ComBio SYDNEY 2026

29 September – 1 October 2026
INTERNATIONAL CONVENTION CENTRE SYDNEY

Tuesday 29 September 2026

0800-1900	**Registration Open (Hall 1 Foyer, Level 1)**					
0830-1900	**Exhibition Open (Hall 1, Level 2)**					
0900-1000	**Opening and Plenary 1**					
Room	Parkside Ballroom					
Chair	Tracy Bryan					
Title	Chromosome choreography during meiosis					
Speaker	Professor Abby Dernburg					
1000-1030	**Morning Tea (Exhibition Hall)**					
1030-1200	Symposia 1					
Streams	**Stream 1: Proteins, Peptides and Structural Biology**	**Stream 2: Plant Biology**	**Stream 3: Cell and Developmental Biology**	**Stream 4: Biochemistry and Metabolism**	**Stream 5: Education**	**Stream 7: 'Omics and Systems Biology**
Stream Leads	Tara Christie and Lisanne Spenkelink	Vanessa Melino and Thomas Roberts	Alexis Diaz Vegas and Edwina McGlinn	Jacky Stoeckli and Christoph Goebl	Tracey Kuit and Matthew Clemson	Mark Larance and Laura Dagley
Room	Parkside Ballroom	Meeting Room C4.8	Meeting Room C4.9	Meeting Room C4.6	Meeting Room C4.10	Meeting Room C4.7
Topics	**Protein dynamics and molecular mechanisms of function**	**Plant development and cell signalling**	**Transcriptional and epigenetic mechanisms coordinating development**	**Cancer metabolism**	**Award talks**	**Spatial 'omics & single cell 'omics**
Chairs	Ivanhoe Leung and Jieqioung Lou	Mike Haydon and Stephanie Conway	Allegra Angeloni and Chuck Herring	Lenka Munoz and Frances Byrne	Tracey Kuit and James Tsatsaronis	Shane Ellis and Maria Tanzer
Presentations	Targeting protein-RNA dynamics for next-generation antimicrobials **Ann Kwan** (20 mins)	Specialisation of photosynthetic biochemistry in C4 chloroplasts potentiates cell-specific chloroplast-to-nucleus signalling for stress acclimation **Kai Chan** (20 mins)	Epigenetic remodelling of enhancers during human gastrulation **Adrienne Sullivan** (20 mins)	Using stable isotope tracing to identify metabolic phenotypes in melanoma **Aparna Rao** (20 mins)	**ASPS Education award presentation** Connecting plants, people and country: an immersive native grains practical in first-year biology **Claudia Keitel** (30 mins)	Subcellular mass spectrometry imaging of lipids and nucleotides **Reuben Young** (20 mins)
	The structural and functional evolution of plant geranyl diphosphate synthases from geranylgeranyl diphosphate synthase **Ruitao Jin** (20 mins)	The critical role of auxin antagonism in land plant evolution **Eduardo Flores Sandoval** (20 mins)	Of fat-tailed dunnarts, mice and men: evolution of epigenetic reprogramming in the embryo **Ksenia Skvortsova** (20 mins)	Understanding and targeting cyclin-dependent kinase 4 (CDK4) to combat advanced prostate cancer **Luke Selth** (20 mins)	**ASBMB Education award presentation** Reimagining biochemistry education in the age of generative AI: evidence from practice **Matthew Clemson** (30 mins)	Cellular heterogeneity and radiation resistance in diffuse midline glioma: A single-cell perspective **Dylan Multari** (20 mins)
	Few amino acid changes in a regulatory protein underpinned faster photoprotection and the evolutionary success of grasses **Maria Ermakova** (15 mins)	Establishing light-activated channelrhodopsins as a discovery tool for guard cell signalling **Yunti Ge** (15 mins)	Elucidation of a novel transcription factor network that contributes to defective human embryonic patterning **Egor Sedov** (15 mins)	AMPK hyperactivation drives mitotic errors and aneuploidy in cancer cells **Janni Petersen** (15 mins)	**NZSBMB Education invited presentation** Building creativity into the cell and molecular bioscience curriucum: A programme-level approach **Kathryn Jones** (30 mins)	Sensitive single cell proteomics at 95 SPD on the NeoVanquish-FAIMS-orbitrap astral zoom platform **Mark Larance** (15 mins)
	How is the chromatin remodelling activity of CHD4 regulated? And can we do it too? **Joel Mackay** (15 mins)	Never too late to flower: cytokinin metabolism controls lateral bud fate in kiwifruit **Nishadi Neluwa Liyanage** (15 mins)	Lineage tracing and characterisation of ectodermal progenitors during mammalian embryo development **V. Pragathi Masamsetti** (15 mins)	Oxidation-triggered aggregation of human apoptotic caspases **Vanessa Morris** (15 mins)		Refate identifies chemical compounds to target gene regulatory networks for cell-fate conversion **Katherine Zyner** (15 mins)
	Canberra Protein Group SIG Presentation Molecular structure and nickel-binding capacity of Proteus mirabilis UreE **Jiayi Pan** (10 mins)	Downstream of auxin in plant organ positioning **Marcus Heisler** (15 mins)	Heat stress at binucleate and trinucleate stages reprograms dna methylation and spatial gene expression in developing wheat grains **Farhad Masoomi-Aladizgeh** (15 mins)	Dipeptidyl Peptidase 9 may regulate the Hypoxia Inducible Factor 1 Alpha pathway and drive hypoxia resistance in cancer cells **Jasmine Minh Hang Nguyen** (15 mins)		Single-cell RNA-SEQ reveals cell-type specific alterations associated with cdh1 loss in gastric cancer **Michaela Hughes** (15 mins)

Presentations	**Sydney Protein Group SIG Presentation** Structural elucidation of nanotubular peptide hormone amyloid fibrils via cryo-EM **Evan Bissett** (10 mins)					
1200-1300	**Lunch (Exhibition Hall)**					
1300-1340	**Plenaries 2**					
	Education Plenary 2	**Plenary 3**	**ANZSCDB President's Medal Plenary 4**			
Room	Parkside Ballroom	Meeting Room C4.8	Meeting Room C4.9			
Chairs	Tracey Kuit and Matthew Clemson	Brent Kaiser	Edwina McGlinn			
Presentations	Are we asking the right questions about education in the age of AI? **Danny Liu** (40 mins)	Stress granules: spatial control of stress responses in plants **Monika Chodaswiecz** (40 mins)	The Hippo pathway; from discovery to clinical trials **Kieran Harvey** (40 mins)			
1340-1350	**Session change over**					
1350-1520	**Symposia 2**					
Streams	**Stream 1: Proteins, Peptides and Structural Biology**	**Stream 2: Plant Biology**	**Stream 3: Cell and Developmental Biology**	**Stream 4: Biochemistry and Metabolism**	**Stream 5: Education**	**Stream 7: 'Omics and Systems Biology**
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Topics	**Protein-protein interactions & macromolecular complexes**	**Plant genomics - Complexity, evolution and conservation**	**Cell communication and signalling networks**	**Epigenetics, gene regulation and disease**	**GenAI**	**Genomics & systems biology**
Chairs	Wilson Wong and Begona Heras	Justin Borevitz and Ashley Jones	Stewart Masson and Kate Lee	Sue Clark and Alyson Ashe	Kathryn Jones and Maurizio Costabile	Ksenia Skvortsova and Korawich Uthayopas
Presentations	Mechanism of bacterial nickel import by type I ABC transporters **Emily Furlong** (20 mins)	Divergent evolution of drought adaptation strategies across sympatric euclypts: getting to the root of the matter **Helen Bothwell** (20 mins)	mTOR signaling in growth and metabolism **Brendan Manning** (40 mins)	Interaction selectivity for homologous E3 ligase cofactors can drive transcription factor specificity across the genome **Luke Isbel** (20 mins)	Vibe coding: building interactive biochemistry and molecular biology learning tools with generative AI **Reece Sophocleous** (20 mins)	Unlocking the female ribosome: characterising the sequence and inheritance of feminine ribosomal DNA in zebrafish **Tim Hore** (20 mins)
	Mapping the nanoscale spatial organization of the human oral microbiome using in situ structural biology and “visual omics” **Debnath Ghosal** (20 mins)	The genetics of resistance to the plant disease myrtle rust: applications in conservation and restoration **Jason Bragg** (20 mins)		Genetic and epigenetic HLA disruption in lung and breast cancer **Clare Puttick** (20 mins)	Designing coherent learning pathways: program-level curriculum redesign in bioscience education **Dhanushi Abeygunawardena, Nirmani Wijenayake Gamachchige, Anne Galea** (20 mins)	3D chromatin rewiring governs lineage identity in prostate cancer **Joanna Achinger-Kawecka** (20 mins)
	Small-molecule inhibition of human telomerase **Scott Cohen** (15 mins)	Complex genomic structural variation underlies climate adaptation across eucalyptus species **Zixiong Zhuang** (15 mins)	**Cell Architecture SIG Presentation** Tunneling nanotubes: reshaping brain cells connectivity in health and diseases **Chiara Zurzolo** (15 mins)	H3.3 and ATRX mutations disrupt rDNA chromatin and create RNA Polymerase I dependency in gliomas **Jieqiong Lou** (15 mins)	Critics and criticality: how do science students evaluate the work of GenAI? **James Tsatsaronis** (10 mins)	Genetic analysis identifies *Ets1* as an environment-dependent regulator of adipose insulin-stimulated glucose uptake **Yi Lin Jiang** (15 mins)
	Different stereochemical selection of 2,3-dihydroxypropanesulfonate by bacterial transport proteins adapted to two distinct ecological niches **Mihwa Lee** (15 mins)	A very rare case of incipient speciation driven by natural long genome structure variants **Judith Lichtenzveig** (15 mins)	Sensory neurons as active regulators of tissue repair: a neuro-immune-regenerative axis **Mikaël Martino** (15 mins)	Epigenetic targeting of enzalutamide resistance in prostate cancer **Alexander Corr** (15 mins)	Crafting the future: integrating AI-driven protein design into the undergraduate biochemistry experience **Ben Peters** (10 mins)	Beyond the HRD/HRP dichotomy: towards precision medicine for high grade serous ovarian cancer with shallow whole genome sequencing **Merridee Wouters** (15 mins)

	Half a century in the making: Cryo-EM structures of viral annealases reveal diverse molecular mechanisms **Gökhan Tolun** (10 mins)	Unravelling the genetic underpinnings of root system architecture in Australian crops **Yasmine Lam** (15 mins)	Modulation of neural stem cell fate by reactive astrocytes **Ashley Hein** (15 mins)	Investigating how the maintenance of epithelial integrity prevents neoplastic tumours **Sarah Williams** (15 mins)	Training laboratory demonstrators to support student learning through energy regulation and artificial intelligence **Hassan Choucair** (10 mins)	Detecting widespread gene mis-annotation in non-model organisms using machine learning and long-read sequencing **Andreas Bachler** (15 mins)

Presentations	**Melbourne Protein Group SIG Presentation** Unusual G protein coupling by frizzled G protein-coupled receptors **Wessel Burger** (10 mins)				Talking biochemistry: using a team-based interactive oral assessment to evaluate experimental design and reasoning **Amber Willems-Jones** (10 mins)	
1520-1550	**Afternoon Tea (Exhibition Hall)**					
1550-1720	**Symposia 3**					
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Topics	**Emerging approaches in structural and imaging techniques**	**Plant epigenetics and epigenomics**	**Cellular and molecular engineering**	**Systems biology in metabolism**	**Open session**	**Protein/DNA/RNA/Lipid modifications**
Chairs	Emma Sierecki and Nick Ariotti	Peter Crisp and Mathew Lewsey	Cesar Moreno and Maria Bergamasco	Magda Montgomery and Brian Drew	Amber Willems-Jones and Matthew Clemson	Sylvie Callegari and Marc Wilkins
Presentations	Visualising the molecular basis of nutrient sensing in Eukaryotes **Charles Bayly-Jones** (20 mins)	B-sister MIKC-type MADS-box genes regulates ovule and seed development in cereal crops **Xiujuan Yang** (20 mins)	Targeting neurological diseases using new mRNA-LNP technologies **Greg Neely** (20 mins)	Identifying and characterising novel metabolic regulators of lysosome homeostasis in cancer **Kristin Brown** (20 mins)	Making the impossible, possible with science fiction prototyping **Julian Pakay** (20 mins)	Defining the realm of non-proteinaceous ubiquitination **Marco Jochem** (20 mins)
	Integrated fluorescence-guided fib-milling and cryo-electron tomography reveal host-pathogen interactions at molecular resolution **Matthew Johnson** (20 mins)	Optimising cellular uptake and functionality of exogenously applied RNAi for plant protection and trait modification **Chris Brosnan** (20 mins)	New cell transplantation paradigms to restore vision in blinding retinal diseases **Anai Gonzalez Cordero** (20 mins)	Heart failure with preserved ejection fraction (HFpEF) **John O'Sullivan** (20 mins)	When 600 first year students found their voice: scaling interactive oral assessment in the biosciences **Masha Smallhorn** (20 mins)	Ribosomal protein methylation shapes ribosome heterogeneity and stress-adaptive translation in *saccharomyces cerevisiae* **Andrew Spiteri** (20 mins)
	Mapping epidermal growth factor receptor-1 sorting domains in endosomes with calibrated 3D expansion microscopy **Izzy Jayasinghe** (15 mins)	Maternal control of seed size by the long non-coding RNA PARVUS in arabidopsis thaliana **Iain Searle** (15 mins)	Protein methylation and embryogenesis: Role of PRMT5 during development **Dimuthu Alankarage** (15 mins)	Regulated mobilisation of a sequestered GLUT4 pool is selectively impaired in insulin resistance **Li Ern Yap** (15 mins)	Sharing insights in problem-based learning: developing an open education resource for biochemistry educators **Katrina Binger** (10 mins)	Probing viral-host protein interactions during poxvirus infection with proximity labelling **Lachlan Yuek Shun Lai** (15 mins)
	Adelaide Protein Group SIG Presentation A morphological screen of nuclear receptor ligand analogues identifies a compound with anti-cancer activity in endocrine-resistant prostate cancer **Michael De Ieso** (10 mins)	**Lightning talk** Identification of hydrogen peroxide sensitive nuclear proteins under abiotic stress in *Arabidopsis thaliana* **Robert Albiston** (3 mins)	**Lightning talk** Molecular profiling of Tasmanian Devil facial tumour vulnerabilities using whole genome CRISPR screening **Jasmine Kaur** (3 mins)	Loss of AKT-negative feedback rewires the insulin signalling network to potentiate the ERK pathway **Jonathan Scavuzzo** (15 mins)	Learning about biomolecular interactions by making a 3D guided tour **Wayne Patrick** (10 mins)	Linking prenatal cannabis exposure to developmental outcomes through epigenetic mechanisms **Amy Osborne** (15 mins)
	Lightning talk Learning to walk: the first steps of an artificial protein motor **Neil Robertson** (3 mins)	**Lightning talk** Unmethylated region profiling in faba bean **Rose Mary Paul** (3 mins)	**Lightning talk** Positive regulation of TLR4-induced type I interferon by an unsual TLR family member **Carmen Mathmann** (3 mins)	Proteomic basis of mortality resilience: pathways and mechanisms **Brian Morris** (15 mins)	**Lightning talk** Enhancing biochemistry practical preparedness through pre laboratory instructional videos **Doaa Hanafy** (3 mins)	Discovering and visualising structural motifs in protein phosphorylation **Heather McDonald** (15 mins)
	Lightning talk Monitoring and modulating protein condensate pathological aggregation **Yi Shen** (3 mins)	**Lightning talk** Alternative splicing of *ZEAXANTHIN EPOXIDASE* enhances zeaxanthin in orange capsicum tissues linking plastid to nuclear signaling with the contra-regulation of transcription factors controlling non-climacteric ripening **Christopher Cazzonelli** (3 mins)	**Lightning talk** What makes branches stop growing? **Stephanie Conway** (3 mins)		**Lightning talk** Learning to question: my journey as a student partner in undergraduate biomolecular science education **Elektra Belle** (3 mins)	

Presentations	**Lightning talk** Understanding the structural assembly and signaling dynamics of IL-6 family cytokines utilizing leukemia inhibitory factor for signaling **Vignesh Kamath Beladi** (3 mins)	**Lightning talk** Reprogramming fertility restoration in hybrid wheat via miRNA regulation and RF gene diversity **Thien Tran** (3 mins)	**Lightning talk** Identification of cullin 3 as a novel regulator of dendritic cell function and development **Huw Morgan** (3 mins)		**Lightning talk** Students as partners in assessment design to enhance engagement and assessment literacy in biochemistry **Christopher Love** (3 mins)	
	Lightning talk Unravelling the complex assembly mechanisms in oxidation-induced amyloids of the tumour suppressor protein P16 **Annika Gölitz** (3 mins)	**Lightning talk** Identification of novel upstream open reading frames as gene editing targets for iron biofortification in bread wheat **Matty Poels** (3 mins)	**Lightning talk** Integrated immune, apoptotic and mitochondrial gene dysregulation in long COVID at 10 months post infection **Muhib Khalid** (3 mins)		**Lightning talk** Tips for improving STEM learning through better cognitive load design **Lana Ly** (3 mins)	
	Lightning talk Competing chaperone pathways in a-synuclein disaggregation and aggregation dynamics **Nicola Auld** (3 mins)	**Lightning talk** Characterising the phase-separating potential of the RGG-Rich RNA-binding protein SbiSALTY2 **Megumi Ikehara** (3 mins)	**Lightning talk** Evaluation of MiR-155 expression in peripheral blood samples of COPD patients **Mahsasadat Seyedsaleh** (3 mins)		**Lightning talk** Embedding AI-supported learning in first-year cell biology using cogniti agents **Michael Widjaja** (3 mins)	
	Lightning talk Structure based engineering of t cell receptors targeting HPV-E5 with HLA-C molecules **Janesha Maddumge** (3 mins)	**Lightning talk** Decrypting the spatial and cell-specific acclimation responses driving stress-resilient C4 photosynthesis **Suyan Yee** (3 mins)	**Lightning talk** Reaggregation of young cumulus cells with young or old nude oocytes partly restores soma-germline communication **Benjamin Wu** (3 mins)		**Lightning talk** Enhancing assessment accessibility and student experience through universal design: evaluating an accessible assessment brief in undergraduate bioscience **Teagan Mock** (3 mins)	
	Lightning talk Terminator takeover: IS1182-family insertion sequences target and usurp intrinsic transcription terminators **Christopher Jin** (3 mins)	**Lightning talk** Exploring the RNA-binding landscape of ATGRP7 in *arabidopsis thaliana* using immunoprecipitation-free approaches **Xingyu Yan** (3 mins)	**Lightning talk** Rewiring host cell signalling: Vaccinia virus exploits a non-canonical CK2-SMAD axis to drive replication and spread **Nic Gracie** (3 mins)		**Lightning talk** Enhancing student engagement and critical thinking through problem based learning **Sunita Ramesh** (3 mins)	
		Lightning talk Protecting crops from lepidopteran pests using RNAi **Soumitra Patekar** (3 mins)	**Lightning talk** The multi-pronged role of CCL17 in rheumatoid arthritis: driving synovial inflammation and cartilage degradation **Adrian Achuthan** (3 mins)		**Lightning talk** The mass spectrometry design challenge - an authentic assessment for biochemistry students **Luke Smithers** (3 mins)	
					Lightning talk Where infrastructure meets innovation: unlocking discovery at the children's medical research institute (CMRI) **Joshua Studdert** (3 mins)	
1730-1900	**Welcome Reception & Poster Session (Exhibition Hall)**					

Wednesday 30 September 2026

0800-1730	**Registration Open (Hall 1 Foyer, Level 1)**					
0800-1730	**Exhibition Open (Hall 1, Level 2)**					
0830-1000	**Symposia 4**					
Streams	**Stream 1: Proteins, Peptides and Structural Biology**	**Stream 2: Plant Biology**	**Stream 3: Cell and Developmental Biology**	**Stream 4: Biochemistry and Metabolism**	**Stream 6: RNA**	**Stream 7: 'Omics and Systems Biology**
Stream Leads	Tara Christie and Lisanne Spenkelink	Vanessa Melino and Thomas Roberts	Alexis Diaz Vegas and Edwina McGlinn	Jacky Stoeckli and Christoph Goebl	Justin Wong and Ianthe Pitout	Mark Larance and Laura Dagley
Room	Parkside Ballroom	Meeting Room C4.8	Meeting Room C4.9	Meeting Room C4.6	Meeting Room C4.10	Meeting Room C4.7
Topics	**Membrane proteins and transport**	**Plant energy biology and carbon metabolism**	**Mitochondrial signalling**	**Drug screening**	**RNA structure and chemistry**	**Functional genomics**
Chairs	Yan Jiang and Rhys Grinter	Monika Murcha and Maria Ermakova	Luke Formosa and Kate McArthur	Peter Gunning and Kym Lowes	Sandro Ataide and Mihwa Lee	Greg Neely
Presentations	How γδ T cells signal their intent **Ben Gully** (20 mins)	Structure of giant kelp photosystem I-FCP uncovers drivers of antenna evolution across the red lineage **María Maldonado** (20 mins)	Mitochondrial stress responses: balancing adaptation and pathology **Aleksandra Trifunovic** (40 mins)	Selective inhibition of oncogenic JNK signalling in metastatic triple-negative breast cancer **Sharissa Latham** (20 mins)	The chemical biology of RNA oxidation **Linglan Fang** (20 mins)	Promoter engineering of the human delta globin gene to enhance expression **Kate Quinlan** (20 mins)
	The twisted link between a dual function glutamate transporter and episodic ataxia **Renae Ryan** (20 mins)	Photosynthesis in the Australian desert **Andrei Herdean** (20 mins)		High-throughput screening of a challenging enzymatic target using acoustic ejection mass spectrometry **Kym Lowes** (20 mins)	Dissecting RNA-directed genome regulation **Hyun Jung Oh** (20 mins)	CRISPR activation reveals oncogenic and therapy-resistance programs in MYC-driven lymphoma **Marco Herold** (20 mins)
	Mechanism of phospholipid transport to the bacterial outer membrane by TAM **Lachlan Adamson** (15 mins)	Uncovering the key photoprotective strategy in C4 plants under fluctuating light **Russell Woodford** (15 mins)	In mitochondrial disease respiratory complex iii2 assembles complex i via toxic intermediate **James Letts** (15 mins)	Targeting cancer's metabolic rewiring: structure-guided discovery of malic enzyme inhibitors **Ben Krinkel** (15 mins)	Mismatch crispri reveals vulnerable essential genes in *staphylococcus aureus* for superior antisense oligonucleotide targeting **William Dan** (15 mins)	CRISPRi screening in cultured human astrocytes uncovers distal enhancers controlling genes dysregulated in Alzheimer's disease **Nicole Green** (15 mins)
	Predicting PIP2 binding sites on ion channels using molecular dynamics simulations and AI-driven tools **Yiyang Wang** (15 mins)	Electricity generation from photosynthetic microorganisms: from phenomenon to mechanism **Laura Wey** (15 mins)	Intercellular mitochondrial exchange as a cellular communication pathway regulated by 5-HT3 Receptors **Santosh Rama Bhadra Rao Tata** (15 mins)	Inhibitors of NAD+ glycohydrolases **Yun Shi** (15 mins)	Buffer-dependent structural evolution and stability of mRNA-lipid nanoparticles **Soumya Kanti De** (15 mins)	Divergent leaf tissue tolerance strategies to sodium in wheat: insights from multi-omics analysis of contrasting genotypes **Nivethitha Balucham**y (15 mins)
	Targeting bacterial virulence mechanisms for infection control **Begona Heras** (15 mins)	The importance of the alternative oxidase family in growth and reproduction of *Lotus japonicus* **Katie Schleyer** (15 mins)	Microtubule stability and association regulate mitochondrial network dynamics **Vaishnavi Ananthanarayanan** (15 mins)	Developing an *in vitro* assay to characterise small molecule inhibitors targeting 2-OG-dependent hydroxylases **An Cao** (15 mins)	Distinguishing the catalytic mechanisms of human RNA n6-methyladenosine (m6A) erasers FTO and ALKBH5 **Wei Shen Aik** (15 mins)	A data-driven systematic approach to detect protein mistranslation in *Saccharomyces Cerevisiae* **James Rosse** (15 mins)
1000-1030	**Morning Tea (Exhibition Hall)**					
1030-1200	**Symposia 5**					
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Topics	**Computational and AI-driven protein modelling, simulation and design**	**Genome editing and functional genomics in crops**	**Cellular biology in development - across scales**	**Lipids and diabetes**	**AI and computational RNA**	**Interactomics**
Chairs	Evelyne Deplazes and Gavin Knott	Brett Williams and Crystal Sweetman	Jan Manent and Melanie White	Melkam Kebede and Belinda Yau	Eduardo Eyras and Selene Fernandez	Gavin Reid and Ashleigh Dale
Presentations	Mechano-presentation of Von Willebrand factor: from molecular dynamics to digital twins for thrombosis prediction **Lining (Arnold) Ju** (20 mins)	Applications of developmental regulators in barley and wheat elite cultivars **Chaoqun (Carrie) Shen** (20 mins)	Signalling interactions between neural crest cells and cardiac progenitors in heart development and congenital heart defects **Sophie Wiszniak** (20 mins)	Emerging regulators of insulin granule biology and B-Cell dysfunction in type 2 diabetes **Melkam Kebede** (20 mins)	Isoform-level transcriptomic complexity in single cells **Ulf Schmitz** (20 mins)	Decoding ephrin receptor pseudokinase signalling: From structural insights to therapeutic strategies **Isabelle Lucet** (20 mins)

Presentations	Uncovering hidden viral vulnerabilities through multiscale modelling: from dynamics to therapeutic targeting **Peter Bond** (20 mins)	Synthetic gene circuits for programming plants **Adil Khan** (20 mins)	When binding modes become a cycle: The SOX2 clockwork at the Nanog locus **Mathias François** (20 mins)	Quantifying and mapping lipid metabolic flux in vivo **Anthony Don** (20 mins)	PCfold: phylogenetically corrected covariation priors for RNA structure prediction **Jean (Jianyu) Wen** (20 mins)	Co-fractionation multiomics for mapping the composition of native membrane lipid-protein complex interactomes **Liuyu (Elle) Peng** (20 mins)
	Empowering coarse-grained molecular simulations with AI-predicted NMR observables **Davide Mercadante** (15 mins)	Genome editing of an upstream Open Reading Frame alters abiotic stress tolerance and grain morphology in bread wheat **Oscar Carey-Fung** (15 mins)	Two distinct timers control vertebrate embryo segmentation **Ertuğrul Özbudak** (15 mins)	Lysosome recycling is essential for muscle glycogen metabolism **Meagan Mcgrath** (15 mins)	Epitranscriptome language modelling is enabled by domain-informed vocabulary expansion with limited data **Alexandra Sneddon** (15 mins)	Cell molecular signalling dynamics, including noise, are pre-tuned by cell phenotypic state **John Lock** (15 mins)
	Queensland Protein Group SIG Presentation Interaction of glycerol with proteins: Implications for the use of glycerol as cryoprotectant in cryo-EM **Solace Roche** (10 mins)	**Lightning talk** The investigation of genetic control of leaf senescence in wheat **Yalin Liu** (3 mins)	**Lightning talk** The hippo signalling pathway regulates the timing of epithelial cell replacement during *drosophila* abdominal morphogenesis **Richard Burke** (3 mins)	Renal nutrient loss contributes to whole-body metabolic protection against a high-fat high-sugar diet in mice **Harry Cutler** (15 mins)	**Lightning talk** RNA nanofactories in yeast for biotechnology applications **Olivia Murphy** (3 mins)	BAM-boozled: pyocin L1 disrupts outer membrane protein assembly in *Pseudomonas aeruginosa* **Imogen Samuels** (15 mins)
	Lightning talk A complete RXFP1-relaxin interaction model unlocks the design of potent mini-protein modulators **Janik Clement** (3 mins)	**Lightning talk** Genomic approaches to characterise the genetic pathways regulating flowering in horticultural tree crops **Stephanie Kerr** (3 mins)	**Lightning talk** Investigating how the maintenance of epithelial integrity prevents neoplastic tumours **Sarah Williams** (3 mins)	A novel model of pregestational type 2-diabetes-induced embryopathy **Madeleine Hardy** (15 mins)	**Lightning talk** Measuring gene vulnerability to find new targets for antisense oligonucleotide antibiotics in uropathogenic e. coli **Jackie Lu** (3 mins)	
	Lightning talk Uncovering the molecular basis of bisphenol recognition by estrogen receptor α **Jordan Pederick** (3 mins)	**Lightning talk** Genome-wide association mapping identifies candidate genes for symbiotic nitrogen fixation under drought in *lotus japonicus* **Mohan Ramesh Gowda** (3 mins)	**Lightning talk** Newly discovered compounds that stop brain cancer invasion by blocking aquaporin-1 channels **Andrea Yool** (3 mins)		**Lightning talk** Characterising shiga toxin phage-encoded small RNAs in enterohaemorrhagic *Escherichia coli* **Sabina Bhandari** (3 mins)	
	Lightning talk Design of switchable protein interfaces for reconfigurable biosystems **Aneesha Ananda** (3 mins)	**Lightning talk** Insights into Cannabis sativa glandular trichome biology using single cell and comparative genomic analyses **Mathew Lewsey** (3 mins)	**Lightning talk** Gene expression studies in PBMCs reveal novel cell-type specific genes **Kirsten Fairfax** (3 mins)		**Lightning talk** RNA phylogenetic substitution models and across-state space model selection in iq-tree3 **Van Nguyen Hoang** (3 mins)	
	Lightning talk Efficient protein crystallisation via bayesian optimisation on a learned chemical manifold **Nicholas Rosa** (3 mins)	**Lightning talk** Functional genomics reveals dormancy-associated regulators of almond flowering in response to seasonal temperature and photoperiod decline **Lucky Paudel** (3 mins)	**Lightning talk** New insights into müllerian duct development provided by single cell transcriptomics in the chicken embryo **Juan Lan Tan** (3 mins)		**Lightning talk** Utilising RNA silencing to modulate cannabinoid biosynthesis in Cannabis sativa **Anthony Brown** (3 mins)	
	Lightning talk *In silico* and *in vitro* characterization of GAF domain in photoreceptors reveals expanded light sensing in the chlorophyll f-producing cyanobacterium halomicronema hongdechloris **Fanyue Wang** (3 mins)	**Lightning talk** Contrasting outcomes in soybean cultivar mixtures linked to shifts in root-associated bacterial communities **Boyu Zheng** (3 mins)	**Lightning talk** Next-generation imaging and deep learning expand phenotypic readouts for drug screening **Moumitha Dey** (3 mins)		**Lightning talk** Membrane wetting and uptake of biomolecular condensates **Lauren Lowe** (3 mins)	

Presentations	**Lightning talk** Translating the advantages of enhanced coarse-grained simulations across resolution ranges **Mina Cullen** (3 mins)	**Lightning talk** Structural and dynamic characterization of phosphatidylethanolamine acyl-chain unsaturation in tomato extraplastidic membranes: a molecular dynamics study **Romina Victoria Sepulveda** (3 mins)	**Lightning talk** Rapid movements and slow mechanical buckling of eyespot organizer in butterfly wings **Yugo Nakazato** (3 mins)		**Lightning talk** Oncomir mir-21 as a master regulator of non-coding RNAs in oral squamous cell carcinoma **Sarah Stapleton** (3 mins)	
		Lightning talk Complex genomic structural variation underlies climate adaptation across *Eucalyptus* species **Ashley Jones** (3 mins)	**Lightning talk** *Kcnj15* loss-of-function drives Parkinson's disease-like phenotypes through neuronal and neuroimmune mechanisms **Benjamin Garland** (3 mins)		**Lightning talk** Functional and evolutionary analysis of grit-rbps in plant translational stress responses **Benjamin Mcdermott** (3 mins)	
		Lightning talk Investigating the TaHRZ gene family for iron biofortification and abiotic stress tolerance in bread wheat **Lily Tarry-Smith** (3 mins)	**Lightning talk** Characterization and genotyping of de novo LTR retrotransposition during mouse embryonic development **Alexander Carleton** (3 mins)			
1200-1400	**Lunch and poster session (Exhibition Hall)**					
1400-1530	**Symposia 6**					
Streams	**Stream 1: Proteins, Peptides and Structural Biology**	**Stream 2: Plant Biology**	**Stream 3: Cell and Developmental Biology**	**Stream 4: Biochemistry and Metabolism**	**Stream 6: RNA**	**Stream 7: 'Omics and Systems Biology**
Stream Leads	Tara Christie and Lisanne Spenkelink	Vanessa Melino and Thomas Roberts	Alexis Diaz Vegas and Edwina McGlinn	Jacky Stoeckli and Christoph Goebl	Justin Wong and Ianthe Pitout	Mark Larance and Laura Dagley
Room	Parkside Ballroom	Meeting Room C4.8	Meeting Room C4.9	Meeting Room C4.6	Meeting Room C4.10	Meeting Room C4.7
Topics	**Post-translational modifications and regulatory mechanisms**	**Molecular plant-microbe interactions**	**Membrane trafficking**	**The microbiome - from association to intervention**	**RNA regulation**	**Data integration and visualisation**
Chairs	Isabelle Lucet and Nicholas Scott	Donald Gardiner and Dugald Reid	Igor Bonacossa Pereira and James Burchfield	Rebecca Simpson and Justin O'Sullivan	Yuchen Feng and Cameron Bracken	Pengyi Yang and Mengbo Li
Presentations	Structure of human PINK1 at a mitochondrial TOM-VDAC array **Sylvie Callegari** (20 mins)	Specialised root hair cells facilitate rhizobial infection **Manuel Frank** (20 mins)	Cave exploration at the nanoscale: new insights into cellular stress sensing **Robert Parton** (20 mins)	The impact of dietary macronutrient distribution on the gut microbiota **Erin Shanahan** (20 mins)	Alternative splicing fine-tunes modular protein interfaces to control protein localisation **Robert Weatheritt** (20 mins)	Spatiotemporal multi-omics reveals architectural and therapeutic remodling in idh-mutant glioma **Saskia Freytag** (20 mins)
	Protein methylation of the eukaryotic translational machinery **Joshua Hamey** (20 mins)	Enhancing topical RNAi for control of whitefly-transmitted begomovirus and its vector **Vivien Tsai** (20 mins)	Growth cone navigation through membrane dynamics: netrin-1 signalling, snare machinery and lipid raft regulation **Ramon Martinez-Marmol** (20 mins)	From faecal microbiota transfer to designer probiotics: translational microbiome therapeutics across obesity and anorexia nervosa **Justin O'Sullivan** (20 mins)	Is AMH the first master sex determining gene in a reptile? **Sarah Whiteley** (20 mins)	Generalisable tissue-wide molecular reconstruction from histology **Jean Yang** (20 mins)
	Hyper-promiscuous protein phosphorylation by phage T7 kinase disarms bacterial immune systems **Tara Bartolec** (15 mins)	Senescent and dead roots drive nitrogen transfer from host plant to arbuscular mycorrhizal fungi **Joe Liew** (15 mins)	Establishing the sorting and degradation pathways of endosomal cargo: role of motor adaptors in signalling regulation **Shreya Boby** (15 mins)	Short-term dietary changes rapidly alter microbial community assemblages and reprogramme systemic immune homeostasis **Rebecca Simpson** (15 mins)	Image-based spatial transcriptomics enables sub-cellular RNA mapping in neurons and muscle fibres **Jingqi Wang** (15 mins)	Effective drug combinations augmenting standard-of-care backbone chemotherapies for colorectal cancer **Tao Tan** (15 mins)
	Zebrafish ink4 tumour suppressor proteins undergo reversible redox-mediated transition into amyloid-like structures **Grant Greene** (15 mins)	Unpacking genomic mechanisms underpinning rapid adaptation of Net Form Net Blotch disease **Fatima Naim** (15 mins)	Macropinocytosis regulated by rab13 and its effectors controls both collective cell migration in andepithelia and metastatic migration of cancer cells **Wanyi Wang** (15 mins)	Killing from the outside: protein antibiotics collapse the Gram-negative outer membrane barrier **Rhys Grinter** (15 mins)	Decoding the non-coding RNA landscape of the parasitic worm fasciola hepatica: orchestrating developmental transitions and host immune evasion **Dayna Sais** (15 mins)	Using pSoup to understand the outcomes of biological networks **Nicole Fortuna** (15 mins)

Presentations		**Perth Protein Group SIG Presentation** Revealing the compensatory pathogenicity mechanisms in *parastagonospora nodorum* lacking major necrotrophic effectors **Callum Verdonk** (15 mins)	Multphoton imaging reveals how psychedelics elicit 5-HT2A partial agonism via endosomal singalling **Gregory Redpath** (15 mins)	Breaking the mould: tyrocidine a variants as next-gen antifungals **Evelyne Deplazes** (15 mins)	Transcription factor ZBTB7A silences fetal globin expression by binding to a non-canonical motif **Michael O'Dea** (15 mins)	Comprehensive systems pharmacology approach to classify drugs with central-acting anticholinergic activity **Kevin Winardi** (15 mins)
1530-1600	**Afternoon Tea (Exhibition Hall)**					
1600-1740	**Plenaries 3**					
	ASBMB Plenary 5 and 6	**ASPS Plenary 7 and 8**		**NZSBMB Plenary 9**		
Room	Parkside Ballroom	Meeting Room C4.8		Meeting Room C4.9		
Chairs	Megan Maher	Mary Byrne and Scott Boden		Christoph Goebl		
Presentations	**ASBMB Lemberg Medal** From glucose transport to systems metabolism: rethinking insulin action in health and disease **David James** (40 mins)	**ASPS Peter Goldacre Award** Green or crispy: understanding the role of heat stress in tree mortality under hotter drought **Renee Marchin Prokopavicius** (25 mins)				
	ASBMB Shimadzu Research Medal Glycoproteomics reveals cancer-promoting glyco-enzymes in the tumour microenvironment **Morten Thaysen-Andersen** (40 mins)	**ASPS Jan Anderson Award** Understanding and engineering extreme salt tolerance: lessons from halophytes **Vanessa Melino** (25 mins)				
	20-min awards					
1715-1830	**Society Annual General Meetings**					
1715-1805	ASPS Annual General Meeting, Meeting Room C4.7					
1745-1830	ASBMB Annual General Meeting, Meeting Room C4.9					
1745-1830	ANZSCDB Annual General Meeting, Meeting Room C4.10					

Thursday 1 October 2026

0800-1800	**Registration Open (Hall 1 Foyer, Level 1)**					
0800-1515	**Exhibition Open (Hall 1, Level 2)**					
0830-0910	**Plenaries 4**					
	Plenary 10	**ASPS Plenary 11**				
Room	Parkside Ballroom	Meeting Room C4.8				
Chairs	Lisanne Spenkelink	Joseph Pegler				
Presentations	Assembly of RNA-protein complexes during transcription **Sarah Woodson** (40 mins)	**Annals of Botany Presentation** Phosphorus-acquisition and -uitilisation strategies of plants in south-western Australia and other phosphorus-impoverished landscapes **Qi Shen** (40 mins)				
0910-0920	**Session change over**					
0920-1000	**Plenaries 5**					
	Plenary 12	**ASPS Plenary 13**			**Plenary 14**	
Room	Meeting Room C4.9	Meeting Room C4.8			Meeting Room C4.10	
Chairs		Brent Kaiser			Justin Wong	
Presentations	Identification of druggable and redox vulnerabilities in cancer **Liron Bar-Peled** (40 mins)	**JG Wood Award** Learning the languages of chloroplasts: implications for crop yield, photosynthesis and resilience **Barry Pogson** (40 mins)			RNA Regulators of stem cell biology **Michael Kharas** (40 mins)	
1000-1030	**Morning Tea (Exhibition Hall)**					

1030-1200	Symposia 7					
Streams	**Stream 1: Proteins, Peptides and Structural Biology**	**Stream 2: Plant Biology**	**Stream 3: Cell and Developmental Biology**	**Stream 4: Biochemistry and Metabolism**	**Stream 6: RNA**	**Stream 7: 'Omics and Systems Biology**
Stream Leads	Tara Christie and Lisanne Spenkelink	Vanessa Melino and Thomas Roberts	Alexis Diaz Vegas and Edwina McGlinn	Jacky Stoeckli and Christoph Goebl	Justin Wong and Ianthe Pitout	Mark Larance and Laura Dagley
Room	Parkside Ballroom	Meeting Room C4.8	Meeting Room C4.9	Meeting Room C4.6	Meeting Room C4.10	Meeting Room C4.7
Capacity	1429	289	160	130	160	130
Topics	**Protein folding, misfolding and aggregation**	**Protein engineering and metabolic pathway optimization**	**Stem cell models of embryo development**	**Obesity and insulin resistance**	**RNA in rare diseases**	**Translational 'omics**
Chairs	Vanessa Morris and Luke McAlary	Simon Williams and Kim Johnson	Anja Knaupp and Pragathi Masamsetti	Leonie Heilbronn and Oli Fuller	Frances Evesson and Lachlan Jolly	Corey Giles and Chris Hodgkins
Presentations	Quantitative single-particle mapping of nanocondensation and liquid-to-solid transitions **Emma Sierecki** (20 mins)	Engineering carbon-fixing protein cages for improved photosynthesis **Taylor Szyszka** (20 mins)	From brain scans to stem cells: An integrated strategy for schizophrenia research **Maria Di Biase** (20 mins)	Genomeprot, a neuropeptidogenomic platform for hormone discovery **Ben Parker** (20 mins)	A severe neurodevelopmental syndrome linked to a deep intronic South Asian founder variant in the ufmylation adaptor CDK5RAP3 **Michaela Yuen** (20 mins)	The dynamic, spatial multi-omic landscape of heart **David Greening** (20 mins)
	Polyamines define regional vulnerability for α-synuclein aggregation through c-terminal interactions **Kensuke Ikanaka** (20 mins)	Are AI generated proteins the future of food? **Ryan Coates** (20 mins)	Long-term engrafting multilineage hematopoietic cells differentiated from human induced pluripotent stem cells **Andrew Elefanty** (20 mins)	Personalized nutrition during metformin initiation: metabolic and microbiome responses in prediabetes and early type 2 diabetes **Dorit Samocha-Bonet** (20 mins)	Implication of a chimeric clmn:syne3 RNA transcript in cerebellar ataxia **Mark Corbett** (20 mins)	OMIX3: multiomics platform for the integrated analysis of clinicial samples **Nikeisha Caruana** (20 mins)
	Ataxin-3 regulates the proteostasis of neurodegeneration-linked RNA-binding proteins via its deubiquitinase activity **Anastasiya Potapenko** (15 mins)	Metabolomic insights into heat resilience during grain filling in Australian wheat **Nicholas Booth** (15 mins)	Live imaging kidney development **Raeesah Hayatudin** (15 mins)	Mixed-chirality prohibitin peptide: D-(RLARLAR)2 enhances stability and *in vivo* effects on obesity **Lai Yue Chan** (15 mins)	RNA N6-methyladenosine (m6A) regulates cell cycle progression in diffuse midline glioma (DMG) and confers sensitivity to FTO inhibition **Samuel Ross** (15 mins)	**ASBMB Eppendorf Edman ECR Award** The protective effect of exercise on breast cancer progression is mediated by extracellular vesicles **Pamali Fonseka** (15 mins)
	The tumour suppressor protein p16 undergoes reversible and fully redox-controlled amyloid formation **Christoph Goebl** (15 mins)	Harnessing the function of plant nutrient transporters for developing novel nutrient-selective biomimetic membrane technologies **Annamaria De Rosa** (15 mins)	Redefining blood stem cell ontogeny during early embryonic development **Elle Koren-Sedova** (15 mins)	Genetic mapping in MASLD identifies INPP1 as a regulator of GPI-anchor synthesis and hepatic lipid burden **Magdalene Montgomery** (15 mins)	Uncovering X chromosome inactivation escape dynamics in autoimmune disease using single cell nanopore sequencing **Daisy Kavanagh** (15 mins)	Geo-ancestral divergence of lncRNA drivers shapes distinct pathways to prostate cancer aggression **Korawich Uthayopas** (15 mins)
	15-min presentaKeeping cool under pressure: Single-molecule visualisation of Hsp70-mediated maintenance of proteostasis during heat stresstion **Bailey Skewes** (15 mins)	An atlas of functional diversity: mapping the arabidopsis thaliana osca protein family **Ali Kusay** (15 mins)	In toto quantification and cartography of emerging haematopoietic stem cells in the mammalian embryo **Sayantani Guha** (15 mins)	CREBRF variant carrying female but not male mice are protected from dexamethasone-induced insulin resistance despite increases in body fat **Kate Lee** (15 mins)	Editing the telomerase RNA locus to model and treat inherited bone marrow failure in human HSPCS **Ashley Yang** (15 mins)	An automated pipeline for refining treatment stratification in high-grade serous ovarian cancer using advanced analysis of swgs-derived copy number profiles **Emma Rath** (15 mins)
1200-1315	**Lunch (Exhibition Hall)**					
1200-1315	**Student and ECR meet the mentors session (C4.6 & C4.7 Foyer)**					

1315-1445	Symposia 8					
Streams	**Stream 1: Proteins, Peptides and Structural Biology**	**Stream 2: Plant Biology**	**Stream 3: Cell and Developmental Biology**	**Stream 4: Biochemistry and Metabolism**	**Stream 6: RNA**	**Stream 7: 'Omics and Systems Biology**
Stream Leads	Tara Christie and Lisanne Spenkelink	Vanessa Melino and Thomas Roberts	Alexis Diaz Vegas and Edwina McGlinn	Jacky Stoeckli and Christoph Goebl	Justin Wong and Ianthe Pitout	Mark Larance and Laura Dagley
Room	Parkside Ballroom	Meeting Room C4.8	Meeting Room C4.9	Meeting Room C4.6	Meeting Room C4.10	Meeting Room C4.7
Topics	**Peptide and protein-based therapeutics**	**Plant membranes and transporters: Mechanisms, engineering and applications**	**Advances in understanding developmental pathologies**	**Cellular senescence and ageing**	**RNA in plant science**	**Glycolipids, glycoproteins, proteoglycans**
Chairs	Yu Heng Lau and Sonia Henriques	Samantha McGaughey and Bronwyn Barkla	Sophie Wiszniak and Ian Smyth	Alexey Terskikh and Emily Wong	Neena Mitter and Iain Searle	Katherine Wontrakul-Kish
Presentations	Peptide nucleic acids for use in sensing and diagnostics **Emma Watson** (20 mins)	Dissecting GABA signalling in plants with fluorescent biosensors and optogenetics **Bo Xu** (20 mins)	From gene discovery to therapy using zebrafish models of neuromuscular disease **Robert Bryson-Richardson** (20 mins)	Multi-OMIC atlas to identify ageing biomarkers in humans **Nir Eynon** (20 mins)	MicroR159 is a genetic switch between growth and pathogen defence in plants **Antony Millar** (20 mins)	Exploiting glycan conservation in pathogens as targets for next-generation antimicrobials and diagnostics **Nichollas Scott** (20 mins)
	First inhibitors of a two-partner secretion system **Alfred Hartojo** #20 (15 mins)	From ocean carbon fixation to crop improvement: characterisation of cyanobacterial bicarbonate transporters for enhancing photosynthesis in plants **Loraine Rourke** (20 mins)	Compromised stem and neuronal cell function of multiple subunits of the transcription MRNA export (TREX) complex define a neurodevelopmental disability spectrum disorder **Jozef Gecz** (20 mins)	Stable isotope tracing to uncover new aspects of NAD+ homeostasis in female reproductive ageing and beyond **Lindsay Wu** (20 mins)	Evolution of RNA-DNA interactions and their effects on plant genome organization **Selene Fernandez** (20 mins)	Ex vivo and multi-glycomic imaging of the retina **Jaclyn Swan** (20 mins)
	AI-designed proteins as inhibitors of hemoglobin-haptoglobin binding: structural and biochemical insights into heme piracy by NTHI **Daniel Fox** (15 mins)	Elucidating the functional roles of drought-responsive chickpea aquaporins **Rose Zhang** (15 mins)	Understanding the genotype-phenotype correlation of ZIC1 variants **Michelle Chang** (15 mins)	Mechanical activation of quiescent neural stem cells in the regenerating zebrafish spinal cord **Samuel Crossman** (15 mins)	RNAi-based biopesticides: from concept to reality **Stephen Fletcher** (15 mins)	Arylsulfatase b regulates adipose tissue expandability through remodelling of the adipocyte glycocalyx and growth factor signalling **Aaron Lambert** (15 mins)
	Function-first discovery of mini-proteins in ultra-miniaturised picolitre compartments **Conan Wang** (15 mins)	Modulation of ion transporters and ATP synthase in regulation of electron transport and carbon uptake in cyanobacteria **Lauri Nikkanen** (15 mins)	Nephron endowment is influenced by maternal macronutrient but not caloric intake in the early postnatal period, and is principally driven by fat and protein **John Bertram** (15 mins)	Exploring the molecular mechanisms behind the regulation of GCN2 - a protein kinase implicated in health and disease **Evelyn Sattlegger** (15 mins)	Native RNA sequencing reveals alternative splicing and epitranscriptomic reprogramming induced by the plant fungal disease myrtle rust **Ashley Jones** (15 mins)	Expanding substrate diversity of O-fucosylation through structural alignment and glycoproteomics **Benjamin Eberand** (15 mins)
	A novel transmission blocking vaccine candidate against malaria parasites **Melanie Dietrich** (20 mins)	Exploring the role of tip aquaporins in water and ion transport in plants **Zhale Hekmati** (15 mins)	Macrophage-derived extracellular vesicles direct muscle stem cell behaviour during zebrafish skeletal muscle regeneration **Quoc Duy Tran** (15 mins)	POT1 oligomerisation drives assembly of higher-order telomere structures required for chromosome-end protection **Hariharan Sivaraman** (15 mins)	The secondary structural conservation of lncRNAsin brassicaceae **Gabriela Santos-Rodriguez** (15 mins)	Targeting lectins using mRNA display with genetic reprogrammed glyco-cyclic peptides **Yichen Zhong** (15 mins)
1445-1515	**Afternoon Tea (Exhibition Hall)**					

1515-1645	Symposia 9					
Streams	**Stream 1: Proteins, Peptides and Structural Biology**	**Stream 2: Plant Biology**	**Stream 3: Cell and Developmental Biology**	**Stream 4: Biochemistry and Metabolism**	**Stream 6: RNA**	**Stream 7: 'Omics and Systems Biology**
Stream Leads	Tara Christie and Lisanne Spenkelink	Vanessa Melino and Thomas Roberts	Alexis Diaz Vegas and Edwina McGlinn	Jacky Stoeckli and Christoph Goebl	Justin Wong and Ianthe Pitout	Mark Larance and Laura Dagley
Room	Parkside Ballroom	Meeting Room C4.8	Meeting Room C4.9	Meeting Room C4.6	Meeting Room C4.10	Meeting Room C4.7
Topics	**AI-enabled synthetic biology**	**Adaptive stress physiology: from molecular responses to whole-plant resilience**	**Cell stress responses**	**Metabolic disease medications**	**RNA and translational research**	**New technologies in 'omics**
Chairs	Dom Glover and Claudia Vickers	Mark Tester and Oula Ghannoum	Louise Uoselis and Meagan Mcgrath	Samantha Hocking and Jerry Greenfield	Ianthe Pitout and Tim Mercer	Ben Crossett
Presentations	From AlphaFold to De Novo protein design: The rise of computational structural biology for prediction and design **Rhys Grinter** (20 mins)	Post-translational control of aquaporins under stress **Caitlin Byrt** (20 mins)	Mitochondria: Genome dynamics within and across generations **Steve Zuryn** (20 mins)	GLP-1 receptor agonists in advanced heart failure: a bridge to transplant through weight optimisation **Kavitha Muthiah** (20 mins)	When antisense therapeutics make sense: insights from rare diseases **Susan Fletcher** (20 mins)	Circadian alignment of food intake improves glucose tolerance and alters proteomic responses to caloric restriction in humans **Leonie Heilbronn** (20 mins)
	Rapid discovery of protein and small-molecule binders and biosensors using mRNA display **Zhenling Cui** (20 mins)	Cross-scale association of plant-level transpiration efficiency with leaf-level physiological determinants in C4 crop species **Alex Wu** (20 mins)	Regulation of cilia and embryonic development by phosphoinositides **Christina Mitchell** (20 mins)	**Denise Wootten** (20 mins)	Investigating MRNA-based immunotherapies for the management of diffuse midline gliomas **Ernest Moles** (20 mins)	State-of-the-art LC-MS/MS for clinical plasma profiling and biomarker discovery **Joel Steele** (20 mins)
	AI-driven design of heavily engineered influenza antigens **Wayne Patrick** (15 mins)	Structural insights into phosphoenolpyruvate carboxylase from C4 photosynthesis **Jasmine Divinagracia** (15 mins)	Transcriptional regulation of cell competition and epithelial fitness by AP-1 and CtBP **Sarah Williams** (15 mins)	Developing novel PPAR-TIAL activators of peroxisome proliferator activated receptor γ to treat metabolic disease **Samuel Wallis** (15 mins)	MBNL1-dependent splicing switch for controllable gene-editing therapy in ctg repeat expansion disorders **Lizaveta Kushniarova** (15 mins)	Uncovering the *leishmania* metabolome using metabolite annotation propagation and synthesis (MAPS) **Thomas Soerianto** (20 mins)
	Profiling of AI-designed cyclical peptides targeting PCNA in cancer **Dayna Holroyd** (15 mins)	Early detection of meja-induced growth-defence trade-offs using hyperspectral phenotyping and machine learning **Oliver Berkowitz** (15 mins)	The primary microcephaly protein, WDR62, binds protein chaperones to regulate purine metabolism and shape brain development **Dominic Ng** (15 mins)	One receptor, multiple fates: structural and dynamic drivers of biased agonism at the glucagon receptor **Xin Zhang** (15 mins)	Antisense oligonucleotides targeting the interferon receptor reverses neuropathology in cerebral interferonopathy **Barney Viengkhou** (15 mins)	Investigating the role of CIC loss of function on the drosophila neural stem cell niche secretome **Tanya Javaid** (15 mins)
	Engineering phage tail fibres for host range expansion **Hugh Evans** (15 mins)	Isolation and identification of high biomass and lipid productivity euglena strain from tropical Malaysian environments for enhancement of biofuel production **Sabrina Aghazada** (15 mins)	Vitronectin metabolically programs pro-fibrotic macrophages in 3D cultures and idiopathic pulmonary fibrosis **Katrina Binger** (15 mins)	Structure meets dynamics: molecular basis of retatrutide tri-agonism **Kenta Ishii** (15 mins)	From rational molecular antigen prioritisation to immune outcomes: A peptide-based mRNA vaccine strategy targeting uropathogenic escherichia coli (UPEC) **Jessica Joyce** (15 mins)	Vista: visualization and integrated system for transcriptomic analysis, a Bioconductor-native package for accessible and extensible RNA-seq analysis **Chirag Parsania** (15 mins)
1650-1800	**Closing Plenary and Award Presentations**					
Chair	Mark Larance					
Title	Exploring the protein universe via multimers and motifs					
Speaker	Professor Martin Steinegger					