

70th Annual National Conference of Association of Physiologists and Pharmacologists of India

Conference

12th to 14th DECEMBER 2024

Theme

Interdisciplinary insights in
Physiology and Pharmacology:
Navigating future horizons
in healthcare

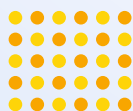
Organised by

Department of Physiology and Department of Pharmacology
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12th December 2024, Thursday, Day -1

Time	Topic & Speakers			Venue
08.00AM - 09.00 AM	REGISTRATION & Breakfast			Registration Area
9:00AM- 9:30AM	Plenary Lecture 1- Sensing Hypoxia: Physiology, Genetics and Epigenetics- Prof Nanduri R. Prabhakar , Ph.D., D.Sc., Harold H. Hines Jr. Professor Director, Institute for Integrative Physiology Director, Center for Systems Biology, Chicago			Panchadeep Auditorium, 1st Floor, Medical College Building
9:30AM - 10:30AM	Oral and Poster Presentation - Parallel session			Scheduled Halls
10:30AM - 11:00AM	Plenary Lecture 2- Precision Diabetes in India: Where are we today?' Dr.V. Mohan , M.D., FRCP (London, Edinburgh, Glasgow ; Ireland), Ph.D., D.Sc., Chairman, Madras Diabetes Research Foundation; Dr. Mohan's Diabetes Specialities Centre Chennai, India. D.Sc (Hon. Causa), FNASc, FASc, FAMS, FNA, FACE, FACP, FTWAS, MACP, FRS (Edinburgh)			Panchadeep Auditorium, 1st Floor, Medical College Building
11.00 AM-11.15 AM	TEA BREAK			Dining Area- Basement
11.15 AM - 12.00PM	INAUGURATION OF THE APPICON 2024 by CHIEF GUESTS			Panchadeep Auditorium, 1st Floor, Medical College Building
12:00noon- 1:00PM	Oral and Poster Presentation - Parallel sessions			Scheduled Halls
1:00PM to 2:00PM	LUNCH BREAK			Dining Area- Basement
2:00Pm to 6:10PM	Parallel Symposium			Scheduled Halls
3:20PM - 3:30PM	TEA BREAK			
Symposium 1.1, 1.2, 1.3	2:00PM - 3:20PM	3:30PM - 4:50PM	4:50PM - 6:10PM	Hall 1
	(Symp: 1.1)-Living on the Edge: Combating Physiological challenges of extreme	(Symp: 1.2)Holistic Well-Being: Stress Resilience, Healthy Aging, and Yoga's Impact on Non Communicable Diseases	(Sym : 1.3) Epidemiological perspectives on Sarcopenic Obesity : From prevention to prevalence	
	1.Underwater Survival: Challenges of long-term sojourns- Lt Col Shelka Dua, Professor, Armed Forces Medical College, Pune 2. Hypoxia Pre conditioning – Current concepts and future directions- Dr. Atul Shekhar, Professor, AFMC, Pune 3. Physiological challenges during human space travel- Dr. Deepanjan Dey, Professor Armed Forces Medical College, Pune 4.Encountering High Altitude and circadian alterations with Pharmacological Support- Dr. Prafull Mohan, Professor AFMC, Pune	1.Stress resilience and meditation- Prof. VIVEK SHARMA, Professor AIIMS, Rajkot,Gujarat 2. Aging gracefully with healthy life style- Dr. JEAN FREDRICK, Associate Professor , AIIMS, Kalyani. 3. Effect of yoga on Non communicable diseases - Dr. Senthil Kumar Subramanian, Associate Professor, AIIMS Madurai	1.Epidemiological perspectives of Sarcopenic Obesity - Dr. Aruna R, Assistant Professor, AIIMS, Kalyani 2.Pathophysiology of Sarcopenic Obesity- Dr. Dibyajyoti Saikia, Assistant Professor, AIIMS, Guwahati 3. Prevention and Management of Sarcopenic Obesity- Dr. KarunaSree Podila, Additional Professor, AIIMS, Kalyani 4. Yoga Based Interventions on the Sarcopenic Obesity- Dr. Madhavan Chandran, Associate Professor, AIIMS, Kalyani	

Symposium 2.1, 2.2, 2.3	(Sym: 2.1)- Role of Stem Cells in Aging	(Symp: 2.2) Novel Insights into the CNS Disorders	(Symposium 2.3)Metabolic Syndrome and Sarcopenia	
	<p>1 .Science behind aging - Dr.Navneet Kour, Assistant Professor, Physiology ASCOMS and Hospital, Jammu</p> <p>2.Role of Stem Cells in Aging - Dr. Sunita Kumari, Assistant Professor, Department of Physiology, All India Institute of Medical Sciences, Jammu</p> <p>3.Age reversal strategies in public domain - Dr Udit Gupta, Assistant Professor, Physiology, AIIMS, Vijaypur, Jammu</p>	<p>1. Caveolin-1 macromolecular signaling complex in epilepsy- Prof. Yogananda S Markandeya, Associate Professor, NIMHANS, Bangalore</p> <p>2. Early signatures of synaptic function decline in diabetic retinopathy -Prof. Bhupesh Mehta, Additional Professor, NIMHANS, Bangalore</p> <p>3. Finasteride administration results in sexually dimorphic effects on mood and synaptic plasticity: exploring the role of glucocorticoids - Prof. Bettadapura N Srikumar, Additional Professor, National Institute of Mental Health and Neurosciences (NIMHANS), Bangalore</p>	<p>1.Sarcopenia: Defintion & Diagnosis -Dr. Velkumary , Professor, JIPMER, Pondicherry</p> <p>2. Mechanism of Metabolic syndrome related Sarcopenia - Dr. Pravati Pal, Prof. Pravati Pal, Professor, JIPMER, Pondicherry</p> <p>3. Frailty Status and Cardiovascular Atonomic Dysfunction in Type 2- Diabetes Mellitus - Dr. Saranya K. Additional Professor, Department of Physiology, JIPMER, Academic Center, JIPMER, Puducherry</p>	Hall 2
Symposium 3.1, 3.2, 3.3	(Symp 3.1) Neural insights into working memory: Bridging cognitive mechanisms and clinical insights	(Symp 3.2) Understanding and Mitigating the Environmental Impact of Pharmaceuticals in India	(Symp 3.3) Sleep regulation and management strategies in various age groups: Recent updates	
	<p>1. Flexible representation of visual working memory under gaze shifts. -Prof. Sridharan Devarajan, Additional Professor, Indian Institute of Science (IISc), Bangalore</p> <p>2. Visuospatial working memory in Schizophrenia: A potential endophenotypic marker- Dr. Suriya Prakash Muthukrishnan, Associate Professor, Department of Physiology, AIIMS, New Delhi</p> <p>3. QEEG correlates of working memory deficits in substance use disorder - Dr. Simran Kaur, Additional Professor, AIIMS, New Delhi.</p> <p>4. Clinical assessment and therapeutic interventions for working memory deficits in addictive disorders and dual disorders - Dr. Yatan Pal Singh Balhara, Professor, Department of Psychiatry, AIIMS, New Delhi</p>	<p>1.Introduction to topic and speakers,Summarize and Road Ahead -Dr. Suyog Sindhu, Associate Professor, KGMU</p> <p>2. Scientific Insights into Pharmaceutical Pollution - Dr. Shazia Hasan, Associate Professor, AIIMS, Rishikesh</p> <p>3. Industry Perspectives and Practical Approaches - Dr. Jignesh Ved, Therapy Area Lead Boehringer, Ingelheim</p> <p>4.Educational Strategies - Dr. Keerthi Rajan M, Junior Resident KGMU</p>	<p>1. Preoptic orchestra for regulation of sleep - Prof. HN Mallick, Professor & Head, Physiology, SGT University, Gurugram</p> <p>2. Aging and Cognition in sleep - Prof. Nasreen Akhtar, Additional Professor, AIIMS, New Delhi</p> <p>3. Sleep disruptions during pregnancy and postmenopausal life: Emerging concerns - Prof. Kamalesh Gulia, Scientist, Sree Chitra Tirunal Institute for Medical Sciences,</p>	Hall 3

Symposium 4.1,
4.2, 4.3

(Symp 4.1) Low-cost simulators for teaching cognitive, psychomotor and affective domains in Physiology

(Symp 4.2) Drug Penetration Across Blood Ocular Barriers

(Sym: 4.3) Controlled Vestibular Stimulation

	<p>1. An overview to Low cost simulators for teaching cognitive, psychomotor and affective domains in Physiology - Dr. Nalini Y C, Associate Professor, Mahatma Gandhi Medical College and Research Institute</p> <p>2. Low-cost simulators for teaching cognitive domain in Physiology - Dr. Niveetha S, Assistant Professor, MGMCRI, Puducherry</p> <p>3. Low-cost simulators for teaching affective domain in Physiology - Prof. Sobana Jai Ganesh, Professor of Physiology, Mahathma Gandhi Medical College and research Institute, Sri Balaji Vidhyapeeth</p> <p>4. Low-cost simulators for skill training in Physiology - Dr. Aruna Raju, Assistant Professor, All India Institute of Medical science, Kalyani</p>	<p>1. Introduction to blood ocular barriers - Prof. Nabanita Halder, Professor, AIIMS, Pharmacology</p> <p>2. Smart Ports of the Eye & Ocular Pharmacokinetics - Prof. Velpandian Thirumurthy, Professor and Head, AIIMS, Pharmacology</p> <p>3. P-glycoprotein & efflux transporters of Blood ocular barriers - Dr. Senthilkumari Srinivasan, Scientist III, Aravind Medical Research Foundation</p> <p>4. Organic cationic Transports of Blood ocular barriers - Dr. J. Nirmal, Ph.D. Associate Professor, Birla Institute of Technology & Science, Pilani, Hyderabad Campus, Department of Pharmacy, Jawahar Nagar, Medchal District, Hyderabad</p>	<p>1. Controlled Vestibular Stimulation - Dr. Joseph Mukkadan, Research Director, LFMRC, Angamaly, Kerala</p> <p>2. Harnessing Vestibular Stimulation for Effective Anxiety Reduction and Neurocognitive Enhancement - Prof. Devi N P, Assistant Professor Rajagiri College of Social Sciences, Autonomous Kalamassery, Kerala, India</p> <p>3. Importance of Yogic pranayam and meditation for the effective stimulation of vestibular apparatus to improve the neural pathways - Dr. Anjana. K, BNYS, MSc, PhD, Associate Proessor, LIMSAR</p>	<p>Hall 4</p>
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13th December 2024, Friday, Day -2			
Time	Topic		Venue
08.00AM -	Breakfast		Panchadeep
9:00AM - 10AM	Oral and Poster Presentation- Parallel sessions		Scheduled Halls
10:00AM - 10:45AM	<p style="text-align: center;">APPI Oration - by Awardee of Maj. Gen. S.L. Bhatia Oration award – 2024 Presentation by Awardee of Best Teacher and Medical Educator Award</p>		Panchadeep Auditorium, 1st Floor, Medical College Building
11.00 AM	TEA BREAK		Basement
11.00 AM - 1.00PM	Oral and Poster Presentation - Parallel sessions		Scheduled Halls
1:00PM to 2:00PM	LUNCH BREAK		Dining Area, Basement
2:00PM to 6:10PM	Parallel Symposium		Scheduled Halls
3:20PM - 3:30PM	TEA BREAK		
Symposium 5.1, 5.2, 5.3	2:00PM - 3:20PM	3:30PM - 4:50PM	
	<p>(Symp: 5.1) P300 as a neurophysiological phenotype for prognostication of cognitive functions and information processing ability: Current scenario, practical challenges and future prospects</p> <p>1. P300 as a neurophysiological phenotype for prognostication of cognitive functions and information processing ability: current challenges - Dr. ABHIMANYU GANGULY, ASSISTANT PROFESSOR, All India Institute of Medical Sciences Deoghar, Jharkhand</p> <p>2. P300 as a neurophysiological phenotype for prognostication of cognitive functions and information processing ability: Practical challenges - Dr. MOHAMMED JAFFER PINJAR, Associate Professor, AIIMS, DEOGHAR</p> <p>3. P300 as a neurophysiological phenotype for prognostication of cognitive functions and information processing ability: current scenario - Dr. Anupkumar Dhanvijay, Associate Professor, All India Institute of Medical Sciences, Deoghar</p>	<p>(Symp: 5.2) Lifestyle Intervention Clinic: NonPharmacological Interventions in Lifestyle Related Disorders</p> <p>1. Lifestyle Interventions: The Pillars of Lifestyle Medicine. - Dr. Rupali Parlewar, Professor, Head, AIIMS, Bilaspur</p> <p>2. Role of Optimum Sleep Pattern and Exercise in Lifestyle Disorders - Dr. Punam Verma, Additional Professor, AIIMS, Bilaspur</p> <p>3. Evidence of Lifestyle Interventions in Lifestyle Disorders - Dr. Navdeep Ahuja, Assistant Professor, AIIMS, Bilaspur</p>	<p>(Symp: 5.3) Integrative approach to Cardiovascular health assessment</p> <p>1. Cardiovascular autonomic function evaluation in the physiology laboratory: our experience from tertiary care center in Western India - Dr. Shival Srivastav, Assistant Professor, AIIMS, Jodhpur</p> <p>2. Baroreflex sensitivity a window to cardiovascular regulatory mechanisms - Dr. Manpreet KAUR, Associate Professor, VMMC and Safdarjung Hospita, Delhi</p> <p>3. Systemic and cerebral endothelial functions in health and diseases - Dr. Kiran Prakash, Assistant Professor, Government Medical College and Hospital, Sector 32, Chandigarh</p> <p>4. Frugal innovations in Cardiovascular physiology laboratory - Dr. Ashish Arvind, Assistant Professor, AIIMS, Gorakhpur</p>
			Hall 1

Symposium, 6.2, 6.3	(Symp: 6.2) Empowering Gen Z students: Harnessing Yoga to Combat the Rising Burden of Life style Disorders		(Symp: 6.3) Intellectual Property Rights (IPR) - from basics and beyond	Hall 2
	<p>1. Epidemiological and genetic Insights into Lifestyle Disorders: Unraveling the Burden of Metabolic Syndrome and NAFLD Among Gen Z Students" - Prof.Gurjit, Professor, Government Medical College and Hospital Chandigarh</p> <p>2. Exploring Role of Environmental Determinants on Metabolic Syndrome and NAFLD Among Gen Z Students - Dr.Rashmi Chandel, Assistant Professor, Government Medical College and Hospital, Chandigarh</p> <p>3. Utilizing Yoga as a Holistic Approach to Address the Escalating Challenges of Lifestyle Disorders - Dr. Anumeha Bhagat, Assistant Professor, Government Medical College and Hospital, Chandigarh</p>		<p>1.Laws and Litigations - Dr. Jayamala, Professor, Sri Venkateshwaraa Medical College Hospital And Research Center</p> <p>2. Introduction to IPR in Medical Sector - Dr. S. Subhashri, Associate Professor, Physiology, Sree lakshmi Narayana institute of medical sciences, Pondicherry</p> <p>3. IPR - from basics and beyond-recent updates- Dr. U Karthika Priyadharshini, Assistant Professor, Physiology, JIPMER, Pondicherry</p>	
Symposium 7.1, 7.2, 7.3	(Symp: 7.1) Roots to Victory: A Comprehensive Guide to Child Athlete Physiology and Development in India	(Symp:7.2) Integration of Team Based Learning approach to Undergraduate Teaching	(Sym. 7.3) Exploring Integrative Power of Yoga: Diverse Paths, Yogic assessments, Cleansing techniques & its Psychoneuroimmunology	Hall 3
	<p>1. Building the Foundation: Understanding the Physiological Growth of Indian Child Athletes - Dr. M. Rajajeyakumar, Assistant Professor, Saveetha Medical College & Hospital</p> <p>2. Stepping Stones to Success: Key Stages in the Long-Term Athlete Development (LTAD) Program - Dr. Harini Priyadharshini Muralidharan, Consultant Sports Physician Royal Challengers, Bangalore</p> <p>3. Fuelling Success: Exercise Programs and Nutrition Strategies for Young Indian Athletes - Dr. Harpreet Kour, Associate Professor, Jawaharlal Nehru Medical College Belagavi</p>	<p>1. Overview of the meaning, relevance and advantages of the Team Based Learning methodologies -- Prof. Manasi Bhattacharjee, Professor & Head, AIIMS, Guwahati</p> <p>2. Flipped Classroom as a Team-Based Learning approach.- Prof. Manpreet KAUR, Associate Professor, VMMC and Safdarjung Hospital</p> <p>3. Case-based Learning as a Team-Based Learning approach - Dr. Soumen Manna, Associate Professor, VMMC & Safdarjung Hospital</p> <p>4. Gamification as a Team-Based Learning approach - Dr. Sundareswaran Loganathan, Assistant Professor AIIMS Guwahati</p>	<p>1. Exploring paths of yoga and understanding the yogic assessment scores for optimal intervention outcome - Dr. Vandana S Daulatabad, Associate Professor, Physiology, AIIMS, Bibinagar</p> <p>2. Ancient Yogic Cleansing techniques for modern lifestyle disorder- Dr. Prafull Kamble, Associate Professor, Physiology, AIIMS, Bibinagar</p> <p>3. Psychoneuroimmunology of meditation - Dr. Dipti Magan, Associate Professor, Physiology, AIIMS, Bhatinda</p>	

Symposium 8.1, 8.2, 8.3	(Symp: 8.1) Neuromodulation in exploring the brain and treating brain disorders	(Symp: 8.2 Stress, Strength & Science : Psycho-neuroimmuno modulation by Yoga meditation)	(Symp: 8.3) Artificial Intelligence: Transforming Medical Education, Research, and Patient Care	Hall 4
	<p>1. Investigating the causal role of the right posterior parietal cortex in reorienting spatial attention- Dr. Sridharan Devarajan, Associate Professor, Centre for Neuroscience, Indian Institute of Science (IISc)</p> <p>2. Modulation of cortical motor maps and excitatory-inhibitory circuitry by low frequency rTMS in hemiparetic cerebral palsy - Prof. SUMAN , JAIN, Professor, AIIMS Delhi</p> <p>3. Neuromodulation in neuropsychiatric disorders - Prof. Kaviraja Udupa, Professor, NIMHANS, Bangalore</p>	<p>1. Cortisol belly, stress and yoga-based life style intervention - Prof. Raj Kumar Yadav, Professor, AIIMS , New Delhi</p> <p>2. Quantifying the Physiological Impact of Yoga and Meditation: A Scientific Approach - Dr. Varun Malhotra, Additional Professor, AIIMS, Bhopal</p> <p>3. From slouch to strength: transforming posture with yoga - Dr. Senthil Kumar Subramanian, Associate Professor, AIIMS, Madurai</p> <p>4. From Asanas to Analysis: Navigating the Land scape of Yoga Intervention Research - Dr. Rajathi. R, Assistant Professor, AIIMS, Bathinda</p>	<p>1. Using AI tools for writing research protocol- Dr. Kaushik Mukhopadhyay, Associate Professor, AIIMS, Kalyani</p> <p>2. Digital transformation in healthcare with emphasis on role of AI - Dr. Madhavan C, Associate Professor, AIIMS, Kalyani</p> <p>3. Optimizing AI Interactions in Healthcare: The power of prompt Engineering - Mr. Kishan & Amiya Patanaik, Director, Neurobit Innovations</p>	
5:15PM-6:30PM	General Body Meeting of APPI			
7:00PM-11:00PM	Banquet Dinner & Entertainment at GREEN PARK, VADAPALANI			

14th December 2024, Saturday, Day -3		
Time	Topic	Venue
08.00AM - 09.00 AM	Breakfast	
9:00AM - 11AM	Oral and Poster Presentation- Parallel sessions	Scheduled Halls
11.00 AM - 11:15AM	TEA BREAK	Dining Area, Basement
11:15AM - 11:45AM	Plenary Lecture 3- " Neuroimmune axis of virus induced neuroinflammation and neurodegeneration- " Dr. Jayasri Das Sarma, Ph.D., FNASc, FASc Professor, Department of Biological Science, Indian Institute of Science Education and Research - Kolkata Adjunct Associate Professor, Department of Ophthalmology, University of Pennsylvania, USA	Panchadeep Auditorium, 1st Floor, Medical College Building
11.45AM - 1.00PM	Undergraduate Session: 1. Animal Experiments for undergraduate teaching " as a part of SK Singh Young Investigator Program- Dr. Ashok Jariyal, Professor, AIIMS, Delhi 2. Building the ideal Medical Community: At tributes of medical students, medical educators, medical professionals " by Dr. K. P. Puthuraya, Former Director, Rajiv Gandhi University of Health Sciences, Bangalore, Karnataka 3. Experiential Learning by Medical Students by Dr. Laxmi T Rao, Professor, Neurophysiology, NIMHANS, Bangaluru; Dr. H. N Mallick, Professor & Head, Physiology, SGT University, Gurugram , & Dr. T. R Raju , Former Senior Professor , NIMHANS, Director, Research, Sankara Academy of Vision, Bangalore, Dr. Ashok Jariyal, Professor, AIIMS, Delhi	Panchadeep Auditorium, 1st Floor, Medical College Building
1:00PM to 2:00PM	LUNCH BREAK	Dining Area, Basement
2:00PM- 3:30PM	Valedictory Program & Award Distribution	Panchadeep Auditorium, 1st