

*Schedule for  
Training on Next Generation Genomic Technologies  
(Next Generation Sequencing and Bioinformatics)*

**Program Directors**

**Dr Malali Gowda, Professor, TransDisciplinary University**

**Dr Pruthvi Chakravathi T, CEO, Bengaluru Genomics Centre**

**Organizing Secretary**

**Dr Pavithra N, Post Doctoral Researcher, TransDisciplinary University**

**Contact Details:**

TDU +91 9972978966, BGC +91-9980227834 <http://tdu.edu.in/genomics/>

**Day 1 (08/01/2018)**

Time	Title	Lecturer/Anchor	Talk/Hands on Session
9:30-9:45AM	Inauguration	Delegates	
9:45-10:15 AM	Genomics Catalyzing the Biological Research	Malali Gowda, Professor, TDU	Talk
10:15-10:30 AM	Sample Collection, Storage and Transportation (Plant and Swab Collection and Incubation)	Roopalakshmi K, Chief Operating Officer, BGC	Demo
10:30 -10:45 AM	<b>Tea Break</b>		
10:45-11:00 AM	Introduction to Sample Collection, Storage and Transportation	Roopalakshmi K, Chief Operating Officer, BGC	Talk and Demo
11:00 -12:30 PM	Genome Size Estimation	BGC	Demo
12:30-1:30 PM	<b>Lunch Break</b>		
1:30-3:30 PM	Genome Size Estimation	BGC	Demo
3:30-4:00 PM	<b>Tea break</b>		
4:00-5:00 PM	Genome Size Calculations	BGC	Demo
5:00-5:30 PM	ProteoGenomics for Assembly and Annotation of Genomes	Keshava Prasad, Professor, Yenepoya University	Talk
5:30-5:45 PM	FAQ		

**Day 2 (09/01/2018)**

9:30-10:30 AM	Nucleic Acid Extraction	TDU/BGC	Hands on Session
10:30-10:45 AM	<b>Tea Break</b>		
10:45-12:15 PM	Nucleic Acid Extraction (Contd)	TDU/BGC	Hands on Session
12:15-12:45 PM	PCR Amplification for NGS	TDU/BGC	Hands on Session
12:45-1:30 PM	<b>Lunch Break</b>		
1:30-2:00 PM	Exosomes, NGS Technologies and Big Data	Satish P. RamachandraRao, Professor, IAIM HealthCare Center	Talk
2:00-3:00 PM	DNA Visualization	TDU/BGC	Hands on Session
3:00-3:30 PM	Assessment of PCR Amplicons	TDU/BGC	Hands on Session
3:30-4:00 PM	<b>Tea Break</b>		
4:00-5:00 PM	Interpretation of Above Results	TDU/BGC	Discussion
5:00-5:15 PM	FAQ		

<b>Day 3 (10/01/2018)</b>			
<b>Time</b>	<b>Title</b>	<b>Lecturer/Anchor</b>	<b>Talk/Hands on Session</b>
9:30-10:00 AM	Three generations of sequencing: An overview of sequencing chemistry	Sheetal Ambardar, Postdoctoral Researcher, TDU	Talk
10:00-10:30 AM	SMRT Sequencing- An Era of more Continuity & Completeness	Rakshit Chaudhary & Pavankumar Chaduvula, Spinco Biotech Pvt Ltd.	Talk
10:30-10:45 AM	<b>Tea Break</b>		
10:45-1:30 PM	NGS Sample Library Preparation DNA Sequencing by NGS Platforms	Chowdry Vinay Kumar, Research Scientist, BGC	Demo
1:30-2:30 PM	<b>Lunch Break</b>		
3:00-6:00 PM	C-CAMP/NCBS Genomics Facility Tour	Sheetal Ambardar, TDU	
<b>Day 4 (11/01/2018)</b>			
9:30 -10:30 AM	Introduction to NGS Raw Data	BGC	Talk
10:30-10:45 AM	<b>Tea Break</b>		
10:45-12:45 AM	Hands on Session on LINUX Command Line	Pavithra N, Postdoctoral Researcher, TDU	Hands on Session
12:45-1:45 PM	<b>Lunch Break</b>		
1:45-2.15 PM	Bioinformatic Programming	Shivaram, Director, Curl Analytics	Talk
2.15- 3.30 PM	HLA Allele Mapping and Variants Calling	Curl Analytics and BGC	Talk
3:30-3:45 PM	<b>Tea Break</b>		
3:45-5:00 PM	16S rRNA Metagenome	TDU and BGC	Hands on Session
5:00-5:15 PM	FAQ		

<b>Day 5 (12/01/2018)</b>			
<b>Time</b>	<b>Title</b>	<b>Lecturer/Anchor</b>	<b>Talk/Hands on Session</b>
9:30-10:00 AM	<i>Indica</i> Rice Genome Assembly and Annotation Using Second and Third Generation Sequencing Technologies	Mahesh HB, Postdoctoral Researcher, TDU	Talk
10:00-1:00 PM	<i>De novo</i> Genome Assembly	BGC	Hands on Session
1:00-2:00 PM	<b>Lunch Break</b>		
2:00-3:30 PM	Sequence Submission to NCBI and Database Tour	Sheetal Ambaradar, Postdoctoral Researcher, TDU	Hands on Session
3:30-3:45 PM	<b>Tea Break</b>		
3:45- 5:00 PM	TDU/I-AIM visit		
5:00-5:15 PM	FAQ		
<b>Day 6 (13/01/2018)</b>			
9:30-10:00 AM	Challenges in Bioinformatics	Sateesh KS, Professor, TDU	Talk
10:00-12:30 PM	NGS Data Submission	BGC	Hands on Session
12:30-1:30 PM	<b>Lunch Break</b>		
1:30-2:30 PM	Report Generation		
2:30-3:00 PM	FAQ/Feedback		
	Valedictory and Certificates Distribution		
3:00-3:30 PM	<b>High Tea</b>		