

Vistas in Life Sciences 2024

An International Conference Celebrating the

Golden Jubilee of the

School of Life Sciences, JNU



January 21-24,2024

Scientific Programme

Vistas in Life Sciences 2024 January 21-24,2024				
	Jan 21, 2024;Day1			
Ve	enue: Conve	ntion Centre, Jawaharlal Nehru University		
	10:00-	Registration		
	10:30-	Alumni Meet and Greet		
	11:30-1:00	Inaugural Session		
	11:45	Arrival of Dignitaries		
		Opening Remarks by Prof. K. Natarajan, Convenor, Vistas in Life Sciences 2024		
		Welcome address by Prof. Supriya Chakraborty, Dean, SLS		
Inaugural	12:00-12:45	Address by Prof. Satish C. Garkoti, Rector, JNU		
Session		Address by Prof. Sudhir K. Sopory, Former Vice Chancellor, JNU		
		Address by Prof. Santishree D. Pandit, Vice Chancellor, JNU		
		Vote of Thanks		
	12:45	Group Photo		
Lunch	1:00-1:45	Cafeteria/Convention Centre Lawns		
		Scientific Talks by Former SLS Faculty Members		
	2:00-4:20	Moderators: Prof. Rajendra Prasad, Amity University- Haryana, & Dr. Ashu Bhan Tiku, SLS, JNU		
	2:00-2:20	Prof. Sudhir K. Sopory Beginning academic odyssey from School of Life Sciences, JNU		
	2:25-2:45	Prof. Rajendra Prasad From Freshman to Faculty: Reflecting on Four Decades of Academic Evolution		
SLS Architects'	3:15-3:35	Prof. Rajiv K. Saxena Therapeutic potential of carbon nanoparticles		
Session	2:50-3:10	Prof. Birendra N. Mallick SLS and JNU - My Independent Research Mentor		
	3:40-4:00	Prof. Baishnab C. Tripathy Oxygenic Photosynthesis, a Major Driver of Evolution of Life		
	4:00-4:20	Prof. Shyamal K. Goswami From a Molecular Biologist to a Redox Biologist: a Memorable Journey		
Tea/Coffee	4:30-5:15	Tea and Interactions		

Memories	5:15-7:00	Reminiscences by Alumni and former faculty members Moderators: Neera Bhalla Sarin & Praveen K. Verma
Cultural Programme	7:00-8:00	An Evening of Cultural Extravaganza Coordinators: Praveen K. Verma, Atul K. Johri, Ananda K. Sarkar, Ashu Bhan Tiku, Ekta Rai, Karunakar Kar
Dinner	8:00-9:30	Cafeteria/Convention Centre Lawns Networking and Dinner
	9:30-	Drop Off to Hotels and Guest Houses

Vistas in Life Sciences 2024 January 21-24,2024		
		Jan 22, 2024;Day2
Ve	nue: Convent	tion Centre, Jawaharlal Nehru University
	7:30-9:00	Breakfast and Registration
	09:25- 09:30	Welcome address
Plenary Session I	9:30-10:15	Chair: Seyed E. Hasnain, IITD and Sharda University; Co-Chair: Pramod C. Rath, SLS, JNU
Plenary Lecture	9:30-10:15	Rajesh S. Gokhale , DBT and IISER-Pune Harmonizing Connections: <i>Understanding Inter-Organ</i> <i>Crosstalk</i>
Session I	10:15-11:05	Structural Biology Chair: T.P. Singh, AlIMS, New Delhi; Co-Chair: Ajay K. Saxena, SLS, JNU
	10:15-10:40	Arun Shukla , IIT Kanpur Structure, Function, and Regulation of G Protein-coupled Receptors
	10:40-11:05	Deepak T. Nair , RCB New Answers for Old Questions regarding DNA synthesis by DNA polymerases
Tea/Coffee	11:05-11:45	Convention Centre Lawns
Session II	11:45-1:00	Metabolism and Metabolic Control Chair: Shyamal K. Goswami, Former Prof, SLS; Co-Chair: Sneh L. Panwar, SLS, JNU
	11:45-12:10	Anand Bachhawat , IISER-Mohali Regulation of One Carbon Metabolism : Solving a 50-year old puzzle
	12:10-12:35	Sunil Laxman, inStem Separating Form from Function: Making Sense of the Mitochondrial Network Morphology
	12:35-1:00	Rajender Motiani , RCB Mitochondrial Calcium Signaling is a Critical Determinant of Skin Pigmentation
Lunch	1:00-2:00	Cafeteria/Convention Centre Lawns

Poster Session	2:00-3:00	Poster Session-I Coordinators: Shweta Saran, Abhisheka Bansal, Devinder Kaur, SLS, JNU
Session III	3:00-4:15	Cancer Therapeutics Chair: Rama Shankar Verma, MNNIT, Prayagraj; Co-Chair: Rana Pratap Singh, SLS, JNU
	3:00-3:25	Gokul Das , Roswell Park Cancer Institute From Research Lab to Patient Clinic: Exploiting a Novel Cellular Pathway for Developing an Effective Cancer Therapeutic Strategy
	3:25-3:50	Gayatri Sabherwal, IBAB Registering What is in Clinical Trial Registries
	3:50-4:15	Vivek Mittal , Weill Cornell Medical College, USA Decoding Cancer Complexity to Develop New Treatment Paradigms
Tea/Coffee	4:15-4:45	Convention Centre Lawns
Session IV	4:45-6:05	Biology of Cancer Chair: R.K. Kale, Former Prof, SLS, JNU; Co-Chair: Neelima Mondal, SLS, JNU
	4:45-5:10	Geetanjali Sachdeva , ICMR-NIRRH Endometrial Functions and Dysfunctions: From Non- Conception to Conception
	5:10-5:35	Dhyan Chandra, Roswell Park Cancer Institute The Mitochondrial Unfolded Protein Response in Prostate Cancer
	5:35-5:50	Neera-Tewari Singh, MSU, East Lansing Chemical Threat Skin Exposures: Inflammatory Mechanisms and Targeted Therapies
	5:50-6:05	Ashish Goyal, DKFZ, Heidelberg Epigenetic Inhibitors Induced ERV Derived Neoantigens - A New Class of Cancer Immunotherapy Targets
Session V	6:05-7:00	Alumni and Young Investigator Talks Chair: Balram Singh, Institute of Advanced Studies, & Boston Centre for Excellence, MA, USA; Co-Chair: Shweta Saran, SLS, JNU
	6:05-6:20	Deepika Kant , AIIMS Infralimbic Cortex Beyond Hippocampus: Temporal Insights into Memory Compensation

	6:20-6:35	Gurcharan Kaur , GNDU, Amritsar Unmasking the Neurotherapeutic Potential of PSA-NCAM, A Key Marker of Adult Brain Plasticity Using Drug Re-Tasking Approach
	6:35-6:50	Sushma Singh, NIPER-Mohali Pyridoxal Kinase Gene Deletion Leads to Impaired Growth, Deranged Redox Metabolism And Cell Cycle Arrest In Leishmania Donovani
Panel Discussion	7:00-7:45	Academia-Industry Connect- A Panel Discussion for Student Career Paths Chair: Rakesh Bhatnagar, SBT, JNU; Co-Chair: Ashwani Pareek, SLS, JNU and DBT-NABI A. Sriram, Biocon, Bangalore Rajeev Varshney, DIPAS, New Delhi Amita Joshi, DBT-BIRAC, New Delhi Sanjoy Mahanty, TCG Life Sciences
Dinner	7:45-9:15	Cafeteria/Convention Centre Lawns Networking and Dinner
	9:30-	Drop Off to Hotels and Guest Houses

	Jan 23, 2024;Day3		
Venue: Convention Centre, Jawaharlal Nehru University			
	8:00-8:45	Breakfast and Registration	
Plenary Session II	9:00-9:45	Chair: B.N Mallick, Amity University, Noida ; Co-Chair: Sushil K. Jha, SLS, JNU	
Plenary Lecture	9:00-9:45	Amita Sehgal , UPenn, USA Biology of Bedtime: Understanding How and Why We Sleep	
Session V	9:45-11:55	Neuroscience and Biology of Behavior Chair: Deepak Sharma, Former Professor, SLS, JNU; Co-Chair: A.C. Mondal, SLS, JNU	
	9:45-10:10	Neeraj Jain , IIT-Jodhpur Effects of Spinal Cord Injuries on the Brains of Newborn and Adult Monkeys	
	10:10-10:35	Surajit Sarkar , DU South Campus A Tale of Two Formidable: Insulin Pathway and Poly(Q) Mediated Neurodegenerative Disorders	
	10:35-11:00	Samrat Mukhopadhyay , IISER-Mohali Yin and Yang of the Prion Protein	
	11:00-11:25	Anita Jagota , UoH Role of Circadian Rhythms in Healthy Aging and Longevity	
Tea/Coffee	11:25-12:00	Convention Centre Lawns	
Session VI	12:00-1:15	Immunology Chair: Arvind Sahu, Regional Centre for Biotechnology, Faridabad; Co-Chair: Niti Puri, SLS, JNU	
	12:00-12:25	Apurva Sarin , DBT-Wellcome India Alliance Regulating a Regulator: Metabolic Cues Underpinning T- Cell Function	
	12:25-12:50	Sudha Kumari , IISc Cell Biological Mechanisms Mediating Optimal Immunosurveillance	
	12:50-1:15	Devinder Sehgal , NII Recruitment of B Cells Expressing Heavy Chains Lacking DH Gene-Derived Amino Acids in the Immune Response Against <i>Streptococcus Pneumoniae</i>	
Lunch	1:15-2:15	Cafeteria/Convention Centre Lawns	
Poster Session & Tea	2:15-3:15	Poster Session—II & Tea/Coffee Coordinators: Ananda K. Sarkar Ekta Rai, Vikas Yadav, SLS, JNU	

Session VII	3:15-4:30	Gene Regulation Chair: Suman K. Dhar, SCMM, JNU; Co-Chair: Rohini Muthuswami, SLS, JNU
	3:15-3:40	Umesh Varshney , IISc Initiator tRNA-centric Mechanisms of Faithful Translation in Bacteria
	3:40-4:05	Sanjeev Galande, Shiv Nadar University Statin Mediated Regulation of SATB Family Chromatin Organizer Proteins and B-Catenin in Colorectal Cancer
	4:05-4:30	Ullas Kolthur , TIFR-Hyderabad Metabolic Tuning of Chromatin Structure and Function
	4:30-4:45	Subhrajit Biswas, Amity University, Noida Decoding the Interplay Among Hepatic Stromal Cells During the Progression of Hepatocellular Carcinoma
Tea/Coffee	4:45-5:15	Convention Centre Lawns
Session VIII	5:15-7:10	Plant Biology Chair: Baishnab C. Tripathy, Sharda University, Noida; Co-Chair: Ashis K. Nandi, SLS, JNU
	5:15-5:40	Subhra Chakraborty , NIPGR Commuting to Fight: Organellar crosstalk and post- translational control shaping plant immunity
	5:40-6:05	Arun Sharma , DU South campus A New Regulator for Ripening of Tomato Fruits
	6:05-6:30	Manoj Majee, NIPGR SKIP "JAZ" by SKIP31: Crossroad for Seed Maturation and Desiccation Tolerance
	6:30-6:55	Prabodh Trivedi , CSIR-CIMAP Small but Mighty: Bigger Role of Small Molecules in Plant Growth and Development
	6:55-7:10	Charanpreet Kaur , DBT-NABI Comparative Transcriptomics Uncover Different Pathways of Plant Growth Promotion Under Stress by Microbes
Panel Discussion	7:10-8:00	Life Sciences Teaching and Research in Indian Universities: Is there a reboot required? Moderators: Ramesh V. Sonti, ICGEB, New Delhi & Rajesh Sharan, Former Professor, NEHU, Shillong Panelists: Alok Bhattacharya, Seyed E. Hasnain, Birendra N. Mallick
Dinner	8:00-9:30	Cafeteria/Convention Centre Lawns Networking and Dinner
	9:30-	Drop Off to Hotels and Guest Houses

	Jan 24, 2024;Day4		
Venue: Convention Centre, Jawaharlal Nehru University			
Breakfast	7:30-8:45	Cafeteria/Convention Centre Lawns	
Session IX	9:00-10:35	Biology of Diseases Chair: Debasisa Mohanty, NII, New Delhi; Co-Chair: Sneha Sudha Komath, SLS, JNU	
	9:00-9:25	S.E. Hasnain , IIT-Delhi & Sharda University Scientific Journey of a Non-Conformist Biologist: Inspired by the JNU Environment	
	9:25-9:50	Dhiraj Kumar, ICGEB Innate Immune Responses to Mycobacterium tuberculosis Infections	
	9:50-10:15	Sudipto Roy , A-Star, Singapore Cilia and Ciliopathies: Our Explorations for a Quarter Century	
	10:15-10:35	Alok Bhattacharya, Ashoka University Redefining Indian Approach to Find and Access Treatment for Patients with Rare Diseases	
Tea/Coffee	10:35-11:05	Convention Centre Lawns	
Session X	11:05-12:35	Fungal Biology Chair: Alok K. Mondal, Former Prof, SLS, JNU; Co-Chair: Atul K. Johri, SLS, JNU	
	11:05-11:30	Rajendra Prasad , Amity University-Haryana Experimental Evolution Offers Valuable Insights into Unravelling the Trajectory of Amphotericin B Resistance In <i>Candida</i>	
	11:30-11:55	Narottam Acharya, ILS, Bhubhaneshwar CAET: A Non-Genetically Modified Attenuated Strain for Anti- Fungal Vaccine Development	
	11:55-12:20	Rupinder Kaur , CDFD SWI/SNF Complex-Mediated Chromatin Remodeling is Pivotal to Immune Evasion	
	12:20-12:35	Narendra Bairwa, CU-Jammu A Simple Assay for the Detection of Late-Stage Apoptosis Features in Saccharomyces cerevisiae	
	12:35-1:00	Alumni Networking	
Lunch	1:00-2:00	Cafeteria/ Convention Centre Lawns	

Session XI	2:00-3:40	Computational Biology Chair: Alok Bhattacharya, Ashoka University; Co-Chair: Karunakar Kar, SLS, JNU
	2:00-2:25	Narendra M. Dixit, IISc Modelling Viral Infections: Applications to COVID-19 Vaccines
	2:25-2:50	Andrew Lynn, SCIS, JNU Using Generative Artificial Intelligence to Predict the Sequence of Future Variants of Concern in Epidemic Viruses: Implications for Immune Escape and Vaccine
	2:50-3:15	Debarka Sengupta , IIITD Harnessing AI and Transcriptomics to Solve Oncology Grand Challenges
	3:15-3:40	Dinesh Kumar, ICAR-IASRI Computational Genomics in Agricultural Germplasm Improvement & Management: Indian Perspective and Challenges
Session XII	3:40-4:45	Award Lectures Chair: Arun S. Kharat, SLS, JNU; Co-Chair: Amarjeet Singh, SLS, JNU
	3:40-3:55	Prof. Sipra Guha Mukherjee Best Ph.D. Thesis Award Lecture
	4:00-4:45	VLS 2024 Poster Award Lectures
Tea/Coffee	4:45-5:30	Networking Tea/Coffee
Session XIII	5:30-6:30	Valedictory and Awards Ceremony
Valedictory Session	5:30-6:05	Welcome remarks by Prof. Supriya Chakraborty , Dean, SLS Remarks by Prof. Satish C. Garkoti , Rector, JNU Address by Dr. Himanshu Pathak , Secretary, DARE & Director General, ICAR, New Delhi
	6:05-6:15	Announcement and Distribution of SLS Awards and Conference Prize Distribution
	6:15-6:30	Closing Remarks
Dinner	7:00-9:00	Networking & Dinner
	9:00-	Drop off to Guest Houses/Hotels and Departure