

"An Overview of Weighted Gene Co-Expression Network Analysis"

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Abstract:

Weighted gene co-expression network analysis (WGCNA) facilitates a systems biologic view of gene expression data. The network framework makes it straightforward to integrate gene expression data with other types of data, e.g. clinical traits and genetic marker data. This talk covers several theoretical topics including network construction, module definition, network based gene screening, and differential network analysis. The methods are illustrated using several applications including i) screening for cancer genes, ii) comparing human and chimp brains, and iii) complex disease gene mapping. Related articles and material can be found at the following webpage

<http://www.genetics.ucla.edu/labs/horvath/CoexpressionNetwork/>