







JSS Academy of Higher Education & Research

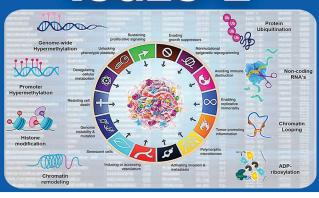
(Deemed to be University) Accredited 'A++' Grade by NAAC Sri Shivarathreeshwara Nagara, Mysuru - 570 015

Anusandhan National Research Foundation (ANRF) Supported

nd International Conference on **Genetics and Epigenetics of Cancer**

with focused theme on

Artificial Intelligence-based Diagnostics and Treatment Approaches



Jointly Organized by

Division of Biochemistry, School of Life Sciences, Mysuru

JSS Academy of Higher Education & Research, Mysuru - 570015

Department of Biochemistry and Department of Medical Genetics JSS Medical College, Mysuru

30th & 31st October, 2025, Mysuru, Karnataka, India **Venue : Sri Rajendra Auditorium, JSS Medical College JSS AHER, Mysuru**





























About the University

JSS Academy of Higher Education & Research (JSS AHER)

JSS Academy of Higher Education & Research (JSS AHER), formerly known as JSS University, was established in the year 2008 under Section 3 of the UGC Act 1956 and accredited by NAAC with A⁺⁺ Grade and ranked 24th by NIRF, Ministry of Education, Govt of India. JSS AHER has four constituent colleges - JSS Medical College, JSS Dental College and Hospital, JSS College of Pharmacy, Mysuru and JSS College of Pharmacy, Ooty. In addition, JSS AHER has departments, Schools & Faculty to outreach activities by establishing departments of Water and Health (2011) and Health System Management Studies (2012). With a view to expand the horizons in the field of Basic Health Science, School of Life Sciences Department was also initiated in the year (2013). JSS Mahavidyapeetha, has been a guiding force providing support and encouragement to the JSS AHER and its initiatives. The Deemed to be University has been focusing on teaching, research, and health services since its inception.

JSS AHER having embraced 'Globalization' has embarked on the international path through strategic initiatives and collaborations. These globalization efforts over the years have provided the students of JSS AHER and the healthcare professionals with an 1800-beds super-specialty hospital, Mysuru. The hospital provides services to a population of about 3 million people from all over Karnataka and India. This rich clinical environment along with dedicated faculty and physicians enables students and trainees to enhance their experience and professional development.





About the School of Life Sciences, Mysuru

The School of Life Sciences (SLS), was established in the year 2013 with the Divine blessings of His Holiness Jagadguru Sri Shivarathri Deshikendra Mahaswamiji, The Chancellor of JSS Academy of Higher Education & Research, Mysuru. The school stands today as a unique institution in the country known for multidisciplinary and interdisciplinary teaching and research in life sciences. The SLS is enunciated in the JSS Academy of Higher Education & Research Strategic Planning Framework. It has a vision and a mission of achieving national and international distinction while strengthening local relevance. The unique courses offered with National Education Policy 2020 covers a wide spectrum of biological, biomedical, and environmental sciences with several interdisciplinary research areas. In addition, many value-added programs have been initiated in the SLS, Mysuru to further provide additional knowledge, which is in alignment with United Nations Sustainable Developmental Goals (UN-SDGs).

About the Division of Biochemistry

Division of Biochemistry was established in the year 2014 under the Faculty of Life Sciences. Currently, the division is offering undergraduate (B.Sc.) and postgraudate (M.Sc.) programs in Biochemistry. The curriculum delivers in-depth knowledge in Biochemistry from basics to advanced applications in Life Sciences and Health Sciences. It is designed and upgraded based on suggestions / demands of the stakeholders including students, academic/ research/ industrial experts. We offer a range of specialized/ optional modules that foster their academic/ research/ career interest. Special interest is also taken to nurture Life Sciences Skill Sets for more Employability and Entrepreneurship. In addition, curricular (Science events) and co-curricular (cultural/sports/ NSS) activities are organized time-to-time to facilitate the holistic growth of the students.

The Division also offers Doctoral and Post-Doctoral Programs focused on thrust areas of research viz., Cancer Biology & Green Nanomedicine, Neuroimmunology, Snake Venom Pharmacology, Mitochondrial Metabolism, Detoxification, Hypertension, Cardiovascular and Pulmonary Medicine, Plant Physiology, Molecular Biology and Biochemistry, Biotic Stress Studies. The staff of Division of Biochemistry has received many research grants from DST-SERB, DBT-BIRAC, DST-WOS-A, ICMR, UGC and NIPER for conducting various research studies and published papers in high impact peer reviewed journals

Programmes offered @ School of Life Sciences Mysuru **JSS Academy of Higher Education & Research Mysuru**

B.Sc (General- 3 years/Honours- 4 Years)

- **Biochemistry**
- Microbiology
- 3. Environmental Sciences
- 4. Food, Nutrition & Dietetics
- 5. Psychology
- 6. Biotechnology
- 7. Statistics & Data Analytics
- 8. Computational Biology & Bioinformatics

M.Sc

- 1. Biochemistry
- 2. Environmental Sciences
- 3. Geoinformatics
- 4. Nanoscience & Technology
- 5. Nutrition & Dietetics
- 6. Molecular Biology
- 7. Cognitive Neuroscience
- 8. Microbiology
- 9. Medical Statistics
- 10. Bioinformatics
- 11. Cosmetic Sciences
- 12. Sports, Nutrition & Management
- 13. Biotechnology
- 14. Medical Physics











Established in 2012 with partial support from the Vision Group on Science and Technology (VGST), Government of Karnataka, the Center of Excellence in Molecular Biology and Regenerative Medicine (CEMR) at JSS Medical College, under JSS Academy of Higher Education & Research (JSS AHER), has completed an impactful twelve-year journey.

Recognized as a "Center of Excellence" by VGST and supported by the Department of Science and Technology, Government of India, under the FIST program, CEMR has grown into a leading hub for cutting-edge biomedical research. In 2023, the Indian Council of Medical Research (ICMR) designated CEMR as a Collaborating Center of Excellence (ICMR-CCoE). The center has also attracted three recipients of the prestigious Ramalingaswami Fellowship from the Department of Biotechnology, Government of India.

Over the years, CEMR has nurtured research within JSS AHER and its constituent institutions, while also serving scientists and scholars from across India and abroad. Several of its doctoral graduates now hold positions in premier academic institutions and industries worldwide. The center has secured research funding worth crores of rupees from national and international agencies, and its members have published extensively in high-impact, peer-reviewed journals. Current scholars are supported by competitive fellowships from ICMR, DST, DBT, CSIR, and other government organizations.

Equipped with state-of-the-art facilities for gene manipulation, cell and tissue imaging, RNA and protein expression analysis, diverse cell culture, phytochemical analysis, and drug screening assays, CEMR continues to be a preferred destination for researchers aiming to advance in molecular biology and regenerative medicine.





DST-FIST SPONSORED

CENTRE





Equipments/Instruments available

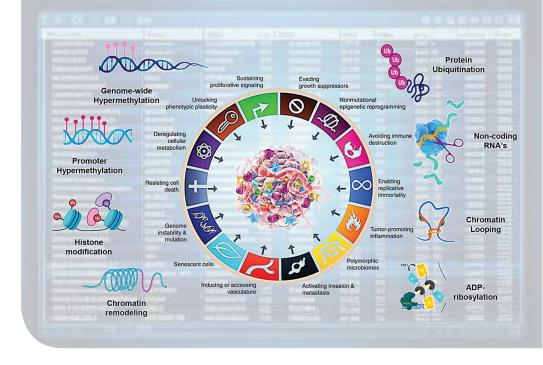
Particulars Partic	Company		
High performance liquid chromatography	Shimadzu		
Nucleocounter	Chemometec		
4D- Nucleofector	Lonza		
Thermocycler	TP 350-Takara		
Gel documentation system	Platinum Q9-WL+UVB0X 26MQ9		
Fluorescent microscope	Axio Imager Z2		
Lyophilizer	Labmate		
Rotavapor	Buchi		
Concentrator unit (speed vac)	Eppendorf		
RT-PCR	Qiagen		
Nanodrop	DS-11 + Spectrophotometer		
Ultra-High Performance Liquid Chromatography	Agilent infinity III		
Multimode plate reader	Perkin elmer		
Biosafety cabinet	1300 Series A2 Class II, Type II		
CO2 incubator	Thermo scientific		
-80°C Deep freezer	U725-86 & ThermoScientific -TDE series		
Liquid nitrogen tank	IC 35D Storage Dewar & Director D-4000		
Refrigerated centrifuge	5430R & Sorva11 ST 8R		
Water purification system	Merck - Millipore		



About the Conference

Background

lifetime The risk of developing cancer in India is increasing at alarming Currently one in rates. nine individuals every are at risk of developing cancer in their lifetime. The National Cancer Registry Programme projected the number of cancer cases to reach 15.7 lakh by the end



of this year i.e., 2025. Therefore, effective strategies for cancer prevention, control, and treatment through early detection, risk reduction, advancements in drug development and the integration of precision medicine are crucial. Both genetic and epigenetic factors play key roles in the initiation and progression of cancer by disrupting cellular functions and modifying gene expression. Understanding these mechanisms is vital for developing cancer therapies. Additionally, Artificial Intelligence (AI) is transforming oncology by enhancing diagnostic accuracy, predicting treatment responses, supporting drug discovery, and enabling personalized treatment strategies. Collectively, these advances are accelerating progress in cancer research, diagnosis, and helping in developing more selective therapies.

Concept and purpose

The objective of this conference is to provide most recent concepts in the areas of genetics and epigenetics of various cancers and the application of Al in cancer diagnosis and treatment. With a focus on the most recent advancements, the conference features a diverse choice of presenters and speakers from renowned institutions and organizations in India. The two-day scientific convention fosters the development of enduring scientific communities and building research collaborations. In addition to the keynote addresses, the conference also features oral/poster presentations. Additionally, it provides an opportunity for networking with eminent scientists in the field.

The conference focuses on the transformative role of AI in cancer diagnosis and treatment. With the rise in biomedical data, AI enables early and accurate cancer detection through advanced imaging, supports informed therapeutic decisions, and accelerates drug discovery via data integration and predictive modelling. Machine learning helps identify disease patterns and predict treatment responses, paving the way for personalized therapy. Recent breakthroughs in AI-driven diagnostic tools, drug discovery and decision support will be featured in this conference.

Addressing the challenges in advancing next-generation cancer genomics research and effectively integrating the vast and complex cancer genomics datasets is another key focus of this conference. The event is expected to be of significant interest to cancer researchers, molecular biologists, and bioinformaticians who aim to incorporate the latest genetic and epigenetic discoveries into their cancer studies.



List of key-note Speakers / Resource Persons



Dr. L S Shashidhara
Director of NCBS
National Centre for Biological Sciences (NCBS-TIFR)
Bangalore, Karnataka, India



Dr. Jamboor K. Vishwanatha
Regents Professor and Vice President
Institute for Health Disparities
University of North Texas Health Science Center
3500 Camp Bowie Blvd Fort Worth, TX 76107, USA



Dr. Riyaz BashaDirector of Research
University of North Texas, USA



Dr. Rana P Singh Vice-Chancellor Gautam Buddha Univ (GBU), Gr. Noida, U.P



Dr. Mahalingam SProfessor, Department of Biotechnology
Indian Institute of Technology Madras (IIT), Chennai 600 036



Dr. Amith Dutt
Professor & Tata Innovation Fellow
Integrated Cancer Genomics Laboratory
Department of Genetics (Biotech Centre)
University of Delhi, Benito Juarez Marg, New Delhi-110021



Dr. Giriraj R Chandak Sir JC Bose Fellow, CSIR-CCMB, Hyderabad



List of key-note Speakers / Resource Persons



Dr. Jayasri Das Sarma
Professor, Department of Biological Science
Indian Institute of Science Education and Research (IISER) - Kolkata



Dr. Kundan Sen GuptaProfessor, Department of Biology
Indian Institute of Science Education and Research (IISER), Pune



Dr. Ritu KulshreshthaProfessor & Head
Department of Biochemical Engineering and Biotechnology
IIT Delhi



Dr. Paturu KondaiahProfessor, Dept. of Developmental Biology and Genetics
Indian Institute of Science, Bangalore - 560012, India



Dr. Annapoorni Rangarajan
Dept. of Developmental Biology and Genetics
Wellcome Trust/DBT India Alliance Senior Research Fellow
Indian Institute of Science, Bangalore, 560012



Dr. Tulika P Srivastava
Professor, School of Biosciences and Bioengineering
Indian Institute of Technology, Mandi
Kamand, Mandi - 175005, Himachal Pradesh, India



Dr. Akila PrashantProfessor & Head, Center for Medical Genomics and Counselling & Center of Excellence in Molecular Biology and Regenerative Medicine Department of Biochemistry, JSS Medical College

JSS Academy of Higher Education and Research, Mysore - 570015



Organizing Committee

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His Holiness Jagadguru Sri Shivarathri Deshikendra Mahaswamiji

Jagadguru Sri Veerasimhasana Mahasamsthana Math, Suttur Srikshethra Chancellor, JSS Academy of Higher Education & Reserach

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JSS Academy of Higher
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Dr. Vishal Kumar Gupta

Dean (Academics)
JSS Academy of Higher
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Dean, School of Life Sciences, Mysuru, JSS AHER

Dr. Akila Prashant

Head, Dept. of Biochemistry, JSS MC JSS AHER

Dr. SubbaRao Madhunapantula

Professor, CEMR Laboratory, JSS MC JSS AHER

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Course Coordinator &
Organizing Secretary
Division of Biochemistry, SLSM
JSS AHER

Dr. D. Guru Kumar

Convener & Organizing Secretary
Division of Biochemistry, SLSM
JSS AHER

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Mr. Pramod N Mr. Mohan Krishna G K

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Dr. Jagadeesh T V Mr. Madesh N (JSS AHER Guest house)

Dr. Anshu Kumar Yadav Ms. Madalambike

Registration

Early Bird Registration (Till 30 th September 2025)			
SI.No.	Participant	Amount with 18% GST	
1.	Students & Research Scholars	2360/-	
2.	Research Associates/ Post Doctoral Fellows	3540/-	
3.	Faculty	4720/-	
4.	Industry (Start- ups/ Private)	9440/-	
5.	Foreign Delegates	100 USD	

* Late Registration (1st October – 15th October 2025)			
SI. No.	Participant	Amount with 18% GST	
1.	Students & Research Scholars	2950/-	
2.	Research Associates/ Post Doctoral Fellows	4720/-	
3.	Faculty	5900/-	
4	Industry (Start- ups/ Private)	11800/-	
5.	Foreign Delegates	150 USD	
Spot Registration (30th and 31st October 2025)			

Spot Registration (30th and 31st October 2025)			
SI. No.	Participant	Amount with 18% GST	
1.	Students & Research Scholars	3540/-	
2.	Research Associates/Post-Doctoral Fellows	5900/-	
3.	Faculty	7080/-	
4.	Industry (Start- ups/ Private)	14160/-	
5.	Foreign Deligates	200 USD	

Abstracts can be submitted in the following thematic areas

- · Precision Medicine
- Genetics and Genomics
- Epigenetics and Mechanisms
- Nutrition and Epigenetics
- Al and ML in Cancer Diagnosis and Treatment
- Pharmaceutical agents Development and Delivery
- Cancer Biology and Cancer Stem Cells
- Molecular mechanisms of drugs

- Synthesis and Characterization of Anti-Cancer Agents
- Bioactivity-guided isolation and characterization of anti-cancer agents
- Alternate Models of Cancer
- Molecular Epidemiology of Cancer
- Molecular Docking
- Indian Ayurveda system in Cancer Therapy
- Prenatal Diagnosis of Cancer
- Cancer Nanotheranostics

Abstract Format

Abstract (250 words excluding title, authors and author affiliations, Font to be used in the abstract: Arial)

- Title (Font size: 14 bold)
- Authors and affiliations (Font size: 12; Underline and bold the presenting author)
- Keywords- Minimum four keywords
- Corresponding author (Font size-12; Provide affiliation and contact details)
- Background
- Materials and Methods
- Results and Discussion
- Conclusions
- Last Date for Submission of Abstract: 15th October 2025

^{*}Prior registration is mandatory to submit the abstract.

^{*}Abstract submissions after 30th September 2025 till 15th October 2025 are considered late submissions and will be subjected to additional registration fees as detailed in Late Registration (1st October – 15th October 2025). No Abstract will be accepted after 15th October 2025.



Poster dimension Feet 3

For Registration Scan this QR Code



Note: At the time of abstract submission, the presenting author has to provide the registration details to the *E-mail: icgec2025@jssuni.edu.in*

For any additional information contact:

Dr. D. Guru Kumar gurukumard@jssuni.edu.in | 9844841983

Dr. SubbaRao V. Madhunapantula madhunapantulas@yahoo.com | 8105278621

About Mysuru city

Mysuru is a cultural capital of Karnataka and is well known for its heritage structures and palaces. Mysuru is located at the foothills of Chamundi Hills, Mysuru State. Mysuru is well known for Mysuru Dasara, State festival of Karnataka. The cultural city is also famous for Mysore silk sarees, Mysurupak, Mysore Peta, Mysore Sandal Soap, etc.

Local Sightseeing and Tourist Places to Visit in and around Mysuru

Distance (km.) from City Bus Stand (CBS)

