Australian Society of Plant Scientists (ASPS) Queensland Node Conference 2024



📍 **Location**: Abel Smith Lecture Theatre, UQ St Lucia Campus (Room 23-101)
📅 **Date**: 28th November 2024

🌼 Session	⏰ Time
🔸 **Registration**	8.00-8.30
🔹 **Welcome and Opening** *Nipuni Thanthrige*	8:30 – 8:45
🔸 **Keynote Seminar** *Chair: Peter Prentis* **Dr Edward Gilding** - Department of Agriculture and Fisheries Atypical characteristics of albumin-1 genes in a basal Phaseoleae are linked to defence peptide cyclisation	8:50 – 9:20
🔹 **Session 1: Discovery Research** *Chairs: Peter Crisp, Stephanie Kerr* • **Buddhini Ranawaka** Factors affecting genome editing in plants • **Alexandria Mattinson** Regulation of P. vulgaris CLAVATA3/EMBRYO SURROUNDING-related (CLE) Peptides During Pathogenic Interactions • **Anuradha De Silva** Mimicry of stress tolerant proteins from related wild species to improve crops tolerance • **Caitlin Dudley** Time to flowering and flowering duration in mungbean are unrelated physiological traits with independent genetic controls	9:25 – 10:25

☕ **Morning Tea & Networking**	10:25 – 10:55
🔸 **Session 2: Translational Research** *Chairs: Brett Williams, Pauline Okemo* • **Stephanie Kerr** Using Functional Genomics To Characterise The Genetic Pathways Regulating Flowering In Horticultural Tree Crops • **Juel Datta** Genomic approaches to investigate the molecular mechanisms of phase transition period in Citrus species • **Stephanie Brunner** A haplotype-based approach to exploring genotype by environment interactions for barley yield • **Shanice Van Haeften** Tapping into genebanks to reveal geographic patterns of temperature adaptation in chickpea	10:55 – 11:55
🥗 **Lunch**	11:55 – 12:30
🏆 **ASPS Award Seminars – Virtual** *Chairs: Martha Ludwig and Lynette Brownfield* • NZSPB Roger Slack Award - David Chagné • ASPB Goldacre Award – Peter Crisp • ASPB Education Award - Ashley Jones & Benjamin Schwessinger • Break • NZSPB elected fellow to the NZ Royal Society - Andy Allan and Kevin Davies • ASPB Jan Anderson – Jenny Mortimer • ASPB JG Wood – Sergey Shabala	12:30 – 3:15
☕ **Afternoon Tea**	3:15 – 3:45
⚡ **Session 3: Flash Talks** *Chairs: Yasmine Lam, Grace Weston-Olliver, Juel Datta, Chamilka Ratnayake* • **Ming Cheng** Maximising pineapple production by controlling flowering time using CRISPR/Cas9 • **Andrea Putri Subroto** Establishment of Protoplast Isolation and PEG-Mediated Transformation for a Pilot Study of Genome Editing in Avocado by Targeting the PDS gene	3:45 – 4:35

• **Dominic Previtera** Heritable transgene-free genome editing using mobile CRISPR elements in plants • **Jordan Gemmell** What Doesn't Kill You Makes You Stronger: Photoinhibitory Priming as a Technique to Enhance Yield and Abiotic Stress Tolerance in Crops • **Nicholas Lester** Hyper-recombinant faba bean for accelerated breeding • **Dylan Bowman** Oral delivery of plant produced compounds • **Julia Solonenka** Anti-freeze proteins as novel fusion partners for the non-chromatographic purification of recombinant plant-produced proteins • **Katherine Pinto-Irish** De novo genome assembly and comparative transcriptome analysis reveal divergence in Neptunia species and insights of Selenium hyperaccumulation and tolerance in Neptunia amplexicaulis from Australia • **Chamilka Ratnayake** Anthocyanin – An alternative to conventional reporter systems: Towards a combinatorial strategy for novel regulatory networks and modified metabolic pathways in *Nicotiana benthamiana* • **Zuba Ahmed** Forward genetic screening in *Nicotiana benthamiana* to unravel genes responsible for successful anthocyanin production	
🏅 **Closing and Award Ceremony** *Chairs: Brett Williams, Nipuni Thanthrige*	4:35 – 4:45
🍽 **Conference Dinner** The Plough Inn - South Bank Parklands	6:30 until late