The Vector NTI Suite of Software: A Comprehensive Bioinformatics Tool for Research and Teaching

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A brief introduction to the UNC Shared Bioinformatics Resource will be given. This will be followed by an overview of the basic informatics tools available in the Vector NTI suite. Vector NTI is representative of the type of comprehensive Bioinformatics tools commonly in use in both academic and cooperative settings that will be necessary for present and future biotechnology workers to master. Vector NTI as supported by the UNC system is a desktop tool using a dynamic license. The modules that make up the Vector NTI system support a number of DNA and protein analysis tools including:

Vector NTI – for DNA and protein sequence analysis and annotation
Molecule Construction and Design – generating in silico DNA plasmids
Blast Search/Viewed – conducting Blast analyses with public databases such as NCBI and Swisspot
Align X – for generation of multiple sequence alignments of proteins and nucleic acids using the Clustal W Algorithm
Contig Express – for editing and assembly of sequence chromatographs based on the **CAP4** sequence assembly logarithm
GenomBench – for viewing genome scale data located on distributed annotation server (DAS) systems
3D Molecule Viewer – for viewing resolved three-dimensional protein structures
Database Explorer – a database for storing molecule created with Vector NTI

The graphical interface, image quality, and ease of information import and export from the Vector NTI system are very user friendly. Following the presentation, we will be happy to install Vector NTI on all machines of interest.