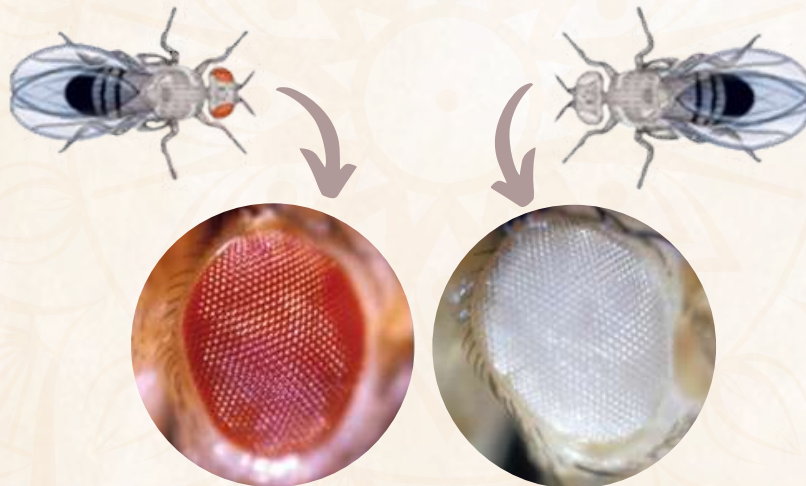


**DEPARTMENT OF ZOOLOGY**  
**SCHOOL OF BIOLOGICAL SCIENCES**  
**CENTRAL UNIVERSITY OF KERALA**  
TEJASWINI HILLS, PERIYE, KASARAGOD - 671 320, INDIA

**National Hands-on Workshop**

# ***Drosophila:*** **Teaching and Research Model**

**20-24 January, 2025**



**@Sabarmati Hall & Godavari Building**

## CENTRAL UNIVERSITY OF KERALA

The Central University of Kerala (CUK), established in 2009 under the Central Universities Act, is located in the serene landscape of Tejaswini Hills, Periyar, Kasaragod. With a mission to foster wisdom through a caring approach, CUK promotes academic growth while instilling a strong sense of ethical and social responsibility. The University offers a diverse range of 27 post graduate and 22 research programs, catering to approximately 2500 students. CUK aims to extend the frontiers of knowledge by encouraging creative thinking, innovation, and critical analysis. The University is dedicated to equipping students with the skills needed to tackle real-world challenges while nurturing their social and cultural awareness. In addition to its main campus, CUK operates a Department of Law in Thiruvalla and an Integrated BA International Relations program in Trivandrum.

## DEPARTMENT OF ZOOLOGY

The Department of Zoology, established in 2010 under the School of Biological Sciences at Riverside Transit Campus, Padannakad, is dedicated to advancing education and research in Zoology. Initially starting with a small group of faculty and students, the department has grown into a thriving academic unit with five permanent faculty members who bring extensive experience and expertise in diverse areas of biological sciences. The department offers M.Sc. and Ph.D. programs in Zoology, providing a comprehensive curriculum to impart theoretical knowledge and hands-on experience. Research is a core focus of the department, with faculty actively engaged in entomology, toxicology, immunology, aquatic pathobiology, herpetology, physiology, developmental biology, and endocrinology. With a strong emphasis on interdisciplinary research and innovative educational practices, the department fosters academic excellence and prepares students to meet global scientific challenges.

## THE CINDERELLA OF GENETICS

Thomas Hunt Morgan first used *Drosophila* as a primary model organism in biological research. A well-annotated genome, tractable genetic systems, a large body of research, readily available biological tools and methodologies, and the considerable genetic similarities between *Drosophila* and humans make it an excellent biological model. It is a highly utilized model organism in many domains, including development and aging, disease and homeostasis, stem cells and differentiation, neurogenesis and neurodegeneration, and many more. It has produced many scientific discoveries and fetched numerous Nobel prizes.



## SCOPE AND OBJECTIVES

This hands-on workshop aims to train young early-career faculty, post-doctoral researchers, Ph.D. scholars, and postgraduate students interested in introducing the *Drosophila* model in their laboratory exercises and research.

The workshop's objectives are:

- To introduce *Drosophila* as a model organism in teaching and research.
- To give hands-on training on fly handling and selected laboratory exercises.
- To provide basic to advanced topics, techniques, and procedural details in *Drosophila*.
- To provide solid knowledge to design and develop research projects using the *Drosophila* model organism.

## CONTENT OF WORKSHOP

This workshop will include lectures, demonstrations, rigorous hands-on training in selected lab exercises, group activities, and presentations from participants. The workshop covers the following contents.

- Fly-rearing and handling techniques
- Mutant analysis
- Genetic crossing experiments
- Transgenic techniques to generate human disorder models
- Genotoxicity analysis (Comet assay)
- Chromosome analysis
- Reproductive assays
- Neuroendocrine hormone analysis
- Behavioural assays
- Immune assays
- Protein/Isozyme polymorphism experiments

Free  
Registration

## WHO CAN APPLY:

Applications are invited from the early career faculty, post-doctoral researchers, Ph.D. scholars, and postgraduate students interested in introducing the *Drosophila* model in their education and research. Interested participants can be registered by submitting abstracts, no objection certificates, and motivation letters.

No. of seat intake: 15

Registration link : <https://forms.gle/4k6TAVmSCukCswrw8>

The last date for application submission is 09 December 2024.

Selected candidates will be informed through e-mail on or before 15 December 2024.

No registration fees and No TA/DA will be provided.

Accommodation: Outstation participants may be provided lodging facilities at a nominal cost at Nilagiri Guest house.

## GUIDELINES FOR THE ABSTRACT SUBMISSION:

The abstract must be written in English. Title: Font Times New Roman, 14, Bold. Authors: Font Times New Roman, 12, Bold. The name of the presenting author should be underlined. Text: The abstract (Times New Roman, Font 12, regular) should be concise and have an accurate summary, a maximum of 250 words. The abstract must state the purpose of the study, details of the participants, measurements, methods, main findings, and conclusion. Candidates will be given 7 minutes for their presentation, followed by 3 minutes of discussion/queries. The best platform presentation will be awarded.

## WORKSHOP FACULTY:



**Prof. H.A. Ranganath**  
Centre for  
Human Genetics,  
Bangalore



**Prof. M.A. Akbarsha**  
Gandh--Gruber-Doerenkamp  
Chair, MGDC/NCAAE,  
Bharathidasan Univ,Trichy.



**Prof. S. N. Hegde**  
University of Mysore,  
Mysuru



**Prof. V. Vasudev**  
University of Mysore,  
Mysuru



**Prof. S.R.Ramesh**  
University of Mysore,  
Mysuru



**Prof. N.B. Ramachandra**  
University of Mysore,  
Mysuru



**Prof. Upendra Nongthomba**  
Indian Institute of Sciences,  
Bangaluru



**Prof. Sarat Chandra Yeniseti**  
Nagaland University,  
Lumani



**Prof. B.P. Harini**  
Bangalore University,  
Bangaluru



**Dr. Anurag Sharma**  
Nitte University ,  
Mangaluru



**Dr. Girish Chandran,**  
Mahajana PG Center,  
Mysuru.



**Prof. V. Shakuntala**  
University of Mysore,  
Mysuru



**Dr. Ravi Ram Kristi Pati**  
CSIR-IITR,  
Lucknow



**Dr. Shamprasad Varija Raghu**  
Yenepoya University,  
Mangaluru



**Dr. Deepti Trivedi**  
National Centre for Biological  
Sciences, Bengaluru



**Dr. Tina Muharjee**  
inStem, NCBS,  
Bengaluru



**Dr. Jawaid Ahsan**  
Central University of  
South Bihar, Gaya



**Dr. Jishy Varghese**  
IISER,  
Trivandrum



**Dr. K.P. Anupama**  
Kannur University,  
Kannur

# ORGANIZING COMMITTEE:



## Chief-Patron:

Prof. Vincent Mathew, Vice-Chancellor (i/c), CUK

## Patron:

Prof. K. Arunkumar, Dean, School of Biological Sciences, CUK

## Chair:

Dr. Indrashis Bhattacharya, Head, Department of Zoology, CUK

## Organizing Secretary:

Dr. H. P. Gurushankara, Department of Zoology, CUK

## Convenor:

Dr. P A Sinu, Department of Zoology, CUK

## Members:

Prof. Sudha Kappalli, Department of Zoology, CUK

Dr. Ramachandran Kotharambath, Department of Zoology, CUK

## Technical Members:

Mr. Arun Raveendran, Technical Assistant, Department of Zoology, CUK

Ms. A. S. Rakendu , Laboratory Assistant, Department of Zoology, CUK

Ms. Reshma Ramarajan, Research Scholar, Department of Zoology, CUK

Ms. L.S. Shilpa, Research Scholar, Department of Zoology, CUK

Ms. C. U. Ammu, Research Scholar, Department of Zoology, CUK

**For queries, Please contact the organizing secretary:**

**Dr. H.P. Gurushankara**

Dept. of Zoology, School of Biological Sciences, Central University of Kerala/  
Tejaswini Hills, Periya, Kasaragod - 671 320, email: [gurushankara@cukerala.ac.in](mailto:gurushankara@cukerala.ac.in)





## Weather:

During January, the weather is warm (21 °C-33 °C) in Kasaragod.

## How to reach:

### Nearest Airports:

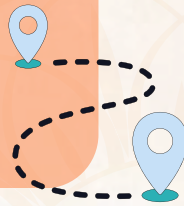
Mangalore (IXE) (80 km),  
Kannur (CNN) (80 km),  
Kozhikode (CCJ) (210 km),  
Kochi (COK) (360 km),  
Bangalore (BLR) (475 km),  
Trivandrum (TRV) (574 km).

### Nearest Bus Terminals:

Periya (1 km),  
Kanhngad (12 km),  
Kasaragod (20 km).

### Nearest Railway Stations:

Kanhngad (KZE) (12 km),  
Kasaragod (KGQ) (22 km).



## Dates to Remember:

### Registration Start Date:

11 November 2024

### Last date for registration:

09 December 2024

### Announcement of selection:

15 December 2024

### Workshop Dates:

20-24 January 2025



[Click to Register](#)

## Tourist Attraction:

Kasaragod is the northernmost district of Kerala, which is famous for its linguistic culture and is also known as "Sapthabhasha Sangamabhoomi," as seven major languages are spoken here. It is also home to some exquisite folk arts and rituals of Kerala.

The 300-year-old Bekal Fort (15 km) is one of the main attractions of Kasaragod. Other important places to visit are Ranipuram Peak (60 km), Valiyaparamba backwaters and houseboat (30 km), sacred forests (40 km), sandy beach (10 km), Swami Nithyananda Ashram (14 km), Ananda Ashram (10 km), Parassinikkadavu Snake Park (65 km), Ananthapura Lake Temple (30 km), Madhur Temple (30 km), Malik Deenar Masque (35 km), Malla Durgaparameshwari temple (25 km).

