

National Symposium Crosstalk Between Animal Research & Alternatives

**NSARA 2023** 

07-09 September, 2023





**CSIR-North East Institute of Science and Technology** Jorhat, Assam, India



Laboratory Animal Science Association of India (LASAI)



## **Major Thematic Areas**

- Animals in Research: Importance, Management & Ethical Regulations
- Computation as Alternative tool
- Animals as Tool for Basic Research
- New Generation Animal Models
- Alternative Models and Applications

Training cum Workshop on 07 Sep, 2023



## Overview \_\_\_\_\_

A three days National Symposium and Workshop on Crosstalk between Animal Research & Alternatives (NSARA 2023) will be organized by CSIR-North East Institute of Science and Technology (NEIST) during September 7-9, 2023 at CSIR-NEIST, Jorhat, Assam, India in collaboration with Laboratory Animal Science Association of India (LASAI). The laboratory animals are the valuable tools to explore the mysteries of our biological system including awareness on nature and cure of human and animal diseases. This symposium will cover ideas and points of view based on scientific findings and the professional expertise of eminent researchers and laboratory animal experts. The goal is to update our understanding of the most recent developments in laboratory animal research as well as alternative approaches currently available and computational interventions.. The symposium thematic areas would cover the topics on scientific relevance and ethical implications in use of animals in research. Viewing the unmet needs of the NER in particular and India in general, we are also planning to organize one day training cum workshop on basic laboratory animal science and experimentation techniques.

On behalf of the local organizing committee, NSARA 2023 it is our immense pleasure to invite you to participate in this event and explore the opportunities. For further details, please visit the website of CSIR-NEIST https://www.neist.res.in

## **CSIR-NEIST** at a Glance



CSIR-North East Institute of Science and Technology (NEIST), Jorhat, Assam is a premier institute engaged in multidisciplinary R&D work under the flagship of the Council of Scientific and Industrial Research (CSIR) since its inception in the year 1961 under its maiden name Regional Research Laboratory (RRL), Jorhat, Assam. CSIR-NEIST takes great pride in accomplishing milestones in scientific and technological missions in service of the nation. The institute caters extensively to the research and development activities in the entire North Eastern Region (NER) of India which is an abode of natural resources like oil and natural gas, minerals, traditional medicinal and aromatic plants, tea, indigenous rice varieties, etc. The Institute has successfully celebrated the Diamond Jubilee in the year 2022 and has generated more than 100 technologies in the areas of Biology, Agro-technology, Material Science and Petroleum Research. Under the flagship of Science & Technology Intervention in North Eastern Region (STINER), Aroma Mission and BioNEST incubator, facilities have been established to strengthen the capacity and the capability building in the NER to carry out biomedical research including animal disease models, evelopment and testing of

herbal formulations and other natural products, basic research on diseases having priority in the national health program and unique to the region and to bring translational interventions for the society in terms of surveillance, diagnostics, therapeutics, and other solutions. Several accomplishments in areas like Natural Products Chemistry, Plant functional Genomics, Medicinal Aromatic plants, Agro-technologies, Petroleum technology, Herbal Chemical Technology, Ecology and Environmental Technology, Geotechnical investigations, Design and Structural Mechanical Engineering, and recently established state-ofthe-art Advanced Computation and Data Science (ACDS) division, have paved the way to constantly benefit the society through basic and applied research interventions including computational modelling, AI&ML. With the advanced technologies, instrumentation and most enthusiastic scientific human resources, CSIR-NEIST has been holding a premier space in leading science in the NER as well as in the country towards societal benefit and self-sustainability.

## **Experimental Animal Facility: CSIR-NEIST**

Experimental Animal Facility of CSIR-NEIST is CCSEA approved facility for laboratory animal breeding and experiments purpose. The facility is properly designed with controlled environmental conditions and equipped with animal housing systems for both rodent and non-rodent species including pathology and clinical hematology and biochemical laboratories.. The animal facility is engaged in performing regulatory preclinical safety and toxicity studies, basic research programs, herbal drug development and formulation testing.

# Aim & Scope

The Symposium is aimed at sharing and disseminating scientific information in the area of preclinical drug discovery and research using animal models as well as other alternative tool for biomedical research. Since, the experimental animals have been proved as backbone of biomedical research programmes, considering a constant need of updating scientific insight and understanding on latest developments in animal research and experimentation, this event will encompass salient observations, experiences and contributions made by researchers and laboratory animal professionals. Besides serving as a platform for interactive discussions to be held on animal research and experimentations, alternative to animal research with computational applications to rationalise the use of animals in research, the programme will be also beneficial for other stakeholders including animal welfare officers, IAEC members and the CCSEA personnel to revamp their thoughts on humane use of animals in research and testing and deduce a future roadmap to bring out refinement in methods and practices of animal research and ethics.

The scope of the proposed symposium and training cum workshop is to set a platform for the first time in North East India, to share the knowledge and expertise of distinguished speakers and resource persons in the areas of biomedical research involving animals as tools, available alternative methods as well as in silico computational modelling and simulations to rationalise the animal usage in research.

# Highlights

- An important event where eminent scientists and research professionals across the country in the field of laboratory animal sciences, biomedical research, alternative tools and computational applications will be participating and delivering their research experiences.
- Scientific talks from eminent speakers of India, including North Eastern Region along with specialized external and inhouse resource persons for the hands-on-training workshop.
- Training cum workshop on basic animal handling and experimentation techniques and alternative tools.
- Interactive session on regulatory aspects of research on animals

## Thematic Areas

- Animals in Research: Importance, Management & Ethical Regulations
- Computation as Alternative tool
- Animals as Tool for Basic Research
- New Generation Animal Models
- Alternative Models and Applications

# Training cum Workshop\_\_\_\_

07 September, 2023

Introduction to laboratory animals, housing and management, Biology & behaviour, experimentation techniques, regulatory guidelines, in silico and computational modeling, 3D Bioprinting, animal ethics and welfare.

# **Eminent Speakers**

- Prof. Madhu Dikshit, Outstanding Scientist, CSIR
- Dr Subeer Mazumdar, DG, Gujarat Biotechnology University
- Dr Vijay Pal Singh, CSIR-IGIB, New Delhi
- Dr SK Datta, Member Secy. CCSEA, New Delhi
- Dr Suresh Poosala, OncoSeekPvt Ltd, Hyderabad
- Dr AmirNazir, CDRI, Lucknow
- Dr Chetna, CSIR-IGIB, New Delhi
- Dr AB Pant, CSIR-IITR, Lucknow
- Dr Partha Sarthi, CSIR-IITR, Lucknow
- Prof. Shandar Ahmed, JNU, New Delhi
- Prof. Gyaneswar Choubey, BHU
- Dr Dipak Datta, CSIR-CDRI, Lucnow
- Dr Ritu Trivedi, CSIR-CDRI, Lucnow
- Dr Aurélie Jory (Lily), ACRC, NCBS, Bangaluru
- Dr KB Patel, ILBS, New Delhi
- Dr P. Nagrajan, NII, New Delhi
- Dr Prajakta Dandekar, ICT, Mumbai
- Dr. Harikrishnan VS , SCTIMST
- Dr. Pawan Kumar Porwal, NIPER-Guwahati
- Dr Vaibhav Dixit, NIPER-Guwahati
- Dr P Chattopadhyay, DRL, Tezpur
- Miss Vijeta Jaiswal, CELLINK, Bangaluru

# **Registration**

### Mode of the Event

The symposium and the workshop will be conducted only on offline mode through physical participation.

## Target Disciplines and Attendees

Students, Researchers, Faculties, Scientists, Entrepreneurs and Industry Professionals from the discipline of Biological/Life Sciences and Pharmaceutical sciences from India.

## Call for Research Abstract

Research abstracts, broadly within the scope of any biological sciences discipline involving animal experiments and other alternative tools including computational applications written in English language (max 250 words) to be submitted by the interested participants. Abstracts can be submitted electronically during the registration using the link https://neist.res.in/nsara-2023/(only .doc and .docx files will be accepted with a maximum size of 5MB). Abstracts accepted will be published in symposium compendium. A poster (Width: 1m, Height: 1.5m) depicting the major research findings presented in the abstract need to be placed in the poster session during the event (offline mode only). Selected few abstracts will be given chance for oral presentations.

Hands-on training will be given to only 25 registered participants on a first come first served basis by the in-house and invited experts during the workshop. There will be awards for best oral and poster presentations. Certificate will be given to all the registered participants

| Participants  | Symposium | Workshop* |
|---|-----------|-----------|
| Students, Research Scholars and<br>Postdocs           | 1000      | 1000      |
| Academic Faculty & Scientists<br>(LASAI members)      | 2000      | 1500      |
| Academic Faculty & Scientists (<br>Non-LASAI members) | 2500      | 1500      |
| Industry Professionals                                | 5000      | 3000      |
| Accompanying person                                   | 1000      | -         |
| Late Registration                                     | +500      |           |

#Registration fee includes symposium and workshop kit, abstract book, lunch, high tea and dinner throughout the event.

Accommodation will be provided only for workshop participants at CSIR-NEIST guest house or hostel based on availability. Other participants have to make their own arrangements for accommodation. The conveners may be contacted for arranging the paid accommodation in Jorhat city close to the event venue.

<sup>\*</sup>Though the symposium is for all the registered participants the workshop is only for selected 25 participants through offline mode on early registration basis.

## Bank Account Details for Payment of Registration Fee

Name of the Bank: STATE BANK OF INDIA

Branch: RRL JORHAT BRANCH

Place: JORHAT

Contact No. : (0376) 2370126 IFSC Code : SBIN0005604 MICR Code : 785002007

Account name: DIRECTOR, NEIST Account No.: 00000030266871392

## Dates for Registration and Abstract Submission

Registration and abstract submission starts: July 15, 2023

Abstract submission ends : August 15, 2023

Registration ends : August 20, 2023

Final date of late registration : August 31, 2023

## REGISTER NOW

For Any Queries Please Contact: nsaraneist23@gmail.com

### **Contact Details of Conveners**

Dr. Himangsu Kousik Bora E-mail: himangsu-bora@neist.res.in
Dr. Rituraj Konwar E-mail: rituraj.konwar@neist.res.in

Dr. Hridoy Jyoti Mahanta E-mail: hridoy@neist.res.in

The Venue

CSIR-NEIST, Jorhat, Assam, India



J. N Baruah Auditorium, CSIR-NEIST



Biological Sciences and Technology Division (BSTD) Conference Hall



## **Tourist Attraction**-



### Kaziranga Golf Resort

It is a heritage tea estate bungalow with a unique course in the midst of a tea garden which is the first of its kind in the world, developed on 150- acre land golf and an excellent choice for travelers visiting Jorhat.



#### Rang Ghar

Located in Sivasagar, Rang Ghar meaning "House of Entertainment" is two storied building built in 1746 during the reign of Swargadeo Pramatta Singha. The building served as a royal sports-pavilion from Ahom kings & nobles during the Rongali Bihu.



#### Kaziranga National Park

It is one of the India's National treasures. The park is located in the districts of Golaghat and Nagaon about 110 kilometres from Jorhat town. It is a home to two-thirds of the worlds greater one-horned rhinoceros.



### Thengal Manor

It id located in a traditional Assamese village named Jalukonibari, About 15 km away from Jorhat town, the majestic mansion to visit. Home to the affluent and aristocratic, the Khongiya Barooah family of Upper Assam, are known for their nobility, philanthropy, and tea plantations.



### Kareng Ghar

Located in Sivasagar, Kareng Ghar, a Royal house of the Tai-Ahom kings was built between 1696 and 1714 under the direction of King Rudra Singha. Later, King Rajeswara Singha constructed a few more stories to the palace, making it a seven-story palace.



#### Sukapha Samannay Kshetra

A must visit place and museum for history lovers of Ahom dynasty. It housed the traditional and modern cultural heritage of Assam. Its just few kilometres away from the event location.



#### Shiva Dol

Located in Sivasagar, Shiva Dol means Lord Shiva temple, is one of the popular tourist destination in the state of Assam. Built in Shikhara architecture, it is the tallest Shiva temple in the country with a height of 104 feet.



#### Talatal Ghar

Located in Sivasagar, Talatal Ghar, is the grandest and biggest of all Ahom monuments and epitomizes Ahom power at its zenith. The place was initially built as an army base rather than a residential palace.



#### Majuli

Majuli is a mysterious place steeped in culture and ancient history. It is located on the mighty Brahmaputra River at about 40 km from the Jorhat town. Being the world's largest river island, it is home to Sattriya culture.

## **Organizing Committee**

Chief Patron & Chairman: Prof. G. Narahari Sastry,
Director, CSIR-NEIST, Jorhat

## Advisors

Prof. Madhu Dikshit

Dr. Radha Rangarajan

Prof. USN Murthy

Prof. Ashish Mukherji

Prof. Pulok Kumar Mukherjee

Dr. SK Datta

Dr. UD Gupta

## Core Committee

Er. Jayanta Jyoti Bora

Dr. RatulSaikia

Dr. S.B. Wann

Dr. Sanjay Deuri

Dr. Mantu Bhuyan

Dr. Jatin Kalita

Dr. Swapnali Hazarika

Dr. Archanamoni Das

Dr. Prasenjit Manna

Dr. Jayashree C Phukon

Dr. Binoy Saikia

Dr. Ravindra Rawal

Dr. Pankaj Bharali

Dr. Jyoti Lakshmi Hati Boruah

Mr. Khirod Buragohain

Dr. Rinku Baishya

Dr. Selvaraman Nagamani

Mr. Rama Shankar Sharma

Mr. Prasoon Kumar

### Convenors

Dr. Himangsu K Bora

Dr. Rituraj Konwar

Dr. Hridoy J Mahanta

## LASAI Members

Dr. Rajdeep Guha

Dr. DS Upadhyay

Dr. SK Rath

Dr. DP Mishra

Dr. Virendra Tiwari

Dr. D. Hansda

Dr. Neeraj Khatri

Sri. Karunesh Rai