

Certificate Course on Laboratory Animal Science (CCLAS)

Feb 6th to 17th, 2023

Schedule

Day	Time	Subject	Resource person
6 th February	08.45 – 09.15 (30 min)	Registration	
	09.15 – 09.20 (5 min)	Inaugural Ceremony: Lighting of the Lamp	Chief guest and organizers
	9.20 – 09.25 (5 min)	Welcome Address	Dr. Anirban Basu, Scientist In-charge, Animal Facility, NBRC
	9.25 – 09.30 (5 min)	Director's Address	Prof. Krishanu Ray, Director, NBRC
	09.30 – 09.40 (10 min)	Chief Guest's Address	Prof. Tankeshwar Kumar, Vice Chancellor, Central University of Haryana
	09.40 – 09.50 (10 min)	Guest of Honor's Address	Dr. S.K. Dutta, Joint Commissioner (Animal Welfare) & Member Secretary (CPCSEA)
	09.50 – 10.00 (10 min)	Vote of Thanks	Dr. Inderjeet Yadav/Dr.Ravi Kumar
	10.00 – 10.40 (40 min)	Group Photographs & High Tea	
	10.40 – 11.10 (20 min)	Brief Introduction, Grouping, Task	Dr. Inderjeet Yadav
	11.10 – 12.10 (60 min)	Introduction to Laboratory Animal Science Animal Welfare and ethics	Dr. Vijay Pal Singh
	12.10 - 1.00 (50 min)	Legislation in India - On Lab Animal Science & Experimentation"	Dr. Vivek Tyagi, Expert Consultant, CPCSEA
	13.00 – 14.00 (60 min)	Lunch	
	14.00 – 13.40 (100 min)	Practical Training: Handling and Restraining of Mice, Rat, Guinea Pig and Rabbit.	
	15.40 – 16.00 (20 min)	Tea	

	16.00 – 17.00 (60min)	Practical Training: Handling and Restraining of Mice, Rat, Guinea Pig and Rabbit.	
7th February	09.00 – 10.00 (60 min)	Anatomy of lab Animal	Dr. Inderjeet Yadav NBRC
	10.00 – 10.30 (30 min)	General Biology of Lab Animals	Dr. Ravi Kumar, NBRC
	10.30 – 10.50 (20 min)	Tea	
	10.50-11:30 (40 min)	Birds in neuroscience research	Dr. Soumya Iyengar, NBRC
	11.30 – 12.30 (60 min)	TBD	TBD
	12.30 – 01.15 (45 min)	Lunch	
	14.00 – 13.40 (100 min)	Practical Training: Handling and Restraining of Mice, Rat, Guinea Pig and Rabbit.	
	15.40 – 16.00 (20min)	Tea	
	16.00 – 17.00 (60min)	Practical Training: Handling and Restraining of Mice, Rat, Guinea Pig and Rabbit.	
8th February	09.00 – 11.00 (120 Min)	Peri-operative care and analgesia	Dr. Shikha, NIB
	11.00 – 11.30 (30 min)	Tea	
	11.30- 12.30 (60 min)	Crucial role of laboratory animal models in stem cell research and regenerative medicine	Dr. Taru Sharma Director, NIAB, Hyderabad
	12.30 – 1.30 (60 min)	Lunch	
	1.30-2.30	"Good welfare makes good science"	Vera Baumans Utrecht University, The Netherlands
	2.30-3.30	"Refinement of procedures"	Vera Baumans Utrecht University, The Netherlands
	3.30-3.45	Tea Break	
	3.45-5.00	Nutrition and feeding	Dr Joannes Cornelius Meijer, Utrecht University, The Netherlands

9th February	09.00 – 09.45 (45 Min)	Animal Models of osteoporosis, rheumatoid arthritis and osteoarthritis	Dr. Mohan Wani, Director, NCCS
	9.45-10.30 (45 Min)	Arrive and Prepare guidelines	Dr Anupama, ILBS
	10.30 – 10.45 (15 Min)	Tea	
	10.45-11.30 (45 Min)	Transgenics and Genome Editing Technology: Mechanism, Applications and future prospects	Dr. Amit Pandey THSTI
	11.30 – 12.15 (45 Min)	Guidelines for filling form B and other regulatory aspects	Dr. Kripale Pandae, Expert consultant, CPCSEA
	12.15 – 1.00 (45 Min)		Dr. Siddharth Pandey
	01.00 – 02.00 (60 min)	Lunch	
	02.00 – 04.00 (120 min)	Demonstration of experimental techniques: Collection of body fluids and Injection techniques	
	04.00 – 04.15 (15 min)	Tea	
	04.15 – 5.00 (60min)	Demonstration of experimental techniques: Suturing	
10th February	09.00 – 10.00 (60 Min)	Humane end points and euthanasia methods	Dr. Himangsu Bora CSIR-NEIST
	10.00-11.00 (60 Min)	Breeding of Rodents, Husbandry and management of rodents	Dr. KB Patel, ILBS
	11.00-11.20 (20 Min)	Tea	
	11.30 - 1.00 (90 Min)	Animal Experiment Design (Methods of Calculation of Sample Size in Animal Study Designing: Pilot Study or, Power Analysis)	Dr. Vijay Pal Singh/Sushil Jha
	1.00 – 02.00 (60 min)	Lunch	
	02.00 – 04.00 (120 min)	Demonstration of experimental techniques: Collection of body fluids and Injection techniques	
	04.00 – 04.15 (15 min)	Tea	

	04.15 – 5.00 (45 min)	Demonstration of experimental techniques: Suturing	
13th February	09.00 – 10.00 (60 min)	Genetic standardization to maintain pure strains of Laboratory rodents	Dr. Arvind Ingle ACTRAC Mumbai
	10.00 – 10.20 (20 min)	Tea	
	10.20 – 11.00 (40 min)	Ethics in Science	Dr. Bela Desai, DBT welcome trust
	11.00 – 11.45 (45 min)	Animal Models for poultry research	Dr. Debasis Nayak IISER, Bhopal
	12.00 – 01.00 (60 min)	Occupational health Hazards and Safety	Dr. Ramachandra S.G, Director, NARFBR, Hyderabad
	01.00 – 02.00 (60 min)	Lunch	
	02.00 – 03.00 (60 min)	Basics of Rodent Anaesthesia, Surgery and Peri-Op Care, Hands-on Assessment, (Practical Group Demo)	
	03.00 – 03.15 (15 min)	Tea	
	03.15 – 05.00 (105 min)	Basics of Rodent Anaesthesia, Surgery and Peri-Op Care, Hands-on Assessment, (Practical Group Demo)	
14th February	09.00 – 10.00 (60 min)	Basic of surgery & Anesthesia	Dr. Sushil Kumar Bits Piani
	10.00-10.15 (15 Min)	Tea	
	10.15 – 11.00 (45 min)	Drug repurposing in pre-clinical research	Dr. Somdutta Sen Saphera Pharma
	11.00 – 12.00 (60 min)	Rodent Necropsy for data generation	Dr Anupama, ILBS
	12.00 – 01.00 (60 min)	Manipulation of gene expression in Hippocampus and analysis of Spatial memory	Dr. Sourav Banerjee NBRC
	12.30 – 01.30 (60 min)	Lunch	
	1.30 – 04.00 (150 min)	Perfusion Techniques	
	04.00 – 04.15 (15 min)	Tea	

	04.15 – 05.00 (45 min)	Severity assessment and Humane endpoints- A Practical approach to implement refinement in experimental procedures	
15th February	09.00 – 10.00 (60 min)	Alternatives in Animal Experimentation	Dr. Suresh Poosala
	10.00-10.40	Cell culture methods for understanding brain disorders	Dr. Pankaj Seth NBRC
	10.40 – 11.00 (15 min)	Tea	
	11.00 – 11.45 (45 min)	Animal Models for screening new drugs in Cardiovascular Research	Dr Harlokes, AIIMS New Delhi
	11.45– 12.30 (45 min)	History of animal welfare in India	Dr. Sujoy Khanna LUVAS, Hisar
	12.30 – 1.30 (60 min)	Effective Health Monitoring, Diseases and Pathology	Dr. Nagarajan, NII, New Delhi
	1.30 – 02.00 (30 min)	Lunch	
	02.00 – 04.00 (120 min)	Necropsy Procedure & Handling animal tissues for Histo-pathological examination	
	04.00 – 04.15 (15 min)	Tea	
	04.15 – 05.15 (60 min)	Necropsy Procedure & Handling animal tissues for Histo-pathological examination	
16th February	09.00 – 09.40 (60 min)	Laboratory animal facility design and equipment's	Dr. Shital Suryavanshi TIFR, Mumbai
	09.40 – 10.20 (45 min)	Zebrafish as an in vivo model system: From basics of rearing to applications in biomedical research	Dr. Rajender Motiani, RCB, Faridabad
	10.20 – 10.30 (10 min)	Tea	
	10.30-11.15	Laboratory animal import, breeding strategies and supply for experiments. ”	Dr. Shital Suryavanshi TIFR, Mumbai
	11.15 - 12.00 (60 min)	Biosafety and Biosecurity	Dr. Ajit Singh NIAH, Baghpat
	12.00 - 01.00 (60 min)	AAALAC International Standards and accreditation Process	KB Patel ILBS, New Delhi

	1.00 – 02.00 (60 min)	Lunch	
	02.00 – 04.00 (120 min)	Introduction to GLP guidelines Protocol Preparation & Self Study	KB Patel ILBS, New Delhi
	04.00 – 04.15 (15 min)	Tea	
	04.15- 05.00 (45 min)	Self-Study	
17th February	09.00 – 11.00 (120 min)	Examination	Dr. Anirban Basu/Dr. Sourav Banerjee/ Dr. Inderjeet/Dr. Vijaypal
	11.00 – 11.30 (30 min)	Tea	
	11.30 – 1.00 (90 min)	Presentation of protocols (cont.)	Dr. Anirban Basu/Dr. Sourav Banerjee/ Dr. Inderjeet/Dr. Vijaypal
	1.00 – 02.00 (60 min)	Lunch	
	02.00 – 03.00 (180 min)	Valedictory function and Certificate Distribution	Dr. S.K. Dutta, Joint Commissioner (Animal Welfare) & Member Secretary (CPCSEA)
	03.00- 03.30 (30 min)	Refreshments and Farewell	

Dr. Inderjeet Yadav
Organizing Secretary