

# Workshop on Human Genome and Transcriptome Analysis

July 25 - 28, 2016

Institute of Bioinformatics, Bangalore

## Overview

Institute of Bioinformatics (IOB) is a premier centre for Genomics, Proteomics and Computational Biology. IOB is carrying out cutting edge research in employing genomics and transcriptomics to understand and enable disease diagnosis. 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 microarraybased methods. 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.

## Focus of workshop

Introductory lectures on high -throughput sequencing methods. Hands on sessions designed to assess and apply quality control, analysis method to align whole-genome and whole-exome sequencing data against human reference and subsequent variant identification and functional annotation. Differential expression analysis using transcript assembly of RNA Seq data and making interpretation of large genome datasets of human. Demonstration of available online resources of public data and analysis tools.

## Workshop focus

- High -throughput sequencing
- Data formats
- Quality control of data
- Analysis tools
- Genome alignment
- Variant analysis
- Transcript assembly
- R packages — NGS analysis
- Visualization using IGV

## Registration

Open to students and researchers from academia and industry. Applications must include a short CV.

To register for the workshop please visit:

[http://www.ibioinformatics.org/registration\\_genomics.php](http://www.ibioinformatics.org/registration_genomics.php)

Only 25 candidates will be selected on first come first served basis.

## Registration fee

Students:	Rs. 15,000	Academic:	Rs. 20,000
Industry:	Rs. 25,000	Foreign Participants:	USD 600

A concession of Rs. 2000/ in the registration fee will be provided for:

1. Students and faculties from Jammu and Kashmir, and North East India
2. A group registration of 3 or more students from the same Institute

Registration fee includes only lunch and refreshments during the workshop. Applicants can contact organizers for accommodation facility with an additional cost. For details about other upcoming workshops at IOB, please visit <http://www.ibioinformatics.org/workshop.php>

## Contact

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## Resource Personnel

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