







11th Annual Conference of the Society for Mitochondrial Research & Medicine "Mitochondria in Health, Disease and Ageing" Manipal School of Life Sciences, MAHE, Manipal, India

9 - 11 October 2025

SCIENTIFIC PROGRAMME

	Day 1, Thursday, 9 October 2025		
13:00 - 14:00h	Registration		
14:00 - 14:30h	Inauguration		
14:30 – 15:00h	Presidential Address: K Thangaraj, CSIR-CCMB, Hyderabad Recent advances in mitochondrial research and medicine		
15:00 - 16:00h	Session I: Mitochondrial genome integrity and maintenance Chair: Robert McFarland, University of Newcastle, UK		
15:00 – 15:20h	Genome integrity in mitochondria - trying to go from basic biology to translational biology	Sagar Sengupta NIBMG, Kalyani, India	
15:20 – 15:40h	An unusual role of RECQL5 helicase, a DNA repair protein, in the regulation of mitochondrial homeostasis	Birija S. Patro BARC, Mumbai, India	
15:40 – 16:00h	Uncovering the genetic basis of mitochondrial dysfunction and neurodegeneration	Debdeep Dutta IIT, Kanpur, India	
16:00 - 16:30h	Tea / Coffee break		
16:30 - 18:00h	Session II: Mitochondrial dysfunction, diseases, and diagnosis Chair: Anju Shukla, Kasturba Medical College, MAHE, Manipal, India		
16:30 - 16:50h	Dual genomic involvement in mitochondrial diseases of the nervous system	P Govindaraj NIMHANS, Bengaluru, India	
16:50 – 17:10h	Improving the diagnosis of mitochondrial disease and defining mitochondrial protein function	Robert Taylor University of Newcastle, UK	
17:10 –17:30h	Untargeted proteomics enables ultra-rapid variant prioritization in mitochondrial and other rare diseases	David Stroud University of Melbourne, Australia	
17:30 – 17:50h	Mitochondrial dysfunction due to PISD loss leads to skeletal phenotypes in spondyloepimetaphyseal	Aarti Sevilimedu DRILS, Hyderabad, India	
18:00 – 19:00h	Poster Session		
	Day 2, Friday, 10 October 2025		
09:30 - 10:50h	Session III: Mitochondrial proteostasis, mitophagy, and aging Chair: Mahadev Rao, Manipal College of Pharmaceutical Sciences, MAHE, Manipal, India		
09:30 - 09:50h	PRMT5 in mitochondria: Regulation of mtDNA stability through TFAM arginine methylations	Benu Brata Das IACS, Kolkata, India	
09:50 – 10:10h	A diet-gene interaction that targets mitochondria to modulate longevity	Arnab Mukhopadhyay NII, New Delhi, India	
10:10 – 10:30h	Molecular regulation of mitochondrial fission and mitophagy signaling in oral cancer stem cells	Sujit K Bhutia NIT, Rourkela, India	
10:30 – 10:50h	Targeting mitophagy to restore mitochondrial health in aging muscle cells	Anupam Patgiri Emory University School of Medicine, USA	
10:50 - 11:20h	Tea / Coffee break		









11:20 - 13:00h	Session IV: Mitochondria: development and Chair: Naresh Babu V Sepuri, University of Hydero		
11:20 – 11:40h	Mitochondrial dynamics in cell formation in <i>Drosophila</i> embryogenesis	Richa Rikhy IISER, Pune, India	
11:40 – 12:00h	Mitochondria play key roles in touch sensory habituation	Sandhya P Koushika TIFR, Mumbai, India	
12:00 – 12:20h	Elucidating the role of PARK7/DJ-1 family proteins in maintaining mitochondrial health	Patrick D'Silva IISc, Bengaluru, India	
12:20 – 12:40h	Exploring liver-to-pancreatic islet communication to uncover mechanisms that propel β-cell dysfunction in MAFLD	Prosenjit Mondal IISER, Berhampur, India	
12:40 – 13:00h	An integrated chemical proteomics and lipidomics approach towards protein function annotation	Siddhesh Kamat IISER, Pune, India	
13:00 - 14:30h	Lunch & Poster session		
14:30 - 16:10h	Session V: SMRM- Young Scientist Award Presentation Chair: K. Thangaraj, President, SMRM, India P. Govindaraj, Secretary, SMRM, India		
14:30 – 14:50h	TBA		
14:50 – 15:10h	TBA		
15:10 – 15:30h	TBA		
15:30 – 15:50h	TBA		
15:50 – 16:10h	TBA		
16:10 - 16:30h	Tea / Coffee break		
16:30 - 17:50h	Session VI: Mitochondrial disorders: clinical perspectives Chair: Robert Taylor, University of Newcastle, UK		
16:30 – 16:50h	Navigating the neurological manifestations of mitochondrial disorders: a case-based review	Soumya Sundaram SCTIMST, Trivandrum, India	
16:50 – 17:10h	Simplifying the mysteries of mitochondrial disease: 25 years at the coalface	Andrew Schaefer University of Newcastle, UK	
17:10 – 17:30h	Clinical spectrum, diagnosis, and management of mitochondrial disorders - old and new insights	Sunita Bijarnia-Mahay Sir Ganga Ram Hospital, New Delhi, India	
17:30 – 17:50h	Challenges in counselling for mitochondrial disorders: heterogeneity, heteroplasmy & beyond	Prajnya Ranganath NIMS, Hyderabad, India	
18:00 - 19:00h	Poster session/ General Body meeting		
19:00 - 20:00h	Cultural programme		
20:00h	Gala Dinner		
	Day 3, Saturday, 11 October 2025		
09:30 - 10:50h	Session VII: Mitochondrial Disorders: treatment and inflammation Chair: Nandeesh BN, NIMHANS, Bengaluru		
09:30 – 09:50h	Mitochondrial DNA disease: what has the nucleus got to do with it?	Sarah Pickett University of Newcastle, UK	
09:50 – 10:10h	Treatment of paediatric mitochondrial disease – "Are we there yet?"	Robert McFarland University of Newcastle, UK	
10:10 – 10:30h	Host mitochondria in viral encephalitis: a key role in infection and inflammation	Gulam Syed ILS, Bhubaneswar, India	









10:30 – 10:50h	Connecting two major hallmarks of aging: mitochondria and stem cells dysplasia	Kasturi Mitra Ashoka University, NCR, India	
10:50 – 11:20h	Tea / Coffee break		
	Session VIII: Mitochondria and cancer Chair: Srinivas Mutalik, Manipal College of Pharmaceutical Sciences, MAHE, Manipal, India		
11:20 – 11:40h	Chimeric small molecules for targeting mitochondria in cancer cells	Sudipta Basu IIT, Gandhinagar, India	
11:40 – 12:00h	Mitochondrial enzymes regulate epigenetic plasticity in cancer	Subhamoy Dasgupta RPCI, Buffalo, USA	
12:00 – 12:20h	Chromosome 14 miRNA cluster regulates mitochondrial metabolism in cervical cancer	Shama P Kabekkodu MSLS, Manipal, India	
12:20 – 12:40h	Unraveling mitochondrial alterations in glioblastoma	Shilpa Rao NIMHANS, Bengaluru, India	
12:40 - 13:00h	Session IX: Technical talks		
12:40 – 12:50h	ТВА		
12:50 – 13:00h	ТВА		
13:00 - 14:30h	Lunch & Poster session		
14:30 - 15:00h	Session X: Mitochondrial metabolism and immunity Chair: Manjunath B Joshi, Manipal School of Life Sciences, MAHE, Manipal, India		
14:30 – 14:50h	Mitochondria at the crossroads of metabolism and ferroptosis	Soni Deshwal Helmholtz Munich, Germany	
14:50 – 15:10h	TRPV4 channels regulate mitochondrial phenotype switching in endothelial cells during angiogenesis	Charles Thodeti The University of Toledo, USA	
15:10 – 15:30h	Diet, obesity, and cancer	Prasenjit Dey Roswell Park Cancer Institute, USA	
15:30 - 16:00h	Concluding session		
16:00h	High Tea		