Supported by:

 $\Delta P$ 





Training on

## "Molecular approaches towards Pathogen & AMR Detection in Wastewater"

29<sup>th</sup> July- 3<sup>rd</sup> August 2024

The CSIR-Center for Cellular and Molecular Biology in conjunction with the Alliance for Pathogen Surveillance Innovations (APSI) India, supported by the Rockefeller Foundation is conducting a handson training on" **Molecular approaches towards Pathogen & AMR Detection in Wastewater**". The training is open to faculty members/researchers from universities/institutes/industries/hospitals and interested individuals in the field of Life Sciences, Medical Sciences, Pharmaceutical Science, & allied areas. It caters to individuals with varying levels of expertise, offering education and training in molecular approaches utilized for pathogen & AMR detection in wastewater samples. The program includes informative lectures, practical hands-on training, demo-sessions, and in-depth instructions on data collection and analyses.

No. of seat Minimum Qualification Dates	<ul> <li>10-12</li> <li>Masters in any branch of Life Science/Allied areas</li> <li>29<sup>th</sup> July- 3<sup>rd</sup> August 2024</li> </ul>
Mode of the Course Mode of selection Course Fee	<ul> <li>In-house training at CCMB</li> <li>Application form &amp; Statement of Purpose</li> <li>Sponsored</li> </ul>

## TrainingCurriculum:

- Relevance/Importance of Wastewater-based surveillance, especially molecular approaches
- Sample collection, processing for nucleic acid extraction (hands-on)
- Pathogen detection & quantitation through qPCR (or qRT-PCR) (hands-on) & variant analysis (hands-on)
- Taxonomic & AMR profiling through NGS (Shotgun- WholeGenome Sequencing)
  - (i) Library preparation for shotgun-WGS (demo/lecture-based)(ii) Bioinformatic analyses for taxonomic profiling & AMR signatures (hands-on)

## SalientFeaturesof the Training:

- > Expert instructorswillprovidelectures andhands-on training
- > Certificate ofparticipation willbeissuedto theparticipants
- Exposuretolaboratorysafetyregulations
- One-to-one interaction with the trainers
- Evaluation assignments and Trouble-shooting sessions

Training Coordinator: Dr. Archana Bharadwaj Siva Senior Principal Scientist CSIR-CCMB, Hyderabad

<u>Contact:</u> Dr. Archana Bharadwaj Siva Nodal Scientist Skill Development Program CSIR-CCMB, Hyderabad E mail: sdp@ccmb.res.in