

Skill Development Program On “Genetic & Microbial Monitoring of Animals” (GMMA-IV)

05th - 13th October 2026



The CSIR-Center for Cellular and Molecular Biology is organizing a hands-on training on ‘Genetic & Microbial Monitoring of Laboratory Animals’ (GMMA-IV) targeted to faculty members/researchers from universities/institutes/industries and interested individuals in the field of Life Sciences, Medical Sciences, Pharmaceutical Science & allied areas. It is intended to train people in monitoring and maintaining lab animals used for various experiments. The training would involve hands-on experimentations and lectures on tissue collection, DNA isolation, genotyping, biochemical analyzers, microbial contamination detection and preventions.

No. of seats	:	10-15
Minimum Qualification	:	Bachelors/Masters in any branch of Life Science/Allied areas
Mode of the Course	:	In-house training at CCMB, Hyderabad
Mode of selection	:	Application form & Statement of Purpose
Course Fee	:	Rs.15,000/- (including accommodation & GST)
Apply using the link	:	http://recruitment.ccmb.res.in/training_programs/sdp/

Training Curriculum: (lectures and hands-on sessions)

- Quality control, both genetic & microbial to maintain genetically homozygous & germ free animals
- Immuno-genetic, biochemical and PCR based testing methods
- Disease screening of lab animals, sample collection & processing techniques for molecular & microbiological monitoring
- Things to sort out during standardization & Exposure to laboratory safety regulations

Hands-on:

- Genomic DNA isolation from tail samples and genotyping by standard PCR with gene specific and SSLP markers
- Biochemical markers (Hb α , ALP, Albumin, SGPT, etc..) to assess the genotype or genetic contamination
- Tissue collection, DNA & RNA isolation, Complimentary DNA synthesis for DNA & RNA viruses
- Identification of infective agents by Real time PCR (qPCR)
- Preparation and observation of agar plates for microbial cultures from different platforms
- Microbial assessment by different staining procedure and ABST
- Biochemical testing by hematology and immunological testing by ELISA
- Fecal examination for endo-parasites and skin scrapping for ecto-parasites

Demos:

- Primer sequence selection, primer design and synthesis
- Basic PCR programming, uses of real time(qPCR) and reverse transcriptase (RT PCR) types
- Buffers and Master mix preparation for DNA,RNA isolations and PCR
- Skin and hair scrapping to identify the presence of ecto-parasites
- Basic histo-pathological techniques involved in health monitoring program

Salient Features of the Training:

- Expert instructors will provide lectures and hands on training
- One-to-one interaction with the trainers
- Evaluation assignments and Trouble-shooting sessions
- Certificate of participation will be issued to the participants

Training Coordinator:

Dr. Jerald Mahesh Kumar
Chief Scientist & In-charge
Animal House, CSIR-CCMB,
Hyderabad.

Contact details:

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Scan to Apply

