



55th Annual Conference of Indian Pharmacological Society

Pre-Conference Workshop

on

EMERGING TOOLS AND TECHNOLOGIES: ALTERNATIVE TO ANIMAL TESTING (18th-19th Nov, 2025)

Organised by
University Institute of Pharmaceutical Sciences, Panjab University, Chandigarh

Session I : "Zebrafish as a model organism: Techniques and Applications in Biomedical Sciences"

18th November, 2025, Tuesday

TIME	ACTIVITY	SPEAKER	VENUE
REGISTRATION AND BREAKFAST (07:30 a.m. - 08:30 a.m.)			
09:00 a.m. - 09:40 a.m.	INAUGURATION		
09:45 a.m. - 10:30 a.m.	From Tank to data: An Introduction to zebrafish Husbandry, experiments, and modelling	Dr. Damanpreet Singh IHBT, Palampur	ICSSR
10:30 a.m. - 11:15 a.m.	Exploring Zebrafish as a potential model for neurobehaviour, neuroregeneration and nanotoxicity research	Dr. Ravneet Kaur Department of Zoology, Panjab University	ICSSR
Tea Break (11:15 a.m. – 11:45 a.m.)			
11:45 a.m. - 12:30 p.m.	HDACs regulate immune cell dynamics and ECM remodelling during appendage regeneration in zebrafish and axolotl	Prof. Rajesh Ramachandran IISER, Mohali	ICSSR
12:30 p.m. - 01:15 p.m.	Zebrafish as a Model of Metabolic Disorder	Dr. Banappa S. Unger ICMR, NITM, Belagavi	ICSSR
Lunch Break (01:15 p.m. - 02:00 p.m.)			
Hands on Training			
02:00 p.m. - 03:30 p.m.	Identification of Zebrafish strains, Live demonstrations of Zebrafish care and housing systems (indigenous RAS system) and handling procedures	Dr. Damanpreet Singh	Zoology Department, PU, CHD
03:30 p.m. - 05:00 p.m.	Zebrafish dissection, Behavioral analysis, sample preparation for electron Fluorescence and confocal Microscopy.	Dr. Ravneet Kaur	Zoology Department, PU, CHD

Professor Anil Kumar
Organizing Secretary



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Session II: "Cell-Based Model System in Biomedical Research"

19th November, 2025, Wednesday

(9:30 a.m. – 5:00 p.m.)

TIME	ACTIVITY	SPEAKER	VENUE
Tea & Breakfast (07:30 a.m. - 09:00 a.m.)			
09:30 a.m. - 10:15 a.m.	Organoids: Modeling organ Development and disease in 3-Dimensions	Dr. Ujjwal Mahajan NIPER, SAS Nagar	Golden Jubilee Hall
10:15 a.m. - 11:00 a.m.	Humane-Relevant Methods in Drug Development and Safety Testing: Where We Are and What's Next	Dr. Rohit Bisht PETA India, New Delhi	Golden Jubilee Hall
Tea Break (11:00 a.m. - 11:30 a.m.)			
11:30 a.m. - 12:15 p.m.	Sprouting Ethics in Science: <i>Allium cepa</i> as a Non-Animal Model for Genotoxicity and Cytotoxicity Studies	Dr. Kalpani Ratnayake CINEC Campus, Sri-Lanka	Golden Jubilee Hall
12:15 p.m. - 01:00 p.m.	Human Organoids: A new Dimensions in Biomedical Research	Dr. Sangeeta P Sah UIPS, Panjab University, Chandigarh	Golden Jubilee Hall
Lunch Break (01:00 p.m. - 02:00 p.m.)			
Hands on Training			
02:00 p.m. - 03:30 p.m.	Part1:Cell Culture as an Alternative to Animal Models	Dr. Manish Jain UIPS, Panjab University, Chandigarh	Cell Culture Laboratory, UIPS
03:30 p.m. - 05:00 p.m.	Part 2:Hands-on Training in Cell Culture	Dr. Sandip V Pawar UIPS, Panjab University, Chandigarh	Cell Culture Laboratory, UIPS

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Session III: Leveraging Computational Approaches in Biomedical Science

19th November, 2025, Wednesday

(9:30 a.m. – 5:00 p.m.)

TIME	ACTIVITY	SPEAKER	VENUE
Tea & Breakfast (07:30 a.m. - 09:00 a.m.)			
09:30 a.m. -10.00 a.m.	Computational Pharmacology in Action: Insight with case studies	Dr. Neelima Dhingra UIPS, Panjab University, Chandigarh	Golden Jubilee Lounge
10: 00 a.m. -10:45 a.m.	Smarter Science in Digital test tubes through <i>in silico</i> intelligence	Dr. Subhash Mohan Agarwal ICMR-NICPR, Noida, UP	Golden Jubilee Lounge
Tea Break (10:45 a.m. - 11:15 a.m.)			
11:15 a.m. - 12:00 p.m.	Generative AI in Healthcare: The Next Transformation	Mr. Barinder Singh HEOR, Pharmacoevidence Pvt. Ltd., Mohali	Golden Jubilee Lounge
12:00 p.m. - 01:00 p.m.	Network Pharmacology for Drug discovery: Basic Concepts	Dr. Rajesh Goel Punjabi university, Patiala	Golden Jubilee Lounge
Lunch Break (01:00 p.m. - 02:00 p.m.)			
<i>Live Demonstration (Participants are requested to bring their own laptops)</i>			
02:00 p.m. - 03:30 p.m.	Hands on training on Network Pharmacology	Prof. Rajesh Goel Punjabi University, Patiala & Dr. Sandeep Kumar Chitkara University, Punjab	Seminar hall, UIPS
03:30 p.m. - 05:00 p.m.	Hands-on Experience on Cheminformatics, docking and ADME prediction	Dr. Neelima Dhingra UIPS, Panjab University, Chandigarh	Seminar hall, UIPS

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Scan for the location



ICSSR



**Golden Jubilee Hall /
Lounge**



Seminar Hall, UIPS



**Zoology Department
PU, CHD**

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