



FACULTY POSITIONS OPEN

IBAB is seeking applications from outstanding candidates to fill three faculty positions. Candidates should have an impressive academic record, as evident in high quality publications in peer reviewed journals.

Two positions are in the broad areas of bioinformatics, cheminformatics, computational or systems biology, protein structure or drug discovery. Candidates with physical or chemical science background are preferred.

The third position is for a new initiative to build a synthetic chemistry/medicinal chemistry program in association with the BIOCON group. The candidate will play a leading role in developing an integrated teaching program of organic chemistry/medicinal chemistry that promotes chemical biology approaches for drug discovery.

Interested candidates should send their updated resume along with names and contact information of three referees to Ms N. Smitha (nsmitha@ibab.ac.in). There is no last date and appointments will be made as and when candidates are found suitable.

Details about the institute are available at www.ibab.ac.in. In brief:

- IBAB currently offers courses in bioinformatics, cheminformatics and laboratory techniques and will shortly be offering a course in organic synthesis in co-operation with BIOCON group.
- The institute has received funding from DBT, DIT (Ministry of Information Technology, Government of India), DST, from industry and other sources.
- IBAB is a DIT Center of Excellence for Research and Training in Bioinformatics.
- Faculty members of the institute have been publishing in Nature Biotechnology, BMC Genomics, Nucleic Acid Research, Bioinformatics, etc.
- The institute has received recognition from Manipal University for the Ph.D. programme and will be initiating this program by the end of the year.
- IBAB provides other support for Faculty members to collaborate with both industry and academia, and have good scope for career advancement.
- IBAB will be soon moving to its own premises at the Biotech Park (Bangalore Helix) near Electronic City close to Infosys and IITB. The two-floor academic block will have several large classrooms, many new wet laboratory facilities, library, incubation facilities for start-ups and so on. A students' hostel and a cafeteria are the other additional facilities at the new premises.

Institute of Bioinformatics and Applied Biotechnology, G-05, Tech Park Mall, ITPB, Whitefield Road, Bangalore 560 066. Phone: 080-2841 0029, 2841 2769; Fax: 080-2841-2761



Institute of Bioinformatics and Applied Biotechnology & Cellworks Group Inc., Bangalore



A Modular Course on Systems Biology (August 5–August 19, 2008)

Systems biology of cellular processes based on the interactions between molecular components can be approximated by a network of biochemical reactions. Simulation of such cellular information provides an extremely useful platform to identify drug targets for therapeutics. Pathway data from prior and ongoing published research work is used for reconstructing biological pathways and their interactions thereby enabling analysis of new hypotheses. This approach is reviewed in the proposed four weeks program with hands-on sessions using Cellworks iC-PHYS™ E-Coli and other disease technology for selected prokaryotic and mammalian systems. The examples are physiology focused flux, and enzyme kinetics based on pathways analyses, with different problem statements on how to conduct different "what-if" analysis studies. A few *in silico* and *in vitro* case studies also form part of the training program.

Participants: This course is intended for those working in the broad area of bioinformatics, systems biology, flux analyses and drug discovery programs in academia and industry. **Intake is restricted to 10.**

Prerequisites: Master degree in Pharmaceutical science/Life science/Bioinformatics and ability to use Linux and Windows operating systems.

Plan of Course: The module is in the form of comprehensive lecture sessions and three full day hands-on training in flux based systems biology. For further details see www.ibab.ac.in

Course Outline: Topics covered include metabolic and signaling pathways in bacterial and mammalian systems, enzyme kinetics, flux balance and analyses, simulating multiple pathways flux analysis in a virtual platform relevant *in vitro* experiments and case studies.

Course Coordinators: Dr Shipra Agrawal, IBAB, and Ms Radhika Shenoy, Cellworks Group Inc.,

Contact: sysbio@ibab.ac.in or nsmitha@ibab.ac.in

Institute of Bioinformatics and Applied Biotechnology
(DIT Center of Excellence in Bioinformatics Research & Training)

G-05, Tech Park Mall, ITPL, Whitefield Road, Bangalore 560 066

Phone: 080-2841 0029/2769/6034; www.ibab.ac.in