

Workshop on fundamentals of mass spectrometry-based proteomics for beginners, March 11-14, 2015, conducted at Institute of Bioinformatics, Bangalore

Convener: Dr. T.S. Keshava Prasad

Institute of Bioinformatics conducted a four days workshop (March 11-14, 2015) on fundamentals of mass spectrometry-based proteomics. The objective of the workshop was to share the expertise of IOB investigators in using high-resolution mass spectrometry proteomic technologies with young researchers in India. Six participants from different institutes, i.e. Dr. Pinky Agarwal from National Institute of Plant Genome Research (NIPGR), New Delhi, Mr. Kaushal K. Bhati and Mr. Prateek Jain from National Agri-food Biotechnology Institute (NABI), Mohali, Ms. Shrilaxmi V. Joshi from Jawaharlal Nehru Centre for Advanced Scientific Research (JNCASR), Bangalore, Ms. Pramila Sharma from Indian Institute Technology (IIT), Ganhinagar and Mr. Suhas Mhaske from National Centre for Cell Science (NCCS), Pune participated in the workshop.

The workshop started with a talk on ‘Introduction to proteomics and mass spectrometry’ by Dr. Keshava Prasad, Faculty Scientist at IOB and Coordinator of this workshop, followed by talk and hands-on training in sample preparation and fractionation strategies. A talk on LC-MS/MS analysis by Dr. Sneha Pinto included fundamentals of mass spectrometry and quantitative proteomics, followed by hands-on training in sample preparation strategies for quantitative proteomics. Dr. Harsha Gowda discussed proteomics strategies for analysis of post translational modifications. Participants were then provided with series of demo and hands-on training in data analysis for both qualitative and quantitative proteomics. Participants were highly motivated and found the workshop significant and essential for basic knowledge of mass spectrometry-based proteomics. Hands-on training in sample preparation, fractionation strategies and data analysis answered multiple queries of the participants. However, the participants felt that the frequency and duration of such workshops could have been increased for a complete training and better practice of proteomic technologies.



Workshop participants getting hands-on training in sample preparation strategies