

Bioinformatics and Systems Biology Core

Services Offered

- **NGS (Next-Generation Sequencing Data) Analyses**
 - RNA-seq
 - Exome and whole genome seq
 - Single-cell seq
 - Chip-seq
 - Metagenomics seq
 - De novo-assembly and annotation of eukaryotic genomes
 - Bacterial genome de novo and guided assembly
- **System Biology Data Services**
 - Ingenuity Pathway Analysis (IPA)
 - Microarray expression analysis
 - Functional analysis of gene sets using GSEA DAVID, KEGG, GO, etc.
 - Copy-number variation analysis for CGH arrays
 - Methylation analysis for DNA methylation arrays
 - Pathway and network analyses
 - TCGA genomic/proteomic data analyses
- **Web Applications and Databases**
 - Development of web applications to publish research data
 - Development of searchable databases for complex research data
- **Machine Learning and Research**
 - Clustering and modeling experimental data using machine learning
 - Development of custom programs to analyze complex data
 - Motifs/pattern discovery from large datasets
 - High-throughput data analysis by supercomputers
 - Analysis of patient data from wearable devices like pedometers
- **Grant Support and Consultation**
 - Pre-grant consultation, support letters, collaborations
 - Consultation on the NGS experimental design and budget quotes
 - Generate figures to represent high-dimensional data
- **Other Bioinformatic Related Support**
 - Sharing data via ftp, depositing data into SRA/NCBI resources, developing personalized blast servers to run BLAST on their own datasets, etc.
- **Analysis Tools:** Ingenuity Pathway Analysis (IPA), CLC Bio Workbench, Vector NTI, CASAVA, Genome Studio, MATLAB, R packages, NGS analysis tools: Tuxedo Suite, bcbio-nextgen, etc.

Pricing

- <http://unmc.edu/bsbc/services/pricing.html>

Contact

Service request website: http://cbsb.unmc.edu/forms/request_service.html

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Core website: <https://unmc.edu/bsbc/>