Cornell New Life Sciences Initiative/ Department of Computer Science COLLOQUIUM

Tuesday, November 30, 2004 4:30pm G10 Biotech

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Comparative Genomics Algorithms: From Genomics to Protein Folding and to Systems

With the recent availability of tools for genome assembly, assembly comparison, and automatic annotation of genomes, genomics entered its post-genome sequence phase, where understanding the control systems of the cell is a basic theme. Building on its success in bio-molecular sequence analysis, comparative genomics is continually expanding its scope and methods towards the components of the cell.

In this talk, I will present an overview of our work on geometries of protein folds, patterns of inheritance of complex disease, and logic functions of the genomic cis-regulatory code.