Conveners
Dr. Y. Swarnalatha
Dr. S. Thanga Suja

Organizers
Ms. Vijayalakshmi R
Ms. K. Sidhika
Mr. C. Narendran
Mr. P. Krishnamani Kumar
Mr. Paul X. Clinton

Workshop Tutor
Ms. Sowmya Pulapet

Patrons
Dr. Mariazeena Johnson, Chancellor
Dr. Marie Johnson, President
Mr. J. Arulselvan, Vice-President
Ms. Maria Bernadette Tamilarasi, Vice – President
Ms. Maria Catherine Jayapriya, Vice – President
Dr. T. Sasiprabha, Vice – Chancellor

Refreshments and lunch will be provided
Certificates will be issued
Accommodation will not be provided

Candidates should bring their laptop with recent Windows version 10+ with 8GB RAM, Ubuntu or Wsh already installed if possible

Sathyabama Institute of Science and Technology and Oneomics jointly presents
3-Days Workshop on
From Sample to Insight: A Hands-on NGS and RNA-Seq Workshop

Venue: IRC 3rd Floor, Skill Development Centre
Sathyabama Institute of Science and Technology
About the Workshop

The purpose of this workshop is to get an understanding of Next-Generation Sequencing (NGS) and gain practical experience in RNA Sequencing data analysis. You will be trained to understand NGS data formats and handle potential problems/errors. The course layout has been adapted to beginners' needs in the NGS data analysis field. It allows anyone with no or little background in computer science to get a first hands-on experience in this new and fast-evolving research topic.

Workshop Outline

**Essential Computing Skills**: Introduce beginners to computing basics for NGS data analysis (e.g. Linux Command-line, tool installation).

**NGS Analysis Algorithms and Data Formats**: Understand read alignment and data formats used in NGS analysis.

**Handling RNA-Seq Data**: Learn to use bioinformatics tools for managing RNA-Seq data.

**RNA-Seq Data Processing**: Trim data, align it to a reference genome, and visualize alignments.

**Expression Estimation**: Estimate gene and transcript expression using different methods.

**Differential Expression Analysis**: Compare various approaches for analyzing differential gene expression.

**Visualization in R**: Visualize and summarize RNA-Seq analysis results using R.

**Pathway Analysis**: Perform pathway analysis to understand the biological context.

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Registration Fee: PG- 2000/- ; PhD- 2500/-

Seats limited to 25 nos

Eligibility: Post graduate, PhD

For Queries Contact:
98402 44450/ 70925 26805

Scan the QR code for registration