ANZSCDB Newsletter

Australia and New Zealand Society for Cell and Developmental Biology INCORPORATED

Winter 2016

Read Up On:

Dear Colleagues,

This year seems to be flying by and so it is time again for another ANZSCDB newsletter. It is at this time that we can all draw breath as we look back on the busy start to the year, probably dominated for most by the preparation and submission of funding applications. At this time we also look forward to our annual ComBio conference and to some success in the funding arena.

Society Awards

The best part of being president of the ANZSCDB is having the opportunity to look at the extraordinary talent we have amongst our members and to award our society's most prestigious awards- The President's Medal and the Emerging Leader Award. I am delighted to announce that Professor Sharad Kumar FAA will receive the President's Medal. With equal delight and enthusiasm I also announce that Associate Professor Ben Hogan will receive the Emerging Leader Award. These awards will be presented at ComBio in Brisbane.

International Student Travel Award

ANZSCDB also enjoys giving PhD students the opportunity to attend an international conference. I loved reading Shannon Nicolson's account of her experiences in attending a Gordon Research Conference in California. Joan Rohl (QUT) reported in the last newsletter about her experience at the European Tissue Repair Society and Wound Healing Society Conferences in Copenhagen.

ComBio2016

As you will all be aware ComBio will be in Brisbane from 3-7 October. I do hope that many of you have registered and have ticked the box to show that you are an ANZSCDB member. This box ticking is important as profits from ComBio are distributed to each of the three societies (ANZSCDB, ASPS and ASBMB) proportional to the number of their members attending ComBio.

ANZSCDB supports student attendance at ComBio by providing Student Travel Awards. These awards cover the registration costs for student members, whose supervisors are also ANZSCDB members. This year we are delighted to announce that the following students have received this award to attend ComBio2016: Mengjie Hu (University of Melbourne); Isabel Hemming (Harry Perkins Institute of Medical research); Chieh Yu (Institute of Health and Biomedical Innovation); Bo Yun (Monash University); Veronica Mendoza (University of New South Wales); Reyhan Akhtar (Monash University). I encourage students to apply for these travel awards in future years, as the society wants to continue to support students to attend ComBio.

The society will be holding its ComBio dinner on Wednesday 5 October. For those of you who have not previously attended I have to tell you that this is a great night. It is a super way to meet other members, as well as the ANZSCDB plenary (high profile) lecturers who have travelled a long way to attend ComBio. An email will be sent out shortly with all the details. I look forward to seeing you at the dinner.

Cell and Developmental Biology State Days

These one-day meetings are a inspiring celebration of the breadth and depth of cell and developmental biology in our communities. The NSW meeting was held in April and you can read a report by Stuart Fraser about what a successful day it was. The dates for future meetings are as follows so watch our for the advertisements: Queensland, Friday 30 September 2016; Victoria, 21 October 2016; Western Australia, 26 August 2016.

Structural Review of NHMRC's Grant Program

The National Health and Medical Research Council (NHMRC) is acutely aware of the huge amount of time an effort that scientists are devoting to preparing and evaluating the high number of grant and fellowship applications that are submitted each year. Therefore, a structural review of its grant program is being undertaken to see if funding schemes can be streamlined to reduce preparation and reviewing time, and at the same time to optimise public investment in health and medical research. This month NHMRC proposed three alternative grant program models, all of which have been designed to consolidate the nine current schemes and to limit the number of unfunded applications. Such streamlining of the application process might enable changes to the review process such that more than one application round per annum could be introduced. Moreover, near-miss applications could be reviewed by the same grant review panel. Information sessions are now taking place at around Australia. Universities, research institutes and organisations are preparing submission to the NHMRC. For information please see https://consultations.nhmrc.gov.au/public_consultations/nhmrc-grant-program.

Membership and Corporate Support

Thanks to all of you who renewed your membership this year. The more members we have the more the ANZSCDB can support cell and developmental biologists. Thank you also to our corporate members: Promega Australia, Australian BioResources, Pakair Cargo Specialists, Corning Incorporated and NewSpec Pty Ltd. Please see advertisements from our corporate members.

I hope that you enjoy this winter edition of the ANZSCDB's newsletter. A huge thank you to all those who have contributed to the newsletter, especially Fiona Wylie.

I am really looking forward to ComBio2016 and I hope to see you all there!

Sally Dunwoodie
President ANZSCDB

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CORNING

Corning CoolCell is an alcohol-free cell freezing container, which controls the rate of freezing to -1°C/minute when placed in a -80°C freezer. CoolCell has been performance tested with a variety of cell types including stem cells, primary cells, PBMC cell lines, insect cells, and yeast. The patent-pending CoolCell technology utilizes a thermo-conductive alloy core and highly insulative outer material to control the rate of heat removal and provide reproducible cell cryopreservation. CoolCell units are easy to use and deliver comparable results.

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Cryogenic Vial Grippers

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Cat. No.	Description	Capacity (Vials)	Exposed Vial Tops	Qty/Pk	Qty/Cs
432000	CoolCell, purple	12	No	1	1
432001	CoolCell LX, purple	12	Yes	1	1
432002	CoolCell LX, green	12	Yes	1	1
432003	CoolCell LX, orange	12	Yes	1	1
432004	CoolCell LX, pink	12	Yes	1	1
432005	CoolCell 5 mL LX, purple	12	Yes	1	1
432006	CoolCell FTS30, purple	30	Yes	1	1
432007	CoolCell FTS30, orange	30	Yes	1	1
432008	CoolCell FTS30, green	30	Yes	1	1
432009	CoolCell FTS30, pink	30	Yes	1	1
432010	CoolCell SV2	12	Yes	1	1
432011	CoolCell SV10	6	Yes	1	1
432012	CoolCell SV2 stem cell cryopreservation system Kit includes Corning CoolCell SV2, Corning XT Starter, and Corning CoolRack® SV2 module	–	–	1	1
432013	CoolCell SV10 stem cell cryopreservation system Kit includes Corning CoolCell SV10, Corning XT Starter and Corning CoolRack SV10 module	–	–	1	1

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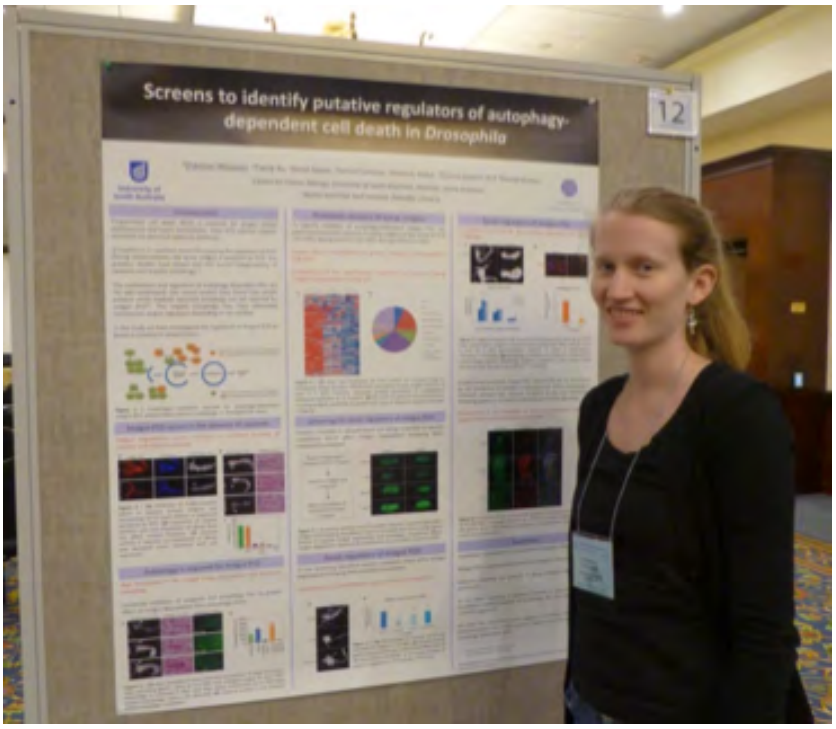
LEICA STUDENT TRAVEL AWARD

Shannon Nicolson, University of South Australia

With the help of the ANZSCDB and Leica, I was very fortunate indeed to attend the "Autophagy in Stress, Development and Disease" Gordon Research Conference (GRC) and adjoining Seminar in March, 2016.



This Gordon conference was held in Ventura, California (USA), a coastal town, 90 minutes driving from Los Angeles. My journey did not get off to a good start with a 9-hour flight delay in New Zealand followed by a missed shuttle bus to the conference site. But what is travel without something going amiss (and catching a cold!).

My scientific experience began with the Gordon Research Seminar (GRS) designed for scientists in the early stages of their careers. It consisted of a small number of oral and poster presentations providing an informal forum for interactive discussion and networking. The seminar began with a keynote session by David Sabatini (Whitehead Institute for Biomedical Research, USA). Here he described his recent discoveries of the proteins which sense amino acids arginine and leucine to regulate mTORC1. Nutrient availability is an important determinant as to whether autophagy is induced or not, and so I rather enjoyed hearing about something important for autophagy but not directly related to autophagy itself. Another interesting talk was given by Sharon Tooze (Francis Crick Institute, UK) about how certain proteins which regulate autophagosome biogenesis are recruited. What really impressed me about this were the cross-disciplinary approaches used to answer some really fundamental questions. I was also selected to give a talk on my research at the seminar. Despite significant jet lag and nerves, it all went well and I think I gained confidence in my presentation skills. I also got asked many questions from the audience and received some great food for thought.

The GRC itself began with a keynote session of three talks. My personal favourite was by Alfred Goldberg (Harvard Medical School, USA) where he discussed common misconceptions about the ubiquitin-proteasome system (UPS), connections between the UPS and autophagy, and the use of proteasome inhibitors to treat disease. In the following days of the conference, sessions were organised according to themes beginning with the mechanisms of how autophagosomes are formed, and the regulation of autophagy during stress and development. A highlight was listening to Eric Baehrecke's (University of Massachusetts Medical School, USA), latest findings on autophagy-dependent cell death in Drosophila which was highly relevant to my own research. The themes then moved into the role of autophagy in metabolism, ageing and immunity. Lastly, autophagy in different diseases, and the latest on modulating autophagy for disease treatment was discussed. With such a vast range of themes, I really broadened my knowledge-base and learnt a little bit about a lot.

The poster sessions of the GRC were organized into four 2-hour sessions over the course of the conference and so each person had two sessions in which to present their poster. I was a little concerned that not many people would stop by to chat with me but I worried unnecessarily. I don't think there were many moments when I didn't have someone to discuss my research with in both sessions. It was really exciting to

have so many people interested in what I was working on, and I also enjoyed visiting the posters of others to hear about topics that were both similar and different from my own. What really endeared me to this conference as well was the fact that the presentation of unpublished data is actively encouraged. Consequently, I felt I was exposed to the most recent advances in the field.

The conference also included what is termed a 'power hour', an optional informal gathering where discussion took place in small groups during our free time in the afternoon. The aim of this power hour was to get talking about the challenges women face in science, what we can do to try and overcome them, and generally to discuss issues surrounding the professional growth of women in science. In case anyone was wondering I would like to add that, yes, there were men there too! My fellow table members were from all levels of science ranging from PhD students like myself, post-doctoral researchers and principal investigators. Consequently, the discussion covered a wide-range of perspectives and was both a spirited and lively one.

With my free time at the conference, much was spent exploring the beach (strangely inhabited by squirrels), socialising with the people I met, and engaging in cultural activities such as the game of Cornhole. This is a game where you toss small bags of corn at a platform opposite you with a round hole.

Anyone who has experienced studying for a PhD (anyone in science actually), surely knows of its challenges. It can be tough. Despite everything, when my PhD comes to an end and I have the chance to reflect back on my journey, I think attending this international conference will be a memorable highlight. It was definitely a worthwhile experience for which I am very grateful. With this final note, I would like to sincerely thank the ANZSCDB and Leica for bestowing me with this award, and enabling me to attend this conference.

ComBio 2016

Brisbane

Brisbane Convention & Exhibition Centre
3 to 7 October 2016

Overseas Plenary Speakers

ComBio2016 Confirmed Plenary Speakers

- **Andrea Ballabio** (Telethon Institute of Genetics and Medicine, ITALY)
- **Xiaofeng Cao** (Centre for Genome Biology, Institute of Genetics and Developmental Biology, Chinese Academy of Science, CHINA)
- **Jennifer Elisseeff** (Translational Tissue Engineering Centre, John Hopkins University, Maryland, USA)
- **Harsha Gowda** (Institute of Bioinformatics, INDIA)
- **Dave Jackson** (Cold Spring Harbor Laboratory, New York, USA)
- **Shigeru Kondo** (Faculty of Frontier Bioscience, Osaka University, JAPAN)
- **Xia Li** (College of Plant Science and Technology, Huazhong Agricultural University, CHINA)
- **Patrick Lupardus** (Department of Structural Biology, Genentech, California, USA)
- **Gene Myers** (Max-Planck Institute of Molecular Biology and Genetics, Dresden, GERMANY)
- **Andrew Oates** (The National Institute for Medical Research, London, UK)
- **Lacey Samuels** (Department of Botany, The University of British Columbia, CANADA)
- **Joseph Thornton** (Departments of Human Genetics & Ecology and Evolution, University of Chicago, USA)
- **Shubha Tole** (Tata Institute for Fundamental Research, INDIA)
- **Jennifer Van Eyk** (Cedars-Sinai, California, USA)
- **Rajeev Varshney** (International Crops Research Institute for Semi Arid Tropics, INDIA)

Themes of the conference will include:

1. Plant Cell and Developmental Biology and Genetics
2. Plant Physiology and Ecology
3. Developmental, Stem Cell & Regenerative Biology
4. Proteins & Proteomics
5. Genomes & Bioinformatics
6. Cell Biology
7. Cell Signalling
8. Biochemistry & Metabolism
9. Education & Career Development

FOLLOW US ON:

Late Poster Abstract Submission Deadline:
Monday, 15 August 2016

On Site Poster Abstract Submission Deadline:
Monday, 26 September 2016

Combined ASBMB, ASPS and ANZSCDB Annual Meetings

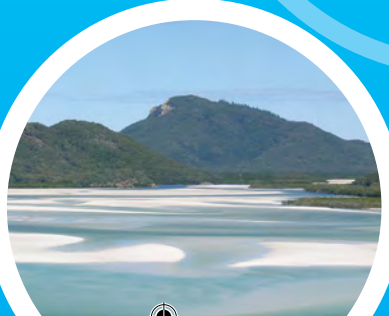
- Australian Society for Biochemistry and Molecular Biology
- Australian Society of Plant Scientists
- Australia and New Zealand Society for Cell and Developmental Biology

Further information:

Conference Chair:
Joe Rothnagel
j.rothnagel@uq.edu.au

Registration/Exhibition:
Sally Jay
combio@asbmb.org.au

Program Chairs:
- Dominic Ng
  d.ng1@uq.edu.au
- Rebecca Ford
  rebecca.ford@griffith.edu.au



www.asbmb.org.au/combio2016

Kazu Kikuchi
- representing ANZSCDB for NSW -

Could you give me a snapshot of your current research?

My research seeks to understand how damaged hearts are naturally regenerated in certain vertebrates such as amphibians and fish, and how regeneration could be induced in the mammalian heart. I use zebrafish as a model, since they can regenerate most adult organs, and I investigate intrinsic and extrinsic mechanisms that regulate cardiac muscle regeneration in this animal. Specifically, I focus on the molecular mechanism that makes cardiomyocytes dedifferentiate and re-enter the cell cycle and how cardiomyocyte regeneration is regulated by non-myocytes such as immune cells.

What was the basic path to becoming Dr Kazu Kikuchi?

After finishing a high school course, I went to School of Medicine, Tohoku University, in my hometown, Sendai in Japan, to become a doctor, influenced by my father who was working as a surgeon. But, when I was rotating clinical departments of the university hospital, I realised I didn't have much interest in being a physician, and so looked for a different career, and decided to become a researcher and entered a graduate school. I joined the Laboratory of Dr Kazuo Sugamura, who had just identified Interleukin (IL)-2 common gamma chain, the gene of which deficiency causes Severe Combined Immunodeficiency. Because of this finding, the lab had been extremely well funded, and about 20 people were working very hard in the lab. I simply thought it was a good idea to work in such an exciting environment. Immediately after starting PhD, however, I learned it was hard to find my project in the lab -- almost all lab members were working on the downstream signalling of common gamma chain, and there seemed nothing left for new students in the lab. My project was changing several times, but fortunately, I was able to work on a novel adaptor molecule that was likely involved in T cell differentiation, which was not a major interest of the lab.

Upon completing my PhD, Dr Motonari Kondo, an alumni of the Sugamura lab, who had just established his lab at Duke University, kindly asked me whether I could join his lab. My CV was weak at that time, and I decided to go to his lab and publish more papers on lymphocyte development, with hope to have a chance to find out my future research focus. After publishing several papers about lymphoid progenitor cells and hematopoietic stem cells, I became interested in tissue resident stem cells, which were increasingly recognised to play important roles in regeneration. I was also interested in epigenetic regulations of cell differentiation, but my application was rejected. Ken Poss, who was a junior faculty at the Duke, took his time to have an informal interview with me and told his recent finding on cardiac progenitor cells in heart regeneration in zebrafish, which I thought quite interesting. I was very excited by the idea to characterise this novel cardiac stem cells using genetic fate-mapping approaches, which had not been applied to regeneration research using zebrafish and amphibian models. I joined his lab to take this challenging project.

Ironically, a series of my genetic fate mapping experiments demonstrated that cardiac stem cells are not the major source of new cardiac muscle in the zebrafish heart; it is the dedifferentiation and proliferation of existing cardiomyocytes that drives cardiac regeneration in zebrafish. When I started my postdoc in Ken's Lab, I hardly imagined staying outside of Japan after the postdoc. However, talking with my colleague, Voot Yin, who just had had an appointment for an assistant professor at the MDI Biological Laboratory, Maine, I gradually changed my mind and applied to several places for an independent position. Through interviews, I had good impressions with Australia. I originally had a very good impression of the country, as I enjoyed staying at a local town in the Queensland when I visited there as a summer student, and my family favoured Australia, as there is only an hour difference between here and Japan. In 2011, I decided to join the Victor Chang Cardiac Research Institute as Head of Cardiac Regeneration Laboratory in the Developmental and Stem Cell Biology Division.

What were the milestone steps along the way and how did they shape your career?

A huge step was changing my research area from immunology to regeneration and deciding to join Ken Poss's Lab at Duke University, before he started publishing papers in top journals. Fin and cardiac regeneration were the focus of the lab, and I was the first postdoc to work on cardiac regeneration, which enabled me to work on whatever I wanted to do.

Another major advance was the Nature paper early in my career. As I mentioned above, this resulted from the Cre/loxP transgenic strains I established to perform genetic fate-mapping experiments. The result was published in Nature, which led to the invitation for job interviews from several places.

What was the hardest thing about setting up as an independent researcher?

To develop an entirely new project in an area different from that of my previous supervisor. It takes about three years to get the first positive result from transgenic reagents that were made from scratch at the VCCRI.
How did you go about doing that and how long did it take to establish that true independence?

What do you see as your biggest research achievement so far?

I think the biggest achievement in my career is still the result that I had when I was a postdoc in Ken's lab -- performing genetic fate-mapping experiments for the first time in adult zebrafish and finding the robust regenerative capacity of cardiomyocytes. I hope to have a new significant achievement soon from my new study in Australia.

What advice would you give people embarking on a career in cell and developmental biology, especially in Australia with your experience in Japan and the USA?

It is probably better to think about moving out from Australia at least once in your career and work with ambitious postdocs in a competitive environment. Having postdoc training abroad will also be an excellent opportunity to develop international research and professional networks. To promote or foster this type of move, I think that once young scientists have a story to tell, it is ideal to attend international meetings to communicate with leading experts, learn latest advances in the field, and possibly find labs that you may want join in the future. ANZSDB meetings such as state meetings and ComBio will also provide great opportunities to communicate with leading scientists.

Who inspires you in science and in life?

In science, I was inspired by my previous supervisor Ken Poss, Duke University, USA. When I joined his lab, the lab was small, just 4-5 people. I saw the process of developing several great stories, which were eventually published in top journals. Discussions during this process and watching him becoming a world leader in regeneration biology were very inspiring. More recently, it is very inspiring for me to hear the breadth of knowledge about

cardiac development and wisdom on grant writing from Richard Harvey, my colleague and next-office neighbour at the VCCRI.

What role do you see the ANZSCDB playing in your research?

Now ANZSCDB plays a vital role in my scientific career. I've been a state representative and help organise the regional ANZSCDB meetings in last two years. This is the first experience in my career to contribute actively to a scientific society and it has made me realise the importance and joy of serving our research community.

What excites you in cell and developmental biology at the moment?

Understanding how regenerative responses are stimulated and promoted in lower vertebrate animals such as zebrafish is a major question. A better understanding of such mechanisms may provide novel insights into the establishment of therapies to enhances regeneration of damaged hearts and CNS in humans.

What are the best and worst things about what you do?

The best thing is to see exciting preliminary results from my RAs or postdocs and discuss with them what stories would arise from the results. The worst thing is to hear blunt opinions from grant or journal reviewers that the results what we thought quite interesting are actually boring.

What would you be doing if you were not doing research?

I would have taken a training program to become a general surgeon and worked in a regional hospital in my hometown.

What do you do to relax?

Playing with my son. We live 10 min walking distance from the Australian National Museum and Royal Botanical Garden in Sydney. Every weekend, we visit the museum or the garden, let my son walk around, and my wife and I enjoy watching him.

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GARVAN INSTITUTE

Australian BioResources

Hunter Meeting 2016

16th Hunter Cell Biology & 2nd Hunter Systems Biology Meetings (incorporating the 9th Hunter Imaging Workshop), Crowne Plaza Hunter Valley Resort, Hunter Valley, NSW, Australia, April 11-15, 2016

Convenors: Patrick Humbert and Sharad Kumar, Hunter Cell Biology Meeting;
Roger Daly, Hunter Systems Biology;
Paul Timpson, Imaging Workshop.

In its second incarnation at the spacious new venue of the Crowne Plaza Hunter Valley, the Hunter Meeting again brought together an impressive star cast of international and local talent. As has become expected of the Hunter Meeting, it was a veritable smorgasbord of outstanding-quality cell biology research ranging from the study of early development of human embryos, systems biology of cancer metastasis and structural biology of trafficking, to the cell biology of learning and behaviour in Drosophila and worms. The collegiality and scientific engagement throughout the week were again a highlight of the meeting with sessions well attended across the board including the poster sessions and trade displays. With the reduced constraints on space in the new building, we were delighted to offer students and junior postdocs the excellent opportunity to present their work and interact socially with national and international leaders in their field. The idyllic setting and beautiful weather were also very conducive to scientific discussions pool side with delegates enjoying the beautiful grounds, its bouncing local Australian wildlife and the many bicycle-accessible wineries. The successful joint meeting format was continued from the previous year with the Hunter Meeting opening with the Systems Biology component followed by the Hunter Cell Biology Meeting that included the Imaging Workshop.

The 2nd Hunter Systems Biology Meeting was chaired by Roger Daly (Monash University) and brought together Australia's burgeoning population of bioinformaticians, computational and cell biologists interested in systems level analysis of cell biological systems. The presentations covered advances in the areas of multidimensional dataset integration, systems biology of tissue development and network biology in medicine and disease. The Systems Biology Keynote speaker Claus Jorgensen (Cancer Research UK Manchester Institute) brought the first day to a fitting end with a terrific talk describing the use of state of the art cell-specific labelling combined with global proteomics analysis to uncover the key molecular crosstalk between tumour and stromal cells that drives cancer progression.

The Hunter Cell Biology Meeting kick-started on Tuesday with Systems-Biology joint sessions covering a wide variety of elegant functional genomics approaches to studying cancer progression, and striking examples of quantitative biology and genomics in the kidney, immune and cardiac development fields. This year's Keith Stanley Lecture was presented by Helen McNeill (Lunenfeld Tanenbaum Research Institute, Canada) who impressively demonstrated the power of mouse genetics in resolving the role of the Hippo pathway and cell polarity in kidney development.
The following days covered themes of asymmetric

cell division, stem cells, tissue architecture, trafficking and neuronal development with this year's featured Organelle in the Spotlight: The Nucleus. Highlights included talks from international invited speakers, Jonathan Loh (IMCB, Singapore) on mechanisms of proviral silencing in embryonic stem cells, Karin Reinisch (Yale, USA) with structural approaches to understanding membrane trafficking, and Scott Waddell (Oxford, UK) who provided wonderful insights into the basis for directed behavior using the Drosophila brain as a genetic model. Scott was also the Australia and New Zealand Society for Cell and Developmental Biology-sponsored speaker for this year. The Hunter Lecture was delivered by Peter Friedl (MD Anderson, USA) who gave an imaging tour de force illustrating the plasticity of cancer invasion in vivo and deep insights into the processes of metastasis and therapy response. Magdalena Zernicka-Götz (Cambridge, UK) in turn presented the EMBO Plenary Lecture and provided fantastic fresh insights into the development of cell lineages and patterning in the early mammalian embryo. Participants were also able to delve more deeply into the latest imaging techniques with the half-day imaging workshop sponsored by Coherent Scientific and Olympus and flawlessly organized by Paul Timpson of the Garvan Institute. Roberto Weigert (NIH, USA) closed off the workshop with the Keynote Lecture and spectacular imaging of membrane remodeling in vivo using intravital microscopy.

This year the international speakers were supported by the European Molecular Biology Organization, PLoS Biology, ANZSCDB, A*STAR, University of Sydney and Monash University, with a special thanks to Dietmar Manstein from FEBS Letters for sponsoring the poster prizes. We also thank all the other trade exhibitors who supported the 2016 Hunter meetings, your ongoing support for this meeting is greatly appreciated and makes a significant positive impact on the meeting. Finally, many people made my convenor role much easier: a huge thanks to Ros Barrett-Lennard and the Magic Touch Consultancies team for their endless work behind the scenes to make this wonderful meeting happen, my co-convenor Sharad Kumar for help with the program, and to past convenor Rohan Teasdale, to whom I am indebted for insight and much advice with the meeting organisation this year. Finally, thanks to all the session and workshop chairs for their help in organising and rolling out the program so smoothly.

We look forward to seeing you all next year at the Hunter Meetings!

Patrick Humbert

NSW and ACT Cell and Developmental Biology Meeting

The annual NSW and ACT Cell and Developmental Biology Meeting was held on Monday the 11th of April, 2016 at the Garvan Institute for Medical Research, Sydney. Over 170 researchers attended the meeting which featured a broad mix of talks from postgraduate students, postdoctoral fellows, national and international speakers. Attendees came from a broad range of tertiary institutions (University of Sydney, UNSW, Newcastle, Wollongong, UTS, ANU, Macquarie) and represented a large of research institutes in NSW (Garvan, Victor Chang, Kinghorn, St Vincent's, Children's Medical Research, Bosch, Centenary, NeuRA, Save Sight).

Professor Melissa Little (Murdoch Children's Research Institute, Melbourne) discussed her group's ground-breaking research into the directed differentiation of pluripotent stem cells into nephron stem cell populations. Professor Roberto Weigert (Intracellular Membrane Trafficking Unit, NIH) kindly stepped in at the last minute to discuss his research group's advances in intravital microscopy and actin dynamics. Through the use of transgenic reporter mice the Weigert group visualized actin-remodeling, in particular during endocytosis. This technique can be utilised in the immune system and Weigert presented his work on the immune system and cellular migration. Professor Jane Visvader (WEHI, Melbourne) presented fascinating work showing the complex cellular and developmental processes taking place during breast development linking these processes to breast cancer development. We gratefully acknowledge the support for Prof Visvader's attendance was provided by the National Breast Cancer Foundation. Ms Cheryl Grant represented the NBCF and discussed the grant writing process from a consumer's point of view.

The meeting also hosted outstanding talks by junior postdoctoral fellows and postgraduate students. The two poster sessions showcased over 40 posters. The meeting concluded with the announcement of the winners for the best oral and poster presentations. The best postdoc presentation was awarded to Dr Julie Moureau (VCCRI) and the best postgraduate student talk prize was awarded to Dr Chanukya Colonne (Sydney Uni). The best postdoctoral poster was awarded to Dr Subhra Hui (VCCRI) and the best student poster was awarded Mr Samuel Rogers (Garvan Institute). It was clearly a difficult task for selecting just one talk and one poster and we are thankful to the local researcher who donated their time to judging. This year we held our inaugural microphotography competition. Mr Jia Hao Yeo (Sydney Uni) won the People's Choice Award in a tight competition featuring truly illuminating images from 18 researchers.

The meeting committee is very grateful for the generous support from the ANZSCDB, ASBMB, CMRI and the School of Medical Sciences, UNSW. We are grateful for the sponsorship from ANZSCDB, NBCF, School of Medical Sciences UNSW, Merck Millipore, Illumina, IDT, LabCabs, Bioline, Lonza, Australian Biosearch, Australian Bioresources and Thermo Fisher. We also gratefully acknowledge the support of the Victor Chang Cardiac Research Institute and the Garvan Institute. Through their support we can forego the registration fee for researchers, unlike many other scientific meetings. We aim to maintain this policy for future meetings, to attract as many early career researchers as possible, to facilitate interactions between junior researchers and inspiring established scientists.

The meeting could not have been as successful as it was without the attendees demonstrating their enthusiasm for science. Finally, I would like to thank the meeting committee members for all their hard work and commitment to making this meeting a success. A lot of time and energy was put into the event and believe it was appreciated by all who attended. We hope that the 2017 meeting is as successful.

Stuart Fraser, University of Sydney

The 2016 NSW/ACT Cell and Development Meeting Committee: Kazu Kikuchi (VCCRI), Stuart Fraser (Sydney Uni), Annemiek Beverdam (UNSW), Kim Beaumont (Centenary Institute). Daniel Hesselson (Garvan Institute), Koula Diamand (ANU)

ANZSCDB

Australia and New Zealand Society for Cell and Developmental Biology Inc.

7th Brisbane Cell and Developmental Biology Meeting and the 5th CADD Symposium

September 30th
2016 – 8am to 5pm

Institute for Molecular Biosciences
The University of Queensland

Andy Oates
The Frances Crick Institute, UK

Lars Ittner
University of New South Wales, Sydney

Geraldine O'Neill
Kid's Research Institute, Westmead

Caroline Ford
University of New South Wales, Sydney

Kelly Smith
Institute for Molecular Bioscience, UQ

Nicole Bryce
University of New South Wales, Sydney

Abstract Submission is OPEN NOW & closes FRIDAY, **2nd September**

To register & submit your abstract please visit:
http://anzscdb.imb.uq.edu.au/index.php

Postdocs and students will be selected from abstracts to present a 15 min talk:
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Michael, M., J. Meiring, B.R. Acharya, D.R. Matthews, S. Verma, S.P. Han, M.M. Hill, R.G. Parton, G.A. Gomez and A.S. Yap (2016). Coronin 1B reorganizes the architecture of F-actin networks for contractility at steady-state and apopotic adherens junctions. Developmental Cell 37, 58-71.

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(COVER IMAGE)

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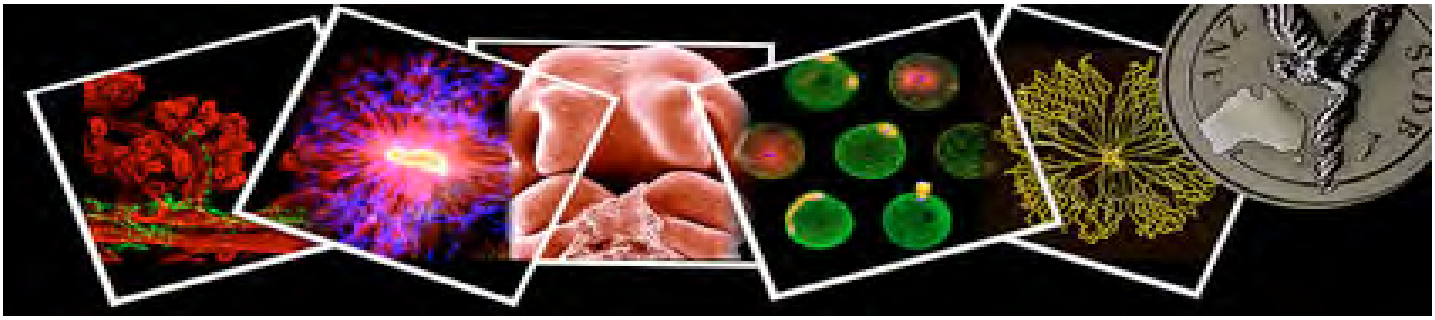
(COVER IMAGE)

Society News

Dr Mirana Ramialison won the Peer Prize for women in science in the life sciences. https://www.thinkable.org/vote_competitions/the-peer-prize-for-women-in-science https://www.thinkable.org/submission_entries/mx2r6ax1
This is a great result!

ANZSCDB President Professor Sally Dunwoodie was one of six finalists in the NSW Premier's Woman of the Year Award in 2016.
http://www.women.nsw.gov.au/women_of_the_year_awards/nsw-premier-s-award-for-woman-of-the-year

Dr Julie Moreau won the best postdoc talk at the NSW and ACT Cell & Developmental Biology Meeting 2016, held at the Garvan Institue on April 11th 2016; titled 'Gene-environment interactions cause congenital heart disease'.



Society News

Professor Richard Harvey elected as Fellow of the Royal Society

Leading Australian developmental biologist and ANZSCDB Past President Professor Richard Harvey (Victor Chang Cardiac Research Institute, Sydney) recently joined scientific luminaries such as Isaac Newton, Charles Darwin, Albert Einstein, Howard Florey and Stephen Hawking as a Fellow of the Royal Society, the oldest continuously operating academy of science in the world. Since its inception in 1660, the Royal Society and its Fellows have played a part in some of the most life-changing discoveries in scientific history.

There are currently only ~1600 Fellows, including 61 Australians.

We asked two other ANZSCDB giants and long-time friends of Harvey to comment on this prestigious honour:

"Richard Harvey is a pioneer of the molecular era of cardiac development and an eminent leading scientist in the research of the genetic control of early heart morphogenesis in development and disease and the functional attribute of cardiac stem cells. His discovery of the homeodomain transcription factor Nkx2-5 provided the entry point for molecular dissection of heart development and congenital heart disease mechanisms in humans. His discovery of new patterning principles that govern heart development and the multiple roles played by Nkx2-5 in heart formation and its dys-regulation in disease, have redefined our understanding of the developing heart and provides a unique entry point to systems level analysis of heart development.

Richard is a deep and innovative thinker. His research endeavour typically carries the hallmark of robust and exhaustively in-depth investigation of the subject, aiming for the highest excellence in research output and never compromised for the sake of paper chase. Richard is also an outstanding scientific leader and has served the cell and developmental biology community generously in advisory roles, learned society function and conference organization. He is great with mentoring, offering good advice and benevolently sharing ideas with junior scientists. His election to the Fellowship of the Royal Society of London is a recognition of his seminal achievement in science, outstanding contribution to the profession and the promotion of the discipline in the scientific and general community."

- Professor Patrick Tam –

"Richard is one of the founders of developmental biology in this country, who remains a strong advocate for the discipline at all levels. Together with Patrick Tam, Rob Saint and myself, he instigated the Australian Developmental Biology Workshop; he has also served as Chair of the AAS National Committee for Cell and Developmental Biology, and is a Past-President of ANZSCDB. Richard was awarded the ANZSCDB President's Medal in 2009 and the ASBMB Lemberg Medal in 2010. He is a Member of EMBO, and on the editorial boards of several highly regarded journals including Developmental Cell. He is internationally respected for his intellect and stewardship of the field. Formerly with an uncanny resemblance to Daryl Hall from the 80's pop duo Hall and Oates, he now finds himself increasingly morphing towards Sir John Gurdon, and does love a good cuppa tea, and so it is fitting indeed that he, like the Nobel Prize winner, has been elected a Fellow of the Royal Society."

- Professor Peter Koopman –

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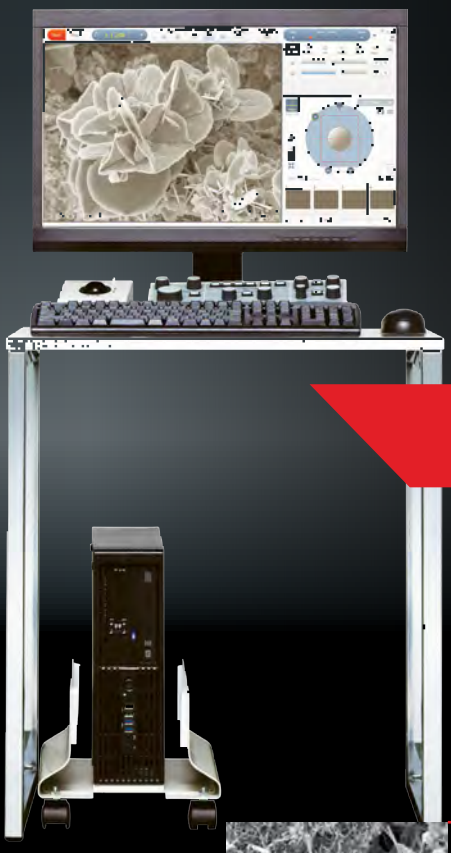

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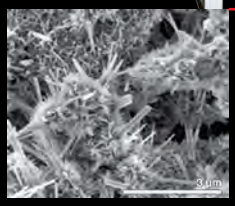
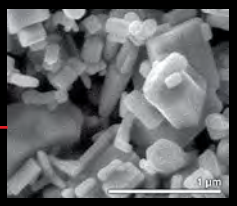


Sample: Cement
Magnification: 40,000x
Accelerating Voltage: 3 kV
Signal: Secondary Electron (SE)
Without metal coating



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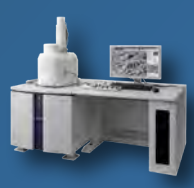
Magnification: 150,000x
Accelerating Voltage: 5 kV
Signal: Secondary Electron (SE)
Without metal coating

Think outside the Lab



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