Microbiology Winter Training Program

The Microbiology Winter Training Program is designed for those seeking advanced microbiological skills, with modules focused on molecular biology, industrial microbiology, environmental analysis, and clinical applications.

Note: Below modules are designed keeping high end industrial professionals into consideration. Please refer individual protocols below for affordable prices.

Advanced Molecular Microbiology

Kindly review the fees outlined for the individual protocols listed in this module.

- Next-generation sequencing (NGS) basics
- CRISPR-Cas gene editing in microbial studies
- Protein purification and analysis in microbes
- Gene expression profiling in response to stress

Industrial Microbiology and Bioprocessing

Kindly review the fees outlined for the individual protocols listed in this module.

- Downstream processing for microbial products
- Bioreactor setup and monitoring for industrial microbes
- Quality control in industrial microbiology
- Bioproduct recovery and purification

Clinical Microbiology and Diagnostics

Kindly review the fees outlined for the individual protocols listed in this module.

- Antibiotic resistance testing and analysis
- Advanced biochemical assays for pathogen identification
- Blood culture techniques for clinical microbiology

- Immunological techniques for infection diagnostics

Environmental Microbiology and Bioremediation

Kindly review the fees outlined for the individual protocols listed in this module.

- Heavy metal resistance and detoxification by microbes
- Microbial ecology in contaminated environments
- Water quality analysis and pathogen detection
- Soil microbial diversity and its ecological impact

Microbial Genetics and Genomics

Kindly review the fees outlined for the individual protocols listed in this module.

- Bioinformatics for analyzing microbial genomes
- 16S rRNA sequencing for microbial taxonomy
- Genomic data analysis and annotation
- Genetic diversity studies in microbial populations

Food Microbiology and Quality Control

Kindly review the fees outlined for the individual protocols listed in this module.

- HACCP principles for food microbiology
- Foodborne pathogen testing and identification
- Shelf-life testing for microbial stability
- Quality assurance techniques in food microbiology

Immunology in Microbial Studies

Kindly review the fees outlined for the individual protocols listed in this module.

- Antibody production against microbial antigens
- ELISA techniques for pathogen detection
- Western blotting for protein detection
- Immunofluorescence for visualizing microbial antigens

Agricultural Microbiology

Kindly review the fees outlined for the individual protocols listed in this module.

- Plant-microbe interaction studies
- Detection of soil pathogens affecting crops
- Nitrogen fixation by soil bacteria
- Biological control agents in agriculture

Cell Culture Techniques in Microbiology

Kindly review the fees outlined for the individual protocols listed in this module.

- Aseptic techniques and contamination prevention
- Cryopreservation of microbial cultures
- Introduction to 3D cell culture systems
- Microbial viability assays in cell culture

Analytical Techniques in Microbiology

Kindly review the fees outlined for the individual protocols listed in this module.

- HPLC for analyzing microbial products
- Spectrophotometry for protein quantification
- Gas chromatography for microbial byproducts
- Thin layer chromatography (TLC) in microbial analysis

Individual Protocols Under Microbiology Winter Training Program

1. Quantitative PCR (qPCR) for microbial quantification | **Fee: Contact for fee**
2. Next-generation sequencing (NGS) basics | **Fee: Contact for fee**
3. CRISPR-Cas gene editing in microbial studies | **Fee: Contact for fee**
4. Protein purification and analysis in microbes | **Fee: Contact for fee**
5. Gene expression profiling in response to stress | **Fee: Contact for fee**
6. Large-scale fermentation techniques | **Fee: Contact for fee**
7. Downstream processing for microbial products | **Fee: Contact for fee**
8. Bioreactor setup and monitoring for industrial microbes | **Fee: Contact for fee**

9. Quality control in industrial microbiology | **Fee: Contact for fee**
10. Bioproduct recovery and purification | **Fee: Contact for fee**
11. Molecular diagnostics for pathogen detection | **Fee: Contact for fee**
12. Antibiotic resistance testing and analysis | **Fee: Contact for fee**
13. Advanced biochemical assays for pathogen identification | **Fee: Contact for fee**
14. Blood culture techniques for clinical microbiology | **Fee: Contact for fee**
15. Immunological techniques for infection diagnostics | **Fee: Contact for fee**
16. Microbial biodegradation of environmental pollutants | **Fee: Contact for fee**
17. Heavy metal resistance and detoxification by microbes | **Fee: Contact for fee**
18. Microbial ecology in contaminated environments | **Fee: Contact for fee**
19. Water quality analysis and pathogen detection | **Fee: Contact for fee**
20. Soil microbial diversity and its ecological impact | **Fee: Contact for fee**
21. Whole-genome sequencing for microbial identification | **Fee: Contact for fee**
22. Bioinformatics for analyzing microbial genomes | **Fee: Contact for fee**
23. 16S rRNA sequencing for microbial taxonomy | **Fee: Contact for fee**
24. Genomic data analysis and annotation | **Fee: Contact for fee**
25. Genetic diversity studies in microbial populations | **Fee: Contact for fee**
26. Microbial spoilage detection in food products | **Fee: Contact for fee**
27. HACCP principles for food microbiology | **Fee: Contact for fee**
28. Foodborne pathogen testing and identification | **Fee: Contact for fee**
29. Shelf-life testing for microbial stability | **Fee: Contact for fee**
30. Quality assurance techniques in food microbiology | **Fee: Contact for fee**
31. Flow cytometry for immune response analysis | **Fee: Contact for fee**
32. Antibody production against microbial antigens | **Fee: Contact for fee**
33. ELISA techniques for pathogen detection | **Fee: Contact for fee**
34. Western blotting for protein detection | **Fee: Contact for fee**
35. Immunofluorescence for visualizing microbial antigens | **Fee: Contact for fee**
36. Biofertilizer development and microbial inoculants | **Fee: Contact for fee**
37. Plant-microbe interaction studies | **Fee: Contact for fee**
38. Detection of soil pathogens affecting crops | **Fee: Contact for fee**
39. Nitrogen fixation by soil bacteria | **Fee: Contact for fee**
40. Biological control agents in agriculture | **Fee: Contact for fee**
41. Mammalian cell culture for microbial infection studies | **Fee: Contact for fee**
42. Aseptic techniques and contamination prevention | **Fee: Contact for fee**
43. Cryopreservation of microbial cultures | **Fee: Contact for fee**
44. Introduction to 3D cell culture systems | **Fee: Contact for fee**
45. Microbial viability assays in cell culture | **Fee: Contact for fee**
46. Mass spectrometry for microbial metabolomics | **Fee: Contact for fee**
47. HPLC for analyzing microbial products | **Fee: Contact for fee**
48. Spectrophotometry for protein quantification | **Fee: Contact for fee**
49. Gas chromatography for microbial byproducts | **Fee: Contact for fee**
50. Thin layer chromatography (TLC) in microbial analysis | **Fee: Contact for fee**

Please contact on +91-8977624748 for more details

Cant Come to Hyderabad? No Problem, You can do it in Virtual / Online Mode