

Update yourself with *in silico* skills for
'omics':

CHOOSE from 3 HANDS-ON COURSES

(Use of bioinformatics resources for genomics, transcriptomics & proteomics:
one of the modular courses conducted by IBAB, as a Center of Excellence in
Research and Training in Bioinformatics, DIT,
Govt. of India)



**A. GENOMICS & NEXT
GENERATION SEQUENCING
(NGS) DATA ANALYSIS: 5
days**

**B. ANALYSIS OF
MICROARRAY & OTHER
TRANSCRIPTOMICS DATA: 3
days**

**C. ANALYSIS OF MASS-SPEC
DATA & PROTEIN-PROTEIN
INTERACTIONS:
2 days**



Organized by,
Institute of Bioinformatics and Applied Biotechnology (IBAB) &
Shodhaka Life Sciences Pvt. Ltd. (SHODHAKA)

At IBAB, Biotech Park, Electronic city, Phase I, Bengalooru (dates to be announced soon)

Limited seats!

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www.ibab.ac.in

www.shodhaka.com

[Click to see – How to apply?](#)

[Click to see – One day "career planing" workshop on 4th March, 2012](#)

[Click to see – One day program on "Demystify biotechnology and bioinformatics" on 2nd March, 2012.](#)

SCHEDULE (*suggestive; dates will be finalized soon*)

DAY 1:

Review of fundamental concepts in cell & molecular biology for genomics
Research, molecular data & information
Bioinformatics-resources / bio-techniques & their links in research

DAY 2:

Genome projects, repeat elements, gene structures & predictions
Comparative genomics concepts
Case studies (hands-on) in sequence analysis

DAY 3:

Case studies (hands-on) with assistance

DAY 4:

NGS & SNP: concepts & resources
Case studies in SNP analysis (hands on)

DAY 5:

De novo NGS read assembly: case studies (hands-on)
Reference-assembly of NGS reads: case studies (hands-on)

DAY 6:

Gene expression studies & microarray technology: an overview
Data file types based on platforms & databases
Case studies (hands-on) of using microarray databases, manual tracing of genes across data types, & in EST resources

DAY 7:

Normalization & clustering: theory
Data analysis: case studies (hands-on) using specific software

DAY 8:

Alternative splice form variations: resources
Advanced case studies in microarray data analysis (hands-on)
Transcription factor databases: case studies (hands-on)

DAY 9:

Introduction to proteomics & mass spectroscopy
Pathways & protein-protein interactions (PPIs)
Practice sessions with PPIs

DAY 10:

Mass spec databases & analysis
More demonstrations & case studies (hands on) in PPIs & pathways

First 3 days are optional for researchers & other professionals

Note: Apart from modular & diploma programs, IBAB has now initiated MSc in 'bioinformatics & biotechnology'

Shodhaka can also custom-design short training programs in some other bioinformatics & biotechnology areas

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