

CSIR Integrated Skill Initiative





Certificate course on Skill Development in Care, Management of Laboratory Animals & Experimental Techniques



CSIR-CDRI

CSIR-CDRI is a unique R & D Institution in the country with state of the art infrastructure for new drug discovery and development from "Concept to Commercialization". It is poised to become a global leader through cutting edge science & technology. For New India, the Institute is re orienting itself into a multidisciplinary nodal centre for development of drug for the unmet medical needs as well as the expectation of the industry. While focusing on the discovery & development of drugs, the institute is aligned & contributing towards the national missions programmes such as Make in India, Swatch Bharat, Skill India, Digital India, Start-up India, Accessible India and Sashakt Bharat.

The certificate course on "Skill Development in Care, Management of Laboratory Animals & Experimental Techniques" is a unique opportunity for skill development and basic training in the area of laboratory animal care, management and experimentation. The course will cover the basic of how to manage animal facility, routine care and husbandry practices of animals, experimental procedures and techniques, quality control procedures, GLP etc. The trained and skilled candidates will have good job prospect in the area of biomedical research, animal facilities in public and private research institutes, pharma industry, and academia.

CSIR-CDRI invites applications for the course as per the details given below:

Title of the Course : Certificate course on Care, Management of Laboratory

Animals & Experimental Techniques

Duration : 03 Weeks (15th May to 5th June 2025)

No. of Seats : 20

Educational Qualification : 10+2 onwards (Science stream will be preferred)

Venue of the course : CSIR-CDRI, Lucknow

Course Fee : Rs. 10,000/-Last Date for submission of : 5th May 2025

applications

Course Coordinator : Dr. Rajdeep Guha (E-mail: rajdeep.guha@cdri.res.in)

TRAINING CURRICULUM

Basic Principles of Laboratory Animal's Care & Management:

General introduction to research animals of various species, their biology and behavior, basic laboratory animal husbandry practices, animal facility layout and functional units, general routine sanitation and hygiene practices, cleaning, washing and sterilization of animal cages, racks, and bedding etc.

Breeding Techniques of different species of Laboratory Animals:

Basic introduction to different methods of breeding practices, inbreeding and out breeding, factors responsible for successful breeding of animals, setting and caring of breeding colonies, Breeding and management of transgenic, knockouts and other genetically modified animal models, genetic characterization of animals etc.

Experimental techniques in Laboratory Animals:

Demonstrations and training on basic experimental techniques on laboratory animals like animal handling and restraining, routes of administration, sampling techniques, necropsy techniques, anesthesia and euthanasia in animals etc.

Patho-physiology of commonly occurring diseases and their preventive measures: Basic introduction to common diseases observed in animals, implementation of health monitoring program and methodologies, prevention and treatment of diseases etc.

Record keeping & Documentation:

Recording and upkeep of various records related to animal breeding, receipt, distribution and dispatch of animals, feed and bedding, disposal records etc.

Animal Nutrition:

Basic requirements of animal nutrition, preparation and formulation of animal feed (theory only), storage and distribution of animal feed etc.

Animals Ethics & Welfare:

Basic concepts on animal welfare and ethics, introduction to animal national and international regulations and guidelines related to animal welfare, preparation and designing animal experimental protocol, Institutional Animal Ethics Committee (IAEC) and its functionaries etc.

Instrumentation for in-vivo Research:

Introduction and basic features of in-vivo instruments like automatic hematology and serum biochemistry analyzer, neurobehavioral facility, non-invasive blood pressure monitoring, micro CT, IVIS, etc.

SALIENT FEATURES OF THE TRAINING

- ➤ Comprehensive Coverage Detailed training on laboratory animal care, management, breeding, and research techniques across multiple species.
- ➤ Hands-on Training Practical sessions on animal handling, administration routes, sampling, anesthesia, euthanasia, and necropsy techniques.
- > Species-Specific Knowledge Covers biology, behavior, and husbandry requirements of various research animals.
- ➤ Breeding & Genetic Management Training on breeding techniques, colony management, and genetically modified animal models.
- ➤ Disease Management & Prevention Identification, prevention, and treatment of common laboratory animal diseases through health monitoring programs.
- ➤ Ethical & Regulatory Compliance Understanding national and international guidelines on animal welfare, ethical considerations, and IAEC functions.
- ➤ Record Keeping & Documentation Maintenance of records related to breeding, distribution, feed management, and disposal.
- > Animal Nutrition & Diet Formulation Covers dietary requirements, feed formulation, storage, and distribution practices.
- ➤ Facility Maintenance & Sanitation Training on cleaning, sterilization, and hygiene practices in animal housing facilities.
- > Instrumentation & In-vivo Research Techniques Introduction to advanced research equipment for hematology, neurobehavioral studies, and imaging.

EVALUATION OF TRAINEES

Theory Courses (50 Marks)	Practical Courses (50 Marks)
Continuous assessment through assignments	Demonstration of Experimental techniques
Term and examination	Guided breeding and management techniques

CERTIFICATION

The certificate will be issued to the successful candidates.

IMPORTANT DATES:

Receiving of application by E-mail (last date): 05/05/2025

Intimation to selected candidates: 09/05/2025

Course Start: 15/05/2025

Kindly send Application by E-mail only (sdp@cdri.res.in)

For more details and registration, kindly visit the link;

https://www.cdri.res.in/skilldevelopment.aspx

Contact:

Coordinator, Skill Development Programme CSIR-Central Drug Research Institute Sec-10, Jankipuram Extension, Sitapur Road Lucknow 226031 (Uttar Pradesh)

E-mail: sdp@cdri.res.in