

Workshop on Quantitative Proteomic Technologies

August 28 - 31, 2013

Institute of Bioinformatics, Bangalore

Institute of Bioinformatics (IOB) is a premier center for Proteomics and Computational Biology. IOB has also established a state-of-the-art proteomics facility to discover and validate candidate biomarkers in human diseases ranging from various neurological disorders and infectious diseases to cancers.

Scientists at IOB have developed strategies for both online and offline multidimensional chromatography for extensive separation and fractionation of samples. We have pioneered the use of *in vivo* labeling strategies such as SILAC, a technology that is currently being used by numerous groups around the world. We are also experts in other quantitative labeling methodologies -¹⁸O labeling and iTRAQ. We were early adopters of the 8-plex labeling reagents.

We will share our expertise in high-resolution proteomic technologies to highly motivated young researchers in India through this 4-day long workshop.

This intensive workshop will offer a theoretical and practical understanding of high-resolution mass spectrometry-based proteomic technologies and their application to biological research.

All the participants will be encouraged to work towards preparing a manuscript with the results achieved during the project. We will coordinate with participants to analyze the data generated by their hands-on work during this workshop, so that it can be submitted as a research article in an international peer-reviewed journal.

Eligibility

Open to students and researchers from academia and industry. Applications must include a statement of purpose (<100 words) along with their CV.

Registration

Please visit http://www.ibioinformatics.org/reg_prot_tech.php to register for the workshop. Candidates will be selected on first-come, first-served basis.

Registration fee:

Participants from Academia - Rs. 20,000

Participants from Industry - Rs. 30,000

A discount of Rs.5000/- will be provided to the participants of a previous workshop at IOB – “**Workshop On Bioinformatics for Human Genome Analysis**”, August 24 - 27, 2013

Refreshments and lunch will be provided throughout the day.

Applicants can contact organizers for accommodation with an additional cost (PG : Rs.350/day; Deluxe sharing: Rs.800/day).

Contact

Institute of Bioinformatics, ITPL, Whitefield Road, Bangalore -560066, India

Ph: 080-28416140, Fax: 080- 28416132,

E-mail: workshop@ibioinformatics.org

Web site: <http://www.ibioinformatics.org>

Focus of the Workshop

- Principles of mass spectrometry
- Sample preparation strategies
- Fractionation techniques
- Labeling techniques
 - iTRAQ labeling
 - SILAC labeling
- Depletion/enrichment strategies
- LC-MS/MS analysis
- Operation of LTQ-Orbitrap Velos and TSQ Quantum Ultra mass spectrometers
- Proteomic data analysis
- Quantitative proteomics

Resource Personnel

- Dr. T. S. Keshava Prasad
- Dr. Nandini A. Sahasrabudde
- Dr. S. K. Shankar
- Dr. Ravi Sirdeshmukh
- Dr. Aditi Chatterjee
- Dr. Ramu Gundimeda
- Other scientists from IOB