

Indo-US Workshop on
“Understanding Cell Biology through Proteomics and Metabolomics”

2-Day Workshop Program Schedule

Time	Speaker Name	Title of Talk
Day 1, 10th December 2018		
12.00 – 12.15	Registration	
12:15 – 12:45	Welcome and introductory speech by NCCS Director and the co-ordinators	
12:45 – 13:00	Introduction of Participants	
13:00 – 14:00	LUNCH	
Session 1A Proteomics in Cell Biology I		
Chairs: Dr. Philip Andrews and Dr. Surekha Zingde		
14:00 – 14:15	Dr. John Yates <i>The Scripps Research Institute, La Jolla, California, USA</i>	PALM (Pulse Azidohomoalanine Labeling in Mammals) analysis for global analysis of newly-synthesized proteins in animal models of disease
14:15 – 14:30	Dr. Utpal Tatu <i>IISc, Bangalore, India</i>	Secretome analysis of a neglected infectious disease causing genus <i>Trichomonas</i> reveals the first example of a bonafide, secretory HSP 90
14:30 – 14:45	Dr. Arvind Sahu <i>NCCS, Pune, India</i>	Proteomic profiling of differentiated and polarized bone marrow derived macrophages: effect of complement on the polarization
14:45 – 15:00	Dr. Ravi Sirdeshmukh <i>Mazumdar Shaw Center for Translational Research, Bangalore, India</i>	Visualizing proteomics data in cell biology and regulatory perspective : Insights from Glioblastoma study
15:00 – 15:15	Dr. Subhra Chakraborty <i>NIPGR, New Delhi, India</i>	Insights into plant immunity from cellular networks through integrative omics
15:15 – 15:30	Dr. M. Balasubramanyam <i>MDRF, Chennai, India</i>	New Biology Insights and clinical relevance of Proteomics and Metabolomics Advancements with special reference to Diabetes
15:30 – 15:45	Dr. Debasis Dash <i>IGIB, New Delhi, India</i>	Advanced search strategies in proteogenomics: Looking beyond the horizon
15:45 – 16:00	Dr. Sharmila Bapat <i>NCCS, Pune, India</i>	Development and Application of a Targeted Database for detection of Chimeric Peptides in Ovarian Cancer
16:00 – 16:15	HIGH TEA	
Session 1B Proteomics in Cell Biology II		
Chairs: Dr. Shantanu Sengupta and Dr. Arun Sreekumar		
16:15 – 16:30	Dr. Robert L. Moritz <i>Institute of Systems Biology, Seattle, Washington, USA</i>	Proteogenomic approaches for biomarker discovery in infectious disease
16:30 – 16:45	Dr. Geetanjali Sachdeva <i>NIRRH, Mumbai, India</i>	Intracellular trafficking and its contribution to endometrial adhesiveness
16:45 – 17:00	Dr. Anjali Shiras <i>NCCS, Pune, India</i>	Understanding protein interactors for noncoding RNAs by mass spectrometry approach

17:00 – 17:15	Dr. Mahesh Kulkarni <i>NCL, Pune, India</i>	Advanced glycation end products: Diagnosis to therapeutics
17:15 – 17:30	Dr. Girdhari Lal, <i>NCCS, Pune, India</i>	Chemokine receptor CCR6 signaling perturbs cellular metabolism in CD4 T cells and promotes a pathogenic response in gut autoimmunity
17:30 – 17:45	Dr. Amol Suryawanshi, <i>ILS, Bhubaneshwar, India</i>	Clinical proteomics for understanding infectious diseases and cancer

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Day 2, 11th December 2018

Session 2	Proteomics for Translational Research Chairs: Dr. Robert Moritz and Dr. Ravi Sirdeshmukh	
09:15 – 09:30	Dr. Akhilesh Pandey <i>Mayo Clinic, Minnesota, USA</i>	Proteomics for Microbial Diagnostics
09:30 – 09:45	Dr. Jennifer Van Eyk <i>Cedars-Sinai, Los Angeles, California, USA</i>	Defining S-nitrosylation in heart disease and its impact on GSK-3 β
9:45 – 10:00	Dr. Abhijit Chakrabarti <i>SINP, Kolkata, India</i>	Protein Aggregates, Membrane Skeleton & Hemoglobin Disease
10:00 – 10:15	Dr. Arun Bandopadhyay <i>IICB, Kolkata, India</i>	Proteomic Approaches Detect Candidate Biomarkers for Assessing Cardiovascular Complications
10:15 – 10:30	Dr. Srikanth Rapole <i>NCCS, Pune, India</i>	Identification of potential biomarkers/targets for breast cancer
10:30 – 10:45	Dr. Niranjana Chakraborty <i>NIPGR, New Delhi, India</i>	Understanding the dynamics of plant cell-wall proteome: turning knowledge into innovation
10:45 – 11:00	Dr. Gopal Kundu <i>NCCS, Pune, India</i>	Deciphering the role of Osteopontin Splice Variants in Regulation of Breast Cancer Stem Cell Phenotype by Proteomics Approach
11:00 – 11:15	Dr. Suman Thakur <i>CCMB, Hyderabad, India</i>	Biomarker to Drug Discovery using Cell biology and Proteomics
11:15 – 11:30	HIGH TEA	
Session 3	Metabolomics for Disease Markers Chairs: Jennifer Van Eyk and Dr. Utpal Tatu	
11:30 – 11:45	Dr. Arun Sreekumar <i>Baylor College of Medicine, Houston, Texas, USA</i>	Metabolic Detours in Cancer: Biological, Biomarkers and Therapeutic Implications
11:45 – 12:00	Dr. Putluri Nagireddy <i>Baylor College of Medicine, Houston, Texas, USA</i>	Metabolic dysregulations and AOX1 role in bladder cancer progression
12:00 – 12:15	Dr. Shantanu Sengupta <i>IGIB, New Delhi, India</i>	Identifying metabolite markers for Coronary Artery Disease
12:15 – 12:30	Dr. Koel Chaudhury <i>IIT-KGP, Kharagpur, India</i>	NMR metabolomics of serum and exhaled breath condensate for discriminating between COPD and COPD-PH: A pilot study
12:30 – 12:45	Dr. Ranjan Nanda <i>ICGEB, New Delhi, India</i>	Therapeutic Drug Monitoring in Tuberculosis Patients
12:45 – 13:00	Dr. H. V. Thulasiram	Targeted metabolic profiling and comparative

	<i>NCL, Pune, India</i>	analysis of limonoids in selected plants
13:00 – 13:15	Dr. Siddhesh Kamat <i>IISER-Pune, Pune, India</i>	An Integrated Lipidomics and Chemoproteomics Platform for Enzyme Function Annotation
13.15 – 14:15	LUNCH AND NETWORKING	
Session 4	New strategies in Interaction Proteomics	
	Dr. John Yates and Dr. Subhra Chakraborty	
14:15 – 14:30	Dr. Richard Vachet <i>University of Massachusetts, Amherst, Massachusetts, USA</i>	Covalent Labeling and Mass Spectrometry for Studying Protein-Protein and Protein-Ligand Interactions
14:30 – 14:45	Dr. Philip Andrews <i>University of Michigan Medical School, Ann Arbor, Michigan, USA</i>	Insights into protein structures and interactions from crosslinking mass spectrometry
14:45 – 15:00	Dr. Ramesh Ummanni <i>IICT, Hyderabad, India</i>	Deciphering the etiology of NASH employing RPPA on hepatocytes derived from ES cells and patient specific fibroblasts
15:00 – 15:15	Dr. Manas Santra <i>NCCS, Pune, India</i>	Deciphering the tumor suppressive activity of FBXO31 through mass spectrometry based identification of its interactomes
15:15 – 15:30	Prof. Sukesh Bhaumik <i>Southern Illinois Univ. School of Medicine, Illinois, USA</i>	Regulation of gene expression by histone covalent modifications and ubiquitin-proteasome system
15:30 – 15:45	Dr. Prasad Kulkarni, <i>ARI, Pune, India</i>	Probing copper binding properties and reactivity of amyloid beta peptide using mass spectrometry
15:45 – 16:00	Dr. Krishnan Venkataraman <i>VIT, Vellore, India</i>	Quality of High Density Lipoprotein (HDL)-Apolipoprotein A1 as a risk predictor Cardio-Vascular Disease (CVD) risks in humans
16:00 – 17:00	Panel discussion and recommendation	
	Moderators: Dr. Ravi Sirdeshmukh, India; Dr. John Yates, USA	
	Dr. Surekha Zingde, India; Dr. Arun Sreekumar, USA	
17:00 – 17:15	Vote of Thanks	
17:15 – 17:30	HIGH TEA	
20:00 – 21:30	NETWORKING AND DINNER	