Genomia Diagnostics Research Pvt. Ltd.

Advancing Science for Life

Innovate | Educate | Diagnose

Diagnostics

Research & Development

Paramedical Institute

Training Programs

About Us

Advancing Healthcare Through Diagnostics, Research & Education

Genomia Diagnostics Research Pvt. Ltd. is a premier institution at the forefront of Diagnostics, Research & Development, Paramedical Institute & Training Programs. With a commitment to scientific excellence and innovation, we provide high-quality diagnostic solutions, cutting-edge research, and industry-focused training programs to empower the next generation of healthcare professionals.

Our Expertise

We specialize in molecular diagnostics, industrial microbiology, clinical research, and bioinformatics, offering precision-driven solutions for healthcare and biotechnology sectors. Our state-of-the-art facility houses specialized departments, including:

- Hematology
- Biochemistry
- Clinical & Industrial Microbiology
- Immunoassay
- Molecular Biology
- Bioinformatics & Biotechnology
- Enzymology
- Fermentation Technology
- Advanced Diagnostics

Biochemistry

Microbiology

Immunossay

Molecular Diagnosis

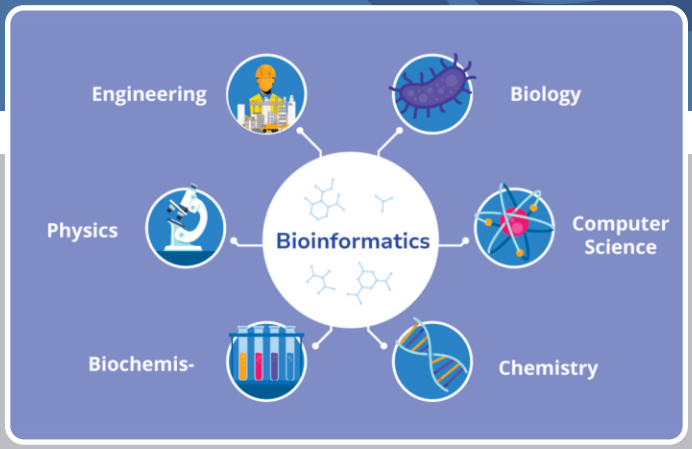
Histopathology

Haematology

BIOINFORMATICS

Introduction, Applications & Computational Approaches

This module provides an in-depth understanding of bioinformatics, including its applications and scope in modern biological research. Participants will gain hands-on experience with computational tools for sequence analysis, including FASTA and BLAST (BLASTP, BLASTN, BLASTX, TBLASTX, TBLASTN). Training includes multiple sequence alignment techniques using ClustalW and an overview of biological databases such as primary (GenBank, EMBL, DDBJ) and secondary (PDB, CATH, SCOP, Pfam, PIR, PROSITE, Swiss-Prot). The course also covers phylogenetic analysis methodologies and computational approaches in structural biology.



INDUSTRIAL MICROBIOLOGY

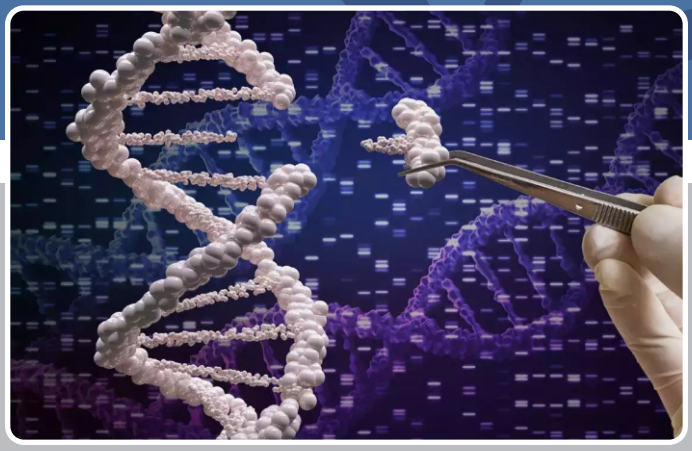
Microbial Techniques, Bioprocessing, and Industrial Applications

Participants will be trained in Good Laboratory Practices (GLP) and essential biosafety protocols. The course covers microbiological instrumentation, including autoclaves, laminar airflow systems, incubators, shakers, and hot air ovens. Students will gain expertise in media preparation, sterilization techniques, microbial isolation from soil samples, Gram and endospore staining, and antibiotic sensitivity testing. Advanced topics include enzyme-producing microbial screening and antibiotic resistance profiling of multidrug-resistant (MDR) microbes from environmental samples.

MOLECULAR BIOLOGY

Fundamentals of Molecular Techniques and Genomic Analysis

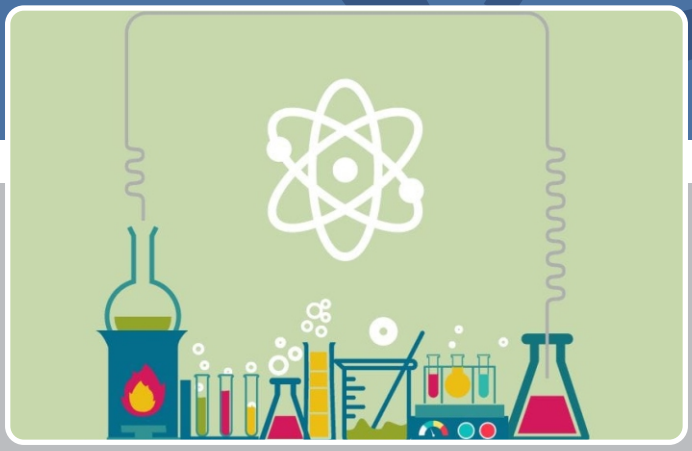
This module focuses on molecular methodologies, covering GLP, reagent preparation, and microbial culturing techniques. Students will perform genomic DNA isolation from prokaryotic (E. coli DH5α) and plant sources, followed by agarose gel electrophoresis and nucleic acid quantification. The course also includes primer designing, polymerase chain reaction (PCR) optimization, and gene amplification techniques.



BIOCHEMISTRY

Principles and Analytical Techniques

This training covers fundamental biochemical techniques, including Good Laboratory Practices (GLP), elementary calculations, micropipette handling, and solution preparation. Students will learn about pH meters, colorimeters, spectrophotometers, and weighing balances. Experimental methodologies include protein quantification using the Bradford method, peptide bond detection via the biuret reaction, and carbohydrate estimation using the DNS reagent method.



MEDICAL MICROBIOLOGY

Microbial Identification and Clinical Diagnostics

This course focuses on clinical microbiological techniques, including instrumentation (autoclaves, incubators, laminar airflow systems, microscopes) and microbial culture methodologies. Training encompasses bacterial identification through various staining techniques, antibiotic susceptibility testing, urine sample analysis, and enzymatic assays such as catalase and oxidase tests. Blood microscopy techniques are also included.

IMMUNOLOGY

Serological Assays and Immune Response Analysis

This module introduces fundamental immunology concepts, micropipette handling, solution preparation, and blood component analysis. Training includes antigen-antibody interactions, bleeding and clotting time assessments, blood grouping, slide agglutination assays (Widal test), serum and plasma isolation, VDRL and ELISA tests, and radial immunodiffusion techniques.

DIAGNOSTICS

Hematological, Biochemical and Clinical Diagnostic Techniques

This module covers hematology laboratory operations, blood sample processing, and microscopy. Training includes hemoglobin estimation, red and white blood cell counts, blood agglutination analysis, serum separation, and biochemical assays such as blood sugar, cholesterol, alkaline phosphatase, and blood urea determination.

FERMENTATION TECHNOLOGY

Microbial Fermentation and Bioprocessing

This course focuses on microbial fermentation techniques, including strain selection, bioreactor operations, and metabolite production. Participants will gain hands-on experience in media optimization, fermentation kinetics, microbial growth monitoring, and downstream processing of fermentation products.

FOOD BIOTECHNOLOGY

Food Microbiology, Safety and Quality Control

This module covers food microbiology principles, laboratory practices, and safety protocols. Training includes microbial isolation from food samples, enumeration of E. coli, milk quality control, food acidity and pH determination, moisture content estimation, adulteration detection, and antioxidant analysis of food products.

FORENSIC SCIENCE

Crime Scene Investigation and Biological Evidence Analysis

Participants will be trained in forensic laboratory techniques, including biological sample collection, DNA extraction, blood and saliva stain identification, electrophoresis-based DNA profiling, and forensic toxicology screening.

ENVIRONMENTAL BIOLOGY

Ecological Analysis and Environmental Monitoring

This module explores environmental biology concepts, laboratory instrumentation, and analytical techniques for soil, water, and air quality assessment. Topics include pH and moisture content analysis, total dissolved solids (TDS) determination, salinity testing, and carbonate ion quantification.

PHARMACOLOGY

Pharmaceutical Analysis and Drug Testing

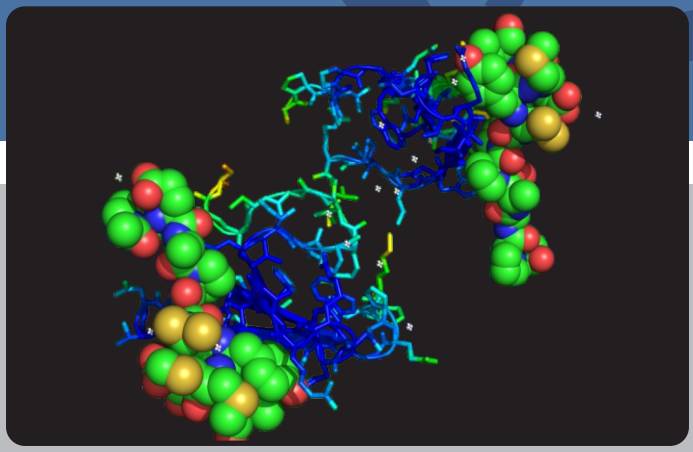
This training covers pharmaceutical chemistry principles, laboratory safety, and drug analysis techniques. Participants will perform antimicrobial susceptibility tests, nitrogen and sulfur detection in compounds, qualitative drug analysis, and limit tests for pharmaceutical contaminants.

PROTEOMICS & ENZYMOLOGY

Protein Structure
Enzyme Kinetics
and
Industrial Application

This module provides training in proteomics methodologies, including protein isolation, quantification using Bradford/Biuret/Lowry's methods, SDS-PAGE separation, and mass spectrometry applications.

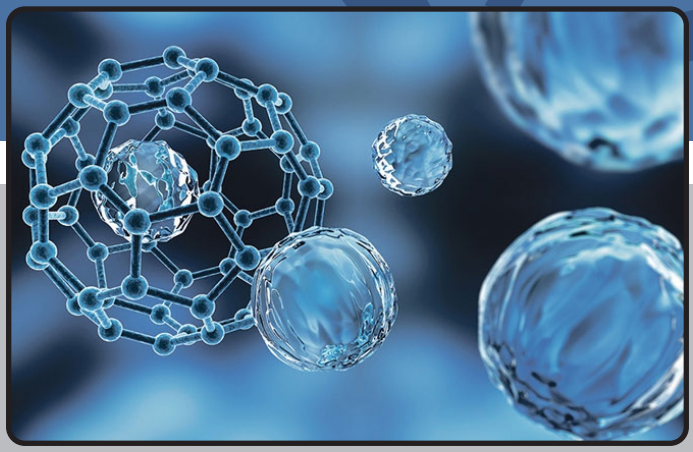
Participants will study enzymology principles, enzyme classification, and industrial enzyme applications. The module covers enzyme production optimization, microbial enzyme screening, and enzymatic activity assays, including amylase, protease, catalase, urease, and citrate production analysis.



NANO BIOTECHNOLOGY

Nanoparticle Synthesis and Biomedical Applications

Participants will gain expertise in nanoparticle synthesis, characterization, and biomedical applications. Training includes the preparation of plant extracts, silver and copper nanoparticle formation, spectrophotometric characterization, and antimicrobial activity assessments.



BIOSAFETY

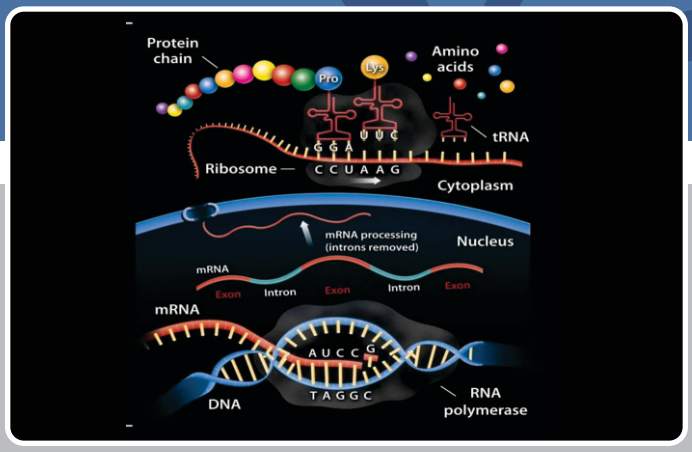
Principles, Practices, and Applications

This module introduces the fundamental concepts of biosafety, focusing on its importance in biological research and laboratory practices. Participants will explore biosafety levels (BSL-1 to BSL-4), risk assessment strategies, and the containment practices required for various pathogens. Training includes guidelines from international biosafety protocols (e.g., WHO, CDC) and handling hazardous materials in compliance with safety standards. The course also emphasizes waste management, emergency response, and the ethical considerations of biosafety in biotechnology and molecular research.

JOB ORIENTED (COMPREHENSIVE)

Integration of Microbiology Molecular Biology and Biochemistry Principles

This module offers a comprehensive approach to understanding the interconnected principles of microbiology, molecular biology, and biochemistry. Participants will learn microbial techniques such as culturing, staining, and identification, alongside molecular techniques like DNA/RNA extraction, PCR, and electrophoresis. The biochemistry segment includes enzyme kinetics, protein estimation, and metabolic pathway analysis. Practical sessions focus on integrating these disciplines for applications in diagnostics, biotechnology, and research. Emphasis is placed on hands-on training with modern instrumentation and techniques, preparing participants for multidisciplinary challenges in biological sciences.



Expertise and Team:

At the heart of Genomia's success lies our team of dedicated professionals, comprising experienced Doctors, Scientists, Researchers, and Technical Experts with diverse backgrounds in Microbiology, Medicine, Biotechnology, and Molecular Biology. Their collective expertise and collaborative spirit drive our commitment to excellence in research, development, and service delivery.

Dr. Asif Anas
PhD –Medical Microbiology
Director
Genomia Diagnostics Research (P) Ltd.

Dr. Rajat Maheshwari
PhD - Microbiology
Technical Head
Genomia Diagnostics Research (P) Ltd.

Dr. Shahbaz Khan
PhD –Molecular Biology
Quality Manager
Genomia Diagnostics Research (P) Ltd.

Dr. Munesh Kumar Harioudh
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Dr. Nimisha Patel
Assistant Professor
Department of Life Sciences,
J C Bose University of Science & Tech.

Dr. Mudassir Azam
Post Doctrate Fellow
National Institute of pathology
Safdarjung hospital

Dr. Ankit Saharan
MBBS MD (Microbiology)
Ex medical officer IOCL
Ex doctor GMSH Chandigarh

Dr. Chandra Prakash
DHR - Young Scientist
Jawahar Lal Nehru University

Dr. Shazia Shaheen Mir
Assistant Professor
Al Bahah University, Saudi Arabia

Dr. Manoj Kumar Yadav
Postdoctoral Fellow
Dankook University, South Korea

Dr. Punit Kumar
Asst. Professor
Karaganda Medical University, Kazakhstan

Dr Uzair Ahmad
Chief Technical officer
Plotnew Bio Innovation Private Limited

Dr. Sabeeha Naaz
Department of Physics
University of Lucknow

Er. Dharmendra Srivastava
M.Tech.- Biochemical Engineering
25+ Years of Industrial Experience

Dr Jagdeep Singh
Head Molecular & Microbiology
MolQ Laboratory

Dr. Namita Bhutani
Ph.D. Microbiology
Quality Partner at Hilton Foods
Auckland, New Zealand

Dr. Saba Zafar
BDS
KDC, CCS University

Ms. Heena Maheshwari
M. Sc. Bioinformatics (Gold Medalist)
MDU Rohtak
7+ Years of Industrial Experience

Genomia Training Academy

Our Education & Training division is designed to bridge the gap between academia and industry. We offer short-term and advanced training modules tailored for students, researchers, and professionals, covering:

- Short-term workshops (Hands-on practical training)
- 1-Month Certification Programs (Specialized skill enhancement)
- 3-Month Advanced Courses (Industry-oriented technical expertise)
- 6-Month Research Training (Project-based industrial exposure)

Why Choose Genomia?

✓ NABL-accredited & ICMR-approved diagnostic laboratory
✓ State-of-the-art research facility & expert faculty
✓ Industry-driven training for career growth
✓ Expanding reach across Delhi-NCR & beyond.

Join us at Genomia—where innovation meets excellence!!

Genomia Diagnostics Research Pvt. Ltd.

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