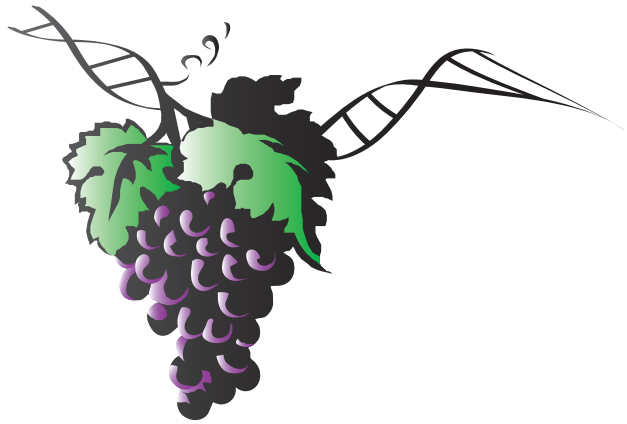


Cell Signalling in Cancer and Development

4th

Barossa Meeting

SCIENCE AMONGST THE VINES[®]



18 – 21 November 2009

Novotel Barossa Valley
South Australia

program

Wednesday 18th November

4.00 – 4.50pm **Registration**
4.50 – 5.00pm **Welcome Address** – Greg Goodall

Session 1 - microRNAs



5.00 – 7.00pm **Chair:** John Scott

5.00 **Antonio Giraldez**, *School of Medicine, Yale University, New Haven, USA*
The role of microRNAs during vertebrate development

5.30 **Carola Vinuesa**, *John Curtin School of Medical Research, Canberra, ACT*
The Roquin family of RNA-binding E3 ligases regulate their targets via the microRNA machinery and control CNS development, lymphomagenesis and autoimmunity

5.50 **Philip Gregory**, *Centre for Cancer Biology, SA Pathology, Adelaide, SA*
miR-200 / ZEB / TGF- β feed-back loops regulate epithelial-mesenchymal transition

6.10 **Alex Swarbrick**, *Garvan Institute, Sydney, NSW*
OncomiRs: Targeting of p53 by microRNAs in cancer and stem cells

6.30 **Suresh Alahari**, *Louisiana State University, New Orleans, USA*
MicroRNA-27b functions as an oncogene and regulates the expression of suppression of tumorigenicity 14 (ST14) gene in breast cancer

7.30 **Dinner at Novotel (Pool-side BBQ) – Sponsored by Medvet**



Thursday 19th November

Session 2 – Stem Cells in Development and Cancer



8.30 – 10.20am **Chair:** Vishva Dixit

8.30 **John Dick**, *University of Toronto, Ontario, Canada*
Stem cell concepts renew cancer research

9.00 **Andrew Boyd**, *Queensland Institute Medical Research, Brisbane, QLD*
Sponsored by The Leukaemia Foundation
Eph receptor tyrosine kinases in development and cancer



9.20 **Geoffrey Lindeman**, *Walter & Eliza Hall Institute, Melbourne, VIC*
Investigating breast stem and progenitor cells to get abreast of breast cancer

9.40 **Quenten Schwarz**, *Centre for Cancer Biology, SA Pathology, Adelaide, SA*
Coordinating neural crest stem cell migration with cell specification

10.00 **Brandon Wainwright**, *Institute for Molecular Bioscience, Brisbane, QLD*
Sponsored by ANZSCBD
The Notch and Hedgehog pathways interact to control growth and patterning of the cerebellum



10.20 **Morning Tea and Poster Viewing**

Session 3 – Therapeutic Opportunities



11.00 – 12.30pm **Chair:** Chris Garcia

- 11.00 **Lina Obeid**, *Medical University of South Carolina, Charleston, USA*
Sphingosine kinase and sphingosine-1-phosphate in inflammation and cancer
- 11.30 **Michele Grimbaldston**, *Centre for Cancer Biology, SA Pathology, Adelaide, SA*
Vitamin D3 promotes mast cell-dependent reduction of chronic UVB-induced skin pathology in mice
- 11.50 **Mark DeWitte**, *CSL, Melbourne, VIC*
Monoclonal antibody targeting CD123 (IL-3R α) in acute myeloid leukaemia (AML):
From bench to clinic
- 12.10 **Paul Foster**, *The University of Newcastle, NSW*
MicroRNA regulation of TH2 mediated allergic airway disease
- 12.30 **Lunch**

Session 4 – Signalling in Vascular Development



1.30 – 3.10pm **Chair:** Blanche Capel

- 1.30 **Christer Betsholtz**, *Karolinska Institute, Stockholm, Sweden*
Cell signalling in angiogenesis
- 2.00 **Tim Hla**, *Weill Medical College of Cornell University, New York, USA*
S1P signaling in the vasculature
- 2.30 **Steven Stacker**, *Ludwig Institute for Cancer Research, Melbourne, VIC*
Characterisation of molecules produced by the endothelium which contributes to tumour metastasis
- 2.50 **Claudine Bonder**, *Centre for Cancer Biology, SA Pathology, Adelaide, SA*
Acute leukocyte recruitment is a sphingosine kinase 1- dependent event
- 3.10 **Afternoon Tea**

Session 5 – Signalling in Morphogenesis



3.40 – 5.30pm **Chair:** Mike Tyers

- 3.40 **Blanche Capel**, *Duke University Medical Centre, Durham, USA*
Patterning the Gonad and its cells
- 4.10 **Paul Thomas**, *University of Adelaide, Adelaide, SA*
Expression of SOX3 in the urogenital ridge is associated with XX male sex reversal in mice
- 4.30 **Ali Nawshad**, *University of Nebraska Medical Center, Nebraska, USA*
Splice variants of TGF β receptor, ALK5 regulate palate morphogenesis
- 4.50 **Dagmar Wilhelm**, *The University of Queensland, Brisbane, QLD*
The role of non-coding RNAs in mouse gonad development
- 5.10 **Yeesim Khew-Goodall**, *Centre for Cancer Biology, SA Pathology, Adelaide, SA*
The Pez-TGF β -miR200 axis in cancer
- 6.00 Award of the Clifford Prize presented by Dr David Filby, Department of Health, SA
- 6.15 Clifford Prize Lecture, Professor John Dick
- 7.00 **Dinner at Tanunda Pines Golf Club - Sponsored by Novartis**



Friday 20th November



Session 6 – Apoptosis

8.30 – 10.10am **Chair:** Mathew Vadas

8.30 **Vishva Dixit**, *Genentech Inc, Molecular Oncology, San Francisco, USA*
Shedding light on ubiquitin modification in cancer

9.00 **Yusuf Hannun**, *Medical University of South Carolina, Charleston, USA*
Neutral sphingomyelinase in the regulation of bioactive sphingolipids

9.30 **Sharad Kumar**, *Centre for Cancer Biology, SA Pathology, Adelaide, SA*
Canonical and non-canonical modes of programmed cell death in development

9.50 **David Huang**, *Walter & Eliza Hall Institute, Melbourne, VIC*
Initiating apoptotic cell death

10.10 **Morning Tea and Poster Viewing**

Session 7 – Global Regulation of Signalling

11.10 – 1.00pm **Chair:** John Dick

11.10 **Mike Tyers**, *Samuel Lunenfeld Research Institute, Toronto, Canada*



Sponsored by Bristol Myer Squibb

Systematic interrogation and manipulation of cellular networks: From the kinome to the chemome

11.40 **Vinay Tergaonkar**, *Institute of Molecular and Cell Biology, Singapore*



Sponsored by AMGEN

New controls of the NFκB pathway

12.10 **Frances Shannon**, *John Curtin School of Medical Research, Canberra, ACT*
Using genome-wide approaches to understand immune regulation and NF-κB function

12.30 **Doug Hilton**, *Walter & Eliza Hall Institute, Melbourne, VIC*
Pathways regulating blood cell production

12.50 **Raymond Spencer**, *South Australian Health & Medical Research Institute, Adelaide, SA*
The vision for SAHMRI

1.00 **Lunch** – Free Afternoon

7.00 **Conference Dinner, Novotel Barossa Valley – Sponsored by CSL**



Session 8 – Cytokine Receptor Signalling



8.40 – 10.30am **Chair:** Roger Daly

- 8.40 **Christopher Garcia**, *Stanford School of Medicine, Stanford, USA*
Mechanistic diversity of shared cytokine receptor recognition and activation: IL-4 and IL-3 receptor complexes
- 9.10 **Michael Parker**, *St Vincent's Institute of Medical Research, Melbourne, VIC*
Assembly of the GM-CSF receptor
- 9.30 **Daniel Thomas**, *Centre for Cancer Biology, SA Pathology, Adelaide, SA*
Targetting cell survival pathways in leukemia stem/progenitor cells
- 9.50 **Paul Ekert**, *Murdoch Childrens Research Institute, Parkville, VIC*
Regulated hox gene expression reveals a novel role for hox genes in myeloid cell proliferation and survival
- 10.10 **James Murphy**, *Walter & Eliza Hall Institute, Melbourne, VIC*
Mixed-lineage kinase domain-like (MLKL) is a novel pseudokinase regulator of haematopoietic stem cell function, which modulates JAK2 signalling
- 10.25 **Sandra Nicholson**, *Walter & Eliza Hall Institute, Melbourne, VIC*
The SPRY domain-containing SOCS box protein SPSB2 targets inducible nitric oxide synthases (iNOS) for ubiquitination and proteasomal degradation

10.40 **Poster Prize Presentation**
Sponsored by Jomar Bioscience



10.45 **Morning Tea**

Session 9 – Specificity of Signalling



11.00 – 12.50pm **Chair:** Nic Nicola

- 11.00 **Rob Parton**, *Institute for Molecular Bioscience, Brisbane, QLD*
New insights into the formation and function of caveolae
- 11.20 **Mark Febbraio**, *Baker Institute, Melbourne, VIC*
Novel therapeutic targets to treat obesity-induced inflammation: Implications for obesity related pathogenesis
- 11.40 **Evan Ingley**, *Western Australian Institute for Medical Research, Perth, WA*
The Lyn binding scaffold protein Liar/Ankrd54 shuttles to the nucleus upon Epo stimulation of erythroid cells and regulates the activity of Erk2, STAT5 and Akt
- 12.00 **Thomas Brunner**, *University of Bern, Switzerland*
A novel anti-inflammatory role of TNF alpha in intestinal inflammation by inducing local glucocorticoid synthesis
- 12.20 **John Scott**, *University of Washington School of Medicine, Seattle, USA*
Intracellular signal transduction events are precisely regulated in space and time
- 12.50 **Closing Remarks** – Angel Lopez
- 1.00 Close of Meeting
- 1.15 Coaches Depart

posters

Posters will be on display in the Cabernet Room and Foyer from Wednesday 18th November to Friday 20th November

No	Title	Last name	Institution
1	Novel MYB targets in haematopoiesis and transformation	Pattabiraman	University of Queensland
2	Nischarin suppresses breast cancer progression and metastasis by affecting Alpha5 integrin-Rac-Cyclin D1 signaling cascade	Alahari	LSU HSC School of Medicine
3	The B'a regulatory subunit targets protein phosphatase 2A to sphingosine kinase 1	Barr	Edith Cowan University
4	Specific targeting versus multitargeting of transmembrane receptors in cancer therapy	Story	Oncology Research International Limited
5	IAP antagonists and IFN γ activate caspase and RIPK1 dependent death pathways	Khan	La Trobe University
6	Biochemical analysis of the SOCS-JAK-Receptor system.	Babon	Walter & Eliza Hall Institute
7	Brain Invaders: The role of Fezf2 in TLR4 signalling in the brain	Parker	Otago University - New Zealand
8	Fluctuations in macrophage phenotype in the cycling mouse mammary gland	Ingman	University of Adelaide
9	IL-3 receptor signalling in HoxB8 immortalised primary myeloid progenitors is not sufficient to prevent HoxB8 withdrawal induced apoptosis and cell cycle arrest.	Salmanidis	Murdoch Children's Research Institute
10	Notch signaling plays a key role in binary cell-fate decisions in the mammary gland	Pal	Walter & Eliza Hall Institute
11	Validation of a model for studying microRNA involvement in metastatic progression of colorectal cancer	Price	WAIMR/UWA
12	Characterizing Caspase-2 function in DNA damage response and in tumour suppression	Dorstyn	Centre for Cancer Biology SA Pathology
13	The roles of autophagy and apoptosis in drosophila midgut cell death	Denton	SA Pathology
14	Dynamin II as a potential new anti-cancer target: Inhibitors induce apoptosis following cytokinesis failure	Chircop	Children's Medical Research Institute
15	Hedgehog regulates vasculogenesis through VEGF dependent and independent mechanisms	Coultas	Walter & Eliza Hall Institute
16	Vitamin D3 substantially reduces IgE-mediated mast cell-dependent passive cutaneous anaphylaxis <i>in vivo</i>	Yu	Centre for Cancer Biology SA Pathology
17	Post-translational regulation of the BH3-only protein Puma by IL-3	Sandow	Centre for Cancer Biology SA Pathology
18	Leucine rich repeat transmembrane proteins: Novel regulators of cell signalling during mouse somitogenesis and neurogenesis	Haines	The University of Adelaide
19	Prediction of sphingosine kinase 1 nucleotide-binding pocket and in silico docking	Pitman	Centre for Cancer Biology SA Pathology

No	Title	Last name	Institution
20	miR-200 regulates cytoskeletal organization through direct targeting of multiple associated genes	Bracken	Centre for Cancer Biology SA Pathology
21	The miR-200b~200a~429 primary transcript is regulated by the transcription factors Sp1, ZEB1 and ZEB2	Kolesnikoff	Centre for Cancer Biology SA Pathology
22	Tumour necrosis factor ALPHA-induced Leukocyte adhesion occurs via a sphingosine kinase-1 dependent activation of Endothelial $\alpha_5\beta_1$ integrin	Barrett	Centre for Cancer Biology SA Pathology
23	Expression profiling of a hemopoietic cell survival transcriptome implicates osteopontin as a functional prognostic factor in AML	Powell	Centre for Cancer Biology SA Pathology
24	Low microRNA-200 family expression is associated with breast cancer stem cell properties	Wright	Centre for Cancer Biology SA Pathology
25	Defining the role of macrophages in embryonic lymphangiogenesis	Gordon	Centre for Cancer Biology SA Pathology
26	Role of the microRNA-200 family in breast cancer metastasis	Li	Centre for Cancer Biology SA Pathology
27	Analysis of expression of the miR-200 family in colorectal adenocarcinoma by <i>in situ</i> hybridisation	Bert	Centre for Cancer Biology SA Pathology
28	The role of SKAM and SK in wound healing	Gliddon	Centre for Cancer Biology SA Pathology
29	The protein tyrosine phosphatase pez regulates TGF-beta secretion and EMT in human breast cancer via regulation of golgi-localised Src family kinases	Wyatt	Centre for Cancer Biology SA Pathology
30	Regulation of <i>Prox1</i> by the microRNA <i>miR-181a</i> in endothelial cells	Kazenwadel	Centre for Cancer Biology SA Pathology
31	Investigating lymphatic vascular remodelling during postnatal mouse mammary gland morphogenesis.	Betterman	Centre for Cancer Biology SA Pathology
32	Regulation of CD123 expression by microRNA	Ramshaw	Centre for Cancer Biology SA Pathology
33	Vitamin D3 promotes inhibition of TNF production by IgE- or IgG1-activated human mast cells.	Fedoric	Centre for Cancer Biology SA Pathology