

Journal of Laboratory Animal Science Year 2025, Volume-8, Issue-2 (Jul-Dec)



EDITORIAL COLUMN

The Journal of Laboratory Animal Science (JLAS) functions as the official publication for the Laboratory Animal Scientists Association of India. Founded in 2004, JLAS seeks to promote discussions on experimental knowledge and to further the science and technology linked to laboratory animal sciences. Since its first issue in 2018, Journal of Laboratory Animal Science has released 61 research articles. In the year 2024, JLAS selected *ACS Publisher* and responsible for publishing articles for JLAS. I am delighted to report that the submission rate has increased, in contrast, the average time to reach a final decision is decreasing, thanks to the adoption of online submission and review processes by ACS publisher. All articles are now assigned a DOI, and they are cross-referenced and indexed in UGC Care, Index Copernicus, and other indexing systems. We expect to achieve Scopus indexing shortly, which will facilitate indexing in PubMed. Thanks to reviewers and members of the Editorial Board to review the articles in time. JLAS is carving out a unique niche among service-oriented journals, with its main objective being the advancement of knowledge and the encouragement of ethical practices in the care, use, and management of laboratory animals in biomedical and veterinary research environments. By serving as a conduit for innovative research, JLAS aims to improve laboratory animal welfare, ensure compliance with regulations, and promote scientific innovation. As a result, JLAS covers a broad spectrum of application areas and methodologies related to laboratory animals, and its impact seems to be consistently expanding.

I am delighted to share the advancements made by Laboratory Animals through the execution of several outreach initiatives, which encompass conferences, seminars, workshops, and innovations carried out by various members of LASA.

LASACON 2024, ACTREC, Navi Mumbai, November 29-30, 2024.

The 12th International Conference of LASA was successfully organized by ACTREC, Navi Mumbai, on November 29–30, 2024. A total of 87 participants attended the pre-conference workshops. The event was inaugurated at the CIDCO Convention Centre by Dr. Niteen Patil, Hon'ble Vice-Chancellor of MAFSU, Nagpur, who also delivered the inaugural Mohan Wani Memorial Keynote Address. Dr. Sudeep Gupta (Director, Tata Memorial Centre), Dr. Pankaj Chaturvedi (Director, ACTREC), and Dr. Prasanna Venkatraman (Deputy Director, CRI-ACTREC) graced the occasion as Guests of Honor.

A total of 426 delegates registered for the main conference. The second keynote address was delivered by Dr. Marcel Frajblat from Brazil. The scientific sessions included 18 expert talks, with participation from seven international speakers representing six countries.

Dr. A. Sankaranarayanan received the Lifetime Achievement Award 2024, while Drs. SG Ramachandra, Arvind Ingle, and Kalidas Kohale were conferred with the newly instituted LASA Fellow Award 2024. Exhibitions featured 43 vendor stalls across two floors, supported by various sponsorship tiers: 3 Premium Platinum, 3 Platinum, 2 Diamond, 14 Gold, and 19 Silver, along with 33 compendium advertisements.

The Annual General Body Meeting was held on November 29, followed by a cultural program and dinner. The conference received 76 poster abstracts and 17 oral presentations. Awards were given for the best three oral and poster presentations by members and delegates, including travel reimbursements for student winners.



Workshops: National Workshop on Laboratory Animal Handling, Experimental Procedures and In-vivo Imaging" January 7-11 2025 BRIC - Institute of Life Sciences (ILS), Bhubaneswar, India

A 5-Day "National Workshop on Laboratory Animal Handling, Experimental Procedures and In-vivo Imaging" Date: -07.01.2025 - 11.01.2025 Organized by Dr. Sarita Jena at BRIC - Institute of Life Sciences (ILS), Bhubaneswar, India. The workshop aims to prime researchers with basic principles, animal experimental procedures, in-vivo imaging techniques and hands-on practices that are essential for the humane use and care of animals. The contents of the workshop will also cover the recommendations of the Committee for the Control and Supervision of Experiment on Animals (CCSEA) and international guidelines. The Workshop accommodated 37 participants in a series of hands-on activities and lectures. The workshop successfully provided:

The participants gained knowledge in Practical experience in animal handling and bio methodologies involved in Animal Experiments. The 5-day workshop was a valuable experience for participants, combining theoretical knowledge with hands-on training. The sessions culminated in a Quiz, Form-B submission and presentations, allowing participants to showcase their expertise. Certificates awarded based on their performance and participation.



ZEBRAFISH WORKSHOP

National Workshop on Zebrafish Facility Management and Research Methodologies. Department of Biological Sciences, TIFR, Mumbai January 27–31, 2025.

With the ever-growing zebrafish research community in India and the increasing popularity of zebrafish as a model organism in biology, there is a rising demand for trained personnel and well-equipped zebrafish facilities. The Department

Perumal Nagarajan

of Biological Sciences at the Tata Institute of Fundamental Research (TIFR), Mumbai, established a modern zebrafish facility in 2009. Since then, it has played a key role in training students, researchers, and professionals in laboratory animal science, particularly in zebrafish housing, husbandry, health, welfare, and ethics. The department has conducted several need-based short trainings and organized three national workshops in 2023, 2024, and 2025, receiving positive feedback. The most recent, the third national workshop on "Zebrafish Facility Management and Research Methodologies," was held from January 27–31, 2025. A total of 18 participants from various research institutions, veterinary, pharmacy, and medical colleges across India attended the workshop. Expert speakers from academia and industry delivered lectures covering diverse topics, including zebrafish development, disease modeling, behaviour studies, heart regeneration, CRISPR/ Cas9 applications, ethics, and welfare. Topics also included facility design, water quality, breeding, embryo handling, and health monitoring. Participants received hands-on training in zebrafish care, breeding, water quality monitoring, embryo culture, anaesthesia, blood sampling, and microinjection techniques. This comprehensive workshop provided both theoretical insights and practical skills essential for effective zebrafish research and facility management. The high demand and strong response underscore the critical need for continued training programs to support India's zebrafish research infrastructure and scientific advancement.



Conference: Current Perspectives of 4Rs in Alternatives to Animal Testing (April 11 & 12, 2025 Ooty)

The two-day national conference on "Current Perspectives of 4Rs in Alternatives to Animal Testing" was successfully held at JSS College of Pharmacy, Ooty, from 11th to 12th April 2025. The event was sponsored by the DST-Anusandhan National Research Foundation, New Delhi, Department of Biotechnology, Government of India, Laboratory Animal Scientists' Association (India) and JSS Academy of Higher Education & Research, Mysuru. The conference aimed to enhance participants' understanding of the evolving principles of ethical animal research. While the traditional 3Rs (Replacement, Reduction, and Refinement) in animal testing have long served as the foundation for humane research practices and 4th R-Rehabilitation-highlighting the ethical responsibility to minimize pain and distress in animals. The conference was inaugurated on 11th April 2025, Dr. S. P. Dhanabal, Principal of JSS College of Pharmacy, Ooy extended a warm welcome to the dignitaries and participants. During the inaugural ceremony, the dignitaries also released the conference chronicle, marking the official commencement of the event. The esteemed Chief Guest, Dr. N. Pazhanivel, Professor of Pathology and Director of the Centre for Animal Health Studies at Tamil Nadu Veterinary and Animal Sciences University, Chennai, presided over the inauguration. The Keynote Address was delivered by Dr. R. K. Shakthi Devan, Secretary of the Laboratory Animal Scientists' Association (India). Eminent national academics and researchers presented plenary sessions on days one and two as part of the structured scientific sessions. The conference included sessions on current scientific research, regulatory science, and pharmaceutical education regarding 4Rs concept. The conference featured a series of expert lectures on alternatives to animal testing and ethical research practices. The conference witnessed active participation from 200 delegates who presented research presentations through e-posters across diverse scientific domains. The conference successfully broadened the scientific community's perspective on ethical animal research by integrating the 4Rs principle in animal testing.



Seminar, CCMB, Hyderabad, March 27, 2025.

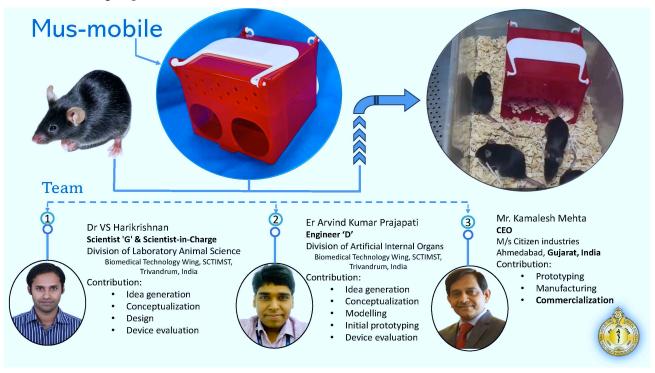
The Committee for the Control and Supervision of Experiments on Animals (CCSEA) organized a "One-day Seminar on Laboratory Animal Welfare and Ethics" on March 27, 2025, at the PM Bhargava Auditorium, Centre for Cellular & Molecular Biology (CCMB), Hyderabad. The seminar targeted Institutional Animal Ethics Committee (IAEC) members and CCSEA nominees from registered establishments. The event received an overwhelming response, with 291 participants registering offline and 125 online. Among them, 264 attended in person, while 125 participated virtually. The seminar was virtually inaugurated by Dr. Abhijit Mitra, Animal Husbandry Commissioner and Chairman, CCSEA, Department of Animal Husbandry and Dairying, Ministry of Fisheries, Animal Husbandry and Dairying, New Delhi. The key themes of the seminar included the alleviation of pain and suffering in laboratory animals and reinforcement of ethical guidelines to ensure humane treatment during scientific research. The event highlighted CCSEA's continued commitment to promoting animal welfare and upholding ethical research practices. Notable addresses were delivered by Dr. M. Jerald Mahesh Kumar, Chief Scientist and Head, Laboratory Animal Facility, CSIR-CCMB, Hyderabad, and Dr. Vinay Nandikoori, Director, CCMB, Hyderabad. They were joined by distinguished experts including Dr. Suresh Poothani, Dr. Vivek Tyagi, and Dr. Kirpali, who contributed valuable insights to the discussions. Participants hailed from various states including Telangana, Andhra Pradesh, Karnataka, and Kerala, reflecting the seminar's wide regional impact and the growing emphasis on animal ethics in research communities across southern India.



Innovations: Mus Mobile

Tail-lifting of mice can cause stress, anxiety and aversive behaviour in them, and this finding is very well documented. This has made scientists develop less stressful techniques like cupping mice with their palms and then lifting and handling them inside a tunnel. These techniques have the disadvantage of being a very slow process.

Another disadvantage is that the tunnel can only handle one mouse at a time and not in groups. A laboratory animal veterinarian from India named Harikrishnan Vijayakumar Sreelatha, who is a LASA, India member and also an alumnus of Uni. of Copenhagen, Denmark, came up with an idea to "Group-Handle" laboratory mice, and together with his colleague, an engineer named Arvind Kumar Prajapati, from Sree Chitra Tirunal Institute for Medical Sciences and Technology, Trivandrum, designed and tested a product that can handle 5-6 adult mice in one go. The mice seem to rush into the device named "Mus-Mobile" before the handler moves it, lifting them all in one go. The technology is transferred to an Indian IVC cage manufacturer named Citizen Industries, Ahmedabad, and will very soon be available in the market for purchase, as intimated by Kamalesh Mehta, the proprietor. The preliminary data is promising with faster, less anxious and stressful shifts in groups.



IACLAM Day - 1st World Meeting for Laboratory Animals Veterinarians

The Secretary of Laboratory Animal Scientists' Association (LASA - India) attended the 1st World Meeting for Laboratory Animal Veterinarians on 1st of June 2025, at the Federation of European Laboratory Animal Science Associations (FELASA) 2025 Congress, in Athens, Greece. The event is organized by the International Association of Colleges of Laboratory Animal Medicine (IACLAM) along with the European Society of Laboratory Animal Veterinarians (ESLAV) and FELASA. The world meeting was inaugurated by IACLAM President Dr Gary Borkowski (American College of Laboratory Animal Medicine) and Past President Dr Patricia Hedenqvist (European College of Laboratory Animal Medicine), with sessions chaired by IACLAM President, Past President as well as Education Standing Committee Chair Dr Vera Baumans (European College of Laboratory Animal Medicine), among other eminent experts.

The world meeting saw participation from 306 veterinarians across the globe and served as a major platform to discuss on global trends, challenges, and innovations in laboratory animal medicine. Key topics included the impact of activism and legislation on research, global training for laboratory animal veterinarians, the evolution of specialist roles, advancements in health and welfare monitoring, refinement of anaesthesia, analgesia and euthanasia, and synergizing veterinary and scientific practices in preclinical research.

Perumal Nagarajan

The sessions promoted global knowledge-sharing, with scientific presentations offering insights into current practices and future directions. IACLAM President Dr Gary Borkowski highlighted the value of international collaboration, emphasizing how collective expertise enhances animal welfare and scientific quality worldwide. IACLAM promotes the role of laboratory animal medicine veterinary specialists worldwide, connecting over 1,900 board-certified diplomates from six Colleges are represented internationally. IACLAM is an associate member of the World Veterinary Association (WVA), and member organization with AAALAC International.

For further details visit https://www.iaclam.org/



Picture from Right to Left; IACLAM Executive and Board Members, President - Dr Gary Borkowski (ACLAM); Chair of Education Standing Committee Dr Vera Baumans (ECLAM); Past President Dr Patricia Hedenqvist (ECLAM); Secretary-Treasurer Dr R K Shakthi Devan (ICLAM); and Dr Byeong-Cheol Kang (KCLAM).

Perumal Nagarajan Editor in Chief