

HANDS-ON TRAINING ON REAL TIME PCR

About the program:

PCR (Polymerase Chain Reaction) has revolutionized the practice of science. This program offers detailed insight about principles of designing an efficiently planned RT-PCR assay, interpreting the generated data and troubleshooting RT-PCR assays. This program is designed to impart the knowledge on advantages of using RT PCR technology and empowering the participants with live, hands-on experience of the Real-Time PCR applications.

Duration:

6 Days (includes theory, hands-on training & evaluation)
Successful completion of the program gets you a Certificate of Participation.

Curriculum Includes:

- ▶ Understanding PCR & Real-Time PCR ▶ Real-Time PCR applications ▶ Primer Designing ▶ Reaction setup for Real-Time PCR ▶ Selection of quantification - relative or absolute ▶ Melting curve analysis ▶ SYBR Green Assay ▶ Sample run ▶ Data Analysis ▶ Real handling of the instrument

Program Suitability:

- ▶ For undergraduate and postgraduate learners from Molecular Biology, Biological Science, Life Science, Microbiology, Biotechnology etc.
- ▶ For those who wish to expand their basic knowledge & gain a better understanding of Real-Time PCR application and data analysis.



HANDS-ON TRAINING ON ELISA

About the program:

Enzyme-linked Immunosorbent Assay is one of the most commonly used techniques applied to detect different antibodies in blood. A deep-immersion experience with this assay can be an excellent asset for any professionals aspiring to make a career in life sciences research and diagnostics. This program aims to equip the participants with hands-on training on various applications, operations, data analysis and interpretation of ELISA technique.

Duration:

6 Days (training includes theory, hands-on training and evaluation)

Successful completion of the program gets you a Certificate of Participation

Curriculum includes:

- ▶ Basic theory of ELISA - immunological technique for quantification of Biomarkers
- ▶ Principles and Kit selection guidelines
- ▶ Method Validation and optimization of ELISA
- ▶ Reagents Preparation
- ▶ Assay procedure
- ▶ Statistical calculations
- ▶ Data interpretation- graph & clinical significance
- ▶ Real handling of the instrument



Program Suitability:

- ▶ For undergraduate and postgraduate learners from Molecular Biology, Biological Science, Life Science, Microbiology, Biotechnology etc.
- ▶ For those who wish to expand their basic knowledge & gain a better understanding of ELISA applications and data analysis.

HANDS-ON TRAINING ON BASIC MICROBIOLOGICAL TECHNIQUES

About the program:

Microbiology laboratory skill is an essential part of an aspiring career in life science. This program is specially designed to train the participants in the fundamental techniques about applied microbiology. The major target of the program is to provide hands-on training to the participants that could boost their confidence in exploring further higher research or analysis in the field of life sciences.



Duration: 6 Days (includes theory, hands-on training, and evaluation)
Successful completion of the program gets you a Certificate of Participation

Curriculum includes:

- ▶ Basic microbiology laboratory procedures ▶ Media preparation ▶ Different types of sterilization techniques
- ▶ Isolation & plating techniques ▶ Maintenance methodologies ▶ Biochemical characterization of microbes

Duration: 2 Weeks (includes theory, hands-on training, and evaluation)
Successful completion of the program gets you a Certificate of Participation

Curriculum includes:

- ▶ Basic microbiology laboratory procedures ▶ Media preparation ▶ Different types of sterilization techniques
- ▶ Isolation & plating techniques ▶ Maintenance methodologies ▶ Qualitative and quantitative identification of Total Bacterial Count, Total coliforms, *Salmonella sp.*, *Escherichia coli*, *Clostridium sp.*, Total Enterobacteriaceae, Total mold count from Raw materials, Feed, Water, Meat, Egg
- ▶ Complete raw materials, Feed and Water microbiology ▶ Biochemical characterization of microbes
- ▶ Antibiotic sensitivity test of biological samples using disc diffusion method

Program Suitability:

- ▶ For undergraduate and postgraduate learners from Molecular Biology, Biological Science, Life Science, Microbiology, Biotechnology etc.
- ▶ For those who wish to expand their basic knowledge & gain a better understanding of application of Microbiology in diagnostics & research.

INTERNSHIP SUMMER TRAINING INDUSTRIAL TRAINING

Who Can Attend?

B Sc/M Sc in Biotechnology / Microbiology /
Molecular Biology / Genetics / Zoology /
Botany / Biochemistry / Others
B Tech/M Tech in Biotechnology / Food Technology

Duration: 01 | 03 | 06 months



Agrivet Research & Advisory Private Limited was set up in 2012 and now it's one of the reputed, science-based, knowledge driven research and advisory organization catering to global clientele. An internship in Agrivet brings you a smooth walk into the real world of scientific research, a guided tour to the life of a researcher and gets you tremendous exposure to the cutting-edge equipment.

TRAINING PROVIDED ON:

- Hands-on experience on Molecular and Microbiology Techniques
- Good Laboratory Practices
- Handling of different Laboratory Instruments
- Basic understanding and working of Livestock R&D
- Reagent preparation, handling techniques and safety protocol
- Sterilization and decontamination process demonstration
- Handling of pathogenic organisms
- Genomics, Transcriptomics and Proteomics
- Isolation, identification, and characterization of microbes
- Microbial metagenomics.
- ELISA
- Extraction and purification of genomic DNA from various samples (microbes, animal tissues, animal digesta, environmental samples etc.)
- Agarose Gel Electrophoresis
- Use of Spectrophotometer
- RNA extraction
- Gene expression study using qRT-PCR.
- Biochemical analysis of blood and serum.
- Primer designing
- Polymerase Chain Reaction (PCR)
- Viscosity analysis of various biological samples using Viscometer.
- Toxin analysis.
- Histomorphometry

