BRIEF REPORT ON THE NATIONAL SEMINAR CONDUCTED AT ICCONS, SHORANUR

A two-day National Seminar "Epigenetics Meets Metabolomics" was organized at Institute for Communicative and Cognitive Neurosciences (ICCONS) on June 09 and 10, 2023.

Organizing Committee of the National Seminar

Member	Name	Designation
Chairman	Dr. Sanjeev V. Thomas	Director, ICCONS
Convenor	Dr. Anitha Ayyappan Pillai	Associate Professor, Dept.
		of Genetics, ICCONS
Co-convenors	Dr. Mary Iype	Professor, Dept. of
		Neurology, ICCONS
	Dr. P. T. Alexander	Associate Professor, Dept.
		of Neurology, ICCONS
Members	Dr. Hamza M	Medical Superintendent,
		ICCONS
	Mr. Tomy Dennis	Administrative Officer,
		ICCONS
	Dr. Premjith P. R.	Medical Officer Ayurveda,
		ICCONS
	Ms. Nisha M. L.	Assistant Professor, Dept. of
		ASLP, ICCONS
	Mr. Santhosh M. E.	Registrar in Clinical
		Psychology, ICCONS
	Ms. Aswathy C.	Physiotherapist, ICCONS
	Mr. Sasidharan P.	Public Relations Officer,
		ICCONS

Funding

The program was co-sponsored by,

- Department of Biotechnology (DBT), Govt. of India
- Science and Engineering Research Board (SERB), Govt. of India
- Council of Scientific and Industrial Research (CSIR), Govt. of India
- Kerala State Council for Science, Technology and Environment, Govt. of Kerala

Resource persons

Twelve resource persons, four of whom were from outside of Kerala, gave 30 minutes' lectures during the seminar. Details of the resource persons and scientific sessions are given on pages 3 and 4 of this report.

Participation

A total of 115 delegates, including 38 faculty and 77 students, attended the two-day program. Among this, there 14 delegates were from outside of Kerala. The registration fee was Rs. 1000 for the faculty and Rs. 500 for the students.

Abstracts, oral and poster presentations

There were 29 abstracts submissions. Eight abstracts were accepted for oral presentations and three for e-poster presentations. The remaining abstracts were published in the proceedings.

Exhibition

Five exhibition stalls were put up during the program.

Scientific program

Day 01: 09.06.2023

09:30-10:15: Inauguration [Dr. Sanjeev V. Thomas, Director, Institute for Communicative and Cognitive Neurosciences (ICCONS), Thiruvananthapuram and Shoranur, Kerala]

10:30-11:00: Dr. P. T. Alexander [Associate Professor, ICCONS, Shoranur, Palakkad, Kerala] Genetic/Epigenetic Approach to Neurological Disorders: A Clinician's Perspective

11:00-11:30: Dr. K. Thangaraj [Director, Centre for DNA Fingerprinting and Diagnostics (CDFD), Hyderabad, Telangana]

Population Genomics and Public Health

11:30-12:00: Dr. K. Rajender Rao [Scientist E (Deputy Director) & Group Leader), Hyderabad, Telangana]

Epigenetic Regulation of Obesity

12:00-12:30: Oral presentations

14:00-14:30: Dr. Moinak Banerjee [Scientist G, Rajiv Gandhi Centre for Biotechnology (RGCB), Thiruvananthapuram, Kerala]

Deriving Hopes in Autism Spectrum Disorder: Challenges and Opportunities

14:30-15:00: Dr. R. V. Omkumar [Scientist G (Retd.), Rajiv Gandhi Centre for Biotechnology (RGCB), Thiruvananthapuram, Kerala]

MicroRNA-Mediated Regulation in Neuropsychiatric Diseases

15:15-15:45: E-poster presentations

15:45-16:45: Technical presentations

Day 02: 10.06.2023

09:30-10:00: Dr. Shantanu Sengupta [Chief Scientist, CSIR-Institute of Genomics and Integrative Biology (CSIR-IGIB), New Delhi]

Understanding Cardiovascular Disease in India Using an -Omics Approach

10:00-10:30: Dr. T. S. Keshava Prasad [Professor and Deputy Director, Yenepoya Research Centre, Yenepoya (Deemed to be University) Mangalore, Karnataka]

Deciphering Actionable Targets for Treatment of Chronic Neurological Diseases through Multi-Omics Investigations

10:30-11:00: Dr. K. P. Mohanakumar [Director, Inter University Centre for Biomedical Research & Super Speciality Hospital (IUCBR & SSH), Kottayam, Kerala] Mitochondrial and Nuclear Genome Communications in Neurons

11:15-11:45: Dr. P. Krishnakumar [Director (Retd.), Institute of Mental Health and Neurosciences (IMHANS), Kozhikode, Kerala] Epigenetics in Neurodevelopmental Disorders

11:45-12:15: Prof. Alagu Manickavelu [Professor, Central University of Kerala (CUK), Kasaragod, Kerala]

Epi(Genetic) Marker Survey on Type 2 Diabetes: Global and Indian Perspective

12:15-12:45: Oral presentations

14:00-14:30: Dr. Raji Kanakkaparambil [Associate Professor, Kerala Veterinary and Animal Sciences University (KVASU), Wayanad, Kerala]

Dietary and Metabolic Control of Epigenetics

14:30-15:00: Dr. Radhakrishnan E. K. [Associate Professor, Mahatma Gandhi University, Kottayam (MGU), Kerala]

Impact of Epigenetic Modulators on Fungal Metabolite Production

15:15-15:45: E-poster presentations

Outcome of the meeting, recommendations, plan of action for future

The program covered diverse topics in epigenetics and metabolism. The impact of a crosstalk between epigenetics and metabolism in human diseases, ayurveda, agriculture, veterinary science, and plant-microbiome interactions, were discussed. There were several fruitful interactions between senior scientists and students/postdocs, and between clinicians and researchers.

Plan of action for future,

- There should be an integration of multi-omics data to accelerate the identification of novel mechanisms and molecular framework of complex diseases
- There should be a suitable platform for interaction between clinicians and researchers to forge collaborative relationships to support the outgrowth of research