Total number of participants: 10

The participation fees for taking the workshop is as follows:

Industry/Research Organizations: **Rs. 5000/-**

Faculties/ Scientists: **Rs. 4500/-**

Students: **Rs. 3000/-**

Accommodation will be arranged on the request

Account details:
SBI, Karyavattom Branch
Account no : 67324349388
IFSC Code : SBIN0070043

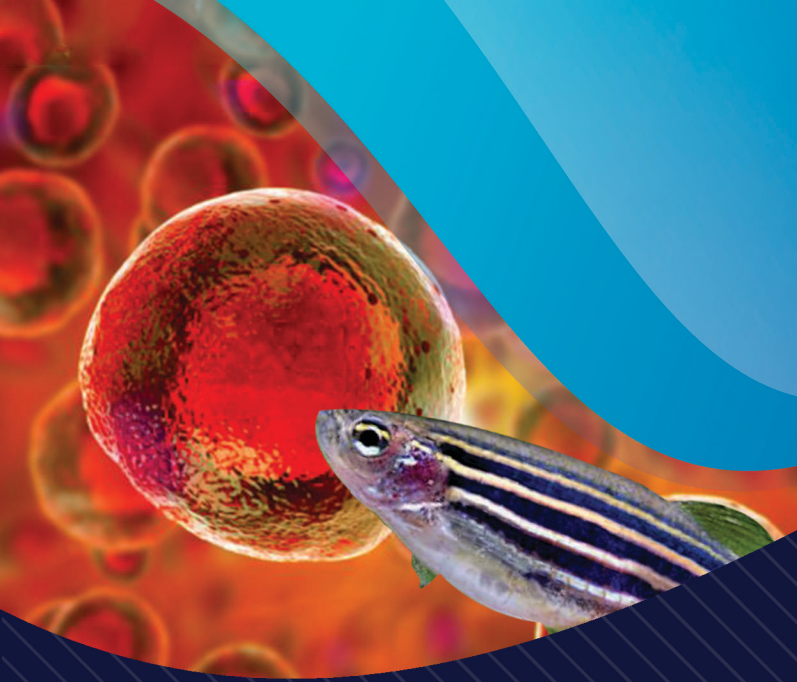
Registration ends: 17-11-2019

Organizing Secretary,

Dr. Sreejith Parameswara Panicker
Assistant Professor,
(Dept. of Health Research Fellow),
Dept. of Zoology, University of Kerala
Mobile - 09496793794,
Email - **p.sreejith@gmail.com**
psreejith@keralauniversity.ac.in

For more details,

Phone: **9497395489**
aaeworkshop2019@gmail.com
Website: **aaeworkshop2019.wixsite.com/website**



NATIONAL WORKSHOP TO STUDY TISSUE REGENERATION USING ZEBRAFISH AND ECHINODERMS AS AN ALTERNATIVE ANIMAL MODELS

25 NOVEMBER 2019 – 29 NOVEMBER 2019

Supported by: University of Kerala

Organised by: Dept. of Zoology, University of Kerala | Advanced Centre for Regenerative Medicine and Stem Cell Research in Cutaneous Biology (ACRem-Stem) |

Co-Organised by: Dept. of Aquatic Biology & Fisheries | Society for Translational Cancer Research | Society for Nutraceuticals and Chronic Diseases

Co-sponsored by : Society for Alternatives to Animal Experiments (SAAE-I)

NATIONAL WORKSHOP TO

STUDY TISSUE REGENERATION USING ZEBRAFISH AND ECHINODERMS AS AN ALTERNATIVE ANIMAL MODELS

25 NOVEMBER 2019 – 29 NOVEMBER 2019

M Mohammed Idris is the senior principal scientist in Center for cellular and molecular Biology (CCMB). He obtained his PhD from Open University, Milton Keynes, United Kingdom. He executed his PhD work at Stazione Zoolgica 'A.Dohrn', Naples, Italy and Sven Loven Marine Centre, Gothenburg, Sweden. His major research activity involves understanding the biomechanism of regeneration and degeneration in alternate model systems such as zebrafish (Daniorerio), marine chordates (Ascidians) and echinoderms (Asterias sp). His ongoing work includes Regeneration of appendages in zebrafish, nervous tissue in ascidians and arms in Asterias sp. He is also interested in understanding the molecular and functional mechanism of neurodegeneration due to the triplet repeat expansion as like in spino cerebellar ataxia and Huntington's disease using zebrafish as the model animal. He published papers on the tissue and organ regeneration in zebrafish, marine chordates and echinoderms and the mechanism of degeneration due to gene, stress and chemicals in zebrafish model system in reputed journals.

Email : ***idris@ccmb.res.in***

VENUE: DEPT. OF ZOOLOGY, UNIVERSITY OF KERALA

Day	Morning Session (9.00 AM to 12 Noon)	After noon Session (2.00 PM to 5.00 PM)
Day 1	1. Introduction to zebrafish 2. Introduction to Ascidian 3. Introduction to Echinoderms	1. Husbandry of zebrafish (Temperature, pH, Water quality, Feeding) 2. Amputation of zebrafish Caudal fin tissue 3. Amputation experiment of Starfish Arm. 4. Regeneration of Ascidian Nervous tissue
Day 2	4. Understanding the complexity of Regeneration and Degeneration in zebrafish	5. Dissection and collection of tissue from zebrafish (Fin, Skin, Muscle, Brain, Blood and Heart) 6. Regeneration of zebrafish Caudal fin tissue - Analysis 7. Wound healing analysis in starfish and Ascidian. 8. Wound healing analysis in zebrafish
Day 3	5. Model Organisms in Life Science	9. PCR analysis of zebrafish genes 10. Behavioral study in zebrafish 11. Breeding of Zebrafish
Day 4	6. Zebrafish – Disease Model	12. Analysis of PCR amplicons 13. Post embryonic Development 14. Analysis of Regeneration in Zebrafish caudal fin tissue
Day 5	7. Zebrafish – Toxicological study model.	15. Molecular and Imaging analysis of Zebrafish caudal fin tissue regeneration

Instructors

Dr. Mohammed Idris, Senior Principal Scientist, CSIR-CCMB, Hyderabad

Ms. Sarena Banu, CSIR-CCMB, Hyderabad

Mr. Mohammed Ghalib, CSIR-CCMB, Hyderabad

Eminent Resource Person

Prof. Dr. M.A. Akbarsha, General Secretary, Society for Alternatives to Animal Experiments-India (SAAE-I), Founder & Gandhi-Gruber- Doerenkamp Chair, Mahatma Gandhi – Doerenkamp Center for Alternatives, Bharathidasan University, Tiruchirappalli, India