

IBAB & Shodhaka bring 3 hands-on bioinformatics courses
(Modular courses on the use of bioinformatics resources for
genomics, transcriptomics & proteomics)
choose any of them, their combinations or all of them!

QUICK LINKS:

1. How to apply

2. Syllabus:

- A. ALL TOPICS
- B. GENOMICS & NEXT GENERATION SEQUENCING (NGS) DATA ANALYSIS: 5 days
- C. ANALYSIS OF MICROARRAY & OTHER TRANSCRIPTOMICS DATA: 3 days
- D. ANALYSIS OF MASS-SPEC DATA & PROTEIN-PROTEIN INTERACTIONS: 2 days

3. Dates:

- Genomics & NGS: 1 to 5 Dec 2011 (5 days)
- Transcriptomics & microarray: 6 to 8 Dec 2011 (3 days)
- Proteomics & mass-spec: 9 & 10 Dec 2011 (2 days)

4. Instructors/organizers

5. Eligibility

6. Accommodation

7. What will you gain?

8. Fees

9. Venue

10. Feedback

11. Pamphlet

How to apply:

1. Pay the fees by DD (payable to Shodhaka Life Sciences Pvt. Ltd.) or **NEFT**: National Electronic Funds Transfer (NEFT) is a simple process of transferring money. It is quick and cheaper than DD. You can contact your bank for the procedure. Just tell them that you want to pay the fees amount to the account with following details (you may want to write this down or print and carry with you). Don't forget to obtain the NEFT number for the transaction.

Details required to pay the fees amount using NEFT are:

Name of the Beneficiary: Shodhaka Life Sciences Pvt. Ltd.

Account No.: 30667280021

Branch IFS code: SBIN0009044

Name of the Bank: State Bank of India

Name of the Branch: Electronic City Branch, Hosur Road, Bengaluru – 560 100

If you prefer DD, please prepare in favour of **Shodhaka Life Sciences Pvt. Ltd.**, Bengaluru, and send a scanned copy to shodhaka@ibab.ac.in After that send the DD through post, please send it to the following address:

Shodhaka Life Sciences Pvt. Ltd

C/o IBAB,

Biotech Park (behind 3M, next to Aravind Ltd),

Electronic City, Phase I,

Bengaluru - 560 100, Karnataka

Ph: 080 6531 6565

2. Send an email (to shodhaka@ibab.ac.in) with the following information:

a) NEFT details as mentioned below (or the DD number/scanned copy)

NEFT number

Bank name and the branch

City of the bank

Date

b) Your full name

c) Your current designation & college/institute/university/company

d) Your alternative email id

e) Your residential phone number

f) Your mobile phone number and attach your latest CV.

You are encouraged to apply in groups so that you can save time in money transfers. **But each applicant must send a separate email to shodhaka@ibab.ac.in along with the above information.**

Limited seats! Apply now!

email: shodhaka@ibab.ac.in OR call: 080-65 31 65 65

Syllabus:

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

1 Dec 2011 (Thursday):

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

2 Dec 2011 (Friday):

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

3 Dec 2011 (Saturday):

Case studies (hands-on) with assistance

4 Dec 2011 (Sunday):

SNP: introduction
Case studies in SNP analysis (hands on)
NGS & SNP: Introduction & use of databases (hands-on)

5 Dec 2011 (Monday):

De novo (NGS) read assembly: demo & practice
Reference-assembly of NGS reads: demo & practice

*First 3 days are designed for graduate and post-graduate students;

optional for researchers & other professionals*

[BACK TO QUICK LINKS](#)

B. ANALYSIS OF MICROARRAY & OTHER TRANSCRIPTOMICS DATA:

6 Dec 2011 (Tuesday)

Gene expression studies & microarray technology: an overview
Data file types based on platforms & database for microarray & ESTs
Case studies (hands on) of using microarray databases & data types

7 Dec 2011 (Wednesday):

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

8 Dec 2011 (Thursday): OPTIONAL for all participants

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

[BACK TO QUICK LINKS](#)

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

9 Dec 2011 (Friday):

Introduction to proteomics & mass spectroscopy
Metabolic pathways & protein-protein interactions (PPIs): demos
Practice sessions with PPIs

10 Dec 2011 (Saturday):

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

[BACK TO QUICK LINKS](#)

Instructors/organizers:

[Dr. Kshitish Acharya](#) is the organizer of the workshop and would be providing key lectures and orientations.

Instructors are experienced in research as well as instructions. Shodhaka has previously conducted training sessions/workshops for scientists *(e.g., 4 day workshop for ICMR scientists on gene ontology, biocuration & gene ontology; 1 day workshop for scientists on NGS data analysis)* and students *(see our web-site for past courses/workshops)*.

[BACK TO QUICK LINKS](#)

Eligibility:

All life sciences students, teachers, researchers, please note that the scientists, teachers are welcome to skip the introductory sessions (first 3 days).

Accommodation:

Hostel accommodation (seperate for ladies & gents) may be available for about 10 gents & ladies each (those who apply first). The hostel rooms will have to be shared (mattresses are not available in most rooms). The charges are likely to be Rs.750/- for any course duration between 1-10 Dec 2011. The food charges in the hostel-mess would be around Rs.90/- per day. PG accommodations (expensive) would be available within 1-3 km periphery of the campus. We can assist you in providing contacts with the owners of such rental places. There are also hotels (more expensive) in the vicinity. [BACK TO QUICK LINKS](#)

What will you gain?

- The technical skills required for the current jobs in life sciences. Shodhaka intends to transfer the knowledge and skills gained from internal research experience to scientists as well as students from the life sciences areas (biotechnology, microbiology, biochemistry, agriculture, zoology, bioinformatics etc).
- All participants will receive hand-outs and program-codes required for operations.
- Opportunity to discuss scientific topics with experienced scientists
- Certificates

Fees

Broad topic	Fees for students	Fees for academic researchers	Fees for other professionals
Genomics & NGS (5 DAYS)	Rs.3000/-	Rs.4500/-	Rs.6000/-
Transcriptomics & microarray (3 DAYS)	Rs.2500/-	Rs.3500/-	Rs.5000/-
Proteomics & mass-spec (2 DAYS)	Rs.2000/-	Rs.3000/-	Rs.4000/-
All of the above topics (10 DAYS)	Rs.5000/-	Rs.7000/-	Rs.10,000/-

Further discounts may be available for groups of individuals applying from an organisation. Contact: shodhaka@ibab.ac.in

Venue:

IBAB, Biotech Park, Electronic city, Phase I, Bengalooru – 560 100. [\(click here for route map\)](#)

[BACK TO QUICK LINKS](#)

Feedbacks:

Two One-day training modules were conducted by Shodhaka: India at **NIN, Hyderabad** on **“de novo and reference-based assembly of NGS reads, and SNP analysis using bioinformatics resources”**. The other was conducted at IBAB. The participants in both the workshops provided an excellent feedback about the training. The only aspect some participants had complained was about need for more topics and time!

Comments of a scientist & head of Biomed. Info. Center, on our NGS workshop (via email): Your hands-on & lecture sessions were most useful in the workshop.

[Feedbacks from other courses from Shodhaka.](#)

[BACK TO QUICK LINKS](#)