# Workshop on Bioinformatics for Human Genome Analysis August 24 - 27, 2013

## Institute of Bioinformatics, Bangalore

Institute of Bioinformatics (IOB) is a premier centre for Genomics, Proteomics and Computational Biology. IOB is carrying out cutting-edge research in genomics and transcriptomics. We have identified candidate genes for several inherited genetic disorders and cancers by integrating NextGen Sequencing (NGS) data from whole genome, exome, transcriptome sequencing and microarray-based methods. IOB has also established a state-ofthe-art proteomics facility to discover and validate candidate biomarkers in human diseases ranging from various neurological disorders and infectious diseases to cancers.

This workshop will focus on introducing high-throughput methods for extensive understanding of biological systems in the context of disease and various cancers. Hands-on sessions and lecture series are designed for participants to acquire essential skills for the analysis and interpretation of diverse datasets of human. Participants will be made familiar with methods and tools for human genome analysis including alignment, annotation and clinical implication of the data. Emphasis on methods for quality control, pre-processing and analysis by open-source tools with statistical implications using R packages and multi-omic analysis using Agilent's GeneSpring platform.

#### 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 <u>http://www.ibioinformatics.org/registration\_genomics.php</u> to register for the workshop. Only 25 candidates will be selected on first-come, first-served basis.

#### **Registration fee:**

Participants from Academia- Rs. 15,000Participants from Industry- Rs. 30,000

Registration fee includes only lunch and refreshments during the workshop. Applicants can contact organizers for accommodation facility with an additional cost (PG: Rs. 350/day and Deluxe twin sharing: Rs. 750/day).

Visit http://www.ibioinformatics.org/workshop.php for other workshops.

### Workshop focus

- Sequencing platforms
- Microarray analysis
- Data Quality control
- Whole genome assembly
- Variant analysis
- RNA-Seq analysis
- Multi-omic analysis using Agilent's GeneSpring suite
- Linux, R and NGS tools

Course Coordinator: Dr. Aditi Chatterjee Resource Personnel:

- Prof. Akhilesh Pandey
- Dr. Ravi Sirdeshmukh
- Dr. T. S. Keshava Prasad
- Dr. Arivusudar Marimuthu
- Dr. Harsha Gowda
- Dr. Rajesh Raju
- Dr. Ramu Gundimeda
- Dr. Nandini A. Sahasrabuddhe

Institute of

**Bioinformatics** 

Other scientists from IOB

#### Contact:

Institute of Bioinformatics, ITPL, Whitefield Road, Bangalore -560066, India. Ph: 080-28416140, Fax: 080- 28416132 E-mail: bioinformatics@ibioinformatics.org

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