

# Bioinformatics Online Module Cross-reference Guide

CCaTS Education, Continuous Professional Development

Online Module	Genomics Technology	Gene Expression	Gene Variation	Polymorphisms	Methylation	Biological Interpretation	Pathway Analysis	Network Analysis	Databases	Genome Browsers
1	X	X		X	X	X	X	X	X	
2	X	X								
3	X	X								
4		X							X	
5		X								
6						X	X	X		
7						X	X	X	X	
8	X									
9									X	X
10		X	X	X	X					
11		X	X	X	X					
12					X					
13					X					
14					X					
15		X								
16		X								
17		X								
18			X	X	X				X	X
19						X	X	X		

## ONLINE MODULES KEY

- 1 Overview of Bioinformatics Tools
- 2 Essentials of Microarray Technology
- 3 Essentials of Microarray Technology: Affymetrix and Illumina Platforms
- 4 Obtaining Data and Gene Expression Profiles from Gene Expression Omnibus Microarray Database and File Decompression
- 5 Using Partek Genomics Suite for Microarray Data Analysis: The Basics
- 6 Using Ingenuity Pathway Analysis Software for Gene Pathways Analysis
- 7 Introduction to Cytoscape
- 8 An Introduction to the Sequence Read Archive and Conversion of SRA Format to FASTQ Format
- 9 Introduction to Integrative Genomics Viewer (IGV)
- 10 Introduction to Galaxy Software
- 11 Loading Data into Galaxy Software
- 12 ChIP-seq Analysis with Galaxy Software (Part 1)
- 13 Analysis of Genome-Wide Methylation Pattern Using Galaxy Software (Part 2)
- 14 Methylation Analysis of Promoter Regions Using Galaxy Software (Part 3)
- 15 Preparation of FASTQ Files for RNA-seq Analysis Using Galaxy Software (part 1)
- 16 RNA-seq Analysis Using Galaxy Software (part 2)
- 17 Interpretation of RNA-seq Analysis Results (part 3)
- 18 Using UCSC Genome Browser for Data Visualization and Analysis
- 19 Gene Pathways Analysis with MetaCore™ Software

## SOFTWARE KEY

Galaxy Software
Gene Expression Omnibus Microarray Database
Partek Genomics Suite
Ingenuity Pathway Analysis Software
Cytoscape Software
Integrative Genomics Viewer
Sequence Read Archive
University of California Santa Cruz (UCSC) Genome Browser
MetaCore