

TITLE: On Epistasis and Genome Scans for Complex Human Disease

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ABSTRACT

Epistasis, interaction among loci or between genes, is of growing interest and importance, especially as the quantity of genotype data being collected today is increasing at a dramatic rate. Most studies that attempt to identify the genetic basis of complex human disease ignore epistasis. As computer power has also been increasing dramatically, it is no longer necessary to be limited by a single-locus approach to the data. This paper reviews the underlying notion of epistasis and approaches that have been proposed for analysing multi-locus models for complex disease.

ABBREVIATIONS

QTL - quantitative trait locus/loci

SNP – single nucleotide polymorphism

KEYWORDS

Epistasis, gene-gene interactions, genome scan, complex human disease, QTL, linkage,

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