

Computation and **I**nformatics in **B**iology and **M**edicine
Training Program Retreat

1:15 p.m. Presentation
CIBM Distinguished Lecturer

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*Algorithms for Haplotype
Block Partitions*

Abstract:

In this lecture we develop dynamic programming algorithms for haplotype block partitioning to minimize the number of representative single nucleotide polymorphisms (SNPs) required to account for most of the haplotype quality in each block. The block quality is a function of the haplotypes defined by the SNPs in the block. Any measure of haplotype quality can be used in the algorithm and of course the measure should depend on the specific application. The dynamic programming algorithm is applied to analyze the haplotype data on chromosome 21 of Patil et al. (*Science* **294**, 1719-1723 [2001]). The results are compared with those identified using a greedy algorithm of Patil et al.

Friday, October 15th

Pyle Center, Room 325/326
702 Langdon Street
9:00 a.m. – 5:00 p.m.