



# 46<sup>th</sup> Annual Conference of Indian Association of Medical Microbiologists



**Atal Bihari Vajpayee Scientific Convention Center, Lucknow**

## Pre Conference CME cum Workshop

### **Nanopore NGS: Covid19 and beyond**

**Objectives of the workshop:** The candidate will be able to understand the basic concept of next-generation sequencing and its implications in human health. The workshop will cover the whole genome sequencing of SARS-CoV-2 from the sample collection, library preparation and data analysis as well as identification of variants of concern.

**Current relevance of the topic:** Nanopore NGS has emerged as a powerful tool in rapidly detecting and characterizing SARS-CoV-2 variants, aiding in the ongoing Covid-19 pandemic response, and showing potential for broader applications in understanding infectious diseases and genomic research beyond Covid-19.

**What will you gain from attending the workshop?** Participants will gain in-depth knowledge and practical skills in utilizing nanopore NGS technology, enabling them to contribute to cutting-edge research, surveillance, and diagnostics in Covid-19 and other infectious diseases, advancing their expertise in genomic applications.

**Who is the target population?** MD Students, Microbiologists, Researchers, scientists, bioinformaticians, healthcare professionals, and anyone interested in exploring the applications of nanopore Next-Generation Sequencing technology in Covid-19 research and its broader potential in infectious disease diagnostics.

**Requirements:** Candidate should preferably bring a laptop. They should have basic knowledge of molecular assays used in clinical diagnosis like RTPCR.

**Evaluation:** Participants will be given a feedback form at the end of the workshop to evaluate the content & organization of the workshop. A pre-workshop & post workshop MCQ based assessment of participants will also be done. The feedback will be used to improve future workshops and to assess the impact of the training.

## Detailed Agenda

Time	Topic	Speakers
9:30-10:30 AM	Introduction to WGS: (Nanopore Technology and its application)	<u>Dr. Shruti Radera</u>
10:30 -1:30 PM	Library Preparation (Lecture)	<u>Dr. Bhupendra Pandey</u>
	Demonstration and Hands-on exercise on Library Preparation (Covid-19)	<u>Dr. Bhupendra Pandey</u> <u>Mr. Ashustosh Paliwal</u>
<b>1:30-2:00 PM Lunch</b>		
2:00-3:00 PM	Sequencing (Lecture)	<u>Dr. Bhupendra Pandey</u>
	Sequencing (Demonstration and Hands-on exercise)	<u>Dr. Bhupendra Pandey</u> <b>(Moderator: <u>Dr. Shruti Radera</u>)</b>
3:00 PM-5:00 PM	Bioinformatics (Lecture)	<u>Dr. Suyash Agarwal</u>
	Data analysis: Demonstration	<u>Dr. Suyash Agarwal</u> <u>Dr. Bhupendra Pandey</u> <b>(Moderator: <u>Dr. Shruti Radera</u>)</b>
5:00-5:30 PM	Post Workshop Assessment Q & A	All the experts

#### Workshop Coordinator:

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