

PSB 2014 – Oral Sessions

March 7, 2014

Conference Opening :				
Chair: Elizabeth Van Volkenburg				
Session Number	Abstract Number	Time	Speaker	Title
		9.30 a.m.	Elizabeth Van Volkenburg	Welcome & Opening Ceremony
I. CONTRIBUTIONS OF SIR J. C. BOSE TO PLANT ELECTROPHYSIOLOGY				
I	Plenary Lecture (L1)	9.45 a.m.	Minorsky Peter	Jagadish Chandra Bose and the Western response to Indian science
	L 2	10.20 a.m.	Virginia Shepherd	J.C. Bose and the roots of Plant Neurobiology
Tea break & Poster Session: 10.45 a.m. – 11.45 a.m.				
II. ELECTROPHYSIOLOGICAL RESPONSES				
II	(L1) Plenary Lecture	11.45 a.m.	Baluska Frantisek	Update on the Darwin's 'Root Brain' oscillatory command centre
	L2	12.05 p.m.	R. F. Oliveira	Action potentials in abscisic acid-deficient tomato mutant generated spontaneously and evoked by electrical stimulation
III. PLANT RESPONSES TO ENVIRONMENT - BIOTIC				
III	L 1	12.25 p.m.	Konopka-Postupolska D.	Annexins a new player in plant stress adaptation to the adverse environment
	L 2	12.45 p.m.	Amar Kumar	Characterization of transcriptome and miRNAome of tomato roots infected with parasitic root-knot nematode (<i>Meloidogyne incognita</i>) by high-throughput sequencing
Lunch: 1.05 p.m. – 2.00 p.m.				

III	L 3	2.00 p.m.	R. Oelmuller	Beneficial and pathogenic fungi in the rhizosphere: How do roots distinguish?
	L 4	2.20 p.m.	Sharmila Chattopadhyay	The intricate position of GSH, a dynamic signalling molecule, in plant defence signalling network
	L 5	2.40 p.m.	Shubhra Chakraborty	Regulatory networks involved in plant-pathogen interaction: An omics approach
IV. PHOTSENSORY MECHANISMS				
IV	L 1	3.00 p.m.	A. G. Volkov	Phytosensors and phytoactuators
	L 2	3.20 p.m.	B. C. Tripathy	Involvement of phytochrome A and calmodulin-dependent kinases in suppression of photomorphogenesis in rice seedling grown in red light with their shoot bottom exposed
	L 3	3.40 p.m.	J. P. Khurana	Functional analysis of the blue light sensing cryptochrome 2 from <i>Brassica</i> and rice
	L 4	4.00 p.m.	K. Yokawa	Volatile ether induces ROS/calcium spikes and light escape-like tropism of roots
Tea break & Poster Session: 4.20 p.m. onward				

March 8, 2014

Chair:				
Session Number	Abstract Number	Time	Speaker	Title
V. SIGNALING IN PLANT DEVELOPMENT AND REPRODUCTION				
V	L 1	9.00 a.m.	C. Karounos	Environmental phosphorus mediates glucosinolates in mustard plants
	L 2	9.20 a.m.	H. Paves	Role of <i>Arabidopsis thaliana</i> myosins in gravotropism of stems
	L 3	9.40 a.m.	P. Khurana	Functional Genomics of Thermal Tolerance in Wheat
	L 4	10.00 a.m.	Rujin Chen	Compound leaf development in legume
	L 5	10.20 a.m.	R. K. Kar	Reactive oxygen species (ROS)-mediated growth and gravisensitivity of embryonic axes during germination of <i>Vigna radiata</i> seeds
	Tea break and Posters: 10.40 a.m. – 11.30 a.m.			
	L 6	11.30 a.m.	S. Yalovsky	Regulation of cell polarity and pattern formation in plants
VI. PLANT HORMONES AND SIGNALING				
VI	L 1	11.50 a.m.	A. S. Raghavendra	Guard cell alkalization precedes the increase in Reactive Oxygen Species or Nitric Oxide during stomatal closure by plant hormones as well as microbial elicitors
	L 2	12.10 p.m.	Cho H.T.	Spatio-temporal dynamics of subcellular localizations of PIN-FORMED auxin
	L 3	12.30 p.m.	Bharti, N	Photomodulation of strigolactone accumulation and physiological effect of associated biomolecules during sunflower seedlings growth

Lunch & Poster Session: 12.50 p.m. – 2.10 p.m.				
VI	L 4	2.10 p.m.	Geetika Sirhindi	Understanding the role of jasmonic acid signalling molecules in nickel tolerance mechanism during seedling growth in <i>Glycine max</i> L.
	L 5	2.30 p.m.	M. J. Beilby	The role of Melatonin and Serotonin in circadian rhythm of Characeae <i>Chara australis</i>
	L 6	2.50 p.m.	A. Jelinkova	Mapping the trafficking pathways of PIN1 with engineered BFA-resistant ARF-GEFs in <i>Nicotiana tabacum</i>
	L 7	3.10 p.m.	González-Fontes A.	Boron deprivation inhibits root cell elongation via an ethylene/auxin/ROS-dependent
	L 8	3.30 p.m.	D. A. Chamovitz	The glucosinolate breakdown product Indole-3-Carbinol acts as an auxin antagonist in roots of <i>Arabidopsis thaliana</i>
Tea break: 3.50 p.m. – 5.00 p.m.				
VII. MECHANISMS OF PLANT COMMUNICATION				
VII	L 1	5.00 p.m.	J. D. Blande	Plant communication by volatiles: mechanisms and environmental interference
	L 2	5.20 p.m.	Renee M. Borges	The volatilome of a nursery for seeds and wasps: why do plant signals change?
	L 3	5.40 p.m.	Stefano Mancuso	Plant bioacoustic – a new frontier in plant communication
	L 4	6.00 p.m.	Ariel Novoplansky	Say it with flowers: flowering acceleration by root communication
	L 5	6.20 p.m.	Aruna Kilaru	Elucidation of <i>N</i> -acylethanolamine pathway and its physiological role in <i>Physcomitrella patens</i>

Poster Session

March 9, 2014

F I E L D T R I P

March 10, 2014

Chair:				
Session Number	Abstract Number	Time	Speaker	Title
VIII. PLANT RESPONSES TO ENVIRONMENT - ABIOTIC				
VIII	L 1	9.00 a.m.	Patrick J. Hussey	Interactions of the plant cytoskeleton with membranes
	L 2	9.25 a.m.	C. Pandolfi	Salt stress priming in <i>Zea mays</i>
	L 3	9.45 a.m.	G. K. Pandey	Negative regulation of ABA signaling and positive regulation of abiotic stresses by a rice protein phosphatase 2C
	L 4	10.05 a.m.	K. J. Appenroth	Increase of starch accumulation in duckweed (Lemnaceae) under abiotic stress
	L 5	10.25 a.m.	I. Karsai	Phenotypic plasticity and fluctuating asymmetry of leaf morphology of three <i>Quercus</i> (Oak) species in response to environmental factors
IX. PLANT SIGNALING AND BIOTECHNOLOGY				
IX	L 1	10.45 a.m.	N. Tuteja	RNA splicing factor promotes crop improvement under drought and salinity stress
	L 2	11.05 a.m.	Anita Grover	Genetic engineering of <i>Brassica juncea</i> for fungus resistance using signaling protein gene NPR1
Tea Break & Poster Session: 11.25 a.m. – 12.20 p.m.				
X. REDOX SIGNALING				
X	Plenary Lecture (L 1)	12.20 p.m.	Sampa Das	Reactive Oxygen Species (ROS): The key player in signaling events of Chickpea (<i>Cicer arietinum</i> L.)- <i>Fusarium oxysporum</i> f. sp. <i>ciceris</i> race 1 (Foc1) interplay.

X	L 2	12.40 p.m.	T. Kagenishi	Extracellular ATP inhibits endocytic vesicle recycling and gravitropism of Arabidopsis roots via NADPH oxidase-mediated ROS signaling
	L 3	1.00 p.m.	Tomonori Kawano	Protection of plant cells and green algae from oxidative copper toxicity by catalytically active metal-binding DNA oligomers

Lunch: 1.20 p.m. – 2.20 p.m.

XI. PLANT SIGNALING MOLECULES

XI	L 1	2.20 p.m.	H.G. Edelman	The root cap orchestrates maize seedling development via root- and shoot-affecting ethylene-dependent signals
	L 2	2.40 p.m.	Wei Siao	Arabidopsis Synaptotagmin-Like proteins (SYTLs) and Synaptic Vesicle protein 2-Like (SVL) in endocytic vesicle recycling pathways of root apex cells
	L 3	3.00 p.m.	Weiming Shi	Shoot-supplied ammonium triggers two distinct responsive signaling pathways in Arabidopsis
	L 4	3.20 p.m.	Jae-Yean Kim	Towards the dissection of Non-Cell Autonomous Protein (NCAP) trafficking machinery
	L 5	3.40 p.m.	Paco Calvo	Probabilistic predictive processing vs. ecological psychology models of plant intelligence

Poster Session: 3.40 p.m. – 4.40 p.m.

Closing Session followed by High Tea: 4.40 p.m.