

## **POSTER PRESENTATIONS**

Monday and Tuesday posters are available for viewing in the Exhibition Hall from 12:10 on Monday, 27 September through to 19:00 on Tuesday, 28 September.

Posters will be attended by the presenting author at Poster Session A from 13:10 – 14:10 on Monday and at Poster Session B from 13:25 – 14:25 on Tuesday.

The day and time of attendance is indicated alongside the poster number.

### **Poster Sessions Monday, 27 September and Tuesday, 28 September**

Posters 001 – 028	Developmental Biology
Posters 029 – 061	Gene Regulation and Signal Transduction
Posters 062 – 070	Cell Architecture and Trafficking
Posters 071 – 082	Molecular Neurobiology
Posters 083 – 130	Molecular Biology of Disease
Posters 131 – 178	Molecular Cell Biology
Posters 179 – 215	Plant Systems
Posters 216 – 261	Proteins: Machines of Life
Posters 262 – 284	Systems Biology and Biotechnology
Posters 285 – 290	Education
Posters 291 – 356	Late Posters ( <i>Not sorted by theme</i> )

DEVELOPMENTAL BIOLOGY

001 – 028

**POS-MON-001 13:10 - 14:10**

Digestive vacuole genesis and endocytic processes in the early intraerythrocytic stages of *Plasmodium falciparum*

**Abu Bakar, N.**, Klonis, N., Hanssen, E., Chan, C. and Tilley, L. (Australia)

**POS-TUE-002 13:25 - 14:25**

Roles of WNT signalling in spermatogenesis

**Abud, H.E.**, Kerr, G., Horvay, K. and Loveland, K.L. (Australia)

**POS-MON-003 13:10 - 14:10**

*LiCAM* acts as a *Sox10* modifier gene during enteric nervous system development

**Anderson, R.B.**, Wegner, M. and Wallace, A.S. (Australia and Germany)

**POS-TUE-004 13:25 - 14:25**

Sexually-dimorphic expression of MIR202\* is associated with testis differentiation in the male chicken embryo

**Bannister, S.C.**, Smith, C.A., Buermans, H., Doran, T.J., Sinclair, A.H. and Tizard, M.L.V. (Australia and The Netherlands)

**POS-MON-005 13:10 - 14:10**

Twist1 is required both in the cranial neural crest and the cranial mesoderm for proper head development

**Bildsoe, H.**, Loebel, D.A.F., Jones, V., Hor, A., Steiner, K., Chen, Y.T., Beringer, R.R. and Tam, P.P. (Australia and USA)

**POS-TUE-006 13:25 - 14:25**

FGF9 antagonises female and promotes male germ cell fate in mice

**Bowles, J.**, Feng, C.-W., Davidson, T.-L., Spiller, C. and Koopman, P. (Australia)

**POS-MON-007 13:10 - 14:10**

Siderophore discovery by application of immobilized metal ion affinity chromatography

**Braich, N.E.** and Codd, R. (Australia)

**POS-TUE-008 13:25 - 14:25**

Twist function in craniofacial morphogenesis

**Brinas, I.B.**, Wade, C.W. and Farlie, P.F. (Australia)

## POSTER SESSIONS MONDAY & TUESDAY

### **POS-MON-009 13:10 - 14:10**

Discovery of a novel A-type lamin interacting transcription factor, LITF, required for myogenesis

Ahmady, E., Deeke, S.A., Rabaa, S., Kouri, L., Krotneva, S., Kenney, L., Blais, A., Stewart, A.F.R. and **Burgon, P.G.** (Canada)

### **POS-TUE-010 13:25 - 14:25**

Proliferation of neurons and non-neuronal cells in the developing mouse stellate ganglion

Gonsalvez, D.G., **Cane, K.N.** and Anderson, C.R. (Australia)

### **POS-MON-011 13:10 - 14:10**

Positional cloning of lymphatic mutants in zebrafish

**Coxam, B.**, Neyt, C., Shulte-Merker, S. and Hogan, B. (Australia and The Netherlands)

### **POS-TUE-012 13:25 - 14:25**

Characterisation of the developmental roles of the *Drosophila* MACPF protein torso-like

**Crossman, T.**, Johnson, T.K., Herr, A., Whisstock, J.C. and Warr, C.G. (Australia)

### **POS-MON-013 13:10 - 14:10**

Integrin linked kinase (ILK) is required for lens epithelial cell survival and proliferation

Teo, J., McQueen-Miscamble, L., Turner, K., Martinez, G., Reneker, L., Dedhar, S., Robinson, M.L. and **De Iongh, R.U.** (Australia, USA and Canada)

### **POS-TUE-014 13:25 - 14:25**

Naringin promotes anticarcinogenic effects on rats bearing Walker 256 tumour

**Camargo, C.A.**, Wutzki, N.C., Bueno, L.G.M., Gomes-Marcondes, M.C.C., Da Silva, M.E.F. and Aoyama, H. (Brazil)

### **POS-MON-015 13:10 - 14:10**

Regulation of interneuron development by suppressor of cytokine signalling-2 (SOCS2)

**Faux, C.H.** and Turnley, A.M. (Australia)

### **POS-TUE-016 13:25 - 14:25**

Repairing hyperoxia-mediated respiratory deficit with endothelial progenitor cells

**Firsova, A.B.**, Cole, T.J. and Mollard, R.A. (Australia)

## POSTER SESSIONS MONDAY & TUESDAY

**POS-MON-017 13:10 - 14:10**

Genetic interaction between transcription factory (*Lhx1*) and WNT inhibitor (*Dkk1*) in head formation in mouse embryos  
**Fossat, N.**, Khoo, P.-L., Jones, V., Lewis, S.L. and Tam, P.P.L. (Australia)

**POS-TUE-018 13:25 - 14:25**

Does genetic variation in metabolite profiles correlate with sucrose content?  
**Glassop, D.**, Zwart, A. and Bonnett, G.D. (Australia)

**POS-MON-019 13:10 - 14:10**

DNA damage-independent functions of ASCIZ as an essential regulator of pulmonary organogenesis  
Jurado, S., Smyth, I., Van Denderen, B., Tennis, N., Hewitt, K., Cole, T.J. and **Heierhorst, J.** (Australia)

**POS-TUE-020 13:25 - 14:25**

Functional identity of the gamma tropomyosin ( $\gamma$ -TM) gene: specific roles in embryonic development, reproduction and cell viability  
**Hook, J.**, Schevzov, G., Hardeman, E.C. and Gunning, P.W. (Australia)

**POS-MON-021 13:10 - 14:10**

Amount of DNA methyltransferase 1 transcripts in various developmental stages of mouse tissues and their expression sites  
**Isokane, T.**, Ghanem, E.M., Nishibori, M., Hiraiwa, N. and Yasue, H. (Japan)

**POS-TUE-022 13:25 - 14:25**

Regulation of WNT signalling is critical in early eye development  
Chen, Y., Storen, R., Greenlees, R., Grigg, J., Tam, P. and **Jamieson, R.** (Australia)

**POS-MON-023 13:10 - 14:10**

The role of the drosophila membrane attack protein Torso-like in early embryonic patterning  
**Johnson, T.K.**, Bennett, M., Herr, A., Warr, C.G. and Whisstock, J.C. (Australia)

**POS-TUE-024 13:25 - 14:25**

*Sox18*-regulated genes implicated in lymphatic development  
**Kartopawiro, J.**, Neyt, C., Francois, M. and Hogan, B. (Australia)

## POSTER SESSIONS MONDAY & TUESDAY

### POS-MON-025 13:10 - 14:10

Chiroptera transthyretin

**Khwanmune, J.** and Prapunpoj, P. (Thailand)

### POS-TUE-026 13:25 - 14:25

Platelet derived growth factor receptor alpha (PDGFR $\alpha$ ) and coronary vasculature formation

**Biben, C.,** Ooi, F., Hartley, L. and Prall, O.W.J. (Australia)

### POS-MON-027 13:10 - 14:10

Sox3 overexpression leads to defective subcommissural organ development with congenital hydrocephalus

**Lee, K.P.Y.,** Cheah, P.S., Piltz, S.G., Rogers, N.A. and Thomas, P.Q. (Australia)

### POS-TUE-028 13:25 - 14:25

The role of FYN kinase in the development of pre-implantation embryos

**Levi, M.,** Maro, B. and Shalgi, R. (France)

## GENE REGULATION AND SIGNAL TRANSDUCTION

029 – 061

### POS-MON-029 13:10 - 14:10

Identifying novel genes in sex development

**Alankarage, D.,** Ludbrook, L., Svingen, T., Bagheri-Fam, S., Koopman, P. and Harley, V. (Australia)

### POS-TUE-030 13:25 - 14:25

The *Creb1* transcription factor modulates *Scd1* expression during mouse lung development

**Antony, N.,** Bird, A.D., Tan, K.H. and Cole, T.J. (Australia)

### POS-MON-031 13:10 - 14:10

Rapamycin and ischemia reperfusion induce heme oxygenase-1 and peroxiredoxin-1 in liver

Kist, A., Wakkie, J., Nikolic, A., Zeile, S., Versteeg, R., Ten Berge, J., Wilson, C.H., Nieuwenhuijs, V.B., Padbury, R.T.A. and **Barritt, G.J.** (Australia and The Netherlands)

### POS-TUE-032 13:25 - 14:25

Exosomal microRNA profiling in neurodegenerative disease

**Bellingham, S.A.,** Kuehlich, J., Coleman, B.M., Sharples, R. and Hill, A.F. (Australia)

**POS-MON-033 13:10 - 14:10**

Cyclin-dependent kinase-like 3 regulates actin remodelling and cell migration

**Brown, M.K.**, Forrest, A., Kerr, M., Wani, S., Cloonan, N., Gabrielli, B. and Grimmond, S. (Australia and Japan)

**POS-TUE-034 13:25 - 14:25**

Taxol and Bortezomib induce apoptosis synergistically in chronic myelogenous leukemia cells

**Bucur, O.**, Stancu, A.L., Petrescu, S.M. and Khosravi-Far, R. (USA and Romania)

**POS-MON-035 13:10 - 14:10**

Investigating the RNA binding properties of Krüppel-like factors

**Burdach, J.G.**, Mackay, J. and Crossley, M. (Australia)

**POS-TUE-036 13:25 - 14:25**

Identification of *Nfil3* as a direct glucocorticoid-regulated gene target in T-lymphocytes

**Carey, K.T.**, Tan, K., Ng, J., Liddicoat, D.R., Godfrey, D.I. and Cole, T.J. (Australia)

**POS-MON-037 13:10 - 14:10**

A novel function of tristetraprolin: inhibiting the activity of poly(A) polymerase (PAP) by directly interacting with Pabpn1 and PAP

Wang, S.-C., Su, Y.-L., Chiang, P.-Y., Lin, N.-Y., Shen, Y.-F. and **Chang, C.-J.** (Taiwan)

**POS-TUE-038 13:25 - 14:25**

Intestinal stem cell gene *Lgr5* is regulated by synergistic c-myc and  $\beta$ -catenin cooperation

**Cheasley, D.A.**, Malaterre, J., Vincan, E., Lightowler, S., Pereira, L. and Ramsay, R.G. (Australia)

**POS-MON-039 13:10 - 14:10**

Analysis of the relationship between bioenergetic signatures and differentiation potentials of human mesenchymal stem cells from different origins

**Chen, C.T.**, Lan, Y.W., Hsu, S.H., Hwang, S.M. and Wei, Y.H. (Taiwan)

**POS-TUE-040 13:25 - 14:25**

Regulation of spliceosomal genes in *Saccharomyces cerevisiae*

**Chen, S.-C.E.**, Kornfeld, G.D. and Dawes, I.W. (Australia)

## POSTER SESSIONS MONDAY & TUESDAY

**POS-MON-041 13:10 - 14:10**

District roles of TTP, hnRNP K and HuR in COX-2 mRNA stability induced by LPS

**Chiang, P.Y.**, Shen, Y.F. and Chang, C.J. (Taiwan)

**POS-TUE-042 13:25 - 14:25**

Phosphorylation adjacent to the Bzip domain of Fos related antigen-1 regulates DNA binding

**Diesch, J.**, Low, D., Morrice, N., Tulchinsky, E., Hannan, R.D. and Dhillon, A.S. (Australia and UK)

**POS-MON-043 13:10 - 14:10**

Biophysical and structural examination of the Ler transcription factor

Stone, R.D., **Dogovski, C.**, Bailey, M.F., Ji, Y., Robins-Browne, R.M. and Perugini, M.A. (Australia)

**POS-TUE-044 13:25 - 14:25**

Proteolysis of an anti-sigma factor controls siderophore synthesis and uptake in *Pseudomonas aeruginosa*

**Draper, R.C.** and Lamont, I.L. (New Zealand)

**POS-MON-045 13:10 - 14:10**

Mechanism of synergistic induction of Glut1 transcription by endothelin-1 and cyclic AMP in 3T3-L1 adipocytes

**Fong, J.C.**, Kao, Y.S. (Taiwan)

**POS-TUE-046 13:25 - 14:25**

Functional analysis of the protein L-isoaspartyl/D-aspartyl O-methyltransferase (PIMT) gene promoter

**Furuchi, T.**, Harada, S., Shimizu, Y., Kosugi, S., Katane, M., Sekine, M. and Homma, H. (Japan)

**POS-MON-047 13:10 - 14:10**

Arabidopsis glycine-rich RNA binding protein 8 (AtGRP8) expression in response to phosphate starvation

**Gaza, H.L.**, Jost, R., Ludwig, M. and Finnegan, P.M. (Australia)

**POS-TUE-048 13:25 - 14:25**

Functional regulation of the Fra-1/AP-1 transcription factor via interactions with protein phosphatase 2A

**Gilan, O.**, Jastrebski, K., Diesch, J., Verrills, N., Hannan, R.D. and Dhillon, A.S. (Australia)

**POS-MON-049 13:10 - 14:10**

Heparanase as a signaling molecule in cancer and inflammation

**Goodall, K.J.**, Poon, I.K.H. and Hulett, M.D. (Australia)

**POS-TUE-050 13:25 - 14:25**

A novel role of dipeptidyl peptidase 9 in P13K/Akt pathway regulation

Yao, T.W., Xia, P., Kim, W.S., Yu, D.M.T., Choi, K.Y. and **Gorrell, M.D.** (Australia and Korea)

**POS-MON-051 13:10 - 14:10**

Evidence that 4E-BP, known as a completely disordered protein, partially folds upon complex formation: new perspectives for the regulation of translation

**Gosselin, P.**, Oulhen, N., Czjzek, M., Cormier, P. and Cosson, B. (France and USA)

**POS-TUE-052 13:25 - 14:25**

Arabidopsis pollen transcription factors

Gibalova, A., Renak, D., Duplakova, N., Solcova, K. and **Honys, D.** (Czech Republic)

**POS-MON-053 13:10 - 14:10**

*In silico* search of potential functional sites within promoters of mouse 06-methylguanine-DNA methyltransferase gene

**Iatsyshyna, A.P.**, Pidpala, O.V. and Lukash, L.L. (Ukraine)

**POS-TUE-054 13:25 - 14:25**

Demonstration of autophosphorylation of the Lyn protein tyrosine kinase a new site in the unique domain - the role of the new autophosphorylation in Lyn kinase function

**Jarassamee, B.**, Chong, Y.P., Williamson, N.A., Purcell, A.W. and Heung-Chin, C. (Australia)

**POS-MON-055 13:10 - 14:10**

Copper chloride induced expression of cytoglobin and HIF-1 $\alpha$  *in vivo*

**Jusman, S.W.A.**, Prijanti, A.R., Iswanti, F.C., Ferdinal, F., Suyatna, F.D., Wanandi, S.I. and Sadikin, M. (Indonesia)

**POS-TUE-056 13:25 - 14:25**

Investigating the contribution of genomic instability to altered microRNA expression in ovarian cancer cell lines

**Kan, C.W.S.**, Hahn, M.A., Huh, J.Y., Dykema, K., Howell, V.M. and Marsh, D.J. (Australia and USA)

**POS-MON-057 13:10 - 14:10**

Extension of *Drosophila* lifespan by overexpression of human clusterin

**Kang, B.H.**, Lee, Y.N., Park, J.J. and Min, B.H. (Korea)

**POS-TUE-058 13:25 - 14:25**

The cellular signaling pathway mediating induction of HBV replication and gene expression by ethanol

**Kim, Y.H.**, Kim, B.K. and Park, Y.G. (Korea)

**POS-MON-059 13:10 - 14:10**

Suppressor of cytokine signaling (SOCS)5 is a potential regulator of the IL-4/JAK/STAT pathway

**Kolesnik, T.B.**, Colombus, R.E., Chakravorty, A., Wilson, T.A., Sprigg, N.S., Carter, W., Zhang, J.-G., Babon, J.J., Nicola, N.A. and Nicholson, S.E. (Australia)

**POS-TUE-060 13:25 - 14:25**

Functional analysis of transcription factors regulating fructosyltransferases involved in the fructan synthetic pathway in wheat

**Kooiker, M.**, Xue, G.P. and McIntyre, C.L. (Australia)

**POS-TUE-061 13:25 - 14:25**

TLR regulation of SPSB1 regulates iNOS induction

**Lewis, R.S.**, Kuang, Z., Kolesnik, T.B., D'Cruz, A., Low, A., Norton, R.S. and Nicholson, S.E. (Australia)

**CELL ARCHITECTURE AND TRAFFICKING**

**062 – 070**

**POS-TUE-062 13:25 - 14:25**

Generation of a granzyme B/EGFP reporter for live-cell imaging

**Bird, C.H.**, Prescott, M., Harper, I. and Bird, P.I. (Australia)

**POS-MON-063 13:10 - 14:10**

Intracellular trafficking of ricin toxin: computational modelling and kinematics

**Chong, D.**, Walker, A. and Skvortsov, A. (Australia)

**POS-TUE-064 13:25 - 14:25**

Siderophore conjugates as antimicrobial and iron-overload agents

Obando, D., Brites, L.J., Shi, C., Liu, J. and **Codd, R.** (Australia)

**POS-MON-065 13:10 - 14:10**

Structural rearrangements of the *P. falciparum* gametocyte: an essential process for parasite transmission

**Dearnley, M.K.**, Dixon, M.W.A., Yeoman, J., Hanssen, E. and Tilley, L. (Australia)

## POSTER SESSIONS MONDAY & TUESDAY

**POS-TUE-066 13:25 - 14:25**

Rab2A participates in the trafficking and secretion of apolipoprotein E

**Dinnes, D.L.**, Kockx, M., Jessup, W. and Kritharides, L. (Australia)

**POS-MON-067 13:10 - 14:10**

Determining the intracellular localisation of AtNHX5 and AtNHX6 and their role in cellular trafficking and salt tolerance

**Ford, B.A.** and Gendall, A.R. (Australia)

**POS-TUE-068 13:25 - 14:25**

Binding of p110 retinoblastoma protein inhibits nuclear import of SV40 large tumour antigen through a phosphoregulated mechanism

**Fulcher, A.J.**, Dias, M.M. and Jans, D.A. (Australia)

**POS-MON-069 13:10 - 14:10**

Regulatory role of PRIP in exocytosis through the interaction with protein phosphatase

**Gao, J.**, Takeuchi, H., Zhang, Z. and Hirata, M. (Japan)

**POS-TUE-070 13:25 - 14:25**

Arl5b is a golgi-localised small G protein involved in regulation of retrograde transport

**Houghton, F.J.** and Gleeson, P.A. (Australia)

### MOLECULAR NEUROBIOLOGY

071 – 082

**POS-MON-071 13:10 - 14:10**

Toxicity of amyloid transthyretins to Down syndrome fibroblast

**Annanon, S.**, Kaewmeechai, S. and Prapunpoj, P. (Thailand)

**POS-TUE-072 13:25 - 14:25**

Long-term memory and learning impairment in Nedd4 heterozygous mice

**Bongiorno, D.**, Boase, N., Kumar, S. and Poronnik, P. (Australia)

**POS-MON-073 13:10 - 14:10**

The involvement of exosomes in intercellular prion transmission

**Coleman, B.M.**, Hanssen, E., Masters, C.L., Lawson, V.A. and Hill, A.F. (Australia)

## POSTER SESSIONS MONDAY & TUESDAY

**POS-TUE-074 13:25 - 14:25**

Evaluation of SRU BIND label-free technology for assessment of kappa opioid receptor ligands in cell-based assays

**Deuis, J.**, Vetter, I., Lewis, R. and Cabot, P. (Australia)

**POS-MON-075 13:10 - 14:10**

Dynein/COPII interaction with mutant SOD1 in SOD1<sup>G93A</sup> transgenic mice and NSC34 cells

**Farg, M.**, Walker, A., Turner, B., Horne, M. and Atkin, J. (Australia)

**POS-TUE-076 13:25 - 14:25**

Ascending GABAergic/peptidergic control of arousal, stress and motivated behaviour: focus on nucleus incertus and relaxin-3 signalling

**Gundlach, A.L.**, Ma, S., Smith, C.M., Ryan, P.J., Hossain, M.A., Wade, J.D., Bathgate, R.A.D., Verberne, A.J.M., Blasiak, A. and Olucha-Bordonau, F.E. (Australia, Poland and Spain)

**POS-MON-077 13:10 - 14:10**

Oxidative stress induces multiple caspase-independent cell death pathways in primary cortical neurons

**Higgins, G.C.**, Devenish, R.J., Beart, P.M. and Nagley, P. (Australia)

**POS-TUE-078 13:25 - 14:25**

The cSrc protein tyrosine kinase is regulated by calpain mediated cleavage upon over stimulation of glutamate receptor in cultured primary neurons

**Hossain, M.I.** and Cheng, H.C. (Australia)

**POS-MON-079 13:10 - 14:10**

Investigating the role of copper in the nervous system

**Hwang, E.C.J.** and Burke, R. (Australia)

**POS-TUE-080 13:25 - 14:25**

The expression of TNF and its receptors in schizophrenia and mood disorders

**Jeon, W.J.**, Gibbons, A.S. and Dean, B. (Australia)

**POS-MON-081 13:10 - 14:10**

Targeted gene delivery to microglia via the scavenger receptor class B, type I

**Malmeyvik, J.M.K.**, Rogers, M.-L., Nilsson, M., Nakanishi, Y., Rush, R.A., Sims, N.R. and Muyderman, H. (Australia, Sweden and Japan)

**POS-TUE-082 13:25 - 14:25**

Towards isoform-selective dynamin inhibitors

**Mariana, A.**, Hill, T.A., McGeachie, A.B., Chau, N., Daniel, J., Gorgani, N.N., McCluskey, A. and Robinson, P.J. (Australia)

**MOLECULAR BIOLOGY OF DISEASE**

**083 – 130**

**POS-MON-083 13:10 - 14:10**

Clinical significance of urine survivin mRNA in prostate cancer detection

**Almaghrebi, M.**, Kehinde, E.O. and Kapila, K. (Kuwait)

**POS-TUE-084 13:25 - 14:25**

Identifying the role of specific non-conserved residues on PI3K in the discovery of isoform-selective PI3K inhibitors

**Amran, S.I.** (Australia)

**POS-MON-085 13:10 - 14:10**

Evasion strategies of echinococcus granulosus to Th1 host protective response during human infection

**Amri, M.** and Touil-Boukoffa, C. (Algeria)

**POS-TUE-086 13:25 - 14:25**

Ethylene mediated defence against the root infecting fungal pathogen *Rhizoctonia solani* in *Medicago truncatula*

**Anderson, J.P.**, Lichtenzveig, J., Oliver, R.P. and Singh, K. (Australia)

**POS-MON-087 13:10 - 14:10**

ATRX is a Sertoli cell survival factor and regulator of spermatogenesis via interaction with Androgen Receptor

**Bagheri-Fam, S.**, Argentaro, A., Svingen, T., Combes, A., Koopman, P. and Harley, V. (Australia)

**POS-TUE-088 13:25 - 14:25**

Polymorphism of SOD2 gene in patients of bronchial asthma

**Bhadoria, D.P.**, Bhadoria, K., Dutta, K., Kumar, M., Singh, B., Singh, S., Kumar, R., Bhadoria, P., Anand, R. and Sharma, G.L. (India and Australia)

## POSTER SESSIONS MONDAY & TUESDAY

### POS-MON-089 13:10 - 14:10

Status of antioxidants in bronchial asthma

**Bhadoria, P.**, Bhadoria, K., Dutta, K., Kumar, M., Singh, B., Singh, S., Kumar, R., Bhadoria, D.P., Anand, R. and Sharma, G.L. (India and Australia)

### POS-TUE-090 13:25 - 14:25

Effect of antioxidants supplementations in salt-induced dyslipidaemia in albino rats

**Bilbis, L.S.**, Saidu, Y., Ahmad, K., Abbas, A.Y., Baba, A.U. and Shuaib, A.M. (Nigeria)

### POS-MON-091 13:10 - 14:10

Targeting the tropomyosin isoform TM5NM1 impairs tumour survival, proliferation and migration

**Bonello, T.**, Stehn, J., Schevzov, G., Coombes, J., McCluskey, A., Haass, N., Dixon, I. and Gunning, P. (Australia)

### POS-TUE-092 13:25 - 14:25

Investigation of mitochondrial function in a methylmalonic aciduria mouse model

**Buck, N.E.**, Siddiqui, T., Laskowski, A., Frazier, A.E., Pitt, J.J., Thorburn, D.R. and Peters, H.L. (Australia)

### POS-MON-093 13:10 - 14:10

The role of ubiquitin in the replication of hepatitis C virus

**Cardeira, S.A.** and Bishop, N.E. (Australia)

### POS-TUE-094 13:25 - 14:25

The mitochondrial citrate carrier is required for chromosome integrity in *Drosophila* and human cells

**Carrisi, C.**, Morciano, P., Cestra, G., De Benedetto, G.E., Corona, D.F.V., Musio, A., Cenci, G. and Capobianco, L. (Italy)

### POS-MON-095 13:10 - 14:10

Detection of proGRP-derived peptides in human colorectal cancer cells and assessment of their role in cellular proliferation

Patel, O., **Chang, M.**, Nordlund, M., Shulkes, A. and Baldwin, G. (Australia and Norway)

### POS-TUE-096 13:25 - 14:25

$\beta$ -arrestin1 promote chronic myelocytic leukemia progress dependent on JNK pathways †

Zhang, P., Long, J., Li, K., Liu, H., Tan, J., Tu, Z. and **Zou, L.** (China)

## POSTER SESSIONS MONDAY & TUESDAY

### **POS-MON-097 13:10 - 14:10**

The serotonin 5-HT<sub>4</sub> receptor splice variants interacts with specific PDZ domain proteins Veli 1-3/Lin7A, B, C homologues: mechanisms in receptor targeting

**Chinkwo, K.A.**, Coupar, I.M. and Irving, H.R. (Australia)

### **POS-TUE-098 13:25 - 14:25**

Effects of HPV oncoproteins on HLA-A2 promoter in cervical carcinoma cell line

**Mohd Habib, S.H.**, Abdullah, A., Othman, S., Karsani, S.A. and Yusof, R. (Malaysia)

### **POS-MON-099 13:10 - 14:10**

A molecular basis for the differential extracellular function of PAI-1 and PAI-2 in cancer

**Cochran, B.J.**, Croucher, D.R. and Ranson, M. (Australia)

### **POS-TUE-100 13:25 - 14:25**

Biochemical characterization of abnormal fibrinogens causing hereditary dysfibrinogenemia

**Kotlin, R.**, Suttner, J. and Dyr, J.E. (Czech Republic)

### **POS-MON-101 13:10 - 14:10**

Reduced ferroportin expression explains why intestinal iron absorption in the neonatal rat is hyporesponsive to stimuli that reduce absorption in adults

**Darshan, D.**, Wilkins, S.J., Frazer, D.M. and Anderson, G.J. (Australia)

### **POS-TUE-102 13:25 - 14:25**

Contribution of metabolic perturbations to the neurodegenerative evolution of Alzheimer's disease

**Daulatzai, M.K.** (Australia)

### **POS-MON-103 13:10 - 14:10**

ApoE polymorphism in coronary heart disease patients from Punjab, India

**Dhiman, S.R.**, Khanna, D. and Balgir, P.P. (India)

### **POS-TUE-104 13:25 - 14:25**

Effects of *Rho* GTPases in metastasis

**Dinsdale, B.**, Li, S.F. and Parish, R.W. (Australia)

## POSTER SESSIONS MONDAY & TUESDAY

### POS-MON-105 13:10 - 14:10

*SEC14*-dependent secretion of the fungal invasin, phospholipase B1, is essential for pathogenicity of *Cryptococcus neoformans*  
**Djordjevic, J.T.**, Chayakulkeeree, M., Johnston, S., Bijosono Oei, J., May, R., Williamson, P.R. and Sorrell, T.C. (Australia, Thailand, UK and USA)

### POS-TUE-106 13:25 - 14:25

Stearoyl-CoA desaturase 1 deficiency reduces apoptosis in the heart of obese ob/ob mice  
**Dobrzyn, P.**, Pyrkowska, A., Miyazaki, M., Ntambi, J.M. and Dobrzyn, A. (Poland and USA)

### POS-MON-107 13:10 - 14:10

Does dysferlin do more than just repair membranes?  
**Evesson, F.J.**, Peat, R.A., Lek, A., Lemckert, F.A., North, K.N. and Cooper, S.T. (Australia)

### POS-TUE-108 13:25 - 14:25

Ability of  $\alpha$ -casein in preventing of amyloid fibril formation of stressed  $\alpha$ -lactalbumin in crowded system  
**Ghahghaei, A.** and Faridi, N. (Iran)

### POS-MON-109 13:10 - 14:10

A high-throughput method for the detection of homoeologous gene deletions in hexaploid wheat  
**Fitzgerald, T.L.**, Kazan, K., Li, Z., Morell, M.K. and Manners, J.M. (Australia)

### POS-TUE-110 13:25 - 14:25

Untangling the web of hepatitis C virus non-structural protein 4B function  
**Fitzsimmons, N.M.** and Bishop, N.E. (Australia)

### POS-MON-111 13:10 - 14:10

Induced splice-switching to study dystrophin isoform function and expression  
**Fletcher, S.**, Adams, A., Geer, K., Johnsen, R.J. and Wilton, S.D. (Australia)

### POS-TUE-112 13:25 - 14:25

Modulation of MHC Class I gene expression by dengue virus  
**Othman, S.**, Abdul Rahman, N. and Yusof, R. (Malaysia)

**POS-MON-113 13:10 - 14:10**

D-Amino acid oxidase: pathophysiological basis and molecular target for schizophrenia

**Fukui, K.**, Ono, K., Abou El-Magd, R.M., Iwana, S., Kawazoe, T., Chung, S.P., Song, Y., Shishido, Y., Yorita, K. and Sakai, T. (Japan)

**POS-TUE-114 13:25 - 14:25**

Iron homeostasis in whole body and intestine-specific hephaestin knockout mice

**Fuqua, B.K.**, Wolkow, N., Bell, A., Hsu, J., Nguyen, M.P., Yu, C.C., Dunaief, J.L., Anderson, G.J. and Vulpe, C.D. (USA and Australia)

**POS-MON-115 13:10 - 14:10**

Polymorphism dependant signaling bias in the human calcitonin receptor

**Furness, S.G.B.**, Khreish, M., Chrisopoulos, A. and Sexton, P.M. (Australia)

**POS-TUE-116 13:25 - 14:25**

Anti-helicobacter pylori activity of edible plant from Northeastern Thailand

**Gannarai, P.**, Rojpibulstit, P., Kangsadalampai, S., Boonsiri, P., Daduang, J. and Valaichone, R.K. (Thailand)

**POS-MON-117 13:10 - 14:10**

Subcellular trafficking of viral proteins is central to viral immune evasion and pathogenicity

**Moseley, G.W.**, Wiltzer, L., Oksayan, S., Rowe, C.L., Marsh, G., Wang, L.F., Blondel, D., Ito, N. and Jans, D.A. (Australia and Japan)

**POS-TUE-118 13:25 - 14:25**

Comparing the chaperone activity of glycerol and  $\beta$ -casein in preventing aggregation of proteins in crowded system

**Ghahghaei, A.** and Rahmany Asgarabad, F. (Iran)

**POS-MON-119 13:10 - 14:10**

The expression of transmembrane tumour necrosis factor is increased in the anterior cingulate of subjects with bipolar disorder

**Gibbons, A.S.**, Tawadros, N., Scarr, E. and Dean, B. (Australia)

## POSTER SESSIONS MONDAY & TUESDAY

### POS-TUE-120 13:25 - 14:25

Mitochondrial abnormalities in the *MECP2*<sup>TM1TAM</sup> mouse model of Rett Syndrome

**Gold, W.A.**, Williamson, S.L., Pelka, G.J., Tam, P.P.L., Gibson, J. and Christodoulou, J. (Australia)

### POS-MON-121 13:10 - 14:10

The role of endoplasmic reticulum stress in type 1 diabetes

**Gorasia, D.G.**, Dudek, N.L., Wee, S., Mangum, J.E., Hubbard, M.J. and Purcell, A.W. (Australia)

### POS-TUE-122 13:25 - 14:25

Shark antibodies and NCAMs as novel diagnostics

**Griffiths, K.**, Casey, J., Parisi, K. and Foley, M. (Australia)

### POS-MON-123 13:10 - 14:10

Propagation of the prion protein via the exosomal pathway

**Guo, B.B.**, Vella, L.J., Cappai, R., Bellingham, S.A. and Hill, A.F. (Australia)

### POS-TUE-124 13:25 - 14:25

Field trials of transgenic cotton expressing a defensin gene for fungal control

Hinch, J.M., Gaspar, Y.M., McGinness, B.S., McKenna, J.A., Anderson, M.A. and **Heath, R.L.** (Australia)

### POS-MON-125 13:10 - 14:10

Proteomic study on rapamycin treated human cancer cell line

Rajagopalan, S., Guha, N., Reddy, Y., Joseph, S., Lateef, S. and **Hennessy, T.** (India and Singapore)

### POS-TUE-126 13:25 - 14:25

Mincle is a novel regulator of the innate immune response to Trehalose-6,6-dimycolate

**Hitchens, K.J.**, Manzanero, S. and Wells, C.A. (Australia)

### POS-MON-127 13:10 - 14:10

Effects of missense mutations in PAH on protein quaternary structure and enzyme function: implications for disease severity in Phenylketonuria

**Ho, G.**, Reichardt, J. and Christodoulou, J. (Australia)

### POS-TUE-128 13:25 - 14:25

G-quadruplex stabilizer BMVC4 induces senescence through both inhibiting telomerase activity and repressing of hTERT expression in cancer cells

**Huang, F.-C.**, Chang, T.-C. and Lin, J.-J. (Taiwan)

**POS-MON-129 13:10 - 14:10**

Characterization of toxicity of ALS-linked SOD1 mutant proteins  
**Jang, J.Y.**, Yoon, E.J., Cho, H.M., Kim, Y.M., Rhim, H.S. and Kang, S.M. (Korea)

**POS-TUE-130 13:25 - 14:25**

Hepatoma-derived growth factor (HDGF) is correlated with malignancy and invasiveness of breast cancer  
**Chen, S.C.**, Yeh, M.H., Chen, H.Y. and Tai, M.H. (Taiwan)

**MOLECULAR CELL BIOLOGY**

**131 – 178**

**POS-MON-131 13:10 - 14:10**

The role of glutaredoxin1 in cellular copper homeostasis  
**Ackland, S.**, Singleton, W., McInnes, K., McKirdy, R., Winnall, W., Mercer, J. and La Fontaine, S. (Australia)

**POS-TUE-132 13:25 - 14:25**

Two BAM complexes in *Klebsiella pneumoniae*  
**Alcock, F.H.**, Clements, A. and Lithgow, T.J. (Australia)

**POS-MON-133 13:10 - 14:10**

Investigating the roles of Krüppel-like factors in megakaryocyte differentiation  
**Artuz, C.M.**, Mak, K.S., Funnell, A.P.W., Pearson, R.C.M. and Crossley, M. (Australia)

**POS-TUE-134 13:25 - 14:25**

Ezrin and NHERF are required for the recombinant PODXL enhancing adhesion, migration and cell-cell interactions  
Fernandez, D., Nowakowski, A., Vilar-Egea, M.P., Parrilla, R. and **Ayuso, M.S.** (Spain)

**POS-MON-135 13:10 - 14:10**

Cel biology of autism: characterisation of the *Deleted in Autism-1* gene family  
**Aziz, A.** and Bishop, N. (Australia)

**POS-TUE-136 13:25 - 14:25**

Molecular sizes of acid-insoluble and acid-soluble glycogen and their responses to exercise and re-feeding  
**Barnes, P.D.**, Clode, P. and Fournier, P.A. (Australia)

## POSTER SESSIONS MONDAY & TUESDAY

**POS-MON-137 13:10 - 14:10**

Functional studies of Homedomain-Interacting protein kinase using *C. elegans* as a model

**Berber, S.** and Nicholas, H.R. (Australia)

**POS-TUE-138 13:25 - 14:25**

SUMO modification of the zinc-finger protein CTCFL/BORIS

**Bernier-Latmani, J.** and Shaw, P. (Switzerland)

**POS-MON-139 13:10 - 14:10**

Regulation of copper uptake and efflux in *Drosophila* intestinal enterocytes

**Binks, T.** and Burke, R. (Australia)

**POS-TUE-140 13:25 - 14:25**

Characterization of Mavi-P35, a baculoviral multiple caspase inhibitor

**Brand, I.L.,** George, C., Lovric, M., Pantaki, D., Kitevska, T., Clem, R.J. and Hawkins, C.J. (Australia and USA)

**POS-MON-141 13:10 - 14:10**

The genetics and cell biology of copper homeostasis in *Drosophila*

Lye, J., Binks, T., Hwang, J., Camakaris, J. and **Burke, R.** (Australia)

**POS-TUE-142 13:25 - 14:25**

Peptidase expression in lymphocytes

**Chen, Y.,** Yao, T.W., Chowdhury, S., Gorrell, M.D. and Yu, D.M.T. (Australia)

**POS-MON-143 13:10 - 14:10**

Purine biosynthesis and its regulation in nodules of sub-tropical legumes

**Chen, C.,** Bussell, J., Atkins, C. and Smith, P. (Australia and Sweden)

**POS-TUE-144 13:25 - 14:25**

Autophosphorylation of ATM at serine 1981 mediates the interaction with MDC1 and stabilizes ATM at sites of DNA double-strand breaks

Davis, A., Zheng, C. and **Chen, D.J.** (USA)

**POS-MON-145 13:10 - 14:10**

Same signal triggers different cell responses in various cell lines

**Cheung, T.W.** and Lam, Y.W. (Hong Kong)

## POSTER SESSIONS MONDAY & TUESDAY

### POS-TUE-146 13:25 - 14:25

Functional characterization of a novel Aurora-A binding protein, AIBp in centrosome structure and spindle formation

**Chou, C.H.**, Wu, C.H., Huang, C.Y., Hsu, C.M., Howng, S.L. and Hong, Y.R. (Taiwan)

### POS-MON-147 13:10 - 14:10

Proteomic profile of the soybean symbiosome membrane

**Clarke, V.C.**, Loughlin, P.C., Jacoby, R.P., Taylor, N.L., Millar, A.H., Day, D.A. and Smith, P.M.C. (Australia)

### POS-TUE-148 13:25 - 14:25

Tropomyosin Tm5NM1 mediates actin-dependent cellular proliferation

**Coombes, J.D.**, Schevzov, G., Stehn, J., Creed, S., Desouza, M., Bach, C.T., O'Neill, G., Musgrove, E. and Gunning, P. (Australia)

### POS-MON-149 13:10 - 14:10

Dexamethasone inhibits intestinal secretory cell ER stress by upregulating degradation of misfolded protein ER stress (ERAD)

**Das, I.**, Png, C.W., Tran, T., Eri, R., Lourie, R., Adams, R., Oancea, I., Crane, D., Florin, T. and McGuckin, M. (Australia)

### POS-TUE-150 13:25 - 14:25

Aged-related increase in xanthine oxidase expression and activity in spleen from mice

Vida, C., Gonzalez, E., Hernandez, O., Rodriguez-Teres, S., Hernanz, A., Corpas, I. and **De la Fuente, M.** (Spain)

### POS-MON-151 13:10 - 14:10

Krüppel-like factor 3 (Klf3) and the UV-response pathway

**Dewi, V.A.**, Pearson, R.C.M. and Crossley, M. (Australia)

### POS-TUE-152 13:25 - 14:25

The secretin protein super-family: new structures for bacterial outer membrane proteins

**Dunstan, R.**, Alcock, F., Webb, C. and Lithgow, T. (Australia)

### POS-MON-153 13:10 - 14:10

Pollen-specific *depoll* gene effects the expression of LTP proteins in *Arabidopsis thaliana*

**Duplakova, N.** and Honys, D. (Czech Republic)

### POS-TUE-154 13:25 - 14:25

Proliferative and survival pathways in oesophageal cancer

**Esau, L.E.** and Hendricks, D. (South Africa)

## POSTER SESSIONS MONDAY & TUESDAY

### **POS-MON-155 13:10 - 14:10**

Targets of RNA-binding protein Musashi-1 in mouse germ cell development

**Fraser, B.A.**, Sobinoff, A., Pye, V.J., Roman, S.D., Hime, G.R., Siddall, N.A., Koopman, P. and McLaughlin, E.A. (Australia)

### **POS-TUE-156 13:25 - 14:25**

The Golgi-localised calcium atpase in breast cancer

**Grice, D.M.**, Vetter, I., Faddy, H.M., Kenny, P.A., Monteith, G.R. and Roberts-Thomson, S.J. (Australia and USA)

### **POS-MON-157 13:10 - 14:10**

Control of cell growth and survival via 14-3-3 (zeta) and type 1 insulin-like growth factor receptor

**Hadzir, S.**, Ramshaw, H., Krake, R., Delaine, C., Guthridge, M., Wallace, J.C., Lopez, A.F. and Forbes, B.E. (Australia)

### **POS-MON-158 13:10 - 14:10**

Oxidation and inflammation increase with ageing in immune cells from men and women

Mate, I., Arranz, L., Garcia-San Frutos, M.V., Vida, C., **Hernanz, A.** and De La Fuente, M. (Spain)

### **POS-MON-159 13:10 - 14:10**

Assembly of mitochondrial porins: adaptation to an endosymbiotic lifestyle

**Hewitt, V.L.**, Gabriel, K., Traven, A. and Lithgow, T.J. (Australia)

### **POS-TUE-160 13:25 - 14:25**

Marsupial interferon inducible transmembrane proteins

**Hickford, D.E.**, Shaw, G. and Renfree, M.B. (Australia)

### **POS-MON-161 13:10 - 14:10**

Differential expression of hedgehog signaling components and Snail/E-cadherin in human brain tumors

**Hong, Y.R.** and Chou, C.H. (Taiwan)

### **POS-TUE-162 13:25 - 14:25**

Cytotoxicity and optical-physical studies of 6-alkynyl-coumarin derivatives

Hisao, C. and **Hong, F.** (Taiwan)

### **POS-MON-163 13:10 - 14:10**

Identification of protein-protein interactions regulating sodium-proton antiporter activity

**Huynh, D.** and Gendall, T. (Australia and Vietnam)

**POS-TUE-164 13:25 - 14:25**

The hijacking of mitochondrial import mechanisms by PorB from *Neisseria meningitidis*

**Jiang, J.-H.**, Davies, J., Strugnell, R.A., Lithgow, T. and Gabriel, K. (Australia)

**POS-MON-165 13:10 - 14:10**

Expression and regulation of thioredoxin in cancer cells during hypoxia

**Karlenius, T.C.**, Shah, F.L., Clarke, F.M. and Tonissen, K.F. (Australia)

**POS-TUE-166 13:25 - 14:25**

Physiological significance of D-Amino acid degradative enzymes in nematode *Caenorhabditis elegans*

**Katane, M.**, Saitoh, Y., Seida, Y., Kawata, T., Maeda, K., Sekine, M., Furuchi, T., Kobuna, H., Sakamoto, T., Inoue, T., Arai, H., Nakagawa, Y. and Homma, H. (Japan)

**POS-MON-167 13:10 - 14:10**

CIAP antagonists and IFN $\gamma$  activate caspase and RIPK1 dependent death pathways in cancer cells

**Khan, N.**, Miasari, M., Chau, D., Wong, W.W.-L., Mckinlay, M., Chunduru, S.K., Benetatos, C.A., Condon, S.M., Vaux, D.L. and Silke, J. (Australia and USA)

**POS-TUE-168 13:25 - 14:25**

Investigation of how Ras<sup>ACT</sup> cooperates with RhoGEF2 over-expression and scribble mutants in tumourigenesis

**Khoo, P.**, Brumby, A.M., Humbert, P.O. and Richardson, H.E. (Australia)

**POS-MON-169 13:10 - 14:10**

Physiological function of a novel NF- $\kappa$ B-regulating molecule, Nucling, in immune system

**Kim, S.M.**, Sakai, T., Tran, N.H. and Fukui, K. (Japan)

**POS-TUE-170 13:25 - 14:25**

Reactive oxygen species generated through NADPH oxidase mediate UV-induced GSK-3 $\beta$  activation

**Kim, H.S.**, Kwon, Y.H., Kim, J.Y. and Sohn, J. (Korea)

## POSTER SESSIONS MONDAY & TUESDAY

### **POS-MON-171 13:10 - 14:10**

A role for sodium/proton exchangers and intracellular hydrogen ion concentration in regulating vitamin C-driven electron transport across the plasma membrane

Lane, D.J.R., Robinson, S.R., Czerwinska, H. and **Lawen, A.** (Australia)

### **POS-TUE-172 13:25 - 14:25**

GSK3 $\beta$  interacts with and phosphorylates Bcl2L12 in brain cancer cells

**Lin, C.C.**, Chen, W.J., Lin, R.C., Chou, C.H., Wu, C. and Hong, Y.R. (Taiwan)

### **POS-MON-173 13:10 - 14:10**

Plastidal starch phosphorylase in sweet potato roots is proteolytically regulated by the 20S proteasome

**Lin, Y.C.**, Chou, I.M., Chen, A.N., Cheng, C.H., Chang, S.C., and Juang, R.H. (Taiwan)

### **POS-TUE-174 13:25 - 14:25**

P21-activated kinase 1 is important for survival of colorectal cancer cells

**Liu, H.**, Huynh, N., Baldwin, G. and He, H. (Australia)

### **POS-MON-175 13:10 - 14:10**

PSPC1 is an importin alpha nucleocytoplasmic transport cargo

**Major, A.T.**, Hogarth, C.A., Miyamoto, Y., Young, J.C., Jans, D.A. and Loveland, K.L. (Australia and USA)

### **POS-TUE-176 13:25 - 14:25**

Regulation of embryonic globins by the Krüppel-like factors

**Mak, K.S.**, Funnell, A.P.W., Pelka, G.J., Radziewicz, T., Power, M., Tam, P.P., Pearson, R.C.M. and Crossley, M. (Australia)

### **POS-MON-177 13:10 - 14:10**

Hepatocyte growth factor (HGF) acutely regulates the epithelial junctional cytoskeleton and zonula adherens by controlling junctional Myosin VI

**Mangold, S.** (Australia)

### **POS-TUE-178 13:25 - 14:25**

Activation of insulin-like growth factor binding protein-3 (IGFBP-3) by DNA-dependent protein kinase (DNA-PK) or ataxia telangiectasia mutated (ATM) is not necessary for its proapoptotic functions

**Marzec, K.A.**, Martin, J.L. and Baxter, R.C. (Australia)

PLANT SYSTEMS

179 – 215

**POS-MON-179 13:10 - 14:10**

Genetic transformation in *Colletotrichum truncatum* associated with anthracnose disease of chili pepper

**Auyong, A.S.M.**, Ford, R. and Taylor, P.W.J. (Australia)

**POS-TUE-180 13:25 - 14:25**

Proteomic studies on a high amylolytic Nigerian maize cultivar

**Awoyinka, O.A.**, Adebawo, O.O., Daini, O.A. and Dipanker, C. (Nigeria and India)

**POS-MON-181 13:10 - 14:10**

Non-destructive high-throughput phenotyping in the Plant Accelerator to study plants under salt and water stress conditions

**Berger, B.** and Tester, M. (Australia)

**POS-TUE-182 13:25 - 14:25**

Molecular analysis of phosphite induced responses in *Arabidopsis*

**Berkowitz, O.**, Jost, R., Hardy, G.S.E.J. and O'Brien, P.A. (Australia)

**POS-MON-183 13:10 - 14:10**

Gene expression of poncirus trifoliata, citrus sunki and their hybrids under infection of phytophthora parasitica using real-time quantitative PCR

**Boava, L.P.**, Cristofani-Yaly, M., Mafra, V.S., Kubo, K.S., Stuart, R.M. and Machado, M.A. (Brazil)

**POS-TUE-184 13:25 - 14:25**

Auxins: crucial to grape berry ripening

**Bottcher, C.**, Harvey, K., Forde, C., Boss, P.K. and Davies, C. (Australia and Switzerland)

**POS-MON-185 13:10 - 14:10**

*In vivo* role for flavonoids in auxin transport and gravity responses

**Buer, C.S.** and Djordjevic, M.A. (Australia)

**POS-TUE-186 13:25 - 14:25**

Spectral extension of photosynthesis

**Chen, M.** (Australia)

## POSTER SESSIONS MONDAY & TUESDAY

### POS-MON-187 13:10 - 14:10

RNAi-mediated manipulation of nitrogen defences in plants using pyridine alkaloid biosynthesis in *Nicotiana* as an experimental system

**Dalton, H.L.**, DeBoer, K.D., Neale, A.D. and Hamill, J.D. (Australia)

### POS-TUE-188 13:25 - 14:25

Characterisation of two necrosis and ethylene inducing protein-like (NLP) genes from *Sclerotinia sclerotiorum*

**Dinsdale, A.J.**, Van Den Elsen, F., Barnett, R. and Plummer, K. (Australia and The Netherlands)

### POS-MON-189 13:10 - 14:10

*Chlamydomonas reinhardtii* - a model alga for the study of triacylglycerol biosynthesis and lipid body biogenesis

**Djordjevic, M.A.**, Chen, H.-C., Hillier, W., Hocart, C. and James, G. (Australia)

### POS-TUE-190 13:25 - 14:25

Evaluation of growth, nodule development and the presence of SAT1 homologs in the Australian wild soybean relative *Glycine canescens*

**Ebrahimie, E.**, Mazurkiewicz, D., Mohammadidehcheshmeh, M., Chiasson, D. and Kaiser, B. (Australia)

### POS-MON-191 13:10 - 14:10

The impact of chloroplast number on photosynthetic properties of tobacco

**Evans, J.R.**, Tazoe, Y., Pengelly, J.J.L., Nugent, G.D. and Von Caemmerer, A. (Australia)

### POS-TUE-192 13:25 - 14:25

The modification of flower colour in *Dianthus caryophyllus*

**Fiorito, S.D.**, Parish, R.W., Brugliera, F. and Gendall, A.R. (Australia)

### POS-MON-193 13:10 - 14:10

Proteomic analysis of the response of wheat cultivars that differ in their capacity to withstand drought

**Ford, K.L.**, Cassin, A. and Bacic, A. (Australia)

### POS-TUE-194 13:25 - 14:25

The affects of light on cyanogenesis in forage sorghum

**Fromhold, S.M.**, O'Donnell, N.H., Blomstedt, C.K., Stuart, P.N., Gleadow, R.M., Hamill, J.D. and Neale, A.D. (Australia)

## POSTER SESSIONS MONDAY & TUESDAY

### POS-MON-195 13:10 - 14:10

A model desiccation-tolerant grass, *Sporobolus stapfianus*  
gandoger

**Gaff, D.F.**, Blomstedt, C.K., Neale, A.D., Hamill, J.D.,  
Ghasempour, H.R. and Sutaryono, Y.A. (Australia and Indonesia)

### POS-TUE-196 13:25 - 14:25

Sclerotial formation in *Sclerotinia*

**Greenhill, A.**, Gendall, A., Benny, U., Rollins, J., Porter, I. and  
Plummer, K. (Australia)

### POS-MON-197 13:10 - 14:10

Expressing red Rubiscos in green plants

**Gunn, L.H.** and Whitney, S.M. (Australia)

### POS-TUE-198 13:25 - 14:25

Manipulation of toxic nitrogen secondary metabolism in plants  
and opportunities in plant biotechnology

**Hamill, J.D.**, Blomstedt, C.K., Dalton, H.L., DeBoer, K.D.,  
DeGuzman, G., Gleadow, R.M., Ling, H.Y., O'Donnell, N.H.,  
Neale, A.D. and Walmsley, A.M. (Australia)

### POS-MON-199 13:10 - 14:10

Identification of flagellar mastigoneme proteins from  
*Phytophthora*

Blackman, L.M., Arikawa, M., Yamada, S., Suzaki, T. and  
**Hardham, A.R.** (Australia and Japan)

### POS-TUE-200 13:25 - 14:25

Molecular analysis of the early stages of soybean nodulation

**Hayashi, S.**, Reid, D., Lorenc, M., Stiller, J., Edwards, D.,  
Ferguson, B.J. and Gresshoff, P.M. (Australia)

### POS-MON-201 13:10 - 14:10

Silencing of the phospholipase C gene in protoplasts from *Coffea*  
*arabica* L. suspension cells

Poot-Poot, W.A., De los Santos-Briones, C., Munoz-Sanchez,  
J.A. and **Hernandez-Sotomayor, S.M.T.** (Mexico)

### POS-TUE-202 13:25 - 14:25

Sequence dynamics of an *Arabidopsis thaliana* genomic locus  
under highlight (HL) stress

**Ichim, M.C.**, Milcamps, A., Papazova, N., Depicker, A., De  
Loose, M. and Van Den Eede, G. (Romania)

**POS-MON-203 13:10 - 14:10**

The *Arabidopsis* phyto-sulfokine receptor contains a functional guanylyl cyclase domain enabling cGMP-dependent downstream signalling *in vivo*

Kwezi, L., Ruzvidzo, O., Wheeler, J.I., Govender, K., Iacoune, S., Thompson, P.E., Gehring, C. and **Irving, H.R.** (Australia, South Africa and Kingdom of Saudi Arabia)

**POS-TUE-204 13:25 - 14:25**

A comparative proteomics approach for identification of effectors in *Venturia inaequalis*

**Jones, D.**, Mesarich, C., Hill, G., Shiller, J., Bowen, J., Templeton, M. and Plummer, K. (Australia and New Zealand)

**POS-MON-205 13:10 - 14:10**

Does phosphite mimic phosphate in regulating the phosphate-starvation response in plants?

**Jost, R.**, Pharmawati, M., Berkowitz, O., Lambers, H. and Finnegan, P.M. (Australia and Bali)

**POS-TUE-206 13:25 - 14:25**

Modification of the intercellular contacts in plant suspension cells through adaptation to environmental stress

**Kasproicz, A.K.**, Michalak, M.J., Baluska, F. and Wjtaszek, P. (Poland and Germany)

**POS-MON-207 13:10 - 14:10**

Evolution of a CIS-element that regulates petal loss expression in the perianth of the *Arabidopsis* flower

**Kilinc, A.** and Smyth, D.R. (Australia)

**POS-TUE-208 13:25 - 14:25**

Novel transient gene-replacement system to investigate RNA processing activities of dicer-like enzymes in plants

**Kim, K.W.**, Eamens, A.L., Fusaro, A. and Waterhouse, P.M. (Australia)

**POS-MON-209 13:10 - 14:10**

Structural basis of disease resistance in flax against flax rust

Ve, T., Williams, S., Valkov, E., Stamp, A., Sornaraj, P., De Courcy-Ireland, E., Ellis, J.G., Dodds, P.N., Anderson, P.A. and **Kobe, B.** (Australia)

## POSTER SESSIONS MONDAY & TUESDAY

### POS-TUE-210 13:25 - 14:25

Identification of plant host proteins targeted by flax rust effector proteins

**Koeck, M.**, Dodds, P.N., Jones, D.A., Ellis, J.G. and Hardham, A.R. (Australia)

### POS-MON-211 13:10 - 14:10

De novo assembly of the *Nicotiana glauca* pollen transcriptome using next-generation sequencing

**Koh, P.**, Cassin, A.M., Edwards, D., Bacic, A. and Newbiggin, E. (Australia)

### POS-TUE-212 13:25 - 14:25

Characterisation of legume angiogenic active metabolites

**Kordbacheh, F.**, Hocart, C., Du Fall, L., Oakes, M., Bezos, A., Parish, C. and Djordjevic, M. (Australia)

### POS-MON-213 13:10 - 14:10

Genome-wide transcriptome analysis of citrus hybrids plants resistant or susceptible to Citrus leprosis C (CiLV-C)

**Kubo, K.S.**, Cristofani-Yaly, M., Ribeiro-Alves, M., Boava, L.P., Costa, F.M., Kishi, L., Mafra, V.S., Freitas-Astua, J., Bastianel, M. and Machado, M.A. (Brazil)

### POS-TUE-214 13:25 - 14:25

Formation of second whorl organs in the *Arabidopsis* flower involves auxin influx and is sensitive to distortion of the flower meristem shape

**Lampugnani, E.R.**, Kilinc, A. and Smyth, D.R. (Australia)

### POS-MON-215 13:10 - 14:10

Tapetum and pollen development regulated by *AtMYB103* and its application in hybrid seed production

**Li, S.F.**, Phan, H., Iacuone, S., Avdic, A., Xu, Y., Pham, H. and Parish, R.W. (Australia)

## PROTEINS: MACHINES OF LIFE

216 – 261

### POS-TUE-216 13:25 - 14:25

Investigating cellular signalling pathways in cancer cell lines treated with a novel computationally designed myxoma virus T5 peptide analogue

**Almansour, N.M.**, Pirogova, E. and Istivan, T. (Australia)

## POSTER SESSIONS MONDAY & TUESDAY

### POS-MON-217 13:10 - 14:10

Analysis of subunit interactions within the nucleosome remodelling and Deacetylase (NuRD) complex

**Alqarni, S.**, Thong, S., Josep, F. and Mackay, J. (Australia)

### POS-TUE-218 13:25 - 14:25

A modular BAM complex in the outer membrane of the  $\alpha$ -proteobacterium *Caulobacter crescentus*

**Anwari, K.**, Poggio, S., Jacobs-Wagner, C. and Lithgow, T.J. (Australia and USA)

### POS-MON-219 13:10 - 14:10

Structure of dihydrodipicolinate synthase from bacteria and plants: insights into regulation and inhibition of a valid drug target

**Atkinson, S.C.**, Dogovski, C., Dobson, R.C.J. and Perugini, M.A. (Australia)

### POS-TUE-220 13:25 - 14:25

Mechanistic perspective for polymerization of ADH and role of  $\alpha$ -Cyclodextrin as an artificial chaperone for solubilization of larger amorphous nanoaggregates

**Barzegar, A.** and Moosavi-Movahedi, A.A. (Iran)

### POS-MON-221 13:10 - 14:10

Analysis of the chromatin binding properties of CHD4

**Bendak, K.**, Mansfield, R.E., Burdach, J., Crossley, M. and Mackay, J. (Australia)

### POS-TUE-222 13:25 - 14:25

Unravelling the enzymes of the tartaric acid biosynthetic pathway in *Vitis vinifera*

**Burbidge, C.A.**, Soole, K.L., Hayes, M.A. and Ford, C.M. (Australia)

### POS-MON-223 13:10 - 14:10

AP180 binding to clathrin in endocytosis: a new insight

**Chan, L.S.**, Robinson, P. and Graham, M. (Australia)

### POS-TUE-224 13:25 - 14:25

Expression and purification of human G72 and DAO, two schizophrenia-related proteins

**Chen, S.Y.**, Chen, Y.J., Wang, C.M., Lane, H.Y. and Chang, H.T. (Taiwan)

## POSTER SESSIONS MONDAY & TUESDAY

**POS-MON-225 13:10 - 14:10**

A potassium switch of ATP-induced GroEL conformational changes

**Chen, J.**, Makabe, K. and Kuwajima, K. (Japan)

**POS-TUE-226 13:25 - 14:25**

Structure-activity analysis of carocin S2

**Chuang, D.Y.** and Wu, J.L. (Taiwan)

**POS-MON-227 13:10 - 14:10**

Structure and function of the TimA protein from *Caulobacter crescentus*

**Civciristov, S.**, Clements, A., Purcell, A., Williamson, N. and Lithgow, T. (Australia)

**POS-TUE-228 13:25 - 14:25**

Biosynthesis of circular proteins in plants

**Conlan, B.**, Gillon, A.D., Barbeta, B.L., Colgrave, M., Craik, D.J. and Anderson, M.A. (Australia)

**POS-MON-229 13:10 - 14:10**

The use of cell permeable peptides to inhibit SPRY domain-containing SOCS box protein 2 (SPSB2) regulation of inducible nitric oxide synthase (iNOS)

**D'Cruz, A.**, Lewis, R.S., Kuang, Z., Norton, R.S., Babon, J.J. and Nicholson, S.E. (Australia)

**POS-TUE-230 13:25 - 14:25**

Mechanisms of transthyretin amyloid formation

**D'Souza, D.G.**, Altland, K., Richardson, S.J. and Pattenden, L.K. (Australia and Germany)

**POS-MON-231 13:10 - 14:10**

Role of the BRCA1 binding protein BRAP2 in the testis

**Fatima, S.**, Davies, G.R., Fulcher, A.J., Wagstaff, K.M., Whiley, P., Loveland, K.L. and Jans, D.A. (Australia)

**POS-TUE-232 13:25 - 14:25**

Structural studies with crotoxin B from *Crotalus durissus* subspecies venom

**Fernandes, C.A.H.**, Salvador, G.H.M., Colombi, D., Soares, A.M. and Fontes, M.R.M. (Brazil)

## POSTER SESSIONS MONDAY & TUESDAY

### POS-MON-233 13:10 - 14:10

Characterization of anti-staphylococcal protein (P128) derived from bacteriophage from in process to purification using microfluidic based LC system coupled to an advanced QTOF-MS  
Gudihal, R., Sundaram, P.M., Madhavi, H.N., Asrani, J. and **Fouracre, C.G.** (India and Australia)

### POS-TUE-234 13:25 - 14:25

Expression and purification of recombinant benzaldehyde dehydrogenase and benzoate dioxygenase from *Rhodococcus ruber* UKMP-5M  
**Hamzah, A.**, Rabu, A. and Tvakoli, A. (Malaysia)

### POS-MON-235 13:10 - 14:10

Beyond permeabilisation - the role of intracellular targets in the action of an antifungal peptide  
**Hayes, B.**, Conlan, B., Anderson, M. and Van der Weerden, N. (Australia)

### POS-TUE-236 13:25 - 14:25

PAS-domain interactions of *Drosophila* and mouse period clock proteins  
**Hennig, S.**, Strauss, H., Arens, J., Schulze, S., Yildiz, Ö., Theiss, C. and Wolf, E. (Germany)

### POS-MON-237 13:10 - 14:10

The three-dimensional structure of the bifunctional FAD synthetase from *Corynebacterium ammoniagenes* reveals oligomeric assemblies  
**Herguedas, B.**, Martinez-Julvez, M., Frago, S., Medina, M. and Hermoso, J.A. (Spain)

### POS-TUE-238 13:25 - 14:25

Understanding how FLIPs inhibit death receptor-mediated apoptosis  
Mirams, R.E., Vajjhala, P.R., Stojanovski, S., Lambert, L.K. and **Hill, J.M.** (Australia)

### POS-MON-239 13:10 - 14:10

The structure of Boo/diva reveals a divergent Bcl-2 protein  
**Hinds, M.G.**, Day, C.L., and Rautureau, G.J.P. (Australia and New Zealand)

## POSTER SESSIONS MONDAY & TUESDAY

**POS-TUE-240 13:25 - 14:25**

Bacterial diaminopimelate epimerase forms an active dimer

**Hor, L.**, Dobson, R.C.J., Dogovski, C., Hutton, C.A. and Perugini, M.A. (Australia)

**POS-MON-241 13:10 - 14:10**

Self-interaction of the sulphate transporter, SHST1

Leves, F.P., Tierney, M.L., Price, G.D. and **Howitt, S.M.** (Australia)

**POS-TUE-242 13:25 - 14:25**

Visualizing difference of conformations of c-Src in live cells using tetracysteine tags and reash reactivity

**Irtegun, S.**, Schweiggert, J., Mulhern, T. and Hatters, D. (Australia)

**POS-MON-243 13:10 - 14:10**

Dissecting the mechanism of binding of isoform-selective PI 3-kinase small molecule inhibitors

**Jennings, I.G.**, Zheng, J., Imran, S.I., Pinson, J., Schmidt-Kittler, O., Kinzler, K.W., Vogelstein, B. and Thompson, P.E. (Australia and USA)

**POS-TUE-244 13:25 - 14:25**

Development of fluorescent chemosensor substrates for high throughput screening of therapeutic inhibitors and assay of oncogenic protein tyrosine kinase activity in chronic myelogenous leukemia cells

**Kamaruddin, M.A.**, Hossain, M.I., Jarasrassamee, B., Thompson, P., Scanlon, D., Cheng, H.C. and Graham, B. (Australia)

**POS-MON-245 13:10 - 14:10**

A proteomic approach to investigate the mechanisms of sodium exclusion in *Physcomitrella patens*

**Kelly, L.**, Ford, K. and Bacic, A. (Australia)

**POS-TUE-246 13:25 - 14:25**

Characterising a caspase-2 cleavage site consensus and identifying its substrates

**Kitevska, T.**, Roberts, S.J., Scott, F.L. and Hawkins, C.J. (Australia and USA)

**POS-MON-247 13:10 - 14:10**

Exploring molecular determinants of protein-carbohydrate interactions in the carbohydrate binding module isoforms of AMPK

**Koay, A.,** Bieri, M., Petrie, E.J., Bailey, M.F., Park, K., Gooley, P.R. and Stapleton D. (Australia and Korea)

**POS-TUE-248 13:25 - 14:25**

Molecular design and targeted cellular delivery of engineered human deoxycytidine kinase to enhance metabolic activation of nucleoside analog prodrugs and improve anticancer therapy

**Konrad, M.,** Ort, S., Mcorley, T. and Lavie, A. (Germany and USA)

**POS-MON-249 13:10 - 14:10**

Channelling scent: New approaches to understand the structural basis of insect odorant reception

**Kralicek, A.V.,** Law, A.L.M., Carraher, C., Christie, D.L. and Newcomb, R.D. (New Zealand)

**POS-TUE-250 13:25 - 14:25**

Structural basis for the inhibition of apoptosis by Epstein-Barr virus BHRF1

**Kvansakul, M.,** Wei, A. Fletcher, J.I., Willis, S.N., Chen, L., Colman, P.M. and Huang, D.C.S. (Australia)

**POS-MON-251 13:10 - 14:10**

The natural history of mitsugumin-53 and the membrane repair complex

**Lemckert, F.,** Waddell, L., Tran, J., Zheng, F., Evesson, F., Chen, A., Clarke, N., Ma, J., North, K. and Cooper, S. (Australia and USA)

**POS-TUE-252 13:25 - 14:25**

Analysis of homotypic and heterotypic interactions of arenavirus Z matrix protein

**Loureiro, M.E.,** Levingston MacLeod, J.M. and Lopez, N. (Argentina)

**POS-MON-253 13:10 - 14:10**

Different domains of the drosophila insulator proteins interact with CP190 and E(y)2 proteins mediating various functions of Drosophila insulators

**Maksimenko, O.,** Bonchuk, A., Stakhov, V. and Georgiev, P. (Russian Federation)

## POSTER SESSIONS MONDAY & TUESDAY

**POS-TUE-254 13:25 - 14:25**

Cathepsin B as a target for control of blood-feeding parasites  
Jilkova, A., Horn, M., Rezacova, P., Kopacek, P., Caffrey, C.R.  
and **Mares, M.** (Czech Republic and USA)

**POS-MON-255 13:10 - 14:10**

The N-terminal extension of holocarboxylase synthetase is  
required for recognition of protein substrates  
**Mayende, L.**, Swift, R.D., Bailey, L.M., Wallace, J.C., Booker,  
G.W. and Polyak, S.W. (Australia)

**POS-TUE-256 13:25 - 14:25**

Characterization of assembly factors involved in complex I  
biogenesis and disease  
**McKenzie, M.**, Lazarou, M., Thorburn, D.R. and Ryan, M.T.  
(Australia)

**POS-MON-257 13:10 - 14:10**

Elucidating the molecular details of RssB-mediated turnover of  
sigmas by the AAA+ protease, ClpX  
**Micevski, D.**, Spall, S.K., Truscott, K.N. and Dougan, D.  
(Australia)

**POS-TUE-258 13:25 - 14:25**

A mechanism of DNA homology search, based on the structure  
of DNA bound to proteins that promote homologous  
recombination  
Masuda, T., Ito, Y., Terada, T., Shibata, T. and **Mikawa, T.**  
(Japan)

**POS-MON-259 13:10 - 14:10**

Dihydrodipicolinate synthase: *o*-aminobenzaldehyde assay for  
high-throughput chemical screen and characterisation of  
chromophore  
**Mitsakos, V.**, Hutton, C.A. and Perugini, M.A. (Australia)

**POS-TUE-260 13:25 - 14:25**

EBITEIN1, a novel ERK1/2 binding protein  
**Miura, K.** and Imaki, J. (Japan)

**POS-MON-261 13:10 - 14:10**

Analysis of the conserved Cx3C motif in Tim9 and Tim10  
proteins of the mitochondrial intermembrane space  
**Mooga, V.P.**, Baker, M.J., Stojanovski, D. and Ryan, M.T.  
(Australia)

SYSTEMS BIOLOGY AND BIOTECHNOLOGY

262 – 284

**POS-TUE-262 13:25 - 14:25**

Proteomic analysis of rice root cultures (*Oryza sativa* L. Sub. indica) during sodium chloride stress

**Bhorncharoenop, C.**, Phaonakrop, N., Jaresitthikunchai, J., Uyen, U., Atikankun, S., Roytrakul, S. and Wetprasit, N. (Thailand)

**POS-MON-263 13:10 - 14:10**

Cold adaptation of proteins: a biophysical study of a psychrophilic alpha-amylase and its stabilized mutants

**Cipolla, A.C.**, Damico, S.D. and Fell, F.G. (Belgium)

**POS-TUE-264 13:25 - 14:25**

Comparative study of HIV-1 Tat transiently and transgenically expressed in tomato

**Cueno, M.E.**, Yamato, H., Hibi, Y. and Okamoto, T. (Japan)

**POS-MON-265 13:10 - 14:10**

Evaluation of alternative mechanisms for the efficient production of a plant-made vaccine

**De Guzman, G.M.**, Walmsley, A.M., Webster, D. and Hamill, J.D. (Australia)

**POS-TUE-266 13:25 - 14:25**

Differential analysis of vitamin D treated U937 myeloid leukemic cells

**Durand, F.M.**, Levina, V., Cooke, I., Coley, A., Hoogenraad, N. and Talbo, G.H. (Australia)

**POS-MON-267 13:10 - 14:10**

Novel bioactive secondary metabolites from Australian medicinal plant endophytes

**Fazendin, Y.K.**, Lim, K.F., Cahill, D., Rookes, J., Conlan, X. and Barnett, N.W. (Australia)

**POS-TUE-268 13:25 - 14:25**

Oxidation of tetrahydropterines by quinines

**Garcia Molina, F.**, Muñoz Muñoz, J.L., Martinez Ortiz, F., Varon, R., Tudela, J., García Canovas, F. and Rodriguez-Lopez, J.N. (Spain)

**POS-MON-269 13:10 - 14:10**

Conserved Block7 sequence of *Bacillus thuringiensis* Cry toxins  
- the innovational peptide-tag for efficient protein production

**Hayakawa, T.**, Shimizu, Y., Ishida, T. and Sakai, H. (Japan)

**POS-TUE-270 13:25 - 14:25**

Development of analytical methods for sequencing  
oligonucleotides using MALDI-TOFMS

Minohata, T., **Hewetson, J.W.**, Yamazaki, Y. and Yamada, M.  
(Japan and Australia)

**POS-MON-271 13:10 - 14:10**

Efficient production of the recombinant Cystatin C using  
innovational peptide-tag derived from *Bacillus thuringiensis* Cry  
toxin

**Iwamoto, S.**, Fan, K., Sato, S., Hayakawa, T., Sudo, S. and  
Sakai, H. (Japan)

**POS-TUE-272 13:25 - 14:25**

Protein structure determination from pseudocontact shift

Schmitz, C., Vernon, R., Otting, G., Baker, D. and **Huber, T.**  
(Netherlands and Australia)

**POS-MON-273 13:10 - 14:10**

Innovative strategy for efficient protein production using a novel  
peptide tag derived from Cry toxin

**Sakai, H.**, Sato, S., Iwamoto, S., Sudo, S., Sakamoto, Y., Uchida,  
M., Matsushima, K., Kashino, Y. and Hayakawa, T. (Japan)

**POS-TUE-274 13:25 - 14:25**

Functional micropatterns to control cell behaviors

**Ho, C.**, Kumar, G. and Co, C. (USA)

**POS-MON-275 13:10 - 14:10**

*Chlamydomonas reinhardtii*. - an algal feedstock for liquid  
biofuels

**James, G.**, Hocart, C., Hillier, W. and Djordjevic, M. (Australia)

**POS-TUE-276 13:25 - 14:25**

Fluorometric approach to selectivity screening of modified  
oligonucleotide hybridization probes

**Kabilov, M.R.** and Pyshnyi, D.V. (Russian Federation)

**POS-MON-277 13:10 - 14:10**

Role of carbohydrate binding domain on expression, activity and  
stability of xylanase C of *Clostridium thermocellum*

**Khan, M.I.M.**, Sajjad, M. and Akhtar, M.W. (Pakistan)

## POSTER SESSIONS MONDAY & TUESDAY

**POS-TUE-278 13:25 - 14:25**

Immunological measurement of Troponin I in sera from the patients with heart damages diseases

**Kim, H.J.**, Kim, T.K., Wang, H., Oh, S.W. and Choi, E.Y. (South Korea)

**POS-MON-279 13:10 - 14:10**

Characterisation of the grain specific homeodomain transcription factors from wheat

**Kovalchuk, N.**, Wu, W., Bazanova, N., Singh, R., Ismagul, A., Eliby, S., Johnson, A., Hrmova, M., Langridge, P. and Lopato, S. (Australia)

**POS-TUE-280 13:25 - 14:25**

Telomerase activity and its use in monitoring bladder cancer

**Lalla, M.**, Dezfouli, S., Mendez, R., Tian, P., Elwood, N. and Macreadie, I. (Australia)

**POS-MON-281 13:10 - 14:10**

Analytical prerequisites for differential and quantitative proteomics

**Levina, V.**, Cooke, I., Durand, F.M., Boyd, S.E., O'Connor, L., Hoogenraad, N. and Talbo, G.H. (Australia)

**POS-TUE-282 13:25 - 14:25**

Rapid response of the human nucleolar proteome to serum stimulation

**Li, Z.F.**, Liang, Y.M., Wang, X., So, L.K.Y. and Lam Y.W. (China)

**POS-MON-283 13:10 - 14:10**

Discovery of novel phage proteins for biotechnology by high throughput sequencing of phage DNA from South African deep gold mines

Mabizela, N.B. and **Litthauer, D.** (South Africa)

**POS-TUE-284 13:25 - 14:25**

Significant improvement of the thermo-stability and optimum pH range of catalytic activity of a lactone-specific esterase by random mutagenesis

**Ishizuka, M.**, Tsukimura, W., Namiki, K., Akanuma, G. and Ushio, K. (Japan)

EDUCATION

285 – 290

- POS-TUE-285 13:25 - 14:25**  
Effectiveness of peer discussion for student understanding of acid-base equilibria  
**Watters, D.J.** and Love, C.A. (Australia)
- POS-TUE-286 13:25 - 14:25**  
Acquisition of scientific writing skills through activities embedded into biological laboratory courses  
**Tonissen, K.F.,** Lee, S.E., Woods, K.J. and Osborne, S.A. (Australia)
- POS-TUE-287 13:25 - 14:25**  
How research informs and enhances learning using student project cases in the Monash MBBS programme  
**Samarawickrema, N.A.** and Macaulay, J.O. (Australia)
- POS-TUE-288 13:25 - 14:25**  
Constructing a generalist biochemistry course around core concepts: Building the big picture for a large mixed-learner cohort  
**Rowland, S.L.,** Gillam, E., Hamiton, S., Harrinson, J., Wright, T. and Ward, L. (Australia)
- POS-TUE-289 13:25 - 14:25**  
Imi Ho'ola post-baccalaureate program at the University of Hawaii School of Medicine  
**Ha, C.,** Lee, W.M. and Judd, N. (USA)
- POS-TUE-290 13:25 - 14:25**  
Student engagement in 1st year biosciences  
**Nott, M.W.** and Poronnik, P. (Australia)

**LATE POSTERS**  
(*Not sorted by theme*)  
291 – 356

**POS-MON-291 13:10 - 14:10**

Gene expression profiling in circulating cells of breast carcinoma patients

**Zima, T.**, Mikulova, V., Tesarova, P., Kolostova, K., Kubecova, M., Rusnakova, V. and Kubista, M. (Czech Republic)

**POS-TUE-292 13:25 - 14:25**

Characterisation of putative plasmodesmata proteins of the Arabidopsis calnexin family

**Liu, D.Y.T.**, Smith, P.M.C., Day, D.A. and Overall, R.L. (Australia)

**POS-MON-293 13:10 - 14:10**

Critical role of C-zyme on p53IG-mediated apoptosis

**Kang, M.Y.** (Korea)

**POS-TUE-294 13:25 - 14:25**

Phosphorylation of PTP-PEST at Ser-39 is regulated through the binding of PP1 alpha

**Palmer, H.E.F.**, Nakamura, K. and Mashima, K. (Japan)

**POS-MON-295 13:10 - 14:10**

CD317/tetherin and lipid raft organization

**Billcliff, P.**, Rollason, R., Prior, I.A. and Banting, G. (UK)

**POS-TUE-296 13:25 - 14:25**

A novel control point in cholesterol biosynthesis

Gill, S., **Stevenson, J.**, Kristiana, I. and Brown, A.J. (Australia)

**POS-MON-297 13:10 - 14:10**

Diversity and biosynthesis of sandalwood oil: scents from *Santalum*

**Plummer, J.A.**, Jones, C.G., Moniodis, J., Zulak, K.G., Barbour, E.L., Bohlmann, J. and Ghizalberti, E.L. (Australia and Canada)

## POSTER SESSIONS MONDAY & TUESDAY

**POS-TUE-298 13:25 - 14:25**

Deletions, repeat-induced point mutations and amino acid substitutions drive evolution of linked effectors in a fungal plant pathogen

van de Wouw, A.P., Cozijnsen, A.J., Hane, J., Brunner, P.C., McDonald, B.A., Oliver, R.P. and **Howlett, B.J.** (Australia and Switzerland)

**POS-MON-299 13:10 - 14:10**

Sodium exclusion genes increase salinity tolerance in durum wheat

**Munns, R.** and James, R. (Australia)

**POS-TUE-300 13:25 - 14:25**

*Flowering locus H (FLH)* and the vernalisation pathway

**Seedat, N.** and Gendall, A. (Australia)

**POS-MON-301 13:10 - 14:10**

Characterization of strawberry plants over-expressing the anthocyanin-regulating gene, *MYB10*

**Lin-Wang, K.**, McGhie, T.K., Espley, R.V., Hellens, R.P. and Allan, A.C. (New Zealand)

**POS-TUE-302 13:25 - 14:25**

Artificial microRNA-mediated downregulation of starch branching enzyme *Iib* expression in rice

**Butardo, V.M.**, Fitzgerald, M.A., Bird, T., Resurreccion, A.P., Larroque, O., Gidley, M.J., Morell, M.K. and Rahman, S. (Australia and Philippines)

**POS-MON-303 13:10 - 14:10**

Growth, proline and ion accumulation in *Safflower callus* cultures under drought-induced osmotic stress

**Karimi, N.**, Ghasempour, H.R. and Soheilikhah, Z. (Iran)

**POS-TUE-304 13:25 - 14:25**

Structural and functional changes induced by tyrosine nitration in cytochrome *C*, a bi-functional protein

**Diaz-Moreno, I.**, Garcia-Heredia, J.M., Nieto, P.M., Orzaez, M., Teixeira, M., Perez-Paya, E., Diaz-Quintana, A. and De La Rosa, M.A. (Spain and Portugal)

## POSTER SESSIONS MONDAY & TUESDAY

**POS-MON-305 13:10 - 14:10**

Application of lentil lectin in the glycoproteomic profiling of serum samples from patients with nasopharyngeal carcinoma  
**Seriramalu, R.**, Pang, W.W., Abdul-Rahman, P.S., Bustam, A.Z., Khoo, A.S.B. and Hashim, O.H. (Malaysia)

**POS-TUE-306 13:25 - 14:25**

Structural decay of fish myoglobin through thermal treatment  
**Ochiai, Y.** (Japan)

**POS-MON-307 13:10 - 14:10**

Structure-activity relationship in human antiquitin  
**Fong, W.P.**, Wong, C.P. and Chan, K.L. (Hong Kong)

**POS-TUE-308 13:25 - 14:25**

Electrophoretic analysis of isoenzymes in three cultivars of date palm (*Phoenix dactylifera* L.) leaflets and roots from Al-Ahsa and Al-Qatif in Saudi Arabia  
**Al-Issa, A.M.**, Al-Helal, A.A. and Al-Saad, F.A. (Saudi Arabia)

**POS-MON-309 13:10 - 14:10**

Solution structure and dynamics of the ring finger domain from the human splicing-associated protein RBBP6 determined using heteronuclear NMR spectroscopy  
**Kappo, M.A.**, Atkinson, R.A., Ab, E., Rees, D.J.G. and Pugh, D.J.R. (South Africa, UK and Netherlands).

**POS-TUE-310 13:25 - 14:25**

Crystal structure of the entire ectodomain of gp130: insights into the molecular assembly of cytokine receptor complexes  
**Xu, Y.**, Kershaw, N., Luo, C.S., Soo, P., Pocock, M.J., Czabotar, P.E., Hilton, D.J., Nicola, N.A., Garrett, T.P.J. and Zhang, J.-G. (Australia)

**POS-MON-311 13:10 - 14:10**

Targeted peptidomic approaches to study immune recognition  
Dudek, N.L., Tan, C.T., Croft, N.P., Scull, K.E., Corbett, A.J., Webb, A.I., Barr, D.P., Reilly, C.B., Williamson, N.A. and  
**Purcell, A.W.** (Australia)

**POS-TUE-312 13:25 - 14:25**

Variable role of non-catalytic domains on activities of cellulases and xylanases  
Sajjad, M., Mahmood, I. and **Akhtar, M.W.** (Pakistan)

## POSTER SESSIONS MONDAY & TUESDAY

### **POS-MON-313 13:10 - 14:10**

Effect of genotype, cold pretreatment and culture medium composition on anther culture response of barely (*Hordeum vulgare L.*)

**Ghasempour, H.R.**, Kahrizi, D. and Abdi, P. (Iran)

### **POS-TUE-314 13:25 - 14:25**

Diagnostic assessment and remediation strategies in introductory molecular life sciences courses

Wright, T., **Hamilton, S.**, Rafter, M., Howitt, S., Anderson, T. and Costa, M. (Australia, South Africa and Portugal)

### **POS-MON-315 13:10 - 14:10**

Cloning boron tolerance genes from barley and wheat

Hayes, J., Schnurbusch, T., Hrmova, M., Baumann, U., Ramesh, S.A., Tyerman, S.D., Langridge, P. and **Sutton, T.** (Australia and Germany)

### **POS-TUE-316 13:25 - 14:25**

Time dependent evaluation of the cytotoxicity of petroleum hydrocarbon bioremediated soil

**Ho, D.H.T.**, Sanderson, B.J., Ball, A.S. and Schmidt, L. (Australia)

### **POS-MON-317 13:10 - 14:10**

A family of plant receptor-like kinases with dual functioning intracellular signaling domains

**Donaldson, L.**, Meier, S., Kwezi, L., Wheeler, J., Gehring, C. and Irving, H. (Saudi Arabia and Australia)

### **POS-TUE-318 13:25 - 14:25**

Ethanol extract of zingiber officinalis (ginger) suppresses hepatic NF $\kappa$ B activity

**Li, X.H.**, McGrath, K.C., Heather, A.K. and Roufogalis, B.D. (Australia)

### **POS-MON-319 13:10 - 14:10**

Schwann cells interact with glial cells and neurons via motile lamellipodial waves

**Ekberg, J.A.K.**, Windus, L., Scott, S., Lineburg, K., Cornock, J., Mackay-Sim, A. and St John, J.A. (Australia)

### **POS-TUE-320 13:25 - 14:25**

Association of spectrin to brain gamma tubulin

**Shashikala, S.** and Sengupta, S. (India)

## POSTER SESSIONS MONDAY & TUESDAY

**POS-MON-321 13:10 - 14:10**

Molecular mechanism of rice bran phytic acid as anticancer in human colorectal adenocarcinoma cells

**Shafie, N.H.**, Mohd-Esa, N., Ithnin, H., Md-Akim, A. and Saad, N. (Malaysia)

**POS-TUE-322 13:25 - 14:25**

Subcellular localization and arginine methylation of SERBP1

**Lee, Y.J.**, Hsieh, W.Y., Chen, L.Y. and Li, C. (Taiwan)

**POS-MON-323 13:10 - 14:10**

Quantitative analysis of androgenic influence on ZEB-1 gene expression

**Anose, B.M.** and Benjamin, D.E. (USA)

**POS-TUE-324 13:25 - 14:25**

Teaching Experimental, Ethical, and Quantitative (TEEQ)

Biology using calibrated peer review<sup>TM</sup> (CPR)

**Pelaez, N.J.**, Dasgupta, A.P., Gundlach, E. and Russell, A.A. (USA)

**POS-MON-325 13:10 - 14:10**

Arabinoxylan arabinofuranohydrolase (AXAH) genes in cereals

**Laidlaw, H.K.C.** and Jobling, S.A. (Australia)

**POS-TUE-326 13:25 - 14:25**

Tissue-specific expression in transgenic tomato fruit of GUS gene driven by the 5' regulatory sequences of desaturase mesocarp specific oil palm (*Elaeis oleifera*) gene

**Ismail, I.**, Saed Taha, R. and Abdullah, N. (Malaysia)

**POS-MON-327 13:10 - 14:10**

A gene expression signature for insulin resistance mediated by excess fat

**Hayward, B.**, Konstantopoulos, N., Molero-Navajas, J., Jowett, J. and Walder, K. (Australia)

**POS-TUE-328 13:25 - 14:25**

TBC1D13: A Rab10/Rab1 binding protein involved in insulin-stimulated GLUT4 translocation

**Davey, J.R.**, Larence, M., Junutula, J.R., James, D.E. and Stoeckli, J. (Australia and USA)

## POSTER SESSIONS MONDAY & TUESDAY

### POS-MON-329 13:10 - 14:10

Analysis of the transcriptional activity of the soybean basic helix loop transcription factor GmSAT1 when expressed in the yeast ammonium transport mutant 26972C

**Mazurkiewicz, D.**, Chiasson, D., Loughlin, P., Okamoto, M. and Kaiser, B.N. (Australia)

### POS-TUE-330 13:25 - 14:25

Characterization of the interaction between the SNARE protein syntaxin and the Sec/Munc proteins

**Christie, M.P.**, Hu, S., Jarrott, R.J., Latham, C.F., Lua, L.H.L., Collins, B.M., James, D.E. and Martin, J.M. (Australia and USA)

### POS-MON-331 13:10 - 14:10

Purification and characterization of a novel alkaline serine protease secreted by *Vibrio metschnikovii*

**Park, J.Y.** and Lee, J.S. (Republic of Korea)

### POS-TUE-332 13:25 - 14:25

Multimodal nanoparticles for the stabilisation of enzymes against thermal inactivation

**Clemons, T.**, Evans, C., Stubbs, K. and Swaminathan, I. (Australia)

### POS-MON-333 13:10 - 14:10

A serine protease secreted by *Staphylococcus aureus* can induce pro-inflammatory cytokines and evokes vascular permeability

**Park, J.W.** and Lee, J.S. (Republic of Korea)

### POS-TUE-334 13:25 - 14:25

Hsa-mir-200b has two functional promoters, differential methylation of which is associated with clinical characteristics in breast cancer

**Wee, E.J.H.**, Peters, K., Hulf, T., Stein, S., Wagner, S., Lee, S.Y., French, J., Francis, G., Clark, S. and Brown, M.A. (Australia)

### POS-MON-335 13:10 - 14:10

An extracellular metalloprotease from *Vibrio vulnificus* activates toll-like receptors 2 and 4 to induce an inflammatory response

**Park, J.E.** and Lee, J.S. (Republic of Korea)

## POSTER SESSIONS MONDAY & TUESDAY

### **POS-TUE-336 13:25 - 14:25**

Thermo Scientific Solaris QPCR gene expression assays - performance and application

Haas, A., Jayne, B., Haimes, J., Covino, J., Leake, D., Kelley, M. and **Gillespie, J.** (USA and UK)

### **POS-MON-337 13:10 - 14:10**

Activation of cAMP-dependent signal transduction pathway in bone marrow hematopoietic stem cells of alpha-fetoprotein-treated animals

**Bogdanov, A.Y.** (Republic of Kazakhstan)

### **POS-TUE-338 13:25 - 14:25**

SUMO-1 marks lysosomes in neurodegenerative diseases and in animal and cellular disease models

**Wong, M.B.**, Noe, N., Meedeniya, A., Richter-Landsberg, C. and Pountney, D.L. (Australia and Germany)

### **POS-MON-339 13:10 - 14:10**

The generation of a doxycycline-inducible, tissue-specific aromatase transgenic mouse

**Chow, J.D.Y.**, Price, J., Bills, M., Simpson, E.R. and Boon, W.C. (Australia)

### **POS-TUE-340 13:25 - 14:25**

Learning biochemistry by using the peerwise system of student contributed multiple choice questions and peer evaluation

**Bottomley, S.** and Denny, P. (Australia and New Zealand)

### **POS-MON-341 13:10 - 14:10**

The catalytically-competent coenzyme allocation into the active site of *Anabaena* Ferredoxin NADP<sup>+</sup> reductase

Lans, I., Peregrina, J.R., Gonzalez-Lafont, A., Lluch, J.M., Garcia-Viloca, M. and **Medina, M.** (Spain)

### **POS-TUE-342 13:25 - 14:25**

So you have made a discovery? What now?

**Tzanidis, A.** and YinFoo, D. (Australia)

### **POS-MON-343 13:10 - 14:10**

The role of L-proline and L-proline transporters in the regulation of ES cell differentiation in culture

Tan, B.S.N., Lonic, A., Morris, M., Rathjen, P.D. and **Rathjen, J.** (Australia)

**POS-TUE-344 13:25 - 14:25**

Role of IFN $\gamma$  signaling in the pathogenesis of HIV

**Achuthan, A.**, Zhou, J., Crowe, S., Scholz, G. and Jaworowski, A. (Australia)

**POS-MON-345 13:10 - 14:10**

A flexible development environment for the analysis of large scale biological data

**Milla, L.** and O'Connor, L. (Australia)

**POS-TUE-346 13:25 - 14:25**

Epigallocatechin-3-gallate inhibits fibril formation by recombinant *Plasmodium falciparum* merozoite surface protein 2

**Adda, C.G.**, Chandrashekar, I.R., MacRaid, C.A., Anders, R.F. and Norton, R.S. (Australia)

**POS-MON-347 13:10 - 14:10**

Molecular basis for membrane recruitment of the PX domain-containing protein SNX17 and its structural relationship to SNX31 and SNX27

**Ghai, R.**, Mehdi, M., Teasdale, R., King, G. and Collins, B. (Australia)

**POS-TUE-348 13:25 - 14:25**

Structural analysis of alpha haemoglobin in complex with alpha haemoglobin stabilizing protein

**Dickson, C.F.**, Rich, A.M., Krishna Kumar, K., Lay, P.A., Mackay, J.P. and Gell, D.A. (Australia)

**POS-MON-349 13:10 - 14:10**

The X-ray crystal structure of murine  $\alpha$ 2-antiplasmin

**Law, R.H.P.**, Encarnacao, J., Zhang, Q., Horvath, A., Buckle, A.M., Whisstock, J.C. and Coughlin, P.B. (Australia)

**POS-TUE-350 13:25 - 14:25**

Receptor localisation to caveolae modulates G protein coupling of the  $\beta_3$ -adrenoceptor

**Evans, B.A.**, Sato, M., Hutchinson, D.S., Furness, S., Bengtsson, T. and Summers, R.J. (Australia and Sweden)

**POS-MON-351 13:10 - 14:10**

OXI: a novel branching mutant in *Arabidopsis thaliana*

**Meyers, E.L.**, Brewer, P.B., Mason, M., Dun, E.A. and Beveridge, C.A. (Australia)

## POSTER SESSIONS MONDAY & TUESDAY

**POS-TUE-352 13:25 - 14:25**

Exploration of  $\beta(1,4)$ -galactan biosynthesis in *Pinus radiata*  
**Weinberg, C.S.**, West, M., Phillips, L., Flint, H., Mast, S. and  
Wagner, A. (New Zealand)

**POS-MON-353 13:10 - 14:10**

Genetic control of C-glycosylation in the biosynthesis pathway of  
flavone-C-diglycosides in bread wheat  
**Wijaya, G.Y.**, Asenstorfer, R. and Mares, D.J. (Australia and  
Indonesia)

**POS-TUE-354 13:25 - 14:25**

How to kill tumour cells that have lost p53 activity: a novel  
apoptotic pathway induced by DNA damaging chemotherapeutics  
**Delbridge, A.R.D.**, Scott, C., Bouillet, P. and Strasser, A.  
(Australia)

**POS-MON-355 13:10 - 14:10**

Comparative analysis of Ficin stability in different chemical  
denaturants  
**Sidek, N.A.A.**, Kadir, H.A. and Tayyab, S. (Malaysia)

**POS-TUE-356 13:25 - 14:25**

Binding of the lectin ArtinM to mast cells results in cell  
activation  
**Lorenzi, V.C.B.**, Roque-Barreira, M.C., Pereira-Da-Silva, G.,  
Jamur, M.C. and Oliver, C. (Brazil)

## **POSTER PRESENTATIONS**

Wednesday and Thursday posters are available for viewing in the Exhibition Hall from 10:45 on Wednesday, 29 September through to 16:00 on Thursday, 30 September.

Posters will be attended by the presenting author at Poster Session C from 13:45 – 14:45 on Wednesday and at Poster Session D from 13:30 – 14:30 on Thursday.

The day and time of attendance is indicated alongside the poster number.

### **Poster Sessions Wednesday, 29 September and Thursday, 30 September**

Posters 001 – 029	Developmental Biology
Posters 030 – 062	Gene Regulation and Signal Transduction
Posters 063 – 075	Cell Architecture and Trafficking
Posters 076 – 087	Molecular Neurobiology
Posters 088 – 133	Molecular Biology of Disease
Posters 134 – 180	Molecular Cell Biology
Posters 181 – 215	Plant Systems
Posters 216 – 260	Proteins: Machines of Life
Posters 261 – 281	Systems Biology and Biotechnology
Posters 282 – 357	Late Posters ( <i>Not sorted by theme</i> )

DEVELOPMENTAL BIOLOGY

001 – 029

**POS-WED-001 13:45 - 14:45**

*Rhou* is required for normal actin distribution and differentiation in the definitive endoderm

**Loebel, D.A.F.**, Studdert, J.B., Jones, V., Power, M., Radziewicz, T. and Tam, P.P.L. (Australia)

**POS-THU-002 13:30 - 14:30**

Highly significant correlation between the protamine content, DNA integrity and quality of ejaculated spermatozoa from infertile men

**Manochantr, S.**, Chiamchanya, C. and Sobhon, P. (Thailand)

**POS-WED-003 13:45 - 14:45**

The role of hedgehog signaling in gut colonisation by vagal enteric neural crest cells

**McConnell, S.**, Simkin, J.E., Zhang, D. and Newgreen, D. (Australia)

**POS-THU-004 13:30 - 14:30**

MicroRNA signalling in early male germ cells

**McIver, S.C.**, Roman, S.D., Nixon, B. and McLaughlin, E.A. (Australia)

**POS-WED-005 13:45 - 14:45**

Regulation of FoxD3 in the neural crest

**Mckeown, S.J.** and Bronner, M. (Australia and USA)

**POS-THU-006 13:30 - 14:30**

Olfactory glia enhance neonatal axon regeneration

Chrehrehasa, F., Windus, L., Ekberg, J., Scott, D., Amaya, D., Mackay-Sim, A. and **St John, J.** (Australia)

**POS-WED-007 13:45 - 14:45**

Characterisation of enu-induced IFT140 mutant mice exhibiting exencephaly and polydactyly

**McMorran, T.A.** and Farlie, P. (Australia)

## POSTER SESSIONS WEDNESDAY & THURSDAY

### **POS-THU-008 13:30 - 14:30**

Transgenic approaches to analyse planar cell polarity/non-canonical WNT signalling in zebrafish early endoderm morphogenesis

**Miles, L.B.**, Mizoguchi, T., Kikuchi, Y. and Verkade, H. (Australia and Japan)

### **POS-WED-009 13:45 - 14:45**

Neogenin 1: a new player in the sonic hedgehog (Shh)/Gli network in the developing vertebrate central nervous system

**Milla, L.A.**, Cortés, C., Wainwright, B.J. and Palma, V. (Chile and Australia)

### **POS-THU-010 13:30 - 14:30**

Temporal regulation of the Salvador-Warts-Hippo pathway in *Drosophila melanogaster* eye development

**Milton, C.C.**, Zhang, X., Albanese, N.O. and Harvey, K.F. (Australia)

### **POS-WED-011 13:45 - 14:45**

The genetic and morphological characterisation of a novel zebrafish development mutant, HL-7.2

**Moore, W.B.**, Sherson, S., Ober, E., Field, H., Dong, P.D., Stainier, D.Y.R. and Verkade, H. (Australia and USA)

### **POS-THU-012 13:30 - 14:30**

Stem cell therapy for Hirschsprung disease: *in vivo* studies using a post-natal mouse model

Hotta, R., Stamp, L., Foong, J.P., Thacker, M., Pontell, L., Bergner, A.J., Anderson, R.G., Furness, J.B., **Newgreen, D.F.** and Young, H.M. (Australia)

### **POS-WED-013 13:45 - 14:45**

The effect of acrylamide exposure on early male germ cells

**Nixon, B.J.**, Nixon, B. and Roman, S.D. (Australia)

### **POS-THU-014 13:30 - 14:30**

The identification of a novel gene involved in *Drosophila* midgut migration

**Pert, M.C.**, Saint, R.B. and Murray, M.J. (Australia)

### **POS-WED-015 13:45 - 14:45**

Xenobiotics; influence on long term oocyte viability

**Pye, V.**, Sobinoff, A.P., Nixon, B., Roman, S.D. and McLaughlin, E.A. (Australia)

## POSTER SESSIONS WEDNESDAY & THURSDAY

**POS-THU-016 13:30 - 14:30**

Novel paracrine signaling from cardiac progenitor cells to early neural crest in mammalian embryos

**Pral, O.**, Menon, M.K., Biben, C., Hartley, L., Martin, J., Imanaka-Yoshida, K. and Harvey, R.P. (Australia and Japan)

**POS-WED-017 13:45 - 14:45**

Identification and characterisation of surface protein complexes in human spermatozoa

**Redgrove, K.A.**, McLaughlin, E.A., O'Bryan, M.K., Aitken, R.J. and Nixon, B. (Australia)

**POS-THU-018 13:30 - 14:30**

Investigation of the role of dynamin in sperm surface remodeling

**Reid, A.T.**, Roman, S.D., Aitken, R.J. and Nixon, B. (Australia)

**POS-WED-019 13:45 - 14:45**

Functional analysis of *Klf2* during embryonic skeletal development

**Rodda, F.A.**, Cameron, T.L., Gordon, C.T., Bateman, J.F. and Farlie, P.G. (Australia)

**POS-THU-020 13:30 - 14:30**

Expression and functional analysis of *SOX3* in murine neurogenesis

**Rogers, N.A.**, Banerjee, K. and Thomas, P.Q. (Australia)

**POS-WED-021 13:45 - 14:45**

Consistent nucleosome retention during chromatin packaging in human spermatozoa

Reid, A.T., McEwan, K., Campbell, D.M., Jans, D.A. and **Roman, S.D.** (Australia)

**POS-THU-022 13:30 - 14:30**

Migration of defined subpopulations of vagal enteric neural crest cells

**Simkin, J.E.**, Zhang, D. and Newgreen, D.F. (Australia)

**POS-WED-023 13:45 - 14:45**

The mammalian expanded homologue, Willin, can not functionally substitute for expanded in *Drosophila*

**Sinha, A.**, Gunn-Moore, F.J. and Harvey, K.F. (Australia and UK)

## POSTER SESSIONS WEDNESDAY & THURSDAY

### POS-THU-024 13:30 - 14:30

Consistent mechanism of primordial follicle activation in neonatal mouse ovotoxicity

**Sobinoff, A.P.**, Pye, V., Nixon, B., Roman, S.D. and McLaughlin, E.A. (Australia)

### POS-WED-025 13:45 - 14:45

Primary mammary epithelial cells (PMEC) derived from lactating human tissue have unique differentiation properties in three-dimensional culture

**Thomas, E.C.**, Zeps, N., Rigby, P.J. and Hartmann, P.E. (Australia)

### POS-THU-026 13:30 - 14:30

Twist genes regulate outgrowth and patterning during limb morphogenesis

**Wade, C.**, Brinas, I. and Farlie, P. (Australia)

### POS-WED-027 13:45 - 14:45

The roles of FoxL2 & Zdhhc17 in skeletal development

**Welfare, M.F.** and Farlie, P.G. (Australia)

### POS-THU-028 13:30 - 14:30

Insights into C-terminal binding protein (CTBP) via a mutagenesis screen in *C. elegans*

**Yucel, D.**, Crossley, M. and Nicholas, H. (Australia)

### POS-WED-029 13:45 - 14:45

Neural crest cell invasion of developing gut is prevented by existing neural crest cells but not by enteric neurons

**Zhang, D.** and Newgreen, D.F. (Australia)

## GENE REGULATION AND SIGNAL TRANSDUCTION

030 – 062

### POS-THU-030 13:30 - 14:30

The regulatory network of TTP, MKP-1 and MAPK in response to preadipocyte differentiation signals

**Lin, N.Y.**, Lin, T.Y., Wang, S.C. and Chang, C.J. (Taiwan)

## POSTER SESSIONS WEDNESDAY & THURSDAY

**POS-WED-031 13:45 - 14:45**

Phosphorylation-dependent regulation of intracellular localization and potential tumor suppressor function of LKB1 by Akt and 14-3-3

**Liu, L.**, Wang, Y., Lam, K.S.L. and Xu, A. (China)

**POS-THU-032 13:30 - 14:30**

Inflammation in sepsis: role of endothelial cells

**Low, W.X.**, Muniandy, S., Qzist, R. and GracieOng, S.Y. (Malaysia)

**POS-WED-033 13:45 - 14:45**

Pituitary and ovarian function in PRIP knockout mice

**Matsuda, M.** and Hirata, M. (Japan)

**POS-THU-034 13:30 - 14:30**

Stress-induced synthesis of phosphatidylinositol 3-phosphate in mycobacteria

**Morita, Y.S.**, Yamaryo-Botte, Y., Miyanagi, K., Crellin, P.K., Coppel, R.L., Kinoshita, T. and McConville, J.J. (Australia and Japan)

**POS-WED-035 13:45 - 14:45**

Analysis of the regulation and function of kiwifruit *FLOWERING LOCUS T*

**Moss, S.M.A.**, Putterill, J. and Varkonyi-Gasic, E. (New Zealand)

**POS-THU-036 13:30 - 14:30**

A tail of STAT3 spliceform differential regulation

**Ng, I.H.W.**, Ng, D.C.H., Jans, D.A. and Bogoyevitch, M.A. (Australia)

**POS-WED-037 13:45 - 14:45**

Identification of a novel c-Jun N-terminal kinase inhibitory peptide

**Ngoei, K.R.**, Catimel, B., Lio, S., Cheng, H.C., Ng, D.C.H. and Bogoyevitch, M.A. (Australia)

**POS-THU-038 13:30 - 14:30**

The oxygen-sensing asparaginyl hydroxylase factor inhibiting HIF-1A (FIH) is an essential regulator of metabolism

**Peet, D.J.**, Linke, S., Zhang, N., Chicher, J., Gorman, J.J., Poelinger, L. and Johnson, R.S. (Australia, USA and Sweden)

## POSTER SESSIONS WEDNESDAY & THURSDAY

**POS-WED-039 13:45 - 14:45**

Cytokine receptors turned on: a general mechanism of activation  
**Poger, D.** and Mark, A.E. (Australia)

**POS-THU-040 13:30 - 14:30**

RNAi screening for novel kinases and phosphatases that regulate the Salvador-Warts-Hippo pathway in growth control  
**Poon, C.,** Cuddy, C. and Harvey, K. (Australia)

**POS-WED-041 13:45 - 14:45**

Nucling, a novel apoptosis-associating protein, regulates NF- $\kappa$ B pathway

**Sakai, T.,** Liu, L., Tran, N.H., Kim, S.M. and Fukui, K. (Japan)

**POS-THU-042 13:30 - 14:30**

The A kinase anchoring protein Akap200 can suppress the oncogenic phenotypes of *Dv-cbl* and *ras<sup>v12</sup>* in the drosophila eye

**Sannang, R.,** Robertson, H. and Hime, G. (Australia)

**POS-WED-043 13:45 - 14:45**

Cell-cycle sensing of oxidative stress in *Saccharomyces cerevisiae* by oxidation of a specific cysteine residue in the transcription factor Swi6p

**Chiu, J.,** Tactacan, C.M., Lin, R.C.Y., Wouters, M.A. and Dawes, I.W. (Australia)

**POS-THU-044 13:30 - 14:30**

Clusterin induces matrix metalloproteinase-9 expression via ERK, JNK and nuclear factor  $\kappa$ B in raw 264.7 cells

**Shim, Y.J.,** Jeon, H.S., Jiang, L.H., Park, I.S. and Min, B.H. (South Korea)

**POS-WED-045 13:45 - 14:45**

Genome wide functional genomics

Thomas, D., Gould, K. and **Simpson, K.J.** (Australia)

**POS-THU-046 13:30 - 14:30**

Cancelled

**POS-WED-047 13:45 - 14:45**

Vascular tone regulation by extracellular UTP through P2X receptor

**Sugihara, M.,** Morita, H., Matsuda, M., Kajioka, S., Ito, Y., Abe, K. and Hirata, M. (Japan)

## POSTER SESSIONS WEDNESDAY & THURSDAY

### POS-THU-048 13:30 - 14:30

A novel non-rad homogeneous assay to monitor post-translational histone modifications

**Sutija, M.**, Kreps, A., Lipari, F., Arias, M., Lévesque-Sergerie, J.P., Rodriguez-Suarez, R., Cosentino, G. and Rouleau, N. (Australia and Canada)

### POS-WED-049 13:45 - 14:45

Genome-wide CHiP-SEQ analysis of histone 3 lysine 27 trimethylation during skeletal muscle development highlights chromosome organisation and regulation of gene expression

**Tellam, R.L.**, Byrne, K., McWilliam, S., Vuocolo, T., Cockett, N. and Gondro, C. (Australia and USA)

### POS-THU-050 13:30 - 14:30

Depletion of the NF- $\kappa$ B transcription factors is required for chromatin reassembly at the GM-CSF promoter following gene activation

**Poke, F.S.**, Upcher, W.C. and Holloway, A.F. (Australia)

### POS-WED-051 13:45 - 14:45

Various forms of the human exosome complex contain differentially localized catalytic subunits: HDIS3 and HDIS3L

**Tomecki, R.**, Kristiansen, M.S., Lykke-Andersen, S., Chlebowski, A., Dziembowski, A. and Jensen, T.H. (Poland and Denmark)

### POS-THU-052 13:30 - 14:30

Characterization of novel PKD inhibitors using biochemical assays and cellular studies

**Vantus, T.**, Varga, A., Szokol, B., Nemeth, G., Orfi, L., Szantai-Kis, C., Horvath, Z., Varga, Z. and Keri, G. (Hungary)

### POS-WED-053 13:45 - 14:45

Guanine nucleotide exchange factors for *Rho* GTPases in endothelial cells: critical transducers of angiogenic signals

Carretero-Ortega, J., Guzman-Hernandez, M.L., Hernandez-Garcia, R., Vazquez-Macias, A., Hernandez-Negrete, I., HellerBrown, J., Gutkind, J.S., Reyes-Cruz, G. and **Vazquez-Prado, J.** (Mexico and USA)

## POSTER SESSIONS WEDNESDAY & THURSDAY

**POS-THU-054 13:30 - 14:30**

The role of Krüppel-like factor 3 in B-lymphocyte development and tumorigenesis

**Vu, T.**, Funnell, A., Gatto, D., Brink, R., Pearson, R. and Crossley, M. (Australia)

**POS-WED-055 13:45 - 14:45**

Non-canonical gonadotropin signalling in ovarian cancer cell migration

**Zhang, H.**, Bolitho, C., Marsh, D.J. and Baxter, R.C. (Australia and China)

**POS-THU-056 13:30 - 14:30**

*Gtf2ird1*, a Williams syndrome-related protein, is a novel sumo substrate

**Widagdo, J.**, Palmer, S.J., Taylor, K., Bontempo, S. and Hardeman, E.C. (Australia)

**POS-WED-057 13:45 - 14:45**

Investigating mechanisms of post-transcriptional gene regulation in zebrafish germ cells

**Wiszniak, S.E.** and Jensen, K.B. (Australia)

**POS-THU-058 13:30 - 14:30**

Differential patterns of DNA methylation and microRNAs in ADPKD kidney tissues by genome-wide analysis

**Woo, Y.M.**, Chung, H.Y., Lee, M.J., Bae, J.B., Shin, S.A., Lyu, J.M., Yoo, K.H., Seo, M.J., Kim, Y.J. and Park, J.H. (Korea)

**POS-WED-059 13:45 - 14:45**

Characterisation of the Arabidopsis dehydrin, *XERO2*

**Wright, E.J.** and Parish, R.W. (Australia)

**POS-THU-060 13:30 - 14:30**

Discovery and characterisation of c-Jun N-terminal Kinase binding proteins

**Yeap, Y.Y.C.**, Ng, D.C.H. and Bogoyevitch, M.A. (Australia)

**POS-WED-061 13:45 - 14:45**

An analysis of stress-stimulated stathmin (STMN) phosphorylation by 2D-PAGE

**Yip, Y.Y.**, Bogoyevitch, M.A. and Ng, D.C.H. (Australia)

**POS-THU-062 13:30 - 14:30**

Marsupials, myths and master regulators

**Young, L.J.**, Flenady, S. and Belov, K. (Australia)

**POSTER SESSIONS WEDNESDAY & THURSDAY**

**CELL ARCHITECTURE AND TRAFFICKING**

**063 – 075**

**POS-WED-063 13:45 - 14:45**

Evolutionary conservation and function of ESCRT-II: a key endosomal sorting complex

**Ilievska, J.**, Singh, J., Dortenzio, R., Annesley, S., Fisher, P. and Bishop, N. (Australia)

**POS-THU-064 13:30 - 14:30**

Membrane micro-domain organization of caveolin-1 modulates lipid raft proteins

**Inder, K.L.**, Loo, D., Zheng, Y.Z., Foster, L.J., Parton, R.G. and Hill, M.M. (Australia and Canada)

**POS-WED-065 13:45 - 14:45**

Protein kinase C controls Apolipoprotein E secretion from human macrophages

**Karunakaran, D.**, Kockx, M., Owen, D., Gaus, K., Jessup, W. and Kritharides, L. (Australia)

**POS-THU-066 13:30 - 14:30**

Disruption of early endosome interaction with *Helicobacter pylori* phagosomes

**Keep, S.J.**, Borlace, G.N., Butler, R.N. and Brooks, D.A. (Australia)

**POS-WED-067 13:45 - 14:45**

Expression of calcium-sensing receptor heterodimers at the cell surface using the GABA<sub>B</sub> sorting system

**Khan, M.A.**, Chan, R. and Conigrave, A.D. (Australia)

**POS-THU-068 13:30 - 14:30**

The C-terminal propeptide of a plant defensin confers cytoprotective and subcellular targeting functions

**Lay, F.T.**, Heath, R.L., Barbeta, B.L., Poon, S., McGinness, B., Connelly, A.A. and Anderson, M.A. (Australia)

**POS-WED-069 13:45 - 14:45**

Mitotic function and localisation of IQGAP1 during glioblastoma cell division

**Lian, A.T.Y.**, Robinson, P.J. and Chircop, M. (Australia)

## POSTER SESSIONS WEDNESDAY & THURSDAY

### POS-THU-070 13:30 - 14:30

Characterizing the role of adaptor protein 1A in the basolateral targeting of kAE1

**Netsawang, J.**, Ngaojanlar, P., Sawasdee, N., Malasit, P., Limjindaporn, T., Yenchitsomanus, P. and Cordat, E. (Thailand and Canada)

### POS-WED-071 13:45 - 14:45

Characterisation of the architecture in mucopolysaccharidosis IIIA neurons

**Parkinson-Lawrence, E.J.**, Hemsley, K., Khalessi-Rad, M., Winter, M., Hopwood, J.J. and Brooks, D.A. (Australia)

### POS-THU-072 13:30 - 14:30

Regulating secretion in innate immunity: *Drosophila* 14-3-3e's role in anti-microbial peptide secretion

**Shandala, T.**, Woodcock, J.M., Ng, Y., Lopez, A.F. and Brooks, D.A. (Australia)

### POS-WED-073 13:45 - 14:45

The tropoelastin R515 residue: roles in tropoelastin assembly and structure

**Yeo, G.C.**, Dyksterhuis, L.B., Mithieux, S.M. and Weiss, A.S. (Australia)

### POS-THU-074 13:30 - 14:30

Lighting up the inner membrane complex of *Plasmodium falciparum*

**Yeoman, J.A.**, Dearnley, M., Dixon, M.W.A., Maier, A.G., Hanssen, E., Baum, J. and Tilley, L.M. (Australia)

### POS-WED-075 13:45 - 14:45

Binding of phospholipase C-related but catalytically inactive protein to SNARE proteins

**Zhang, Z.**, Takeuchi, H., Gao, J. and Hirata, M. (Japan)

## MOLECULAR NEUROBIOLOGY

076 – 087

### POS-THU-076 13:30 - 14:30

Protein engineering and Amyloid  $\beta$  mutations

**Nisbet, R.**, Nuttall, S., Caine, J., Varghese, J., Sankovich, S., Bartone, N. and Streltsov, V. (Australia)

## POSTER SESSIONS WEDNESDAY & THURSDAY

### POS-WED-077 13:45 - 14:45

A tale of two scaffolds - protein engineering of the amyloid- $\beta$  peptide

**Nuttall, S.D.**, Caine, J., Varghese, J., Nisbet, R., Sankovich, S., Bartone, N. and Streltsov, V. (Australia)

### POS-THU-078 13:30 - 14:30

Calcium induces alpha-synuclein aggregates in solution, on surfaces and in cultured cells

**Pountney, D.L.**, Nath, S., Goodwin, J. and Engelborghs, Y. (Australia and Belgium)

### POS-WED-079 13:45 - 14:45

Triazine derivatives decrease LPS-induced cell death by inhibiting NF- $\kappa$ B and COX-2 in neuron-like PC12 cells

**Ramin, M.R.** and Khodagholi, F. (Iran)

### POS-THU-080 13:30 - 14:30

An investigation of the factors that regulate muscarinic receptor expression in schizophrenia

**Seo, M.S.**, Scarr, E. and Dean, B. (Australia)

### POS-WED-081 13:45 - 14:45

Three sites phosphorylated by protein kinase A in human tau protein affect its interaction with 14-3-3zeta

**Sluchanko, N.N.**, Seit-Nebi, A.S. and Gusev, N.B. (Russian Federation)

### POS-THU-082 13:30 - 14:30

The BH3-only protein Bim: possible link between ER stress and apoptosis in neural cells expressing mutant SOD1

**Soo, K.Y.**, Atkin, J.D., Farg, M., Walker, A.K., Horne, M.K. and Nagley, P. (Australia)

### POS-WED-083 13:45 - 14:45

Changing the solvent accessibility of the prion protein disulfide bond markedly influences its trafficking and effect on cell function

**Tabrett, C.A.**, Harrison, C.F., Schmidt, B., Bellingham, S.A., Hardy, T., Sanejouands, Y., Hill, A.F. and Hogg, P.J. (Australia and France)

## POSTER SESSIONS WEDNESDAY & THURSDAY

### **POS-THU-084 13:30 - 14:30**

Expression of NF- $\kappa$ B regulated cytokines to evaluate early diagnosis of neurodegenerative disorders mainly Huntington's disease and spinocerebellar ataxia

Potdar, P.D. and **Tatwani, S.** (India)

### **POS-WED-085 13:45 - 14:45**

Changes in signalling proteins in muscarinic receptor deficit schizophrenia

**Udawela, M.**, Scarr, E., Hannan, A.J., Thomas, E.A. and Dean, B. (Australia and USA)

### **POS-THU-086 13:30 - 14:30**

SOCS2 regulates neurite outgrowth and neuronal survival through Trk receptor interactions

**Uren, R.T.**, Faux, C.H., Turbic, A., Wong, A.W., Murray, S.S. and Turnley, A.M. (Australia)

### **POS-WED-087 13:45 - 14:45**

Identification of olfactory signalling genes in drosophila melanogaster

Liu, Y.-C., Honda, T., Beale, M., De Bruyne, M. and **Warr, C.G.** (Australia)

## MOLECULAR BIOLOGY OF DISEASE

088 – 133

### **POS-THU-088 13:30 - 14:30**

GSTP isoleucine 105 to valine polymorphism may play a role in determining susceptibility to peptic ulcer

**Kangsadalampai, S.**, Gamnarai, P., Rojpibulstit, P. and Vilaichone, R.K. (Thailand)

### **POS-WED-089 13:45 - 14:45**

Studies on the role of P73 proteins in intestinal stem cells and tumours

**Kass, L.**, Horvay, K., Stiewe, T., Hime, G.R. and Abud, H.E. (Australia and Germany)

## POSTER SESSIONS WEDNESDAY & THURSDAY

### POS-THU-090 13:30 - 14:30

Anti-cancer effect by knock-down of the proteins over-expressed in lung cancer

**Kim, J.E.**, Koo, K.H., Kim, Y.H., Sohn, J. and Park, Y.G.  
(Korea)

### POS-WED-091 13:45 - 14:45

Apoptosome apparatus and expression of its regulators, XIAP, AIP1 and nucling, in non-small cell lung cancer cells and tissues  
Moravcikova, E., **Krepela, E.**, Prochazka, J., Cermak, J. and Benkova, K. (Czech Republic)

### POS-THU-092 13:30 - 14:30

DNA analysis in females with 46,XY karyotype-associated sex development disorders

**Krepelova, A.**, Malikova, M., Simandlova, M., Plevora, P. and Gaillyova, R. (Czech Republic)

### POS-WED-093 13:45 - 14:45

Functional analysis of zinc transporters of ZnT/SLC30A family members among a mammary gland disorder of reduced zinc secretion into milk

**Kumar, L.**, Michalczyk, A., Freesonte, D. and Ackland L.  
(Australia)

### POS-THU-094 13:30 - 14:30

Isomalyngamide A, A-1 and their analogs suppress cancer cell migration *in vitro*

**Li, W.-S.**, Chang, T., More, S., Lu, I.-H., Hsu, J.-C., Chen, T.-J., Jen, Y., Jao, S.-C. and Lu, C.-K. (Taiwan)

### POS-WED-095 13:45 - 14:45

Identification and functional characterisation of *WDR35*, a gene mutated in short rib polydactyly syndrome

Amor, D.J., Fitzpatrick, E., Mountford, H., Bahlo, M., Mill, P., Hall, E., Bromhead, C., Pope, K., Aftimos, S., Jackson, I., Delatycki, M., Savarirayan, R. and **Lockhart, P.J.** (Australia, UK and New Zealand)

### POS-THU-096 13:30 - 14:30

Identification of activated kinase proteins in cholangiocarcinoma

**Loilome, W.**, Dokduang, H., Juntana, S., Namwat, N. and Yongvanit, P. (Thailand)

## POSTER SESSIONS WEDNESDAY & THURSDAY

### **POS-WED-097 13:45 - 14:45**

The functional characterisation of human RMND5 proteins in prostate cancer

**Louw, A.**, Dawson, L., Harvey, J. and Bentel, J. (Australia)

### **POS-THU-098 13:30 - 14:30**

Characterisation of human acetyl CoA carboxylase-A target for obesity therapeutics

**Macaulay, S.L.**, Castelli, L.A., Jarvis, K., Liepa, A.J., Fernley, R.T., Pilling, P., Epa, V.C. and Kemp, B.E. (Australia)

### **POS-WED-099 13:45 - 14:45**

Osteopontin is required for normal skeletal muscle degeneration and regeneration

Uaesoontrachoonm, K., Tudor, E.M., Pagel, C.N. and **Mackie, E.J.** (Australia)

### **POS-THU-100 13:30 - 14:30**

Finding new signaling pathways that contribute to breast cancer pathogenesis

**Majewski, I.J.**, Bosma, A., Severson, T., Kerkhoven, R., Velds, A., Linn, S.C. and Bernards, R. (Netherlands)

### **POS-WED-101 13:45 - 14:45**

Clusterin (Apo J) and COMMD1: chaperones that facilitate the degradation of the mammalian copper transporters, ATP7A and ATP7B

**Materia, S.**, Cater, M., Klomp, L., Mercer, J. and La Fontaine, S. (Australia and The Netherlands)

### **POS-THU-102 13:30 - 14:30**

The Agilent Technologies' SureSelect target enrichment system for next-generation sequencing demonstrates high performance and enables diverse applications

Roberts, D., Happe, S., **McInnes, R.**, Pabon, C., Giuffre, A., Novak, B., Visitacion, M., Joshi, S., Ong, J. and LeProust, E. (USA and Australia)

### **POS-WED-103 13:45 - 14:45**

Canine mammary tumours: a model for human breast cancer?

**Milley, K.M.**, Toribio, R., Slavin, J., Scott-Dowell, K., Papadopoulos, R., Richardson, S.J. and Danks, J.A. (Australia)

## POSTER SESSIONS WEDNESDAY & THURSDAY

### POS-THU-104 13:30 - 14:30

Interaction between the Ataxia Telangiectasia mutated (ATM) and tuberous sclerosis complex (TSC) pathways

**Newman, J.V.**, Crampton, E.M., Kozlov, S. and Watters, D. (Australia)

### POS-WED-105 13:45 - 14:45

The vitamin E analogue  $\gamma$ -Tocotrienol blocks osteocalcogenesis and promotes osteoblast maturation

**Odysseos, A.D.**, Liapis, V., Hay, S., Christou, Y.A., Maltezos, E., Keramidis, A. and Evdokiou, A. (Cyprus and Australia)

### POS-THU-106 13:30 - 14:30

Mutations in the bHLH/PAS transcription factor SIM1 may underpin a novel monogenic obesity disorder

**Raimondo, A.**, Ramachandrapa, S., Farooqi, S. and Whitelaw, M.L. (Australia and UK)

### POS-WED-107 13:45 - 14:45

A random shRNA screening strategy to identify novel drug targets

**Ramadas, R.D.**, Dawes, I.W. and Arndt, G.M. (Australia)

### POS-THU-108 13:30 - 14:30

Critical role of the hepatic glucocorticoid receptor in systemic bile salt homeostasis which impacts upon cholesterol-gallstone disease

**Rose, A.J.**, Berriel Diaz, M., Reimann, A. and Herzig, S. (Germany)

### POS-WED-109 13:45 - 14:45

Induction of metallothionein in cultured human keratinocytes by zinc: detection with a commercially available monoclonal antibody

**Ross, S.** and Gray, P.J. (Australia)

### POS-THU-110 13:30 - 14:30

Pharmacological screening for the therapy of Friedreich ataxia

Li, L., Van den Hengel, S., Cook, J., Sandi, C., Pook, M., Ioannou, P.A., Delatycki, M.B. and **Sarsero, J.P.** (Australia and UK)

## POSTER SESSIONS WEDNESDAY & THURSDAY

### POS-WED-111 13:45 - 14:45

An oncogenomics-based in vivo cDNA screen pinpoints co-amplified *CCND1* and *FGF19* as therapeutic targets for liver cancer

**Sawey, E.T.**, Cai, C., Bakleh, A., Liu, Q., French, D.M., Finn, R.S., Lowe, S.W. and Powers, S. (USA)

### POS-THU-112 13:30 - 14:30

Role of exogenous adenosine in cardiac reperfusion injury under high glucose stress

**Sermsuvitayawong, K.** and Wilairat, P. (Thailand)

### POS-WED-113 13:45 - 14:45

Pentacyclic triterpenoid Lantadene A: antitumor activity and expression of transcription factors

**Sharma, M.** and Sharma, N. (India)

### POS-THU-114 13:30 - 14:30

Characterisation of *BCHE* polymorphisms in small Australian Defence Force cohort

**Shields, K.A.** and Lewis, J. (Australia)

### POS-WED-115 13:45 - 14:45

Cardioprotective effect of vasoendothelial growth factor at myocardial infarction

**Shurygin, M.G.**, Shurygina, I.A., Dremina, N.N. and Kanya, O.V. (Russia)

### POS-THU-116 13:30 - 14:30

Recombinant expression and characterisation of protease inhibitor-resistant trypsins from the midgut of *H. punctigera*

**Stevens, J.A.**, Dunse, K.M. and Anderson, M.A. (Australia)

### POS-WED-117 13:45 - 14:45

Chemokine binding to sulfotyrosine residues in chemokine receptors

**Stone, M.J.**, Millard, D.J., Clayton, D., Zhu, J.Z., Simpson, L.S., Widlanski, T.S. and Payne, R.J. (Australia and USA)

### POS-THU-118 13:30 - 14:30

Androgen regulation of P27 in breast cancer cells

**Tay, J.W.**, Azzam, D.G., Harvey, J. and Bentel, J.M. (Australia)

## POSTER SESSIONS WEDNESDAY & THURSDAY

### POS-WED-119 13:45 - 14:45

Marcks expression during inflammatory process in liver fluke-associated cholangiocarcinoma

**Techasen, A.**, Loilome, W., Namwat, N., Thanan, R. and Yongvanit, P. (Thailand)

### POS-THU-120 13:30 - 14:30

Constraints with major-histocompatibility complex class I-restricted peptides: presentation and consequences for T-cell recognition

**Theodossis, A.**, Guillonnet, C., Welland, A., Ely, L.K., Clements, C.S., Williamson, N.A., Webb, A.I., Doherty, P.C., McCluskey, J., Purcell, A.W., Turner, S.J. and Rossjohn, J. (Australia)

### POS-WED-121 13:45 - 14:45

Evaluation of prostate cancer antigen-1 as a molecular target for prostate cancer and pancreatic cancer

**Tsujikawa, K.**, Koike, K., Hase, T., Kitae, K., Ueda, Y., Shimada, K., Syo, M., Konishi, N., Nakajima, Y. and Yamamoto, H. (Japan)

### POS-THU-122 13:30 - 14:30

Biomarkers discovery in the neoadjuvant breast cancer treatment

**Tvrđik, D.**, Povysil, C., Dundr, P., Velenska, Z., Melcakova, S., Skalova, H. and Petruzalka, L. (Czech Republic)

### POS-WED-123 13:45 - 14:45

Lung metastatic cholangiocarcinoma cell line acquires higher level of CD133 expression and exhibits higher proliferation *in vivo*

**Vaeteewoottacharn, K.**, Seubwai, W., Wongkham, S. and Okada, S. (Thailand and Japan)

### POS-THU-124 13:30 - 14:30

Characterisation of protein disulphide isomerase family members in neurodegenerative diseases

**Walker, A.K.**, Farg, M.A., Turner, B.J., Soo, K.Y., Home, M.K. and Atkin, J.D. (Australia)

## POSTER SESSIONS WEDNESDAY & THURSDAY

### POS-WED-125 13:45 - 14:45

Expression and specific activity of Manganese Superoxide Dismutase (MnSOD) in rat breast and blood during chemical carcinogenesis induced by Dimethylbenz(a)anthracene

**Wanandi, S.I.**, Nida, K., Wuyung, P.E. and Dewi, S. (Indonesia)

### POS-THU-126 13:30 - 14:30

Measurement of liver alkaline phosphatase in human serum by immunoassay

**Wang, H.T.**, Kim, H.J., Kim, T.K. and Choi, E.Y. (Korea)

### POS-WED-127 13:45 - 14:45

Hepcidin-independent iron recycling in a mouse model of haemolytic anaemia

**Wilkins, S.J.**, Frazer, D.M., Darshan, D., Whitelaw, N.C., Whitelaw, E. and Anderson, G.J. (Australia)

### POS-THU-128 13:30 - 14:30

Secreted adipocyte fatty acid binding protein (FABP4) forms the molecular basis of the adipo-insulin axis

**Wu, L.E.**, James, D.E. and Cantley, J. (Australia)

### POS-WED-129 13:45 - 14:45

The gastrin gene in human gastric cancer cells is transcriptionally activated by hypoxia

**Xiao, L.**, Kovac, S., Baldwin, G. and Patel, O. (Australia)

### POS-THU-130 13:30 - 14:30

Wnt5a acts as an oncogene in EBV-associated nasopharyngeal carcinoma

**Yap, L.F.**, Munirah, A., Zabidi, M.M., Chai, S.J., Chu, T.L., Tan, S.K., Lim, P., Wei, W., Teo, S.H. and Khoo, A.S.B. (Malaysia and UK)

### POS-WED-131 13:45 - 14:45

Induction of etheno-DNA adduct by carcinogenic oxysterols in immortalized cholangiocyte

**Yongvanit, P.**, Jusakul, A., Loilome, W., Namwat, N.

Dechakhamphu, S. and Kobayashi, N. (Thailand and Japan)

### POS-THU-132 13:30 - 14:30

Incidence of inosine triphosphate pyrophosphohydrolase (ITPA) deficiency in patients with haematological malignancies

**Zamzami, M.**, Catley, L., Marinaki, A., Bowling, F. and Duley, J. (Australia, Saudi Arabia and UK)

## POSTER SESSIONS WEDNESDAY & THURSDAY

### POS-WED-133 13:45 - 14:45

NEDD9 is required for mesenchymal invasion of glioblastoma cells

**Zhong, J.** and O'Neill, G.M. (Australia)

## MOLECULAR CELL BIOLOGY

134 – 180

### POS-THU-134 13:30 - 14:30

Characterisation of SH-SY5Y neuroblastoma cells as a model for nerve agent neurotoxicology

Thompson, G., Thirkettle-Watts, D. and **Mawdsley, D.**  
(Australia)

### POS-WED-135 13:45 - 14:45

Improved processing of short hairpin RNA molecules targeting H5N1 influenza

**McLachlan, K.P.**, Muralitharan, M., Hinton, T.M., Tyack, S.G. and Doran, T.J. (Australia)

### POS-THU-136 13:30 - 14:30

Utilising a photoactivatable fluorescent protein (DENDRA) to investigate essential processes in the malaria parasite, *Plasmodium Falciparum*

**McMillan, P.J.**, Rozano, L., Mwesigye, E.E., Hanssen, E. and Tilley, L. (Australia)

### POS-WED-137 13:45 - 14:45

Vacuolar turnover of the nucleus in *Saccharomyces cerevisiae* by late nucleophagy

**Mijaljica, D.**, Prescott, M. and Devenish, R.J. (Australia)

### POS-THU-138 13:30 - 14:30

Nuclear-localized importin alpha regulates gene expression in mammalian spermatogenesis

**Miyamoto, Y.**, Yasuda, Y., Yamashiro, T., Nagai, M., Masui, A., Yoneda, Y., Jans, D.A. and Loveland, K. (Australia and Japan)

## POSTER SESSIONS WEDNESDAY & THURSDAY

### POS-WED-139 13:45 - 14:45

Cyclic AMP dependent protein kinase A stabilises Bim<sub>EL</sub> during apoptosis

**Moujalled, D.**, Weston, R., Carter, H., Goyal, P., Ninnis, R., Coley, A.M., Strasser, A. and Puthalakath, H. (Australia)

### POS-THU-140 13:30 - 14:30

In the presence of high levels of RIPK3, TNF can cause cell death independent of caspase 8 and RIPK1

**Moujalled, D.**, Gentle, I., Wong, L., Evans, J., Deed, S., Hanssen, E., Strasser, A. and Vaux, D.L. (Australia)

### POS-WED-141 13:45 - 14:45

Activation of the calcium-sensing receptor by glutathione analogs: physiological significance and insights into the mechanism of action

**Mun, H.C.**, Broadhead, G.K., Avlani, V.A., Jourdon, O., Christopoulos, A., Church, W.B., Delbridge, L. and Conigrave, A.D. (Australia)

### POS-THU-142 13:30 - 14:30

Yeast genome-wide analysis identifies cellular processes affecting aggregation of amyloid beta 42-GFP fusion reporter

**Nair, S.**, Traini, M., Dawes, I.W. and Perrone, G.G. (Australia)

### POS-WED-143 13:45 - 14:45

Targeting of the innate immune regulatory protein Mull1 to mitochondria

**Ng, H.**, Khoo, J., Jenkins, K., Mansell, A., Gabriel, K. and Nagley, P. (Australia)

### POS-THU-144 13:30 - 14:30

A pleiotropic effect of SIRT1 on HSF1-dependent gene activation?

**Nguyen, M.T.**, Láng, J., Bulhardt, O., Csermely, P. and Soti, C. (Hungary)

### POS-WED-145 13:45 - 14:45

Characterization of putrescine and spermidine uptake by the human malaria parasite, *Plasmodium falciparum*

**Niemand, J.**, Birkholtz, L., Louw, A.I. and Kirk, K. (South Africa and Australia)

## POSTER SESSIONS WEDNESDAY & THURSDAY

### POS-THU-146 13:30 - 14:30

MiD49 and MiD51, novel mitochondrial outer membrane proteins acting as Drp1 effectors in mitochondrial division  
**Palmer, C.S.**, Osellame, L.D., Laine, D., Koutsopoulos, O.S., Frazier, A.E. and Ryan, M.T. (Australia)

### POS-WED-147 13:45 - 14:45

Cellular and extracellular forms of podocalyxin (PODXL)  
Fernandez, D., Larrucea, S., Nowakowski, A., Vilar-Egea, M.P., Ayuso, M.S. and **Parrilla, R.** (Spain)

### POS-THU-148 13:30 - 14:30

Rapid purification of native histidine-rich glycoprotein from human plasma utilizing a stepwise purification method  
**Patel, K.K.**, Hoogenraad, N.J., Poon, I.H. and Hulett, M.D. (Australia)

### POS-WED-149 13:45 - 14:45

Redox homeostasis at the cellular and subcellular level  
**Perrone, G.G.**, Ayer, A., Minard, A., Fife, C., Fellermeier, S., Tan, S.-X., Meyer, A.J. and Dawes, I.W. (Australia and Germany)

### POS-THU-150 13:30 - 14:30

Localization of serine hydroxymethyltransferase isoforms in *Plasmodium falciparum*  
**Pornthanakasem, W.**, Leartsakulpanich, U., Uthaiyibull, C., Kongkasuriyachai, D. and Yuthavong, Y. (Thailand)

### POS-WED-151 13:45 - 14:45

Real-time monitoring and composition of the potassium efflux at early stages of apoptosis in leucemic t-cells  
**Pottosin, I.**, Valencia-Cruz, G., Bonales-Alatorre, E., Shabala, L., Shabala, S. and Dobrovinskaya, O. (Mexico and Australia)

### POS-THU-152 13:30 - 14:30

Malate transporters in the soybean (*glycine max*)- rhizobia symbiosis  
**Qu, Y.**, Clarke, V.C., Loughlin, P.C., Day, D.A. and Smith, P.M.C. (Australia)

### POS-WED-153 13:45 - 14:45

Cellular roles of the Puf1/Puf2 RNA binding proteins in yeast  
**Quenault, T.L.** and Traven, A. (Australia)

## POSTER SESSIONS WEDNESDAY & THURSDAY

### **POS-THU-154 13:30 - 14:30**

A novel inhibitor of ribosomal RNA gene transcription identifies coupling of Pol I transcription to multiple cell cycle checkpoints and senescence

**Quin, J.**, Sanij, E., Bywater, M., Drygin, D., Anderes, K., McArthur, G., Pearson, R. and Hannan, R. (Australia and USA)

### **POS-WED-155 13:45 - 14:45**

Identification of ligand(s) for human leukocyte immunoglobulin like receptor 4 (LILRA3)

**Rajasekariah, P.**, An, H., Bryant, K. and Tedla, N. (Australia)

### **POS-THU-156 13:30 - 14:30**

Characterization of the  $\alpha$ -Syn expression pattern by immunofluorescence assay with commercially available anti- $\alpha$ -Syn antibodies that recognize distinct regions of  $\alpha$ -Syn

Nam, M.K., Han, J.H., Park, D.W., Kim, S.S., Kim, G.Y., Shin, H.A., Moon, J.M. and **Rhim, H.** (Korea)

### **POS-WED-157 13:45 - 14:45**

Biochemical analysis of flavoprotein subunit isoforms in human mitochondrial complex II (succinate-ubiquinone reductase)

**Sakai, C.**, Tomitsuka, E., Miyagishi, M. and Kita, K. (Japan)

### **POS-THU-158 13:30 - 14:30**

Decoding the mechanism of cell-elasticity adhesion by modifying tropoelastin

**Seneviratne, M.G.**, Mithieux, S.M., Bax, D.V. and Weiss, A.S. (Australia)

### **POS-WED-159 13:45 - 14:45**

Influence of p38 MAPK inhibitor on inflammation after surgical wound

**Shurygina, I.A.**, Shurygin, M.G., Zelenin, N.V., Granina, G.B. and Lepekhova, S.A. (Russia)

### **POS-THU-160 13:30 - 14:30**

Immune-enhancing antitumour RNA interference therapy for cervical cancer

**Singhania, R.**, Gu, W. and McMillan, N. (Australia)

## POSTER SESSIONS WEDNESDAY & THURSDAY

**POS-WED-161 13:45 - 14:45**

Induced polyploidisation and mutagenesis for generation of novel pasture grass fungal endophytes

**Ludlow, E.**, Guthridge, K.M., Forster, J.W. and Spangenberg, G.C. (Australia)

**POS-THU-162 13:30 - 14:30**

Regulation of Na<sup>+</sup> in the intraerythrocytic malaria parasite

**Spillman, N.J.**, Allen, R.J.W. and Kirk, K. (Australia)

**POS-WED-163 13:45 - 14:45**

Role of APP copper binding domain in APP metabolism and structure

**Spoerri, L.**, Vella, L.J., Pham, C.L.L., Barnham, K.J. and Cappai, R. (Australia)

**POS-THU-164 13:30 - 14:30**

Inhibition of Bak activation by VDAC2 is dependent on the Bak transmembrane anchor

**Stojanovski, D.**, Lazarou, M., Frazier, A.E., Kotevski, A., Dewson, G., Kluck, R.M., Vaux, D.L. and Ryan, M.T. (Australia)

**POS-WED-165 13:45 - 14:45**

*Reclinomonas americana*: a snapshot of mitochondrial evolution

**Tong, J.**, Gabriel, K. and Lithgow, T. (Australia)

**POS-THU-166 13:30 - 14:30**

Hamlet binding to  $\alpha$ -actinin disrupts focal adhesions and facilitates tumor cell detachment

**Trulsson, M.**, Hao, Y., Gisselsson, L., Chao, Y., Urbano, A., Aits, S., Mossberg, A.K., Mok, K.H. and Svanborg, C. (Sweden, Singapore and Ireland)

**POS-WED-167 13:45 - 14:45**

Regulatory role of PRIP in the bone formation

**Tsutsumi, K.T.**, Matsuda, M.M., Jimi, E.J. and Hirata, M.H. (Japan)

**POS-THU-168 13:30 - 14:30**

The role of PRIP in the regulation of autophagy

**Umebayashi, H.**, Matsuda, M., Kanematsu, T. and Hirata, M. (Japan)

## POSTER SESSIONS WEDNESDAY & THURSDAY

### POS-WED-169 13:45 - 14:45

Inhibition of ATP-binding cassette transporter G2 increased mitochondrial localization of PpIX in ALA treated cells and enhanced their apoptotic cell death induced by photodynamic treatment

**Utsumi, K.**, Fujita, H., Uchida, M., Yamamoto, M., Inoue, K., Utsumi, T. and Sasaki, J. (Japan)

### POS-THU-170 13:30 - 14:30

Evidence for a novel developmentally regulated, amyloid precursor protein processing pathway

**Vella, L.J.**, Munter, L.M., Fodero-Tavoletti, M.T., Roberts, R., Masters, C.L., Barnham, K.J. and Cappai, R. (Australia and Germany)

### POS-WED-171 13:45 - 14:45

The role of mitochondrial protein, Cisd2, in adipogenesis

**Wang, C.H.**, Chen, Y.F., Wu, C.Y., Tsai, T.F. and Wei, Y.H. (Taiwan)

### POS-THU-172 13:30 - 14:30

The characterization of C10orf65 a putative complex I assembly factor

**Wang, X.**, Wang, W., McKenzie, M. and Ryan, M.T. (Australia)

### POS-WED-173 13:45 - 14:45

Deciphering the molecular details of type V secretion systems in enteropathogenic *Escherichia coli* (EPEC)

**Webb, C.T.**, Selkig, J.P., Celik, N. and Lithgow, T.J. (Australia)

### POS-THU-174 13:30 - 14:30

Antiproliferative and proapoptotic effects of curcumin from *Jatropha curcas* on human small cell lung cancer cell line

**Wetprasit, N.**, Bhorncharoenpong, C., Uyen, U., Abhornsuwan, T., Promboon, A., Roytrakul, S. and Ratanapo, S. (Thailand)

### POS-WED-175 13:45 - 14:45

The effects of weakened mitotic checkpoints: molecular events that follow and the relevance to cancer therapy

**Wong, H.**, Murray, M., Gregory, S. and Saint, R. (Australia)

### POS-THU-176 13:30 - 14:30

Optimization of heterogeneous ion channel expression in HEK-293T cells

**Yaakob, N.S.**, Exintaris, B. and Irving, H.R. (Australia)

## POSTER SESSIONS WEDNESDAY & THURSDAY

### POS-WED-177 13:45 - 14:45

A single amino acid point mutation in fibroblast activation protein (FAP) in humans is associated with loss of function and cell surface localization

**Yao, T.W.**, Osborne, B., Wang, X.M., Yu, D.M.T., Topaloglu, K.A. and Gorrell, M.D. (Australia and Turkey)

### POS-THU-178 13:30 - 14:30

Thrombin-treated cyclooxygenase-2 expression and prostaglandin E<sub>2</sub> production by primary myoblasts is mediated by protease-activated receptor-1

**Yoo, H.J.**, Pagel, C.N., Pike, R.N. and Mackie, E.J. (Australia)

### POS-WED-179 13:45 - 14:45

The role of WW and C-terminal domains in Yorkie/Yes-Associated Protein

**Zhang, X.**, Milton, C.C., Humbert, P.O. and Harvey, K.F. (Australia)

### POS-THU-180 13:30 - 14:30

Large-conductance Ca<sup>2+</sup>-activated potassium and ether-á-go-go potassium channels regulated proliferation of human mesenchymal stem cells

**Zhang, Y.Y.** and Li, G.R. (China)

## PLANT SYSTEMS

181 – 215

### POS-WED-181 13:45 - 14:45

Characterising the inhibition of legume nodulation caused by low pH conditions

**Lin, M.H.**, Ferguson, B.J., Indrasumunar, A. and Gresshoff, P.M. (Australia)

### POS-THU-182 13:30 - 14:30

Characterizing a novel LEA protein from resurrection grass

**Ling, H.Y.**, Blomstedt, C.K., Hamill, J.D., Walmsley, A.M. and Neale, A.D. (Australia)

### POS-WED-183 13:45 - 14:45

Investigating the role of short RNAs in tomato fruit development

**Lopez-Gomollon, S.** and Dalmay, T. (UK)

## POSTER SESSIONS WEDNESDAY & THURSDAY

### POS-THU-184 13:30 - 14:30

Characterisation of the *Phytophthora* zoospore secretome

**Ludowici, V.A.**, Blackman, L.M. and Hardham, A.R. (Australia)

### POS-WED-185 13:45 - 14:45

Towards the domestication of a wild rice relative, *microlaena stipoides* using large scale gene sequencing

**Malory, S.**, Shapter, F.M., Elphinstone, M.S., Chivers, I.H. and Henry, R.J. (Australia)

### POS-THU-186 13:30 - 14:30

A quiescent MIR159c: target gene regulatory module implies the ancient MIR159 family has very few targets of biological relevance in Arabidopsis

Allen, R.S., Li, J. Alonso-Peral, M.M., White, R.G., Gubler, F. and **Millar, A.A.** (Australia)

### POS-WED-187 13:45 - 14:45

Examination of residues that influence interaction between Rubisco and Rubisco activase

**Milward, S.E.** and Whitney, S.M. (Australia)

### POS-THU-188 13:30 - 14:30

Over expression of *Snakin-1* and *Snakin-2* genes under a potato light inducible *Lhca3* promoter in transgenic potatoes for broad spectrum disease resistance

**Mohan, S.**, Meiyalaghan, S., Jones, E.E., Jacobs, J.M.E., Pringle, J.M. and Conner, A.J. (New Zealand)

### POS-WED-189 13:45 - 14:45

The role of *AtMYB5* and *AtMYB23* in seed coat and trichome development

**Napoli, R.**, Parish, R. and Li, S. (Australia)

### POS-THU-190 13:30 - 14:30

Characterisation of the *SERK* gene family in legumes involved in development and defense

**Nolan, K.E.** and Rose, R.J. (Australia)

### POS-WED-191 13:45 - 14:45

Environmental regulation of the cyanogenic glycoside, dhurrin, in sorghum

**O'Donnell, N.**, Blomstedt, C., Stuart, P., Neale, A., Hamill, J. and Gleadow, R. (Australia)

## POSTER SESSIONS WEDNESDAY & THURSDAY

### POS-THU-192 13:30 - 14:30

Ontogenetic variation in *Eucalyptus* defense profiles

**O'Gorman, K.L.**, Miller, R.E., Cody, N., Burns, A.E., Foley, W.J. and Gleadow, R.M. (Australia)

### POS-WED-193 13:45 - 14:45

The consequences of altering N-terminal post-translational processing of Rubisco in tobacco chloroplasts

**Orr, D.J.**, Houtz, R.L. and Whitney, S.M. (Australia and USA)

### POS-THU-194 13:30 - 14:30

Protein and DNA are taken up by plant roots

**Paungfoo-Lonhienne, C.**, Lonhienne, T.G.A., Rentsch, D., Mudge, S.R., Webb, R. and Schmidt, S. (Australia and Switzerland)

### POS-WED-195 13:45 - 14:45

Dichotomy in the *NRT* gene families of Arabidopsis and cereal species

**Plett, D.**, Toubia, J., Baumann, U., Garnett, T., Tester, M. and Kaiser, B.N. (Australia)

### POS-THU-196 13:30 - 14:30

Genetic architecture of root systems in cotton

**Proadhan, M.A.**, McGee, P.A. and Saleeba, J.A. (Australia)

### POS-WED-197 13:45 - 14:45

Modelling scenarios for biomass opportunities in sugarcane

**Rae, A.L.**, Lam, D. and O'Shea, M.G. (Australia)

### POS-THU-198 13:30 - 14:30

CLE induction of soybean nodule regulation

**Reid, D.E.**, Li, D., Hayashi, S., Ferguson, B. and Gresshoff, P. (Australia)

### POS-WED-199 13:45 - 14:45

Characterisation of the wheat multi-pathogen resistance gene *Lr34/Yr18/Pm8*

**Risk, J.**, Solomon, P., Richardson, T., Viccars, L., Chandramohan, S., Tabe, L., Spielmeier, W. and Lagudah, E. (Australia)

## POSTER SESSIONS WEDNESDAY & THURSDAY

### POS-THU-200 13:30 - 14:30

An investigation on the influence of DGAT1 and polyoleosin on triacylglyceride production

**Roldan, M.B.**, Winichayakul, S., Scott, R. and Roberts, N.J.  
(New Zealand)

### POS-WED-201 13:45 - 14:45

An unusual GA and ABA synergism promotes somatic embryogenesis in *Medicago truncatula* 2HA: implications for transcriptional regulation

**Rose, R.J.**, Kurdyukov, S., Zhang, X.Y. and Nolan, K.E.  
(Australia)

### POS-THU-202 13:30 - 14:30

*In planta* production of recombinant enzymes for the processing of biofuel feedstocks

**Scott, R.W.**, Bartho, J.D. and Roberts, N.J. (New Zealand)

### POS-WED-203 13:45 - 14:45

P-body participation in cellular reprogramming of cultured mesophyll protoplasts

Bhuller, D.S., **Sheahan, M.B.** and Rose, R.J. (Australia)

### POS-THU-204 13:30 - 14:30

Root growth responses in barley (*Hordeum vulgare* L.) to salt stress

**Shelden, M.C.**, Roessner, U., Tester, M. and Bacic, A.  
(Australia)

### POS-WED-205 13:45 - 14:45

A comparative genomics approach for identifying effectors in *Venturia inaequalis*

**Shiller, J.B.**, Mesarich, C., Jones, D., Bowen, J., Templeton, M. and Plummer, K. (Australia and New Zealand)

### POS-THU-206 13:30 - 14:30

Manipulation of the non-phosphorylating pathway alters ionic homeostasis

**Smith, C.A.**, Barthet, M.M., Whelan, J., Smith, P.M.C., Day, D.A. and Soole, K.L. (Australia)

### POS-WED-207 13:45 - 14:45

Browning of cinnamon myrtle (*Backhousia myrtifolia*) leaves

**Sommano, S.**, Joyce, D., D'Arcy, B. and Joyce, P. (Australia)

## POSTER SESSIONS WEDNESDAY & THURSDAY

### POS-THU-208 13:30 - 14:30

From zygote to oil and protein bodies in the seed of the model legume *Medicago truncatula*

**Song, Y.,** Wang, X.-D., Garg, M. and Rose, R. (Australia)

### POS-WED-209 13:45 - 14:45

An autoactive flax R protein is purified with ATP bound in its nucleotide binding pocket

Williams, S.J., **Sornaraj, P.,** Decourcy-Ireland, E., Menz, R.I., Kobe, B., Ellis, J.G., Dodds, P.N. and Anderson, P.A. (Australia)

### POS-THU-210 13:30 - 14:30

Jasmonic acid and ethylene signaling pathways are involved in citrus defenses against *A. alternata* "tangerine pathotype"

**Stuart, R.M.,** Kubo, K.S., Boava, L.P., Bastianel, M. and Machado, M.A. (Brazil)

### POS-WED-211 13:45 - 14:45

A transcriptional and enzymatic evaluation of malic acid metabolism in developing winegrapes

**Sweetman, C.,** Ford, C.M. and Soole, K.L. (Australia)

### POS-THU-212 13:30 - 14:30

Investigating the roles of barley *CesA* genes in cell wall biosynthesis

**Tan, A.H.T.,** Burton, R.A. and Fincher, G.B. (Australia)

### POS-WED-213 13:45 - 14:45

High energy forage with elevated and protected triacylglycerides

**Winichayakul, S.,** Scott, R., Roldan, M., Cookson, R., Richardson, K., Bryan, G. and Roberts, N. (New Zealand)

### POS-THU-214 13:30 - 14:30

Characterization of regulated protein secretion in *Phytophthora zoospores*

**Zhang, W.,** Hardham, A.R. and Blackman, L.M. (Australia)

### POS-WED-215 13:45 - 14:45

Genotype and environment effects on protein composition of wheat grains

**Md Zin, N.H.,** Copeland, L. and Wilkes, M. (Australia)

PROTEINS: MACHINES OF LIFE

216 – 260

- POS-THU-216 13:30 - 14:30**  
 Termination of DNA replication in *E. coli*: not every *Ter* site mediates termination of replication  
**Moreau, M.J.** and Schaeffer, P.M. (Australia)
- POS-WED-217 13:45 - 14:45**  
 Strategy for comprehensive identification of functional human N-myristoylated proteins using an insect cell-free protein synthesis system  
**Moriya, K.**, Suzuki, T., Ando, E. and Utsumi, T. (Japan)
- POS-THU-218 13:30 - 14:30**  
 $\beta$ 7-strand is essential for monomer interaction in homo- and heterooligomers of human small heat shock proteins  
**Mymrikov, E.V.**, Bukach, O.V., Seit-Nebi, A.S. and Gusev, N.B. (Russian Federation)
- POS-WED-219 13:45 - 14:45**  
 Rational drug design of inhibitors for the Schizophrenia therapeutic target Kynurenine Aminotransferase-I  
**Nadvi, N.A.**, Akladios, F., Salam, N.K., Park, J.H., Hibbs, D.E., Hanrahan, J.R., Kapoor, V., Gorrell, M.D. and Church, W.B. (Australia)
- POS-THU-220 13:30 - 14:30**  
 Designer single-stranded RNA-binding proteins  
**Nguyen, C.D.**, Weisbrodt, S., Mansfield, R. and Mackay, J.P. (Australia)
- POS-WED-221 13:45 - 14:45**  
 Natural substrates of the N-end rule pathway in *Escherichia coli*  
**Ninnis, R.**, Spall, S., Talbo, G., Truscott, K. and Dougan, D. (Australia)
- POS-THU-222 13:30 - 14:30**  
 Analyzing LIM-domain mediated interactions  
**Nisevic, I.**, O'Connell, M., Mansfield, R. and Matthews, J.M. (Australia)
- POS-WED-223 13:45 - 14:45**  
 Structure-function studies of annexins in infectious diseases  
**Osman, A.** and Hofmann, A. (Australia)

## POSTER SESSIONS WEDNESDAY & THURSDAY

### **POS-THU-224 13:30 - 14:30**

An investigation in partnerships: paraspeckle protein- RNA interactions

**Passon, D.M.**, Lee, M., Bythell-Douglas, R.R., Fox, A.H. and Bond, C.S. (Australia)

### **POS-WED-225 13:45 - 14:45**

The antifungal activity of a plant defensin requires the fungal cell wall

**Payne, J.A.**, Hulett, M., Anderson, M.A. and Van der Weerden, N. (Australia)

### **POS-THU-226 13:30 - 14:30**

Dynole 34-2 is a potent inhibitor of dynamin that induces cell death following cytokinesis failure and suppresses glioblastoma tumour growth *in vivo*

Chircop, M., **Perera, S.**, Ma, M.P.C., Lau, H., Gilbert, J., Jones, N.C., Dabacco, G., Gordon, C.P., Young, K.A., Morokoff, A., Sakoff, J., O'Brien, T., McCluskey, A. and Robinson, P.J. (Australia)

### **POS-WED-227 13:45 - 14:45**

Oligomeric structure of DAP decarboxylase from diverse bacterial species

**Peverelli, M.G.**, Dogovski, C. and Perugini, M.A. (Australia)

### **POS-THU-228 13:30 - 14:30**

Distinct partitioning of polyQ and polyA-expanded proteins in cells

**Polling, S.**, Ramdzan, Y.M., Hill, A.F. and Hatters, D.M. (Australia)

### **POS-WED-229 13:45 - 14:45**

Synthesis of the recombinant chimeric transthyretin for its functional study

**Poodproh, R.**, Leelawatwattana, L. and Prapunpoj, P. (Thailand)

### **POS-THU-230 13:30 - 14:30**

Development of a peptide inhibitor of matriptase for *in vivo* testing

**Quimbar Dominguez, P.M.**, Daly, N.L., Dunse, K.M., Hulett, M.D., Craik, D.J. and Anderson, M.A. (Australia)

## POSTER SESSIONS WEDNESDAY & THURSDAY

**POS-WED-231 13:45 - 14:45**

Mitogenic and metabolic signalling via the insulin receptor isoform-A

**Rajapaksha, K.H.**, Alvino, C.L., Wallace, J.C. and Forbes, B.E. (Australia)

**POS-THU-232 13:30 - 14:30**

Ultracellular alterations of the hepatocellular carcinoma cell line induced by Hep88 mAb: A novel harmful mAb

**Rojpibulstit, P.**, Manochan, S., Puthong, S., Gamnarai, P., Kittisenachai, S., Kangsadalampai, S. and Roittrakul, S. (Thailand)

**POS-WED-233 13:45 - 14:45**

The extracurricular activities of upstream open reading frames

Friend, L., Hillman, K., Skarszewski, A., Wang, X.Q., Gorman, J., Smith, R. and **Rothenagel, J.A.** (Australia)

**POS-THU-234 13:30 - 14:30**

Inhibition of mushroom tyrosinase by novel monofunctional and bifunctional dithiocarbamates sodium salts

**Saboury, A.A.** and Amin E. (Iran)

**POS-WED-235 13:45 - 14:45**

The structure and vaccine potential of an immunomodulatory salivary cystatin from a soft tick

**Salat, J.**, Paesen, G.C., Rezacova, P., Kotsyfakis, M., Kovarova, Z., Sanda, M., Andersen, J.F., Kopacek, P., Kopecky, J. and Mares, M. (Czech Republic, UK and USA)

**POS-THU-236 13:30 - 14:30**

Characterisation of oxidized recombinant human galectin-1 structure and function

**Scott, S.A.** and Blanchard, H. (Australia)

**POS-WED-237 13:45 - 14:45**

Identification and characterization of protein kinases that bind to N-terminal domain of DNA methyltransferase 1

**Sekiguchi, M.**, Sugiyama, Y., Sueyoshi, N. and Kameshita, I. (Japan)

## POSTER SESSIONS WEDNESDAY & THURSDAY

**POS-THU-238 13:30 - 14:30**

Knockdown of calmodulin-dependent protein kinase I-delta causes developmental abnormalities in zebrafish

**Senga, Y.**, Nagamine, T., Nimura, T., Sueyoshi, N. and Kameshita, I. (Japan)

**POS-WED-239 13:45 - 14:45**

Fluorescence-activated cell sorting analysis of thioredoxin in cancer cells under different oxygen conditions

**Shah, F.L.**, Di Trapani, G., Karlenius, T.C., Clarke, F.M. and Tonissen, K.F. (Australia)

**POS-THU-240 13:30 - 14:30**

Quasi-irreversible insulin-receptor complexes: Evidence for the formation of disulphide bonds between insulin and the insulin receptor

**Shelton, B.P.** and Helmerhorst, E. (Australia)

**POS-WED-241 13:45 - 14:45**

The biomolecular channelling of a reactive intermediate

**Smith, N.E.**, Vrielink, A., Corry, B. and Attwood, P. (Australia)

**POS-THU-242 13:30 - 14:30**

Cross-reactivity between lupin and peanut

**Soo, L.**, Smith, P.M.C., Mir, G.A., Smith, W.B., Prescott, S.L., Soutter, V. and Loblay, R.H. (Australia)

**POS-WED-243 13:45 - 14:45**

Plasmodium serine hydroxymethyltransferase is different in substrate specificity from its homologues - a potential antimalarial target

**Sopitthummakhun, K.**, Leartsakulpanich, U., Yuthavong, Y. and Chaiyen, P. (Thailand)

**POS-THU-244 13:30 - 14:30**

A prophage based genetic selection for use in protein structure function studies

Murchland, I., Schubert, R.A., Dodd, I.B. and **Shearwin, K.E.** (Australia)

## POSTER SESSIONS WEDNESDAY & THURSDAY

### POS-WED-245 13:45 - 14:45

Enamide analogues of pantothenate (vitamin B<sub>5</sub>) inhibit proliferation of the human malaria parasite *Plasmodium falciparum*

**Spry, C.**, Villa, M.V.J., Marquez, R. and Saliba, K.J. (Australia and Scotland)

### POS-THU-246 13:30 - 14:30

Accumulation of endogenous low molecular weight crystallin peptides in the human lens: a key event in the aging process

**Su, S.-P.**, Truscott, R.J.W., McArthur, J.D. and Aquilina, J.A. (Australia)

### POS-WED-247 13:45 - 14:45

Crystal structure of importin  $\alpha$  complexed with the DNA repair protein Ku70 peptide

**Takeda, A.A.S.**, Kobe, B. and Fontes, M.R.M. (Brazil and Australia)

### POS-THU-248 13:30 - 14:30

Purified mouse CYP27B1 can hydroxylate 20,23-Dihydroxyvitamin D<sub>3</sub> producing 1 $\alpha$ ,20,23-Trihydroxyvitamin which has altered biological activity

**Tang, E.K.Y.**, Janjetovic, Z., Li, W., Nguyen, M.N., Slominski, A. and Tuckey, R.C. (Australia and USA)

### POS-WED-249 13:45 - 14:45

ANS fluorescence studies on flexibility and substrate-induced conformational changes of the psychotropic and mesophilic acetate kinases

**Tang, A.K.**, Motoshima, H. and Watanabe, K. (Japan and Bangladesh)

### POS-THU-250 13:30 - 14:30

Molecular basis of death domain interactions that regulate assembly of proinflammatory caspase-1 activating complexes

**Vajjhala, P.R.**, Kaiser, S., Mirams, R.E. and Hill, J.H. (Australia)

### POS-WED-251 13:45 - 14:45

Expression, purification and characterization of cloning-grade zinc finger nuclease

**Tovkach, A.** and Tzfira, T. (Australia and USA)

## POSTER SESSIONS WEDNESDAY & THURSDAY

**POS-THU-252 13:30 - 14:30**

Inhibitors of viral protein nuclear import as anti-viral agents

**Wagstaff, K.M.**, Rawlinson, S.M. and Jans, D.A. (Australia)

**POS-WED-253 13:45 - 14:45**

Charged repetitive proteins unite diverse eukaryotes

**Waller, R.F.**, Gould, S.B. and McFadden, G.I. (Australia)

**POS-THU-254 13:30 - 14:30**

Characterisation of a recombinant plant-made soluble receptor for advanced glycation endproducts (sRAGE)

**Webster, D.E.**, Mulcair, M., Madhavan, S., Bialkowski, K., Talbo, G., Premaratne, R., Cooper, M.E., Forbes, J.M. and Thomas, M.C. (Australia)

**POS-WED-255 13:45 - 14:45**

Switching the catalytic properties of C<sub>3</sub> and C<sub>4</sub> plant Rubiscos

**Whitney, S.M.** (Australia)

**POS-THU-256 13:30 - 14:30**

Biophysical characterisation of protein-RNA interactions

**Wilce, J.A.**, Kim, H.Y., Yoga, Y., Cowieson, N., Scanlon, M.J., Headey, A.J., Gorospe, M., Williams, B. and Wilce, M.C.J. (Australia and USA)

**POS-WED-257 13:45 - 14:45**

Characterisation of substrate specificity of the oxygen-dependent asparaginyl hydroxylase FIH-1

**Wilkins, S.E.**, Hyvarinen, J., Koivunen, P. and Peet, D.J. (Australia and Finland)

**POS-THU-258 13:30 - 14:30**

New tricks to measure how genetic modifiers of mutant huntingtin toxicity affect huntingtin aggregation in *Drosophila*

**Wong, Y.Q.**, Quinn, L.M., Bottomley, S.P. and Hatters, D.M. (Australia)

**POS-WED-259 13:45 - 14:45**

Interaction of dengue virus envelope protein with endoplasmic reticulum-resident chaperones facilitates dengue virus production

**Wongwiwat, W.**, Limjindaporn, T., Noisakran, S., Yenchitsomanus, P. and Malasit, P. (Thailand)

## POSTER SESSIONS WEDNESDAY & THURSDAY

### POS- THU-260 13:30 - 14:30

Structure of a dimeric enzyme from a bacterial psychrophile provides insight into molecular evolution at the quaternary level

**Wubben, J.M.**, Dogovski, C., Dobson, R.C.J., Codd, R. and Perugini, M.A. (Australia)

## SYSTEMS BIOLOGY AND BIOTECHNOLOGY

261 – 281

### POS-WED-261 13:45 - 14:45

Development of a new suite of polycyclic-based conjugates of desferrioxamine B for iron overload disease

**Liu, J.**, Obando, D., Schipanski, L.G., Groebler, L.K., Witting, P.K., Kalinowski, D., Richardson, D.R. and Codd, R. (Australia)

### POS-THU-262 13:30 - 14:30

Pain phenotyping of interstitial cystitis/painful bladder syndrome patients to target biomarker studies

**Mayer, R.** (USA)

### POS-WED-263 13:45 - 14:45

Optimization of the horseradish peroxidase catalysed biodegradation of pentachlorophenol

**Martinez-Ruiz, J.**, Thomas, V., Martinez-Gutierrez, R., Garcia-Canovas, R. and Tudela, J. (Spain)

### POS-THU-264 13:30 - 14:30

The plant defensin NaD1 acts synergistically with fungicides to inhibit the growth of fungi *in vitro*

**McKenna, J.A.**, Van der Weerden, N.L., Anderson, M.A. and Heath, R.L. (Australia)

### POS-WED-265 13:45 - 14:45

Remazol brilliant blue royal biodegradation catalysed by horseradish peroxidase

**Mendez, P.**, Parra, M., Tomas, V., Martinez-Gutierrez, R., Garcia-Canovas, F. and Tudela, J. (Spain)

## POSTER SESSIONS WEDNESDAY & THURSDAY

### POS-THU-266 13:30 - 14:30

Rosmarinic acid oxidation and its antioxidant capacity  
**Munoz-Munoz, J.L.**, Garcia-Molina, F., Garcia-Molina, M.,  
Ros, E., Varon, R., Tudela, J., Garcia-Canovas, F. and  
Rodriguez-Lopez, J.N. (Spain)

### POS-WED-267 13:45 - 14:45

Investigation of MHC haplotyping with peptide nucleic acids  
using quantitative real time polymerase chain reaction  
**Murphy, N.M.**, Pouton, C.W. and Irving, H.R. (Australia)

### POS-THU-268 13:30 - 14:30

Development of a MHC class II peptide binding prediction  
method with high-poulation coverage for efficient vaccine design  
**Oyarzun, P.**, Ellis, J. and Kobe, B. (Australia and Chile)

### POS-WED-269 13:45 - 14:45

Indigo Carmine biodegradation catalysed by methylsyningate-  
laccase mediator system  
**Parra, M.**, Jimenez, L., Tomas, V., Martinez-Gutierrez, R.,  
Garcia-Canovas, F. and Tudela, J. (Spain)

### POS-THU-270 13:30 - 14:30

Delivery of multiple proteins using multi-gene expression  
vehicles  
**Poon, S.**, Connelly, A.A., Rainone, M., Guarino, R., McKenna,  
J.A., Carroll, K.T., Anderson, M.A. and Heath, R.L. (Australia)

### POS-WED-271 13:45 - 14:45

The agile technologies sureselect target enrichment system for  
next-generation sequencing: enrichment and depletion  
applications for transcriptome analysis  
**Roberts, D.**, Happe, S., Lin, E., Pabon, C., Guiffre, A., Fullmer-  
Sementek, S., McInnes, R., Joshi, S., Novak, B. and Leproust, E.  
(USA and Australia)

### POS-THU-272 13:30 - 14:30

Vitamin D interactions with P-glycoprotein expression and  
function in intestinal LS174T cells  
Kota, B.P., Tran, V.H., Allen, J. and **Roufogalis, B.D.** (Australia)

### POS-WED-273 13:45 - 14:45

Growth hormone gene manipulation in *Channa striatus*  
**Shrestha, T.R.** and Majumdar, K.C. (Nepal and India)

## POSTER SESSIONS WEDNESDAY & THURSDAY

**POS-THU-274 13:30 - 14:30**

Production of non-natural siderophores from *Shewanella putrefaciens* and *Alteromonas haloplanktis*

**Soe, C.Z.**, Pakchung, A.A.H. and Codd, R. (Australia)

**POS-WED-275 13:45 - 14:45**

Antimicrobial peptides produced by pepsin digestion of the fruit protein of *Brucea amarissima* Desv

**Sornwatana, T.**, Roytrakul, S., Wetprasit, N. and Ratanapo, S. (Thailand)

**POS-THU-276 13:30 - 14:30**

*Bacillus cereus* which can grow in the presence of benzene

**Tsugeno, Y.** (Japan)

**POS-WED-277 13:45 - 14:45**

Expression analysis of mincle on human peripheral blood cells

**Vijayan, D.**, Radford, K., Bellette, B., Beckhouse, A., Ashman, R., Nair, R. and Wells, C. (Australia)

**POS-THU-278 13:30 - 14:30**

Development of a luciferase reporter cGMP responsive promoter system suitable for use in plant protoplasts

**Wheeler, J.I.** and Irving, H.R. (Australia)

**POS-WED-279 13:45 - 14:45**

Implementation of splice switching therapies for Duchenne muscular dystrophy

**Wilton, S.D.**, and Fletcher, S. (Australia)

**POS-THU-280 13:30 - 14:30**

Stress inducible expression of TaDREB4 increases drought tolerance of transgenic wheat and prevents undesirable changes in plant development

**Yadav, M.K.**, Eini, O., Nataliya, K., Tatiana, P., Bazanova, N., Singh, R., Ismagul, A., Eliby, S., Langridge, P. and Lopato, S. (Australia and India)

**POS-WED-281 13:45 - 14:45**

Plant-based approach towards understanding the influenza A virus antigenic drift

**Yamato, H.**, Cueno, M.E., Omagari, K. and Okamoto, T. (Japan)

LATE POSTERS  
(Not sorted by theme)  
282 – 356

**POS-THU-282 13:30 - 14:30**

NMDA receptor antagonist administration leads to down-regulation of DISC1 expression and over migration of newly generated neurons in the adult hippocampus

**Namba, T.**, Uchino, S., Kohsaka, S. and Kaibuchi, K. (Japan)

**POS-WED-283 13:45 - 14:45**

Adipose-derived mesenchymal stem cells enhance tissue regeneration by inducing growth of blood vessels and nerves

**Kalinina, N.I.**, Lopatina, T.V., Efimenko, A.Y.U., Parfyonova, E.V. and Tkachuk, V.A. (Russia)

**POS-THU-284 13:30 - 14:30**

Hyperosmotic and oxidative stress induces intracellular  $CA^{2+}$ -dependent apoptosis through the cathepsin B and caspase 3-mediated pathways in skin epidermal human cell line

**Silva, R.A.**, Machado, D., Souza, A.C.S., Shishido, S.M., Ferreira, C.V., Paredes-Gamero, E.J. and Justo, G.Z. (Brazil)

**POS-WED-285 13:45 - 14:45**

ATF3 is required for TLR mediated survival signalling in murine bone marrow derived macrophages via its repression of pro-apoptotic BAK and BAX

**Thompson, M.R.**, Xu, D. and Williams B.R.G. (Australia)

**POS-THU-286 13:30 - 14:30**

Phenotypic analysis of soybean root and nodule tissues after RNAi induced silencing of the membrane bound transcription factor GmSAT1

**Mohammadi-Dehcheshmeh, M.**, Ebrahimie, E., Chiasson, D., Tyerman, S.D. and Kaiser, B.N. (Australia and Iran)

**POS-WED-287 13:45 - 14:45**

Analysis of Sharpin mutant mice and the role of Sharpin in the TNF receptor super-family pathways

**Gangoda, L.R.**, Hasbold, J., Gerlach, B., Carter, H., Silke, J. and Vaux, D.L. (Australia and UK)

## POSTER SESSIONS WEDNESDAY & THURSDAY

### POS-THU-288 13:30 - 14:30

Receptor interacting protein kinase 1 - interactions in TNF receptor 1 signalling

**Evans, J.M.**, Gentle, I.E., Vaux, D.L. and Silke, J. (Australia)

### POS-WED-289 13:45 - 14:45

Cellular inhibitor of apoptosis proteins and mouse embryonic fibroblast proliferation

**Rickard, J.A.**, Moulin, M., Feltham, R., Anderton, H., Vaux, D.L. and Silke, J. (Australia)

### POS-THU-290 13:30 - 14:30

Improvement of wheat and barley tolerance to drought by modulated expression of transcription factors

**Eini, O.**, Pyvovarenko, T., Singh, R., Eliby, S., Sivasankar, S., Simmons, C., Williams, B., Tingey, S., Langridge, P. and Lopato, S. (Australia and USA)

### POS-WED-291 13:45 - 14:45

*In vivo* dynamics of Huntingtin protein aggregation

**McCoey, J.M.**, Wong, Y.Q., Hatters, D.M. and Quinn, L.M. (Australia)

### POS-THU-292 13:30 - 14:30

Deciphering the steps involved in the trafficking of PfEMP1, a key virulence protein in the malaria parasite *Plasmodium falciparum*

**Mwesigye, E.E.**, McMillan, P.J., Maco, B., Hanssen, E. and Tilley, L. (Australia)

### POS-WED-293 13:45 - 14:45

Myosin II and Rab6 are involved in Golgi vesicle formation/release and cisternal maintenance

**Micaroni, M.**, Storrie, B., Morgan, G.P. and Marsh, B.J. (Australia and USA)

### POS-THU-294 13:30 - 14:30

*TBC1D24* regulates neuronal differentiation: cellular mechanisms behind a novel genetic cause of focal epilepsy and intellectual disability

**Jolly, L.A.**, Corbett, M.A., Bahlo, M., Afawi, Z., Gardner, A.E., Oliver, K., Shalata, A., Korczyn, A.D., Samuel, S.F. and Gecz, J. (Australia and Israel)

## POSTER SESSIONS WEDNESDAY & THURSDAY

### **POS-WED-295 13:45 - 14:45**

Role of cysteine proteases in the mechanism of action of the anticonvulsants levetiracetam and carbamazepine and the calpain inhibitor calpastatin in pentenyltetrazol-kindled rats

**Mansour, M.**, Albaker, A. and Alhaider, A. (Saudi Arabia)

### **POS-THU-296 13:30 - 14:30**

Sonic hedgehog and notch signaling can cooperate to regulate neurogenic divisions of neocortical progenitors

**Dave, R.K.**, Ellis, T., Toumpas, M.C., Robson, J.P. and Wainwright, B.J. (Australia)

### **POS-WED-297 13:45 - 14:45**

MicroRNAs are required for the proper cortical layering of the anterior zone cerebellum

**Constantin, L.**, Dave, R.K. and Wainwright, B.J. (Australia)

### **POS-THU-298 13:30 - 14:30**

Constitutive reduction of neurite growth by TRPM2 underlies the etiology of bipolar disorder

**Oh, U.** and Jang, Y. (Republic of Korea)

### **POS-WED-299 13:45 - 14:45**

Construction of Dengue virus-2 domain III envelope protein

**Ahmad Rashidi, H.S.**, Yusof, R. and Abdul Rahman, N. (Malaysia)

### **POS-THU-300 13:30 - 14:30**

Silencing suppression in the viral family Luteoviridae

**Fusaro, A.F.**, Correa, R.L., Kawchuk, L., Jackson, C.S., McLean, H., Vaslin, M.F.S. and Waterhouse, P.M. (Australia, Brazil and Canada)

### **POS-WED-301 13:45 - 14:45**

A sensitive assay to quantitate O-glycans in crude samples

**Bhavanandan, V.P.**, Abdul-Rahman, P.S. and Hashim, O.H. (Malaysia)

### **POS-THU-302 13:30 - 14:30**

Inhibitory effects of PES3520 on PDGF-BB-induced proliferation of VSMCs through blocking PDGF-RB phosphorylation

**Park, E.S.**, Lim, Y., Tudev, M., Yoo, H.S. and Yun, Y.P. (South Korea)

## POSTER SESSIONS WEDNESDAY & THURSDAY

**POS-WED-303 13:45 - 14:45**

Decursin inhibits histone deacetylase activity by activating sphingosine kinase type II

**Shin, K.O.**, Kim, S.M., Seo, C.H., Lee, E.S. and Lee, Y.M. (South Korea)

**POS-THU-304 13:30 - 14:30**

Role of anti-apoptotic Bcl-2 family member Mcl-1 in lymphoma development

**Grabow, S.**, Kelly, P.N., Bouillet, P. and Strasser, A. (Australia)

**POS-WED-305 13:45 - 14:45**

NRF2 dysfunction in patient-derived cell lines in a new model of sporadic Parkinsons disease

**Cook, A.L.**, Vitale, A.M., Ravishankar, S., Matigian, N., Mellick, G.D., Wells, C.A., Mackay-Sim, A. and Wood, S.A. (Australia)

**POS-THU-306 13:30 - 14:30**

Homozygous frame shift mutation in ECM1 gene in two siblings with lipoid proteinosis

**Azhar, A.**, Samdani, A.J., Shahid, S.M., Nawab, S.N., Sheikh, R., Qader, S.A. and Ismail, M. (Pakistan)

**POS-WED-307 13:45 - 14:45**

Neurodevelopmental pathways altered in a novel, patient-derived cell model of schizophrenia

**Fan, Y.**, Abrahamsen, G., Mills, R., Cooper-White, J., McGrath, J.J. and Mackay-Sim, A. (Australia)

**POS-THU-308 13:30 - 14:30**

Apoptotic genes expression in mice hepatocytes during malaria infection

**Alkahtani, S.** (Saudi Arabia)

**POS-WED-309 13:45 - 14:45**

LILRA2 selectively regulates LPS-mediated cytokine production and phagocytosis in peripheral blood monocytes

**Lu, H.K.**, Endoh, Y., Huynh, O., Mitchell, A., Hampartzoumian, T., Geczy, C., Bryant, K., Arm, J.P., Borges, L. and Tedla, N. (Australia and USA)

## POSTER SESSIONS WEDNESDAY & THURSDAY

### **POS-THU-310 13:30 - 14:30**

ATRX is a sertoli cell survival factor and regulator of spermatogenesis via interaction with androgen receptor  
Bagheri-Fam, S., Argentaro, A., Svingen, T., Combes, A., Koopman, P. and **Harley, V.R.** (Australia)

### **POS-WED-311 13:45 - 14:45**

Differential methylation of hnRNP A2/B1 paralogs detected in neuronal cells and cell lines by mass spectrometry  
**Friend, L.R.**, Landsberg, M.J., Nouwens, A.S., Rothnagel, J.A. and Smith, R. (Australia)

### **POS-THU-312 13:30 - 14:30**

Structural/functional properties of isolated HuR-hnRNP complexes of mammalian cell origin  
Papadopoulou, C., Ganou, V., Patrino-Georgoula, M. and **Guialis, A.** (Greece)

### **POS-WED-313 13:45 - 14:45**

Cell polarity complexes regulate growth via the Salvador/Warts/Hippo (SWH) pathway  
**Parsons, L.M.**, Grzeschik, N.A., Allott, M.L., Harvey, K.F. and Richardson, H.E. (Australia)

### **POS-THU-314 13:30 - 14:30**

Quinic acid metabolism in kiwifruit  
**Marsh, K.B.**, Bolding, H. and Laing, W. (New Zealand)

### **POS-WED-315 13:45 - 14:45**

Beta-sitosterol regulates adipocyte genes involved in glucose uptake, adipogenesis and lipid mobilization  
**Kanthimathi, M.S.**, Chai, J.W. and Kuppusamy, U.R. (Malaysia)

### **POS-THU-316 13:30 - 14:30**

A critical role for the protein phosphatase 2A B' $\alpha$  regulatory subunit in dephosphorylation of Sphingosine kinase 1  
**Pitman, M.R.**, Barr, R.K., Magarey, A.M., Moretti, P.A.B. and Pitson, S.M. (Australia)

### **POS-WED-317 13:45 - 14:45**

Sumoylation of IGF-1R is mediated through SUMO-E3 ligase RanBP2  
**Sjostrom, S.**, Warsito, D., Sehat, B. and Larsson, O. (Sweden and Canada)

## POSTER SESSIONS WEDNESDAY & THURSDAY

### POS-THU-318 13:30 - 14:30

Evaluation of P16 protein as a biomarker in penile carcinoma

**Kagohara, L.T.**, Guimaraes, G.C., Lopes, A., Cunha, I.W., Coudry, R.A. and Soares, F.A. (Brazil)

### POS-WED-319 13:45 - 14:45

A novel 4,6-disubstituted 2,2-dimethylchroman induces apoptosis in human cervical carcinoma hela cell via inhibition of DNA synthesis

**Zhang, X.**, Hwang, J. and Kim, D.-K. (Republic of Korea)

### POS-THU-320 13:30 - 14:30

Tissue Microarray study of matrix metalloproteinases in soft tissue sarcomas

**Muto, N.H.**, Cunha, I.W., Carvalho, K.C., Malagoli, R., Buim, M.E.C., Nascimento, C.F., Ferreira, S.S. and Reis, L.F.L. (Brazil)

### POS-WED-321 13:45 - 14:45

Induction of apoptosis and DNA damage by an analogue of methyl jasmonate

Zhao, J., Zhang, X., Kang, S., Hwang, J., Jung, J. and **Kim, D.-K.** (Republic of Korea)

### POS-THU-322 13:30 - 14:30

Copy number variation in individuals with clinical diagnosis of Li-Fraumeni or Li-Fraumeni like syndrome and without germline alterations in TP53 gene

**Silva, A.G.S.**, Achatz, M.I., Brentani, R., Rosenberg, C. and Krepischi, A.C. (Brazil)

### POS-WED-323 13:45 - 14:45

Actin fibers and fibronectin networks remodeling during early adipocyte differentiation

**Nobusue, H.**, Oki, Y., Shimizu, T., Onishi, N., Saya, H. and Kano, K. (Japan)

### POS-THU-324 13:30 - 14:30

A window of opportunity: the mechanism of perforin and granzyme synergy

**Lopez, J.A.**, Trapani, J.A. and Voskoboinik, I. (Australia)

### POS-WED-325 13:45 - 14:45

Conserved expression of VASA in marsupials and monotremes

Hickford, D., Frankenberg, S., Pask, A., Shaw, G. and **Renfree, M.B.** (Australia and USA)

## POSTER SESSIONS WEDNESDAY & THURSDAY

### POS-THU-326 13:30 - 14:30

Epigenetic regulation of *Oct4* and *Pdx-1* in mouse embryonic stem cells and MIN6 cells

**Wong, J.C.Y.**, Jack, M.M. and O'Neill, C. (Australia)

### POS-WED-327 13:45 - 14:45

The role of Nedd4 in embryonic blood and lymphatic vascular development

**Secker, G.**, Kazenwadel, J., Boase, N., Kumar, S. and Harvey, N. (Australia)

### POS-THU-328 13:30 - 14:30

Identification of epigenetic components required for cell-to-cell movement of an RNA silencing signal in Arabidopsis

**Searle, I.R.**, Smith, L. and Baulcombe, D.C. (Australia and UK)

### POS-WED-329 13:45 - 14:45

PAP signals from the chloroplast regulate exoribonucleases, gene silencing and stress responses in Arabidopsis

**Crisp, P.A.**, Estavillo, G.M., Pornsiriwong, W., Wirtz, M., Carrie, C., Hell, R., Whelan, J. and Pogson, B.J. (Australia and Germany)

### POS-THU-330 13:30 - 14:30

Mechanisms of small, non-coding RNA-directed gene silencing in fish

**McFarlane, L.J.**, Fitzner, A., Koopman, P. and Wilhelm, D. (Australia)

### POS-WED-331 13:45 - 14:45

Field evaluation of transgenic perennial ryegrass (*Lolium perenne* L.) plants for enhanced fructan accumulation

**Dimech, A.M.**, Badenhorst, P.E., Panter, S., Liu, Z., Ramage, C., Stewart, A.V., Smith, K.F., Mouradov, A. and Spangenberg, G.C. (Australia and New Zealand)

### POS-THU-332 13:30 - 14:30

Regulation of the human *CHOP* gene promoter by the stress response transcription factor ATF5 via the AARE1 site in human hepatoma HepG2 cells

**Yamazaki, T.**, Ohmi, A., Kurumaya, H., Kato, K., Abe, T., Okuyama, R., Umemura, M., Kaise, T., Takahashi, S. and Takahashi, Y. (Japan)

## POSTER SESSIONS WEDNESDAY & THURSDAY

**POS-WED-333 13:45 - 14:45**

Investigating the role of Klf3 in erythropoiesis at the physiological and molecular level

**Norton, L.J.**, Mak, K., Funnell, A.P.W., Pearson, R.C.M. and Crossley, M. (Australia)

**POS-THU-334 13:30 - 14:30**

Does the extraction of cell contents during digestion of grasses by the Australian plague locust occur via plasmodesmata?

**Armour, W.J.**, Clissold, F.J., Barton, D.A., Overall, R.L. and Simpson, S.J. (Australia)

**POS-WED-335 13:45 - 14:45**

Wash-dependent actin drives vesicle neutralisation: a requirement for exocytosis

**Carnell, M.J.** and Insall, R. (UK)

**POS-THU-336 13:30 - 14:30**

Exendin-4 enhances adult neurogenesis after focal cerebral ischemia in mice

**Kang, H.M.**, Jin, J. and Park, C. (Republic of Korea)

**POS-WED-337 13:45 - 14:45**

Hydroxysteroid dehydrogenase transformations of 5 $\beta$ -scymnol and identification of oxoscymnol transformation products by LCMS

**Macrides, T.A.**, Hodges, L.D., Wynne, P.M., Glowacki, L.L., Kalafatis, N. and Wright, P.F.A. (Australia)

**POS-THU-338 13:30 - 14:30**

Characterizing the conformation of monomeric Huntingtin

**Scicluna, B.J.**, Ramdzan, Y.M., Mok, Y.F., Mulhern, T.D. and Hatters, D.M. (Australia)

**POS-WED-339 13:45 - 14:45**

Neuroprotective effects of ethyl pyruvate on Parkinson's disease model

**Choi, J.S.** and Jeong, J.W. (Republic of Korea)

**POS-THU-340 13:30 - 14:30**

The role of PLZF in shaping oncogenic characteristics of cancer cells

**Suliman, B.A.**, Xu, D. and Williams, B.R.G. (Saudi Arabia and Australia)

## POSTER SESSIONS WEDNESDAY & THURSDAY

### POS-WED-341 13:45 - 14:45

TRPC6 was neuroprotective in cerebral ischemia

Du, W.L., **Huang, J.B.**, Yao, H.L., Zhou, K.C. and Duan, B. (China)

### POS-THU-342 13:30 - 14:30

Streptococcus pneumoniae: choosing rational targets for structure determination

**Riboldi-Tunnicliffe, A.** (Australia)

### POS-WED-343 13:45 - 14:45

Antiproliferative activity and proteomic analysis of gene expressed in hepatocellular carcinoma (HepG2) cancer cell lines treated with phytic acid

**Saad, N.**, Mohd Esa, N., Ithnin, H., Abdul Rahman, S. and Shafie, N.H. (Malaysia)

### POS-THU-344 13:30 - 14:30

Characterisation of the mechanism by which the BTB/POZ zinc finger protein, abrupt mediates tumorigenesis in Drosophila

**Turkel, N.**, Brumby, T., Goulding, K., Bolden, J., Martin-Blanco, E. and Richardson, H. (Australia and Spain)

### POS-WED-345 13:45 - 14:45

Biofilm formation as character to select wine *Saccharomyces cerevisiae* strains

**Sidari, R.** and Howell, K.S. (Italy and Australia)

### POS-THU-346 13:30 - 14:30

Regulation of the essential *M. tuberculosis* peptidoglycan-precursor flippase

**Gee, C.L.**, Papavinasasundaram, K.G., Blair, S.R., Baer, C.E., Falik, A.M., King, D.S., Sassetti, C.M. and Alber, T. (USA and Australia)

### POS-WED-347 13:45 - 14:45

Effects of progesterone on cell growth of T cell leukemia cells

**Kon, A.**, Sato, M. and Toyoda, H. (Japan)

### POS-THU-348 13:30 - 14:30

Synergistic cytotoxic effects of delphinidin with arsenite on human leukemia cell lines

**Yoshino, Y.**, Yuan, B., Okuzumi, S., Takemae, F. and Toyoda, H. (Japan)

## POSTER SESSIONS WEDNESDAY & THURSDAY

**POS-WED-349 13:45 - 14:45**

Putative CIS-regulatory elements in highly expressing sperm cell genes of rice

**Sharma, N.**, Russell, S.D., Bhalla, P.L. and Singh, M.B.  
(Australia and USA)

**POS-THU-350 13:30 - 14:30**

A bacterial elongation factor G homolog exclusively functions in ribosome recycling in the spirochaete *Borrelia burgdorferi*

**Suematsu, T.**, Yokobori, S., Morita, H., Yoshinari, S., Ueda, T., Kita, K., Takeuchi, N. and Watanabe, Y. (Japan)

**POS-WED-351 13:45 - 14:45**

Molecular characterization of the duplicated taurocyamine kinase from *Schistosoma mansoni*

Laurent, S., Awama, A., Salvador, A., Gouet, P. and **Marcillat, O.** (France)

**POS-THU-352 13:30 - 14:30**

Identification of benzopyrazine derivatives as a novel class of Grb7 antagonists

**Ambaye, N.D.**, Gunzburg, M., Wilce, M.C.J. and Wilce, J.A.  
(Australia)

**POS-WED-353 13:45 - 14:45**

Bioinformatic analysis of sheep corneodesmosin (CDSN) and alpaca agouti signalling protein (ASIP)

**Bottomley, S.**, Subramaniam, N.S., Feeley, N.L., Morgan, E.F., Munyard, K.A. and Groth, D.M. (Australia)

**POS-THU-354 13:30 - 14:30**

Rheological behavior of dairy desserts prepared with *Caesalpinia pulcherrima* seed galactomannan

Arcanjo, S.R.S., Holanda, M.L., Beserra, J.F., Oliveira, A.M.C., Paula, R.C.M., Monteiro-Moreira, A.C.O. and **Moreira, R.A.**  
(Brazil)

**POS-WED-355 13:45 - 14:45**

Crosslinked seed polysaccharides for one-step purification of galactose-binding lectins

Teixeira, D.M.A., Braga, R.C., Gadelha, P., Reicher, F., Moreira, R.A. and **Monteiro-Moreira, A.C.O.** (Brazil)

## POSTER SESSIONS WEDNESDAY & THURSDAY

**POS-THU-356 13:30 - 14:30**

Molecular cloning and characterization of strictosidine synthase of *Mitragyna speciosa*

**Zainal, Z.**, Jumali, S.S., Baharum, S.N., Mohd Said, I. and Ismail, I. (Malaysia)

**POS-WED-357 13:45 - 14:45**

Synergistic effects of ascorbic acid (AA) and thiazolidinedione (TZD) on secretion of high molecular weight adiponectin

**Webster, J.**, Rose, F., Richards, A. and Whitehead, J. (Australia)