

**DBT Funded Training Program**  
**Bioinformatics for Metagenome data analysis (NGSDAT 2019)**  
**March 19-22, 2019**

Bioinformatics Centre, ICAR-Indian Institute of Spices Research, Kozhikode, Kerala  
 Department of Genomic Science, Central University of Kerala, Kasaragod, Kerala

**Schedule**

<b>Day 1: Tuesday, 19 March 2019</b>		
09:30 am – 10:00 am	Registration	
10:00 am – 10.30 am	Welcome Inaugural session and workshop background & group photo	
10:30 am – 11:00 am	Pre evaluation	
11.00 am – 11.45 pm	<b>Lecture</b> Metagenomics: An NGS tool for exploring the microbiomes	Dr. Santhosh J Eapen (Principal Scientist and Head, Division of Crop Protection & Co-ordinator (Bioinformatics) ICAR-IISR)
11:45 am – 12.45 pm	<b>Lecture</b> Next Generation Sequencing- Chemistry and Platforms	Dr. A. Ishwara Bhat, Principal Scientist (Plant Pathology, ICAR-Indian Institute of Spices Research)
12:45 pm – 1.30 pm	<b>Lecture</b> Metagenome analysis	Dr. Tony Grace (Assistant Professor, Department of Genetics, Central University of Kerala)
01:30 pm - 02:30 pm	Lunch break	
02:30pm -03:30pm	<b>(Lecture &amp; Practical's)</b> Introduction to the Linux system; command lines for data analysis	Ms. Neethu Isaac, (Junior Research Fellow, ICAR-IISR)
3.30 pm – 3.45 pm	Tea/Coffee	
3.45 pm – 5.00 pm	<b>(Lecture &amp; Practical's)</b> Introduction to various data formats, Quality Control, Trimming, Filtering of Low Quality Reads.	Mrs. Blessy M. Baby (Ph.D. Scholar, ICAR-IISR)
<b>Day 2: Wednesday, 20 March 2019</b>		
09:30 am – 10.00 am	<b>Lecture:</b> General workflow of Metagenome data analysis	Dr. Muhammed Manzoor A.P. (Research Associate, ICAR-IISR)

10:00 am – 10.15 am	Setting up your computers	
10.15 am to 10.30 am	Introduction to MOTHUR	Dr. Sudeep D Ghate (Post Doctoral Fellow, Yenepoya University)
10:30 am – 11:00 am	Getting started with MOTHUR	
11.00 am- 11: 20 pm	Tea/Coffee	
11.20 am -1.00 pm	MOTHUR contd.	
01:00 pm - 02:00 pm	Lunch Break	
02:00 pm - 03:30 pm	MOTHUR contd.	
3.30 pm – 03.45 pm	Tea/Coffee	
03.45 pm – 04.30 pm	MOTHUR contd.	
<b>Day 3: Thursday, 21 March 2019</b>		
09:30 am – 10:30 am	MOTHUR: General statistical data analysis	
10: 30 am – 11:20 am	Tea break	
11.20 am-12.00 pm	Data analysis using Microbiome Analyst	Dr. Sudeep D Ghate (Post Doctoral Fellow, Yenepoya University) Dr. Muhammed Manzoor A.P. (Research Associate, ICAR-IISR)
12.00 pm- 1: 00 pm	Data analysis using other offline/online tools	
01:00 pm - 02:00 pm	Lunch Break	
3.15 pm – 5:00 pm	Getting started with QIIME	Mr. Kumar Arvind. (Ph.D student, Central University of Kerala)
<b>Day 4: Friday, 22 March 2019</b>		
09:30 am – 10:30 am	<b>Lecture</b> Rhizosphere soil metagenomics: A case study in black pepper	Dr. P. Uma Devi (ICAR-IISR)
10.30 am to 11.15 am	Practical's on QIIME	
11:15 am – 11:30 am	Tea break	
11: 20 am – 1:00 pm	Practical's on QIIME	
01:00 pm - 02:00 pm	Lunch Break	
02:00 pm -03:30 pm	Valedictory Session Post evaluation, Feedback submission and certificate distribution	Guest: Dr. Belle Damodara Shenoy (Scientist, National Institute of Oceanography, Visakhapatnam)