



St Johns National Academy of Health Sciences



CELEBRATING THE DIAMOND JUBILEE OF ST. JOHN'S MEDICAL COLLEGE

Department of Physiology

Presents

National Level CME on "Emerging Role of Skeletal muscle in Health and Disease"

26th May 2023

Online Mode

Time: 9.00 am to 5.00 pm

Skeletal muscle plays a vital role in the human body beyond its known function related to movement. This National Level CME being conducted by Department of Physiology as part of St Johns Diamond Jubilee celebration is an attempt to update the current concepts in the field of skeletal muscle biology with special emphasis on various mechanisms, repair, and adaptation in health and disease. The sessions are designed to help participants understand the importance, assessment, diagnosis, and management of skeletal muscle health.

ORGANIZING COMMITTEE

Dr Sucharita S (Organizing Chairperson), Prof and HOD,
Department of Physiology

For queries please contact:

Dr Sowmya S (Organizing Secretary), Assoc Professor,
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REGISTRATION: FREE!!

Register on or before 18th May 2023.

Registration to the event is mandatory and
E certificate will be issued for only those
who register.

Link for registration:

<https://forms.gle/yDtVDsLAD3ZJmx>

PROGRAM SCHEDULE

Timings	Session	Guest Speaker
9.00 - 9.30 am	Registration	
9.30 - 10.00 am	Inauguration	
10.00-10.45 am	The secret life of dormant muscle stem cells	Dr Jyotsna Dhawan, Emeritus Scientist, CSIR- Center for Cellular and Molecular Biology, Hyderabad India
10:45-11.00 am	Break	
11.00-11.45 am	Myosins in adult homeostasis and musculoskeletal disease	Dr. Sam J. Mathew, Associate Professor, Department of Developmental Genetics, Regional Centre for Biotechnology, NCR Delhi
11.45 – 12.30 pm	Role of RNA circles in Muscle Regeneration	Dr. Amaresh C Panda, Scientist-D and Wellcome Trust/ DBT Intermediate Fellow, Institute of Life Sciences (ILS) Nalco Square, Bhubaneswar
12.30- 1:30 pm	Break	
1:30 – 2.15 pm	Understanding Mitochondrial Myopathy	Dr. Nandeesh BN, Additional Professor, Department of Neuropathology, NIMHANS
2.15- 3.00 pm	Mechanical and metabolic functions of Skeletal Muscle	Dr. Sucharita S, Professor & HOD, Department of Physiology, St John's Medical College
3.00- 3.45 pm	Skeletal muscle injury and rehabilitation	Dr. Rajkumar S Amaravathi, Professor, Department of Orthopaedics, St John's Medical College and Hospital
3.45- 4.00 pm	Feedback and Concluding Ceremony	

Our Resource Persons

DR. JYOTSNA DHAWAN

Dr. Jyotsna Dhawan, obtained Ph.D. (cell biology) from Boston University, pursued postdoctoral work (adult stem cells and gene therapy) from Stanford University. Dr. Dhawan joined CCMB in 1996 (worked on biology of muscle stem cells and muscle repair, helped to establish the Institute for Stem Cell Science and Regenerative Medicine (InStem) in Bangalore, serving as the Dean from 2009-2014. The focus of her research is to identify the importance of mechanisms in dormant stem cells that promote tissue regeneration. A recipient of Wellcome Trust UK International Senior Research Fellowship (2004-2009), an India Today Woman Scientist Award (2008), VASVIK Award (2013), Fellow of the Indian National Science Academy in 2019, President of the Indian Society for Cell Biology (2020-22) and President of the Indian Society of Developmental Biology (2019-22). Dr Dhawan serves on the scientific advisory board of Ignite Life Science Foundation, an effort by scientists, academics, and management professionals to create new funding opportunities to enhance the life science ecosystem in India.



DR. SAM MATHEW

Dr. Sam Mathew carried out his PhD in the areas of development and genetics, at the University of Cologne, Germany. He carried out postdoctoral research at the University of Utah, USA, working on the skeletal muscle, using mouse models. Some of his work led to the characterization of markers for the muscle connective tissue fibroblasts, the cells that secrete the extracellular matrix surrounding the muscle. He has also worked extensively on the muscle stem cells and their role in muscle regeneration and homeostasis. He started as an independent investigator at the Regional Centre for Biotechnology, Faridabad, in 2012. His lab mainly focuses on understanding the role of skeletal muscle proteins such as myosins, their regulation and function, and how their impairment leads to musculoskeletal diseases.



DR. AMARESH C PANDA

Dr. Amaresh C Panda completed his bachelors and master's degree from Utkal University, Bhubaneswar, India. He obtained Ph.D. (Biotechnology) from National Centre for Cell Science, University of Pune, India. Worked as a Postdoctoral Fellow at National Institute on Aging, NIH, USA; Assistant Scientist at the University of Miami, USA; Postdoctoral Research Associate at the University of Colorado, USA. He is a recipient of Wellcome Trust/DBT India Alliance Intermediate fellowship (2019). His studies have uncovered new mechanistic details of the post-transcriptional regulation by RNA-binding proteins, microRNAs, and circular RNAs in physiological processes, including insulin production, myogenesis, and cellular senescence. Dr. Panda has published more than 50 research and reviews articles with more than 4500 citations in Google Scholar (highly cited, top 2% of scientists worldwide). Served as Editor and Reviewer for various prestigious journals. Recently, his group developed a low-cost RNA isolation kit with superior features and transferred the technology to a startup named RNA Biotech Pvt. Ltd., Bhubaneswar, for commercialization.



DR. NANDEESH BN

Dr. Nandeesh is working as Additional Professor at, Department of Neuropathology, NIMHANS. He has completed MD, DNB, and Post Doctoral Fellowship (Neuropathology). His key Achievements includes MBBS (University Rank), MD – Gold Medalist, he has been awarded with best Paper & Poster awards. He has around 100 Publications both National & International including 60 Guest Lectures. His interest includes understanding Mitochondrial Myopathy. Mitochondria are ubiquitous organelles that play crucial role in vital cellular function especially oxidative phosphorylation and energy metabolism. Mitochondrial diseases possess defects in the respiratory chain complex that leads to impaired oxidative phosphorylation and decrease in cellular energy (ATP) production. Two genomes, one mitochondrial and one nuclear, encode the components of the respiratory chain. Mitochondrial diseases are caused by mutations in mitochondrial or nuclear genes, or both. Multiple tissues / organ systems may be involved. Mitochondrial disorders present with diverse and often non-specific clinical features posing diagnostic and therapeutic challenges. Dr Nandeesh focuses on understanding the role of skeletal muscle and mitochondrial function



DR. SUCHARITA S

Dr. Sucharita S, M.D., Ph.D. is working as Professor and Head, Department of Physiology, St John's Medical College, Bangalore. She is also heading the Division of Clinical Physiology, Department of Physiology. She has done her International research fellowship sponsored by Indian Council of Medical Research at National Hospital of Neurology and Neurosurgery and Imperial College, London. She was also trained in Muscle Physiology at King's College, London. She was awarded with Dean Louis and May Monteiro Prize as best researcher within institute twice. She has been awarded by Physiological society UK senior research fellowship and DBT/Wellcome Trust India Alliance Intermediate Fellowship for her work on skeletal muscle. Her research interest includes understanding role of skeletal muscle in the prevention of Type 2 Diabetes. Her current body of work focuses on studying healthy ageing, body composition and cancer research and role of lifestyle modification in chronic diseases including Type 2 Diabetes, COPD to name few. She has numerous ongoing research projects including various research publications to her credit.



DR. RAJKUMAR S AMARAVATHI

Dr. Rajkumar S. Amaravati, is working as Professor, Department of Orthopaedics and Head of Division of Sports Injury, Joint preservations & Regenerative Medicine at St John's Medical College and Hospital. He has completed DNB, MNAMS, FTSS (France), FRCS (Glasgow, UK). He is working as visiting Professor Edge Hill University, UK and FIFA Centre of Medical Excellence, Porto, Portugal. He has ongoing collaborations with University of Pittsburgh, USA, Edge Hill University, UK, FIFA Centre of Medical Excellence, Porto, Portugal and Ewha Women's University, Seoul Hospital. He is a Life Member of State, National & International Orthopedics & Arthroscopy bodies. Accredited to Sports Injury, Joint Preservation and Regenerative Medicine consultant for Abhinav Bindra Foundation. Has won many awards of the State and National Orthopedic & Arthroscopy Association. He has published papers (more than 100) in State, National and International peer reviewed Journals including 514 Citations. He works extensively in Sports injury and regenerative medicine.

