



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 <i>Nipuni Thanthrige</i>	8:30 – 8:45
◆ Keynote Seminar <i>Chair: Peter Prentis</i> 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 <i>Chairs: Peter Crisp, Stephanie Kerr</i> <ul style="list-style-type: none">• Buddhini Ranawaka Factors affecting genome editing in plants• Alexandria Mattinson Regulation of <i>P. vulgaris</i> 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
<p>◆ Session 2: Translational Research</p> <p><i>Chairs: Brett Williams, Pauline Okemo</i></p> <ul style="list-style-type: none"> • 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
<p> ASPS Award Seminars – Virtual</p> <p><i>Chairs: Martha Ludwig and Lynette Brownfield</i></p> <ul style="list-style-type: none"> • 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
<p>⚡ Session 3: Flash Talks</p> <p><i>Chairs: Yasmine Lam, Grace Weston-Olliver, Juel Datta, Chamilka Ratnayake</i></p> <ul style="list-style-type: none"> • 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

<ul style="list-style-type: none"> • 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 <i>Neptunia</i> species and insights of Selenium hyperaccumulation and tolerance in <i>Neptunia amplexicaulis</i> from Australia • Chamilka Ratnayake Anthocyanin – An alternative to conventional reporter systems: Towards a combinatorial strategy for novel regulatory networks and modified metabolic pathways in <i>Nicotiana benthamiana</i> • Zuba Ahmed Forward genetic screening in <i>Nicotiana benthamiana</i> to unravel genes responsible for successful anthocyanin production 	
<p> Closing and Award Ceremony</p> <p><i>Chairs: Brett Williams, Nipuni Thantrige</i></p>	4:35 – 4:45
<p> Conference Dinner The Plough Inn - South Bank Parklands</p>	6:30 until late