



# Pre-conference Workshop

## Workshop on NGS Data Analysis 23 Jan, 2019 Short read, Long read and Hybrid Analysis

Time: 9:00 AM to 5:30 PM  
Venue: ITC Gardenia, Bangalore

Learn from expert faculties of Genotypic, QTLomics and Dhiti Omics



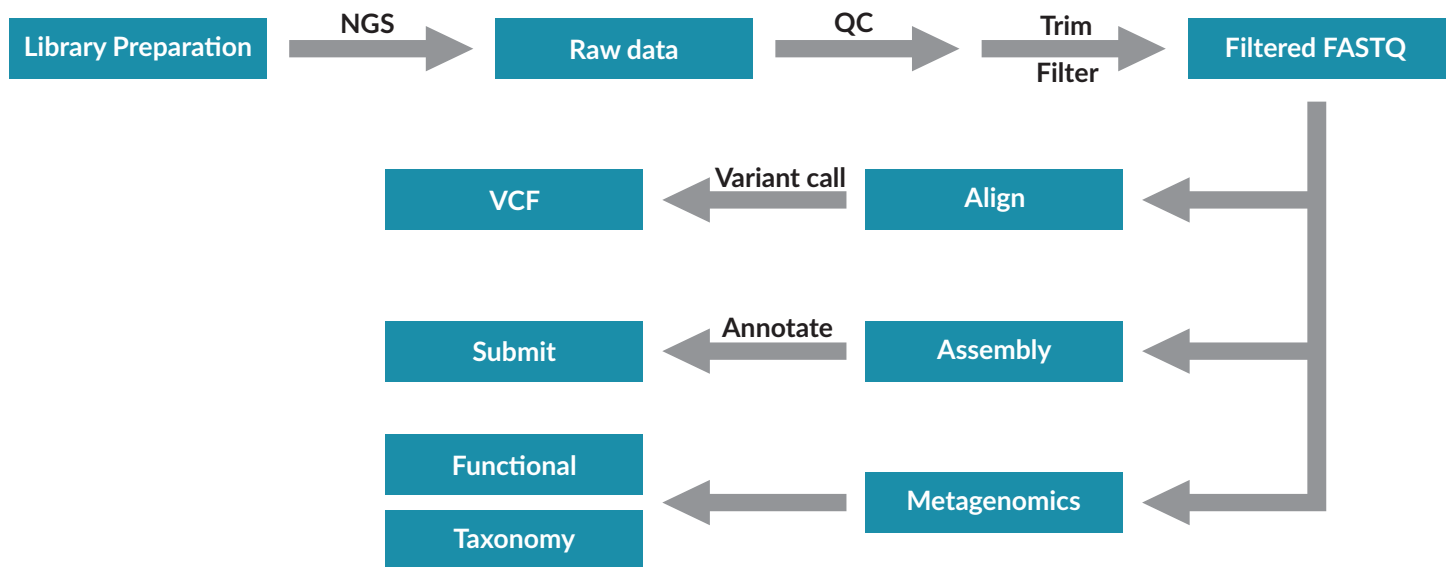
### Who should attend?

- NGS users : Illumina, Pacbio, Ion and Nanopore sequencers
- No prior experience in NGS analysis is required
- Diagnostic labs who want to apply NGS
- Students who are interested in NGS data analysis

### Why?

Learn from Experts :

- Who have helped publish more than 600 articles in a peer reviewed journal
- Who understand NGS analysis beyond scripts, codes and standard pipeline



**Registration:**  
W:www.genomicsindia.co.in  
Email:Conference@genotypic.co.in  
Dr. Prashanth : +91 9632058833

**Registration Fee:**  
**Workshop only:**  
INR 5,000 (Rupees Five Thousand Only)

**For conference registrants:**  
INR 3,000 (Rupees Three Thousand only)

Save 40% on workshop by registering for GIC 2019 conference

**Certificate of NGS Data Analysis workshop participation will be provided**



# Pre-conference Workshop on NGS Data Analysis on 23<sup>rd</sup> January 2019

**Time:** 9:00 AM to 5:30 PM

**Venue:** ITC Gardenia, Bangalore

Short read, Long read and Hybrid Analysis		
Time	Session	Topics
9:00 - 9:30 AM	Introduction to Sequencing Technology	<ul style="list-style-type: none"><li>Short read vs Long reads</li></ul>
9:30 - 10:30 AM	Data processing for short reads	<ul style="list-style-type: none"><li>Quality - FastQC, Poretools and Q-Score</li><li>File format and type conversion - Fastq, Fasta, Fast5</li><li>Removing adapters/barcodes - Porechop</li></ul>
10:00 - 10:30 AM	Long read sequencing and basecalling	<ul style="list-style-type: none"><li>Nanopore live run</li><li>Basecalling - Albacore, Guppy</li></ul>
10:30 - 11:00AM	Tea Break	
Parallel Sessions		
	Whole Genome Assembly	Metagenome Analysis
11:00 - 1:00 PM	<b>De novo Assembly - Canu and MaSuRCA</b> <ul style="list-style-type: none"><li>Error Correction - Canu</li><li>Assembly - Canu, Spades and MaSuRCA</li><li>Scaffolding - Pyscaf, N50 and QC of scaffold</li><li>Polishing - Nanopolish, Pilon</li></ul>	<b>Short reads 16s vs Long reads 16s - EPI2ME 16S Analysis</b>
1:00 - 2:00PM	Lunch	
2:00 - 3:30 PM	<b>Genome Annotation</b> <ul style="list-style-type: none"><li>Gene prediction - Prokka, Augustus</li><li>Functional classification - GOFEAT etc.</li></ul>	<b>Whole genome metagenome analysis - EPI2ME WIMP</b>
3:30 - 4:00 PM	Tea break and discussion	
4:00 - 5:30 PM	<b>Comparative Analysis</b> <ul style="list-style-type: none"><li>Circos plots - Brig</li><li>Synteny plots - Mauve</li></ul>	<b>Antimicrobial Resistance Analysis</b>

- Lecture, demonstration and hands on [Bring your own laptop for Data Analysis]

## NEFT Instructions

**Beneficiary Name** : GENOMICS INDIA CONFERENCE  
**Beneficiary Address** : No. 259 Apurva 4<sup>th</sup> Cross, RMV 2<sup>nd</sup> Stage, 80 Feet road, Bangalore - 560094.  
**Bank Name** : Canara Bank  
**Branch** : Basvanagudi Branch  
**Bank Address** : NO 180, Gandhi bazaar main road, Bangalore - 560004.  
**Account Number** : 0403201003357  
**IFSC Code** : CNRB0000403  
**MICR Code** : 560015032

## Registration:

**W:** [www.genomicsindia.co.in](http://www.genomicsindia.co.in)  
**E:** [Conference@genotypic.co.in](mailto:Conference@genotypic.co.in)  
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