

PLENARY LECTURE

Prof. Alok K. Sinha

FNASc, Staff Scientist VI

NATIONAL INSTITUTE OF PLANT GENOME RESEARCH



AWARDS AND HONORS

2015: TATA Innovation Fellowship by the Department of Biotechnology, Govt. of India.

2013: National Bioscience Award from Department of Biotechnology, Govt. of India

2013: Dr. B.C. Deb Memorial Award from Indian Science Congress Association

2006 & 2010: Re-invitation as Alexander-von-Humboldt Fellow

2011: Fellow of National Academy of Sciences, Allahabad, India (FNASc)

2007-2009: DST-DAAD Fellow

1998-2000: Alexander-von-Humboldt Fellow

RESEARCH INTEREST

Prof. Sinha's group is interested in understanding the complexity of signals being transduced through mitogen activated protein kinase (MAPK) cascade in plants. The MAPK cascade is evolutionarily conserved among the eukaryotes and typically consists of three types of protein kinases, MAPK, MAPK kinase (MAPKK), and MAPKK kinase (MAPKKK). By responding to external stimuli, the MAPK cascade plays a critical role in gene expression, metabolism, cell death, proliferation, and differentiation. In plants, the MAPK cascade is also involved in various biotic and abiotic stress responses, hormone responses, cell division, and developmental processes. Rice and *Arabidopsis* are two-model system they are using to understand this complex signaling cascade. By using a combination of molecular and biochemical techniques along with genomics and proteomic approaches his group is trying to identify the function of specific MAPKs. His main focus lies in understanding the role of MAPKs during development and plant-pathogen interaction both in rice and *Arabidopsis*.

PROGRAM: 7 th January, 2017	
Time	Event
8:00 AM to 9:00 AM**	Registration and poster installation
9:00 AM to 10:00 AM	Plenary lecture: Prof. Alok Sinha <i>Submergence tolerance in rice: A New Twist by MAP Kinase Regulation</i>
10:00 AM to 10:15 AM	Neha Dobriyal <i>Functional pleiotropy of Caj1: Role of J domain and lipid binding domain</i>
10:15 AM to 10:30 AM	Yadukrishnan P <i>Role of BBX13 in integration of ABA and light signaling pathways to regulate Arabidopsis development</i>
10:30 AM to 10:45 AM	Preeti Saryan <i>Floral and ecological characters as a proxy to our understanding of niche competition among Hedychium from the NE</i>
10:45 AM to 11:15 AM	Tea break
11:15 AM to 11:30 AM	Sudipta Ghosh <i>Development of small molecule inhibitors for disruption of bacterial SRP</i>
11:30 AM to 11:45 AM	Ankit Gupta <i>Cysteine-regulated aggregation hotspots in amyloidogenic protein hVDAC3</i>
11:45 AM to 12:00 PM	Rituja Saxena <i>Understanding the Thermophilic Microbial Community in the Hot Springs of Central India through Metagenomics</i>
12:00 PM to 1:30 PM	Lunch break
1:30 PM to 1:45 PM	Shikha Kushwaha <i>Genetic and Molecular Characterization of Drosophila Aster-associated Protein in Synapse Development and Function</i>
1:45 PM to 2:00 PM	Viniti Tomar <i>Investigating the role of Wg protein secretion and spreading in tissue growth and patterning in Drosophila wing epithelium</i>

Time	Event
2:00 PM to 2:15 PM	Saurabh Jayesh Mehta <i>Nucleoporins are not just gatekeepers: They have role to play in Development</i>
2:15 PM to 2:30 PM	Pushendra Kumar Sahu <i>Crg1 N-terminal is essential for tolerance against Cantharidin induced cytotoxicity in Saccharomyces cerevisiae</i>
2:30 PM to 2:45 PM	Ranjeet Singh Mahla <i>Host genome polymorphism governs MTB pathogenesis</i>
2:45 PM to 3:00 PM	Smriti Singh <i>Intragenic DNA methylation dependent binding of BORIS contributes to Warburg effect by modulating alternative splicing and promotes breast cancer</i>
3:00 PM to 3:45 PM	Tea break and group photo
3:45 PM to 4:00 PM	Rupali Yadav <i>Structural and Thermodynamic characterization of metal binding in Vps29 from Entamoeba histolytica</i>
4:00 PM to 4:15 PM	Abhishek Anil Dubey <i>Methylotrophic metabolism in Mycobacterium smegmatis</i>
4:15 PM to 4:30 PM	Bharat Ramasubramanian Iyer <i>Distinct structural elements govern stability and catalysis in the outer membrane enzyme PagP</i>
4:30 PM to 7:00 PM	Tea Break & Poster session
7:00 PM to 7:30 PM	Concluding remarks and Prize distribution
7:30 PM to 9:00 PM	Dinner

** Registration will be also done on 6th Jan, 2017 (Fri) from 03:00 to 05:00 pm in AB-3 Courtyard (Badminton court area), Block-C.