd A New First-Year Undergraduate Course Integrating **Biology and Computer Science**

National Center for Biotechnology Information

The Tree (or Forest?) of Life in the Age of Genomics



Jian Ma University of Illinois at Urbana-Champaign Understanding Structural Genomic Changes: Biological Questions and Computational Challenges



Glenn Tesler UC San Diego An Introduction to the Poisson Distribution and Haldane's Model of Crossovers

Olga Troyanskaya

Tandy Warnow

Princeton Building "Google" for Biology: Answering Specific **Biological Questions Based on Diverse Genomic Data**





Lior Pachter **UC Berkeley** What Is the Neighbor-Joining Algorithm?

University of Texas, Austin Phylogeny Estimation: Why It Is "Hard", and How to Design Methods with Good Performance



Yitzhak (Tzachi) Pilpel Weizmann Institute Codon-tRNA Adaptation: A Code for Determining Translation Efficiency

Tiffani Williams Texas A&M Computational Approaches for Constructing Majority Consensus Trees

Conference Chairs: Pavel Pevzner (UCSD) and Ron Shamir (Tel Aviv University). Organizing Committee: Sangtae Kim, Laura Gracia, and Son Pham

Sponsored by the Howard Hughes Institute, Center for Algorithmic and Systems Biology (CASB) at Calit2, International Society for Computational Biology, and Bioinformatics & Systems Biology Graduate Program at UC San Diego.









