



ISCB
2025



SCHEDULE

INTERNATIONAL SYMPOSIUM ON
CILIATE BIOLOGY
& INTERDISCIPLINARY RESEARCH

organized by

**ACHARYA NARENDRA
DEV COLLEGE**

NEW DELHI, INDIA

in association with

INDIAN SOCIETY OF CILIATE BIOLOGY (ISoCB)

Affiliated society of

Indian Network of Soil Contamination Research (INSCR) &
International Society of Protistologists (ISOP)

SCHEDULE: ISCB 2025

Pre-Symposium Workshop

Date	Time		
February 03, 2025	09.00 am – 05.00 pm	Workshop-I: Culturing and Identification of Ciliates Workshop-II: Bioinformatic Tools for Studying Ciliates	To be conducted jointly by ISoCB, ZSI, INSCR and phixgen

DAY 1 (Room A)

Date	Time	
February 06, 2025	08.00 am – 09.00 am	Registration Interaction amongst Scientists and Students
	09.00 am – 09.30 am	Inauguration
		Chairpersons: Dr Alan Warren, Prof Yuri Mazei Co-Chairperson: Dr Rimpay Kaur Chowhan
	09.30 am – 10.10 am	Plenary Lecture I Prof Joel Dacks (University of Alberta, Canada): Evolutionary Cell Biology of the Endomembrane System: How Ciliate Biology Frames Pan-Eukaryotic Phenomena?
	10.10 am – 10.50 am	Plenary Lecture II Prof Elena Sabaneyeva (St Petersburg State University, Russia): The Ciliate <i>Paramecium bursaria</i> and its Inhabitants
	10.50 am – 11.10 am	Tea & Photo Session
	11.10 am – 11.40 am	Poster Session
		Chairpersons: Prof Joel Dacks, Prof Elena Sabaneyeva Co-Chairperson: Dr Ritu Khosla
	11.40 am – 12.20 pm	Plenary Lecture III Prof Yuri Mazei (Lomonosov Moscow State University, Russia): Community Ecology of Marine Benthic Ciliates: Integrating Taxonomic, Metabarcoding and Functional Traits Approaches

12.20 pm – 01.00 pm	Plenary Lecture IV Dr Alan Warren (Natural History Museum, London, UK): Cell Shape-Shifting and Ultrafast Contraction in Ciliates
01.00 pm – 01.40 pm	Plenary Lecture V Prof Rup Lal (ANDC, University of Delhi, Delhi): Ciliate Protozoans in Microbiomes: A Neglected Resource Awaiting Discovery
01.40 pm – 02.30 pm	Lunch
Symposium Lectures	
	Chairpersons: Prof Rup Lal, Prof Sukanya Lal Co-Chairperson: Dr Anita Thakur
02.30 pm – 03.00 pm	Prof Atul K Johri (Jawaharlal Nehru University, New Delhi, India): Vaccine Development from Jenner to Genomics
03.00 pm – 03.30 pm	Dr Abdur Rahaman (National Institute of Science Education and Research (NISER)-Bhubaneswar): Cellular Trafficking and Organellar Homeostasis
03.30 pm – 04.00 pm	Plenary Lecture VI Prof David JS Montagnes (University of Liverpool, UK): Finding Your Scientific Story by Writing Backwards
04.00 pm – 04.20 pm	Tea
	Chairpersons: Dr Abdur Rahaman, Dr Simran Bhullar Co-Chairperson: Dr Sushma Bharadwaj
04.20 pm – 04.50 pm	Poster Session
04.50 pm – 05.20 pm	Plenary Lecture VII Dr Alexey Potekhin (University of Innsbruck, Austria): Bacterial Killer Symbionts of <i>Paramecium</i> : Diversity, Ecology, Genomics
05.20 pm – 05.50 pm	Plenary Lecture VIII Prof Bettina Sonntag (University of Innsbruck, Austria): Ciliates in Science Communication
06.00 pm – 07.00 pm	Cultural Program (Dhwani Room)
07.00 pm onwards	Dinner

DAY 1 (Room B)

Date	Time	
February 06, 2025	Invited Talks by Faculty	
	Chairpersons: Prof Charu Khosla Gupta, Prof Pooja Bhagat Co-Chairperson: Dr Aparna Sharma	
	02.30 pm – 02.40 pm	Prof Soma Mondal Ghorai (Hindu College, University of Delhi, India): Anti-Staphylococcal and Anti-Biofilm Activity Analysis of Chimeric Endolysins: An in-vitro, ex-vivo and in-vivo Study
	02.40 pm – 02.50 pm	Prof Urmi Bajpai (Acharya Narendra Dev College, University of Delhi, India): The Rise of Superbugs: can Bacteriophages offer A Line of Defense?
	02.50 pm – 03.00 pm	Dr Jyoti Taneja (Daulat Ram College, University of Delhi, India): Identification and Characterization of Potential Vaccine Candidate using Hypothetical Proteins from <i>Mycoplasma genitalium</i> : A Reverse Vaccinology Based Approach
	03.00 pm – 03.10 pm	Dr Raunak Dhanker (GD Goenka University, Gurugram, India): Importance of Ciliates in Zooplankton Diet
	03.10 pm – 03.20 pm	Dr Parveen Gill (Zakir Husain Delhi College, University of Delhi, India): LC50 Assessment of Neonicotinoid Insecticide Imidacloprid and Evaluation of its Toxicity Parameters Against <i>Eisenia fetida</i>
	03.20 pm – 03.30 pm	Prof Sarita Kumar (Acharya Narendra Dev College, University of Delhi, India): The Buzzing Threat: Innovative and Sustainable Approaches for Mosquito Control
	03.30 pm – 03.40 pm	Dr Arpita Sharma (GD Goenka University, Gurugram, India): Harnessing Genetic Engineering for Enhancing Abiotic Stress Tolerance: A Sustainable Pathway for Future Agriculture
	03.40 pm – 03.50 pm	Dr Geetika Kalra (Acharya Narendra Dev College, University of Delhi, India): Impact of Exogenous Application of Antioxidants on ROS Signaling in Germinating Seeds of <i>Solanum Lycopersicum</i> L.
	03.50 pm – 04.00 pm	Dr Manoj Kumar Singh (University of Allahabad, Prayagraj, India): Exploring the Potential of Endophytic Bacteria isolated from Dragon Fruit Plant
	04.00 pm – 04.20 pm	Tea

	04.20 pm – 04.50 pm	Poster Session
	06.00 pm – 07.00 pm	Cultural Program
	07.00 pm onwards	Dinner

DAY 2 (Room A)

Date	Time	
		Chairpersons: Dr Bharti Sarkar, Dr Debjani Dutta Mukhopadhyay Co-Chairperson: Dr Deepshikha
February 07, 2025	08.50 am – 09.30 am	Plenary Lecture IX Prof Gaytha Langlois (Bryant University, USA): Video Storytelling – Tracking Microbial Communities on Coral Reefs
		Symposium Lectures
		Chairpersons: Dr Komal Kamra, Dr Archna Pandey Co-Chairperson: Dr Kavita Mittal
	09.30 am – 10.10 am	Dr Santosh Kumar (BRIC-National Centre for Cell Science, Pune, India): Understanding the Molecular Mechanism of Biogenesis of Lysosome-Related Organelles using the <i>Tetrahymena thermophila</i>
	10.10 am – 10.40 am	Dr Dagmar Jirsova (Arizona State University, USA): Mosaic Protein Localization of Glycolysis and Gluconeogenesis in <i>Paramecium Tetraurelia</i> and its preference for Anabolic Metabolism
	10.40 am – 10.55 am	Prof Seema Makhija (ANDC, University of Delhi, India): Molecular and Morphological Descriptions of three Species Belonging to Class Colpodea: A Journey from Classical Taxonomy to Macrogenome Analysis
	10.55 am – 11.10 am	Prof Ravi Toteja (ANDC, University of Delhi, India): Ciliates and Human Health
	11.10 am – 11.30 am	Tea

11.30 am – 12.00 noon	Poster Session
	Chairpersons: Prof Seema Makhija, Dr Princy Hira Co-Chairperson: Dr Vineet Girdharwal
12.00 noon – 12.15 pm	Dr Ilmas Naqvi (Zakir Husain Delhi College, University of Delhi, India): Discovering a new species of the Genus <i>Hemiurosomoida</i> from a Fresh Water Body, Delhi, India
12.15 pm – 12.30 pm	Dr Santosh Kumar (Zoological Survey of India, Kolkata, India): Curiosity Driven Frugal Science with Ciliates
Young Scientist Presentations	
12.30 pm – 12.45 pm	Dr Harpreet Kaur (University of Alberta, Canada): Comparative and Phylogenetic Analyses of Snares across the Ciliate Diversity
12.45 pm – 01.00 pm	Dr Simran Bhullar (Ramalingaswami Re-Entry Fellow (RLS), Department of Genetics, University of Delhi South Campus): <i>Paramecium tetraurelia</i> : Lessons Learnt
01.00 pm – 01.15 pm	Dr S Sripoorna (Ohio State University, USA): Unveiling the Complexity of Rumen Ciliates: Insights into Diversity and Lysosomal Peptidase Profile
01.15 pm – 01.30 pm	Dr Jeeva S Abrham (Columbia University, USA): Diversity and Taxonomic Study of Ciliates from Freshwater Sites in Delhi, India, with Special Emphasis on the Genus <i>Euplotes</i>
01.30 pm – 02.20 pm	Lunch [GBM of ISoCB for members at 01.30 pm (committee room) followed by lunch]
Symposium Lectures	
	Chairpersons: Dr Utkarsh Sood, Prof Anita Narang, Dr Meenakshi Thakur Co-Chairperson: Dr Rashmi Sharma
02.20 pm – 02.50 pm	Dr Komal Kamra (ANDC, University of Delhi, India): Mining Ciliates for Science and Fun
02.50 pm – 03.20 pm	Dr Maximilian H. Ganser (Paris Lodron University of Salzburg, Austria): A Multidisciplinary Approach for Investigating Marine Planktonic Ciliates (Alveolata, Ciliophora, Oligotrichea)
03.20 pm – 03.50 pm	Dr Valentina Serra (University of Pisa, Italy): One Mitogenome to Rule them all: How Mitochondrial Genomes Help in Disentangling the Phylogeny of Ciliophora

	03.50 pm – 04.20 pm	Poster Session
	04.20 pm – 04.40 pm	Cultural Program
	04.40 pm – 05.20 pm	Valedictory: Presentation of Summary, Dr Alan Warren Quiz Using Cut Outs from the Presentations Open to Students, Prize Distribution to Winners
	05.20 pm	High Tea

DAY 2 (Room B)

Date	Time	
February 07, 2025		Invited Talks by Faculty
		Chairpersons: Prof Urmi Bajpai, Prof Geetu Gambhir Co-Chairperson: Dr Rimpay Kaur Chowhan
	10.10 am – 10.20 am	Dr Khangembam Cherita Devi (University of Allahabad, Prayagraj, India): <i>Nitrospira</i> : Nature's One-Stop Shop for Nitrification
	10.20 am – 10.30 am	Prof Charu Khosla Gupta (Acharya Narendra Dev College, University of Delhi, India): Ciliates: The Warriors of Eco restoration
	10.30 am – 10.40 am	Prof Hardeep Kaur (Ramjas College, University of Delhi, India): Environmental Drivers of Fungal Resistance: Evolution, Mechanisms, And Impact
	10.40 am – 10.50 am	Dr Rahul Dev Ambedkar (School of Open Learning, University of Delhi, India): A Bioinformatics Approach for the Novel Corona Virus
	10.50 am – 11.00 am	Dr Parminder Kaur Narang (SGTB Khalsa College, University of Delhi, India): Microalgae: Future Perspectives- Human Welfare
	11.00 am – 11.10 am	Prof Anita Narang (Acharya Narendra Dev College, University of Delhi, India): Optimizing in-vitro Culture of <i>Acacia nilotica</i> : Overcoming Contamination, Browning, and Seasonal Variability
	11.10 am – 11.30 am	Tea

11.30 am – 12.00 noon	Poster Session
	Chairpersons: Dr Ilmas Naqvi, Dr B. Hareramadas Co-Chairperson: Dr Rahul Dev
12.00 noon – 12.10 pm	Dr Shashi Dahiya (ICAR-Indian Agricultural Statistics Research Institute, New Delhi, India): AI in Agriculture
12.10 pm – 12.20 pm	Dr Archna Pandey (Acharya Narendra Dev College, University of Delhi, India): A Bioluminescence-Based Whole-Cell Biosensor for Quality Control of Food-Grade Silver Foil (E174)
12.20 pm – 12.30 pm	Prof Uma Dhawan (Bhaskaracharya College of Applied Sciences, University of Delhi, India): Unfolding the Epigenetic Code: Role of 5-Hmc In REM Sleep Deprivation Associated Neurodegeneration
12.30 pm – 12.40 pm	Prof Uma Chaudhary (Bhaskaracharya College of Applied Sciences, University of Delhi, India): Exploiting Moonlight Proteins to Combat Antimicrobial Resistance
12.40 pm – 12.50 pm	Dr Sumit Sahni (School of Open Learning, University of Delhi, India): Transforming Agri-Waste into a Bio-Circular Economy: Sustainable Mushroom Cultivation And Resource Reutilization
12.50 pm – 01.00 pm	Dr Sunita Jetly (Acharya Narendra Dev College, University of Delhi, India): Unveiling the Silent Threat: A Comprehensive Review on the Imperative Role of Thalassemia Screening in Bharat
01.00 pm – 01.10 pm	Dr Swati Sharma (Blood Research Center, University of North Carolina Chapel Hill, NC): Platelet PAR4 (F2RL3) plays a Protective Role in Viral Infections by Inducing the Release of Anti-Inflammatory Extracellular Vesicles (EVs)
01.10 pm – 01.20 pm	Dr Rashmi Sharma (Acharya Narendra Dev College, University of Delhi, India): Anticholinesterases in Plants and their Allelopathic Potential
01.20 pm – 01.30 pm	
01.30 pm – 02.20 pm	Lunch [GBM of ISoCB for members at 01.30 pm (committee room) followed by lunch]

Oral Presentations by Faculty

Chairpersons: Prof Uma Chaudhary, Dr Raunak Dhanker

Co-Chairperson: Dr Pragati Malik

02.20 pm – 02.30 pm

Dr Deepali Joon (SGTB Khalsa College, University of Delhi, India): Developing a Rapid Diagnostic Tool using Loop Mediated Isothermal Amplification Combined with Lateral Flow Dipstick: Insights for Ciliate Pathogen Detection

02.30 pm – 02.40 pm

Dr Vineet Girdharwal (Acharya Narendra Dev College, University of Delhi, India): Habitat Ecology of Spotted Owlet *Athene brama brama* (Temminck 1981) in Rural Area

02.40 pm – 02.50 pm

Dr Rimpay Kaur Chowhan (Acharya Narendra Dev College, University of Delhi, India): SARS-Cov-2 and Heart Tissue Pathology: Uncovering New Insights into Protein Accumulation and Cardiovascular Impact

02.50 pm – 03.00 pm

Dr Jagjeet Singh (RPS Group of Institutions, Mahendergarh, Haryana, India): Protective Efficacy of Berberine against Acetamidoprid-Mediated Impaired Electron Transport System and Mitochondrial Ailments

03.00 pm – 03.10 pm

Dr Divya Bajaj (Hindu College, University of Delhi, India): The Vicious Cycle of Anthropogenic Environmental Pollutants and their Biomagnification Causing Food Insecurity

03.10 pm – 03.20 pm

Ms Swati Maurya (Acharya Narendra Dev College, University of Delhi, India): To Study the Spatial and Temporal Variations in the Physical, Chemical Parameters and Ciliate Community Structure from the Forest Area and the Extreme Environments.

03.20 pm – 03.30 pm

Dr Mandeep Kaur (Acharya Narendra Dev College, University of Delhi, India): Exploring the Efficacy of Plant Extracts in the Biological Control of Plant Pathogenic Fungi

03.30 pm – 03.40 pm

Dr Rajeev Ranjan (Acharya Narendra Dev College, University of Delhi, India): Bacterial Bioluminescence: A Rapid Biosensing Tool for Ecotoxicological Monitoring

03.40 pm – 03.50 pm

Ms Bhumika Chauhan (Acharya Narendra Dev College, University of Delhi, India): A Comprehensive Study on Prevalance of Parasitic Infection in Commonly Edible Freshwater Fish *Channa striata* (Snakeheaded Murrel) from Meerut Region

	03.50 pm – 04.20 pm	Poster Session
	04.20 pm – 04.40 pm	Cultural Program
	04.40 pm – 05.20 pm	Valedictory: Presentation of Summary, Dr Alan Warren Quiz Using Cut Outs from the Presentations Open to Students, Prize Distribution to Winners
	05.20 pm	High Tea

DAY 2 (Room C)

Date	Time	
February 07, 2025		Oral Presentations by Students
		Chairpersons: Prof Soma Mondal Ghorai, Dr Jyoti Taneja Co-Chairperson: Dr Md. Arafat Hussain
	12.00 noon – 12.10 pm	Ms Muskan Yadav (Acharya Narendra Dev College, University of Delhi, India): Optimization of Recombinant Interferon Beta (IFN- β) Expression in <i>E. coli</i> through Systematic Variation of Induction Parameters
	12.10 pm – 12.20 pm	Mr Nitin Joshi (Acharya Narendra Dev College, University of Delhi, India): Impact of Air Pollution on Leaf Morphology in Urban Tree Species of Delhi
	12.20 pm – 12.30 pm	Mr Arnav Abhay Narayan (Acharya Narendra Dev College, University of Delhi, India): Biomechatronic Robotic Arm Actuated by Biological Muscle Tissue
	12.30 pm – 12.40 pm	Mr Ashish Arora (Indian Institute of Technology Delhi, India): Synthesis and Evaluation of Pangas Catfish (<i>Pangasius pangasius</i>) Tail-Derived Hydroxyapatite-Based 3D Porous Scaffolds for Bone Regeneration
	12.40 pm – 12.50 pm	Ms Jyoti Dagar (Acharya Narendra Dev College, University of Delhi, India): Advancing Ciliate Diversity Studies: Insights from DNA Barcoding in Freshwater and Terrestrial Ecosystems

12.50 pm – 01.00 pm	Ms Saloni Ghosh (Acharya Narendra Dev College, University of Delhi, India): Unlocking SARS-Cov-2 Secrets: In-Silico Design of RT-PCR Primers for Rapid Diagnosis and Research
01.00 pm – 01.10 pm	Mr Sandeep Antil (Acharya Narendra Dev College, University of Delhi, India): Assessing Ciliate Diversity as a Bioindicator of Heavy Metal Pollution and Seasonal Water Quality Changes in the Yamuna River
01.10 pm – 01.20 pm	Mr Hariom Chaudhary (Acharya Narendra Dev College, University of Delhi, India): Cancer Resistance and MDM2: Uncovering the Molecular Mechanisms
01.20 pm – 01.30 pm	Ms Tanisha Singh (Acharya Narendra Dev College, University of Delhi, India): Efficacy of Zinc and Copper Nanoparticles in Modulating Seed Germination
01.30 pm – 02.20 pm	Lunch [GBM of ISoCB for members at 01.30 pm (committee room) followed by lunch]
	Chairpersons: Dr Neetu Kukreja, Prof Uma Dhawan Co-Chairperson: Dr Sushma Bharadwaj
02.20 pm – 02.30 pm	Mr Vatsal Bhargava (Department of Zoology, University of Delhi, India): Reclassification of <i>Spiroplasma atrichopogonis</i> Koerber <i>Et Al.</i> 2005 as a Later Heterotypic Synonym of <i>Spiroplasma mirum</i> Tully <i>Et Al.</i> 1982 using Genome-Centric Methodologies
02.30 pm – 02.40 pm	Mr Abhilash Kumar (Ramjas College, University of Delhi, India): Resolving Taxonomic Ambiguities in <i>Williamsia</i> Species: A Whole-Genome Approach
02.40 pm – 02.50 pm	Dr Annu (Maharshi Dayanand University, Rohtak, Haryana, India): Acetamiprid Exposure Mediates Structural and Molecular Alterations in the Liver Tissue of Rats
02.50 pm – 03.00 pm	Ms Ritu Arora (Acharya Narendra Dev College, University of Delhi, India): Bacteriophage-Encoded Endolysins as Protein Antibiotic Candidates
03.00 pm – 03.10 pm	Mr Sandeep Gupta (Acharya Narendra Dev College, University of Delhi, India): Assessing the Impact of COVID-19 and its Vaccination on the Reactivation of Varicella-Zoster Virus
03.10 pm – 03.20 pm	Mr Hritik Kadian (Guru Gobind Singh Indraprastha University, New Delhi, India): Metal Mayhem: Unveiling the Toxic Impact of Heavy Metals on <i>Paramecium</i> Sp.

03.20 pm – 03.30 pm	Mr Rohit Kumar Barnwal (Acharya Narendra Dev College, University of Delhi, India): Magnetic Nanoparticle-Mediated Immobilization of Alpha-Amylase from Germinating Barley Seedlings
03.30 pm – 03.40 pm	Ms Divya (Acharya Narendra Dev College, University of Delhi, India): Impact of Novaluron on the Reproductive Potential and Gonotrophic Cycles of <i>Aedes aegypti</i> L. (Diptera: Culicidae)
03.40 pm – 03.50 pm	
03.50 pm – 04.20 pm	Poster Session
04.20 pm – 04.40 pm	Cultural Program
04.40 pm – 05.20 pm	Valedictory: Presentation of Summary, Dr Alan Warren Quiz Using Cut Outs from the Presentations Open to Students, Prize Distribution to Winners
05.20 pm	High Tea

Venue, unless mentioned otherwise, is Acharya Narendra Dev College, Govindpuri, Kalka ji, New Delhi 110019

