

# ANZSCDB Newsletter

Australia and New Zealand Society for Cell and Developmental Biology INCORPORATED



Winter 2015



Dear Colleagues,

This is my last newsletter as ANZSCDB President before passing it over to the very capable hands of our President-Elect Sally

Dunwoodie. I am indebted to the current executive for their tireless efforts in keeping the society on track over the past two years. On your behalf I would like to thank Jo Bowles (Secretary), Rohan Teasdale (Treasurer), Peter Currie (Past President) and Sally Dunwoodie (President Elect) for all their hard work. In particular, I would also personally like to thank Jo and Rohan, whose dedication has made my job as President so much easier than it could have been. I have enjoyed working with them and have really appreciated Rohan's knowledge of high finance and Jo's efficient and good-natured manner in dealing with crises. Also thanks to our Newsletter Editor Fiona Wylie for going above and beyond the call of duty to produce such professional and informative newsletters.

Reflecting on my time as President of ANZSCDB a few things stand out in terms of the challenges facing the research community in the current economic climate. Although this sector is suffering worldwide, there are a few factors specific to the Australian system. One is the fact that our system has come to depend highly on fellowship support at all levels, including for the most senior and well respected of our scientists. While obtaining grant funding is becoming more and more difficult and stressful for all, the pressure to obtain continuing salary support adds another dimension. The recent consultation paper on NHMRC fellowships raised several scenarios that, if implemented, would likely have a major impact on the scientific community. This would arguably be felt most by independent research institutes, many of which rely on most of their senior researchers being funded by fellowships. The proposed "up and out scheme" would see many researchers drop off the system at all levels as the pyramid of fellowship support steepens dramatically to a fine point at the most senior levels. While the suggestion that universities and research

## President's Report

### Read Up On:

The President's report

Sigma-Aldrich advertorial

Leica Studnet Travel Award - meeting report 2014

Member Profiles  
- hear from a new member and a veteran State rep

Hunter 2015 x2...the new model was a hit

Paper highlights

Upcoming meetings

institutions should assume more responsibility for supporting their staff has some validity in an ideal world, it is unlikely that the current financial pressures facing universities will allow for the level of increased support required. This will likely be even more difficult for independent research institutes to absorb. At a time when younger researchers are struggling more than ever to see a future in research in Australia, it is important to consider ways of providing a clearer vision of career progression if we are to maintain a vibrant research culture and community in this country. It will be interesting to hear the response of the scientific community to the fellowships paper, and to see how NHMRC responds.

Another issue that has come to the fore yet again in the past few years is gender equity in science. The recent publicity surrounding unfortunate comments made by Nobel Laureate Tim Hunt regarding the "problems" with having women in labs, highlighted some of the opinions women thought (hoped) they had left behind many years ago. While the twitter response (#Distractinglysexy) was humorous, and there was much debate about whether the response from UCL in virtually forcing Hunt from his position as Honorary Professor was an over-reaction, the fact that such comments are made in 2015,

however lightheartedly, points to a bigger underlying issue. The point is that despite open discussion on gender equity for many years, and many attempts to address the lack of women at senior levels in science, this still remains a significant issue. Our own figures from Australia show an alarmingly low representation of women at professorial level in Universities, and the percentage of women at SPRF level of the NHMRC fellowship scheme remains appallingly low, although much of this reflects the decreased number of women applying due to attrition at earlier career stages. Clearly attempts to address this issue have been unsuccessful and it is time to take a different and more pro-active approach. It is therefore great to see that the Australian Academy of Science has established the Science in Australia Gender Equity (SAGE) Initiative that in August 2015 will launch a pilot of the Athena Swan Charter in Australia. For those of you who don't know, this charter was introduced in the UK in 2005 to address the under-representation of women at senior levels in science. It provides a framework for institutions to implement policies and practices to improve gender equity in science and, importantly, a number of UK-based funding agencies have linked funding eligibility to institutional buy-in to Athena Swan. This requires considerable commitment

by institutions in terms of collecting and analysing data about existing policies, and developing a plan to address the engagement and retention of women at all levels. SAGE is calling for 20 institutions to take part in the 2-year Australian pilot. NHMRC have concurrently issued guidelines to help institutions develop policies to support women in health and medical research, indicating that they are also serious about tackling this issue. This seems to be the most positive and constructive attempt so far to tackle the issue of gender equity more broadly across the scientific community and, based on indicators of success in the UK, we can hopefully look forward to improvements in Australia in the coming years.

### **Members in the spotlight**

As in previous newsletters we offer you the chance to get to know two of our members through our member profiles. Later in the newsletter our editor Fiona Wylie chats to Annemeik Beverdam from UNSW. Annemiek is one of our NSW state reps, having already served as a Qld state rep before relocating to NSW. Given her commitment to the society and in recognition of the important contributions our state reps make to ANZSCDB, we decided that it is time to hear a bit more about her career and the influences that have shaped it to date. For our other profile we are taking a

slightly different approach and introducing you to a relatively new member of our community, Roger Pocock, who moved to Monash University earlier this year from Copenhagen. We decided that this was a good forum for society members to get to know new members.

### Announcement of Awards

It is a pleasure to announce the winners of the two major ANZSCDB awards to be presented at Combio in Melbourne in September. I am extremely grateful to members of the ANZSCDB committee, who were given the extremely difficult task of ranking an incredibly strong and worthy field of nominees for both awards. As always, having the advice of this group of highly successful senior members was invaluable. The establishment of this committee by former President Edna Hardeman was a great initiative that has made decisions such as these easier.

### The President's Medal

We are extremely grateful to Sigma-Aldrich for continuing their generous support of the President's Medal. This is the highest honour bestowed by ANZSCDB and recognises outstanding contributions to cell and developmental biology in Australia and NZ. I am delighted to announce that the 2015 ANZSCDB President's Medallist is Professor Melissa Little from the Murdoch Children's Research Institute in Melbourne. Melissa is a leading figure in developmental and stem cell biology in Australia and internationally. For many

years, Melissa has made seminal contributions to studying the development of the urogenital system, efforts that culminated recently in the successful differentiation of a pluripotent stem cell into a mini kidney in vitro. These are landmark studies with implications for future kidney regeneration efforts. In addition to her considerable scientific achievements, Melissa is well known for her leadership and advocacy roles in the scientific community, including a stint as Chief Scientific Officer of the Australian Stem Cell Centre and her current role as Vice-President of the Australian Society for Stem Cell Research. She also served on the Australian Government's Wills and McKeon strategic reviews into Health and Medical Research, and is a member of the NHMRC Research Committee. Anyone who knows Melissa will appreciate her endless capacity for hard work and dedication to advocating for biomedical research in Australia.



There is no doubt Melissa is an extremely deserving recipient of the 2015 President's Medal – congratulations Melissa.



President's Medal

### The ANZSCDB Emerging Leader Award

For some years now there has been debate about the appropriateness of the title "Young Investigator Award" for the ANZSCDB award that recognises our up-and-coming leaders in cell and developmental biology. It was felt that the title Emerging Leader Award more accurately reflects the purpose of this award and so we have decided to re-name the award. I am extremely pleased to announce that this year's winner is Associate Professor Brett Collins from the Institute for Molecular Bioscience at the University of Queensland.

Brett works at the interface of cell and structural biology and to quote him "is a cell biologist that uses X-ray crystallography rather than microscopy". Brett has made major contributions to our understanding of the structure-function relationships governing membrane trafficking machineries, resulting in publications in leading scientific journals at all stages of his career to date. Brett's very successful post-doctoral stint at Cambridge Institute for Medical Research UK set him on an upward trajectory that continued after he moved back to Australia and established an independent research group at





the IMB. His work is unique in combining structural biology and cell biology, and through key collaborations Brett is making inroads into understanding the structural consequences of mutations affecting proteins involved in trafficking in neurological diseases such as Alzheimer's and Parkinson's. Brett is clearly a rising star in the Australian cell biology community and is extremely worthy of this award.

We very much look forward to talks from both Melissa and Brett at Combio2015 in Melbourne, and we will learn more about them in our Summer Newsletter.

### **Leica International Student Travel Award(s)**

Leica again this year have provided support to assist with international student travel. We all know that this is a vital part of a PhD student's education and as supervisors we are invariably heartened by the genuine enthusiasm that accompanies a student's return from a particularly stimulating

conference. However, with increasing funding pressures it is becoming difficult to find the funds to support this important activity and we are therefore extremely grateful to Leica for their support of this award. The number of applications for this award continues to grow (22 this year, up from 14 in 2014), and it was almost impossible to discriminate between them, with all applicants deserving our support. To help spread the available funding a little we have decided to continue with the tradition we started last year and make two separate awards. This year's recipients are Shannon Nicolson from the University of Adelaide and Joan Rohl from Queensland University of Technology. Shannon will attend that Gordon Research Seminar and the GRC on Autophagy in Stress, Development and Disease in California in March 2016, and Joan will attend and speak at the 7th Joint Meeting of the European Tissue Repair Society & the Wound Healing Society in Copenhagen in October, 2015. We wish them well on their travels and look forward to hearing about their adventures in upcoming newsletters.

### **Combio2015**

Combio is the annual meeting of the society and this year will be held at the Melbourne Convention and exhibition Centre from 27 September 27 to 1 October. The chair of the overall organising committee is our own Marie Bogoyevitch (University of Melbourne). ANZSCDB

Member David Jans (Monash University) is also on the executive and Paul Gleeson (University of Melbourne) and Edwina McGlinn (Monash University) are members of the committee. The programme is looking great - see the advertisement later in this newsletter for details of plenary speakers.

One of the highlights of Combio over recent years has been the ANZSCDB Dinner held on the Tuesday night (29th September) and I encourage all those attending Combio to come along. Watch out for email messages about details on venue and how you can sign up.

Finally, as always the AGM will be held prior to the Conference Dinner on Wednesday 30 September - it will be good to see as many members as possible there, so please show your support by coming along and having your say.

### **State Cell and Developmental Biology Days**

These highly successful meetings are organised by our state reps and have become major events for the cell and developmental biology communities in most Australian capital cities. We are delighted with how these meetings have grown in popularity, due almost entirely to the hard work of our state reps and local organising committees. The NSW meeting was held earlier this year immediately prior to the Hunter Cellular Biology

Meeting, and was hugely successful. Upcoming meetings will be held in Brisbane on October 2 (plenary speaker, John Wallingford, University of Texas at Austin); Melbourne also on October 2 (plenary speakers, Guangshuo Ou, UCSF, Tshingua University, China; Suresh Jesuthasan, A-Star, Singapore); and Adelaide on November 17 (plenary speaker, Richard Marais, Cancer Research UK's Manchester Institute). Watch out for announcements of your local meeting.

### Membership

As always, membership continues to be an issue for the society. We need a core membership base to raise awareness of our disciplines and to provide a vibrant interactive community for all our members. In addition, we rely heavily on our

membership subscriptions to support our activities such as state cell and developmental biology days and student travel bursaries. Increasing our membership base will definitely help us support these types of worthwhile efforts. Related to this we are very happy to welcome our newest corporate member Australian BioResources, and to thank them for their support. I would ask you all to encourage your students, staff and other colleagues to join ANZSCDB. In addition I ask you to take care to renew your own membership.

With renewals all now due at the end of December/early January it is very easy to overlook this at such a busy time of year.

Finally, I would like to thank you all for supporting ANZSCDB and contributing to the promotion of cell and developmental biology in Australia and New Zealand. I am confident that we are leaving the society in good shape and in good hands. I look forward to continuing my involvement with ANZSCDB as Past-President and wish Sally and the new executive all the best for the next few years.





## Introducing the Science Next Collaborative

In order to empower the latest generation of scientists to better commercialise their research, Sigma-Aldrich has spearheaded a new initiative that forges a dynamic partnership between industry and academia.

### A meeting of minds

Earlier this year, Sigma-Aldrich convened seven of Australia's top scientists as part of a Think Tank group to focus on a pressing problem in the life sciences industry, and to brainstorm on how they might go about remedying it. Specifically, how could Sigma-Aldrich and academia join forces to better enable Australian scientists, especially early- and mid-career researchers (EMCRs), to successfully translate their research through to commercialisation?

All involved in the initiative agree this is an important concern. "A thorough examination of the Australian scientific research sector uncovered that many researchers are struggling to achieve the final steps in their research continuum:

successful commercialisation," said Reich Webber-Montenegro, Director – Marketing, Inside Sales, and Shared Services, Sigma Aldrich Oceania. "It's true," agrees Think Tank member and Macquarie University Professor Mark Baker. "Innovation and commercialisation is a bit like snakes and ladders – ten steps forwards and two steps back."

Enter Sigma-Aldrich's Science Next Collaborative (SNC). An Australian first in industry-led initiatives, the SNC brings together leading Australian scientists to facilitate an exchange of knowledge and ideas, and create educational resources and best practice models for commercialisation.

SNC Think Tank member and Associate Professor Derek Richard of Queensland University of Technology, highlighted the initiative's importance. "It's so difficult for young researchers to take their discoveries through to commercialisation, possibly due to a lack of experience in intellectual property protection, market research,

lodging patents and gaining working capital, which are all fundamental elements in the commercialisation of research," he said. "So we wanted to look at ways to help change that."

### From research to realisation

The goal of the SNC Think Tank is simple to state but complex to achieve. How could they pool their combined experience to discuss how industry and academia might join forces to better empower EMCRs in navigating the path to secure economic returns for their scientific discoveries?

It was vital to all those involved that something tangible arose out of the SNC and the Think Tank. "No one wanted it to be just a collection of old scientists sitting in a room talking about how things have gone wrong," said Professor Peter Currie of the Australian Regenerative Medicine Institute and Think Tank member. "We had to come up with concrete measures to make the pathway to innovation both in industry and academia easier for our young scientists."



**SCIENCE NEXT**  
COLLABORATIVE



*"If only the Science Next Collaborative had arrived 10-15 years ago in Australia, it would have made a real difference to my own commercial pathway."*

*Associate Professor Derek Richard of Queensland University of Technology*

Recently, the SNC Think Tank published a position paper "Bridging the Gap Between Australian Industry and Academic Research". It captures the current situation and key challenges, and also proposes potential solutions.

For example, just as research funding is in decline, Australian universities and research institutes are producing more EMCRs than there are academic tenure positions available. However, the SNC position paper suggests one way to manage this issue is by developing programs that train EMCRs in how to better transition their research to have a commercial prospect. It also identified a need to encourage entrepreneurialism in order to move away from the risk-averse culture that currently stifles commercial research output – one way being the adoption of various proposed best-practice models from overseas, currently exemplified by the model of the UK's Medical Research Council – Technology which works to identify, evaluate and then champion the best up-and-coming research and technology.

Additionally, the SNC position paper points out the inherent value in industry-led innovation centres, ongoing partnerships between academia and industry (such as the SNC), and PhD scholarships whereby future EMCRs might spend part of their academic institutional study "embedded" within the fold of a commercial sponsor.

### From white paper onwards

Needless to say, the scientists involved were all enthusiastic about the SNC's early results. "Being involved in this initiative is critically important," said Professor Currie. "A partnership between industry and academia is perhaps the only real way we're going to get consensus about what needs to be done in the innovation sector, and also help involve major stakeholders like government and universities about policies and procedures that could be put in place."



Back row (left to right): Associate Professor Derek Richard (QUT), Professor Peter Currie (Monash University), Professor Mark Baker (Macquarie University), Professor John Carver (ANU).  
Front row (left to right): Reich Webber-Montenegro (Director - Marketing, Inside Sales & Shared Services Oceania, Sigma-Aldrich), Associate Professor Kaylene Simpson (Peter MacCallum Cancer Centre)

### The SNC Think Tank members

#### **Professor Mark Baker**

*President, Human Proteome Organisation, Professor of Proteomics & Biochemistry, Department of Biomedical Sciences, Macquarie University*

#### **Professor John Carver**

*Director of the Research School of Chemistry, Australian National University*

#### **Professor Peter Currie**

*Deputy Director, Australian Regenerative Medicine Institute, Monash University*

#### **Associate Professor Derek Richard**

*Principal Research Fellow Faculty of Health, Biomedical Sciences, Biomedical Sciences Queensland University*

#### **Associate Professor Kaylene Simpson**

*Head of Victorian Centre for Functional Genomics at the Peter MacCallum Cancer Centre*

#### **Professor Deborah White**

*Member of the Centre for Cancer Biology, the Centre for Personalised Cancer Medicine and a Professor of both Medicine and Paediatrics at the University of Adelaide*

Professor John Carver of the Australian National University, another Think Tank member, has similar views. "What's got me really excited about this program is that I think it's the first time any company in Australia has really put their hand out to academia to try and build bridges, and Sigma-Aldrich is showing great innovation in doing so."

Assoc. Professor Richard concurs: "If only the Science Next Collaborative had arrived 10-15 years ago in Australia, it would have made a real difference to my own commercial pathway."

### SNC Forums

To build on the discussion and debate raised in the SNC Positioning Paper, and to deliver additional concrete educational activities and resources, a series of Science Next Collaborative Forums will be held in Brisbane, Sydney,

and Melbourne in August and September. The Forums will involve the Think Tank members as well as other keynote speakers, who will be invited to showcase new progressive strategies and best-practice models and case studies on how to successfully bridge the gap along the commercialisation continuum.

In the words of Ms Webber-Montenegro, the future looks bright. "By launching the SNC, Sigma-Aldrich is playing a pivotal role in establishing dialogue and relationships across the industry, and we are eager to see its positive impact within the scientific community," she said. "We're not only going to be talking about the problem – we will be delivering real tools in order to help the solution come alive."

To download the SNC Position Paper, or to register for the FREE SNC forums, visit [www.sciencenextcollaborative.com](http://www.sciencenextcollaborative.com)

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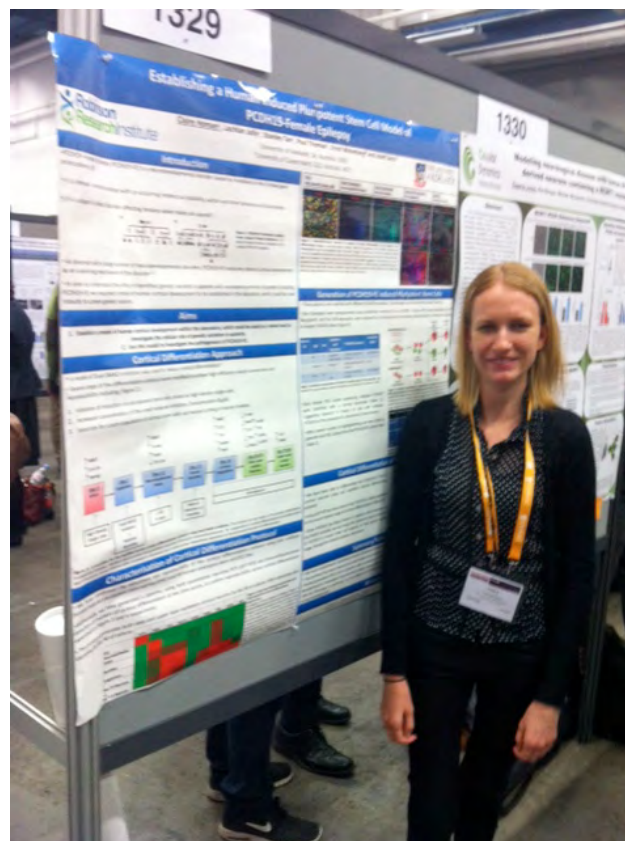
# Leica Student Travel Award Winner

Thanks to the kind support of Leica and the ANZSCDB, I was fortunate enough to attend the International Society for Stem Cell Research (ISSCR) Annual Meeting this year, held in the hometown of the Nobel prize (and ABBA), Stockholm, Sweden.

**CLAIRE HOMAN, University of Adelaide**  
2014 Winner of the Leica Travel Award

Having embarked on a challenging PhD using induced pluripotent stem cells (iPSC) to model the neurodevelopmental disorder, PCDH19-female epilepsy, I decided this conference was the only choice for me. The opportunity to be surrounded by world leaders in stem cell biology and to hear all of the new and exciting developments of this rapidly evolving field was invaluable.

Upon arriving at the conference and sitting in the first plenary session I felt slightly overwhelmed at the scale of the conference with over 3700 delegates from all over the world. However, I soon overcame these feelings as soon as the first talks of the meeting began. Having the opportunity to listen to "the father of iPSCs", Professor Shinya Yamanaka, describe his current work on the progression of iPSC technology and Professor Jurgen Knoblich explain his work modeling human brain development through the generation of cerebral organoids (brains in a dish) was truly inspiring.



After listening to the first round of plenary talks I then progressed to the poster area to locate my designated spot among the hundreds of other posters. Standing by my poster for the first poster session of the meeting, I was excited to talk to numerous people interested in my work. Talking to people that were facing the same challenges that I have been experiencing presented a great opportunity, as did being able to offer advice given my experience and receive very helpful suggestions on things that I could be doing to progress/improve my own work. Throughout the meeting there were three, 2-hour poster sessions, and I found these sessions the most useful times for me, to be exposed to new unpublished work and to gain an insight into how people are using stem cell technologies and the advancement of current techniques. These sessions were also a great opportunity to be able to talk to the researchers themselves and really ask the specific/detailed questions that people don't tend to publish or talk about. I was really impressed with how open people were with talking about their projects and not only sharing the things that worked, but



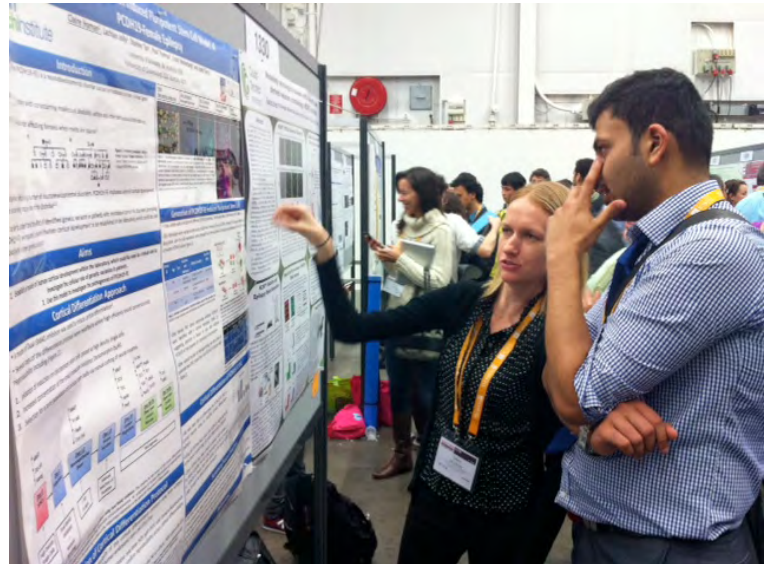
also openly commenting on the inconsistencies or pitfalls of their models, something faced by most researchers using iPSC technology.

At a conference of this size it is easy just to disappear into the crowd, especially being a junior investigator. However, at the ISSCR they have established several junior investigator events to enable networking among other junior investigators and the opportunity to interact with leaders in stem cell research. One of these events I attended was the "Meet the experts luncheon" and I selected to have lunch with Professor Magdalena Gotz. I and eight other junior investigators from Sweden, Canada, England and Germany, were able to sit around a table with Professor Gotz and discuss everything from in vivo vs in vitro models, designing experiments which ask the right questions dependent on the model system used and whether discoveries using human pluripotent stem cells could really be translated into human treatments. Additionally, she shared her experience of a career in research and the reasons why she made her career choices. I found this experience a highlight of the meeting.

Attending this conference has provided me with the opportunity to meet and talk with many other developmental and stem cell biologist working throughout the world, and to see firsthand the exciting progress in this rapidly evolving field. I learnt more about the new techniques being applied in this field and about the potential for clinical translation of this work, with several human clinical trials using stem cells currently underway.

I left the meeting filled with ideas of experiments that I couldn't wait to try and the names of people that would be more than willing to help me along the way.

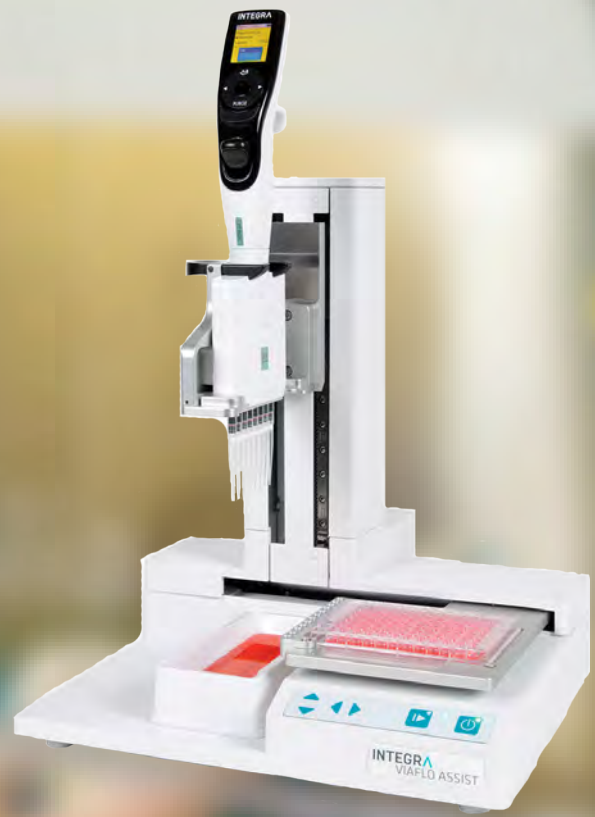
I am extremely thankful to the ANZSCDB and Leica for awarding me the PhD international travel award. Without their support it would have been very difficult for me to attend this meeting in Stockholm. I strongly encourage other PhD students to join this society as I have found the ANZSCDB to be very supportive of its junior members. Lastly, I recommend that all other PhD students try and attend an international conference during their candidature. I have found it to be a truly valuable experience and a unique opportunity to gain insight into research going on throughout the world.





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# Roger Pocock

## - welcome to our society

*In January 2015, Associate Professor Roger Pocock moved his research group from Copenhagen to Australia to head the Neuronal Development and Plasticity Laboratory in the Department of Anatomy and Developmental Biology, Monash University. He also became one of our newest ANZSCDB recruits.*

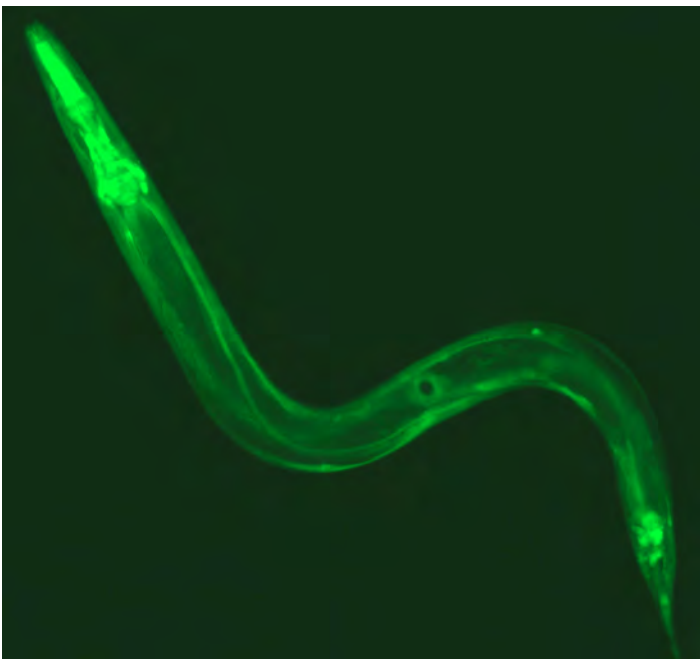
### **Could you give me a snapshot of your current research?**

My group's aim is to better understand how the brain develops and functions. With a fundamental understanding of developmental mechanisms we will be able to better understand what happens when development goes awry and causes brain disorders.

We use the *Caenorhabditis elegans* model to study various aspects of neuronal development and function including fate specification, neuronal migration and axon guidance and neuroplasticity.

### **What was the basic path to becoming Associate Professor Roger Pocock?**

I am originally from the United Kingdom where I grew up on the south coast of England. As a teenager I entered the banking sector. During my mid-twenties, I decided to completely change my career path after watching a documentary on the BBC. The program focused on *Drosophila* and worm geneticists working on homeotic genes.



I didn't know what DNA was, let alone what a gene was, but I was so enthralled by their work that I decided to go to biology evening classes whilst working in the bank during the day. After a number of years of study I was then able to start my undergraduate degree in Genetics and Biochemistry at the University of Wales in Aberystwyth and then at Washington State University in the USA.

I trained as a doctoral student at the University of Oxford from 2000-2005, where I was first introduced to my favorite model organism - the nematode *Caenorhabditis elegans*. During this period, I first worked on the transcriptional control of embryonic development before moving into the world of neuroscience.

Upon completion of the doctorate, I commenced postdoctoral work at Columbia University Medical Centre in New York City. Here, I again used *C. elegans* as a model system to study development, but there it was to study how the nervous system senses and responds to environmental stress. This work produced groundbreaking studies in the field of hypoxia (low oxygen), and insights that are now being used in designing drugs to prevent neuronal defects in premature newborn babies.

In 2010, I started my own research group at the University of Copenhagen, with a focus in the early phase on delineating the roles of microRNAs in neuronal development and function as well as in the control of neuronal fate decisions during development. The first few years of this foray into independent research yielded important insights into how both conserved transcription factors and microRNAs control neuronal development. Following on from that the Pocock laboratory started to look more deeply into how microRNAs regulate brain development and function during development and during the aging process.

similar bonds with people here.  
The best part...the weather!

***What do you see as your biggest research achievement(s) to date?***

We showed for the first time that hypoxia (lack of oxygen) can cause developmental defects in the brain. Specifically, we showed that specific neurons are misguided in low oxygen conditions and identified the molecular mechanism responsible for causing the defects. The same mechanism has subsequently been shown in vertebrates and is being targeted at present to help prevent brain disorders in premature babies.



In January 2015, I relocated my laboratory to the Department of Anatomy and Developmental Biology at Monash University. At present, the group comprises five students who have relocated from Denmark and four postdoctoral researchers who have been recruited in Australia. This provides a highly dynamic and internationally competitive environment to enable research in the laboratory to flourish.

***What were the hardest and best parts of moving your lab halfway across the world?***

The hardest part was leaving some great colleagues behind, although I hope to forge

***Who inspires you in science and in life?***

I was initially inspired by two biologists, Lewis Wolpert and Michael Levine, who I stumbled across when watching the documentary program mentioned earlier. Levine's work in particular sparked my interest - especially his crazy experiments involving the misexpression of homeobox genes in the fly, whereby he induced legs to grow in place of antennae and genitals to grow on the head! Watching these experiments on TV in England first drew me into biology.

***What role do you see the ANZSCDB playing in your research, particularly as a newbie to Australian research?***

As a new member of the ANZSCDB I am excited to attend conferences and to be introduced to Australian science by visiting universities throughout the country. I see the ANZSCDB as a conduit to provide me access to all the top developmental biologists in Australia and New Zealand.

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

That you never know what is next around the corner. Some of the projects I am working on now in my laboratory I would have never predicted 5 years ago, or even 2 years ago in some cases. For example, 5 years ago I did not think that I would be working on germline development. This is a bit of a stretch for a neurobiologist but these kinds of twists and turns are what make life as a scientist interesting and fun. You are not really in control of the situation - your model organism is and you never know what surprises are around the next corner of the worm.

***What advice would you give people embarking on a career in cell and developmental biology today?***

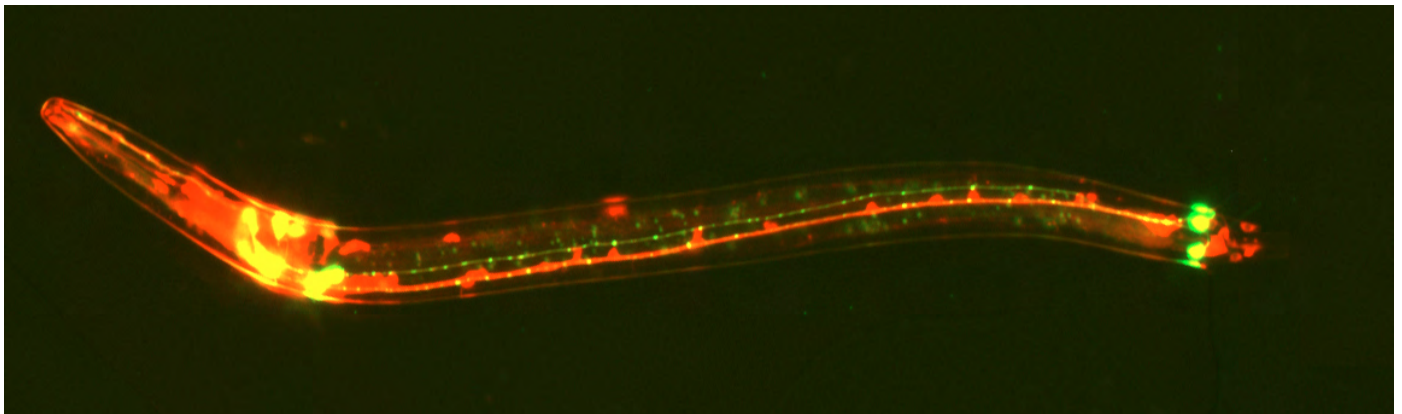
Find a mentor who is invested in developing your career. I cannot stress enough the importance of being in a nurturing environment during your PhD and postdoc periods. I would also advise anyone not to waste a moment in the lab. Optimize your time as much as possible and hope for a little luck. We all need that.

***What do you do to relax?***

I like to read scientific papers! No, really. I enjoy playing tennis and golf and enjoying all of what the great outdoors of Melbourne and Australia have to offer.

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

I would like to be good enough to play professional golf! No chance unfortunately!





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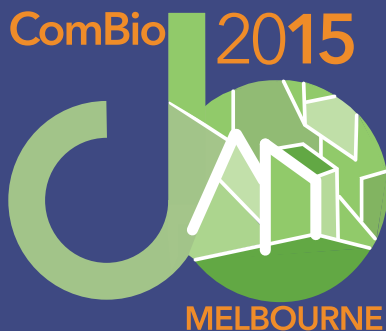
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## Melbourne Convention and Exhibition Centre 27 September to 1 October 2015

### Conference Themes:

- ◆ Cancer Biology
- ◆ Global Change Biology
- ◆ Infection and Host
- ◆ Metabolic Diseases
- ◆ Neuroscience
- ◆ Plant Cell Biology
- ◆ Plant Ecophysiology
- ◆ Regenerative and Developmental Biology

### Provisional Threads:

- ◆ Advanced Structural Methods
- ◆ Chemical Biology and Drug Discovery
- ◆ Emerging and Enabling Technologies in the Biological Sciences
- ◆ Genomics and Transcriptomics
- ◆ Molecular and Cellular Imaging
- ◆ Proteomics and Metabolomics
- ◆ Systems and Computational Biology

### Overseas Plenary Speakers

- ◆ **Martin Caffrey** (Trinity College Dublin, Ireland)
- ◆ **Ana Maria Cuervo** (Albert Einstein College of Medicine, USA)
- ◆ **Junko Kyojuka** (Tohoku University, Japan)
- ◆ **Jiayang Li** (Institute of Genetics and Development Biology, Chinese Academy of Sciences, China)
- ◆ **Roberto Mantovani** (University of Milan, Italy)
- ◆ **Carolyn Moores** (Birbeck College, UK)
- ◆ **Ruth Nussinov** (National Cancer Institute, USA)
- ◆ **Guangshuo Ou** (Tsinghua University, China)
- ◆ **Pam Ronald** (University of California Davis, USA)
- ◆ **Bob Schmitz** (University of Georgia, USA)
- ◆ **Luca Scorrano** (University of Padua, Italy)
- ◆ **John Wallingford** (University of Texas, USA)
- ◆ **Minoru Yoshida** (RIKEN, Japan)

**Extended Deadline for Late Poster Abstracts:**  
Friday, 14 August 2015

### Combined ASBMB, ASPS, ANZSCDB, NZSBMB and NZSPB Annual Meetings

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

### Further information:

#### Conference Co-Chairs:

Marie Bogoyevitch  
[marieb@unimelb.edu.au](mailto:marieb@unimelb.edu.au)  
Ed Newbigin  
[edwardjn@unimelb.edu.au](mailto:edwardjn@unimelb.edu.au)

#### Program Co-Chairs:

David Jans  
[david.jans@monash.edu](mailto:david.jans@monash.edu)  
Ed Newbigin  
[edwardjn@unimelb.edu.au](mailto:edwardjn@unimelb.edu.au)  
Matthew Perugini  
[M.Perugini@latrobe.edu.au](mailto:M.Perugini@latrobe.edu.au)

#### Registration/ Exhibitions:

Sally Jay  
[combio@asbmb.org.au](mailto:combio@asbmb.org.au)

### Follow us on:



[www.asbmb.org.au/combio2015](http://www.asbmb.org.au/combio2015)



# Annemiek Beverdam

## - a dedicated state rep

Dr. Annemiek Beverdam heads the Developmental and Regenerative Dermatology Laboratory in the School of Medical Sciences at UNSW where she studies skin development and regeneration. Although relatively new to life as an independent researcher, she is a veteran State representative for ANSCDB, having served consecutively across two states since 2011.

### **What was the path to becoming Dr Annemiek Beverdam?**

As a young child growing up in The Netherlands I was always curious about the world around me – and at high school I felt like I had discovered how the world worked through physics and chemistry, although funnily enough, I dropped Biology to keep languages and literature.

After high school and still not sure about what I wanted to do as a grown up, I settled on Medical Biology at the University of Utrecht in preference to Medicine because it was a good combination of all sciences. Amazingly, the very first course I attended was embryology, and in that lecture room with 400 medical biology and medicine students, I was absolutely fascinated, listening to the overwhelming embryology jargon about ectoderm, endoderm and mesoderm, and how a single zygote undergoes division, cavitation, folding, and morphogenesis, to eventually become a whole functioning organism.

I also learned about genetics, and how to study gene function by genetic manipulation. I remember the first time I heard about how to make cells blue, and how to study promoter function. I was amazed, and hooked! Indeed, during my first placement as a Masters student at the Rudolph Magnus Institute for Neurobiology and Hubrecht Institute, I actually made blue cells for promoter studies of a neural-specific gene *Gap43*, and I made blue *Xenopus laevis* embryos through a technology called biolistics.

During that time, I heard Ronald Plasterk speak about the role of G protein-coupled receptors in *C. elegans* development. He is a fantastic speaker, and I loved his research, prompting me to visit the Netherlands Cancer Institute to pursue further placements. Amongst others there, I met with John Collard in the Department of Cell Biology, and decided to work with him to learn the yeast two-hybrid system. I identified components of the Arp2/3



complex as interactors of Tiam1. I thoroughly enjoyed the dynamic research atmosphere at the NKI and was now thoroughly hooked on science.

But I missed my embryos, so was very happy to find a PhD project in Frits Meijlink's group at the Hubrecht Institute in Utrecht, studying *aristaless*-related genes in mouse embryonic development. Here, I generated the *Alx3* knock out mice, which also happened to be blue. These mice took lots of tears and frustration in the over 2 years it took to generate them...and to my great despair they had no abnormalities! I was about to quit research and even completed a postgraduate course in science journalism on the side.

However, I was also looking at mouse mutants for highly related sister genes *Alx4* and *Cart1*, and found severe skeletal abnormalities in these mice, the most striking of which were severe midfacial clefts. We characterized these abnormalities, I wrote my thesis, and we published two papers in *Development*. My love for science was restored and I now had a passport to the world!

Italy was my first stop, as a postdoc in the lab of Dr. Giovanni Levi in Genova, who had just generated *Dlx5/6* mutant mice with the most amazing craniofacial abnormalities. Unfortunately, another group was just a bit earlier than us, and published the abnormalities of this mouse in *Science*. But I got to present the work at the Mouse Genetics Meeting at Cold Spring Harbour. Unfortunately, after less than a year of my postdoc, Giovanni's lab was forced to close down and I didn't want to move with him to Paris, so I was again on the hunt for overseas adventures. And further we did go.



A fantastic opportunity came up in Peter Koopman's group at the Institute for Molecular Bioscience (IMB), University of Queensland, so my partner and I headed to Brisbane. At the IMB, my colour palette shifted slightly and I generated reporter mice with green glowing gonads to identify novel genes important for sex determination and gonad development, and characterising these exciting genes resulted in a string of papers.

Not long after our next adventure began with the birth of our first son. We decided to stay in Brisbane for a while and I took up a new postdoc position with Professor Brian Key at UQ. Here I explored gene function in yet another developing organ system, studying the genetic wiring of the mouse olfactory system together with my first PhD student Gregory James, using a small research grant that I had won.



Brian suggested that I look into the role of YAP (Yes-associated protein) in regenerating olfactory neurons, a project I was very excited about. So, I generated a transgenic mouse line overexpressing YAP in olfactory neuroepithelial stem cells - however, whatever I did to try to enforce a phenotype in the olfactory system of these mice, nothing happened! But then, as these mice grew older, I noticed that the skin developed increasingly severe abnormalities and became bald. I found that this was caused by an overactive stem/progenitor cell population resulting in a much thicker epidermis with hair follicles that transformed into stem/progenitor cell masses. This is an incredible rewarding mouse model to work with, and resulted in a great publication in JID and eventually an NHMRC project grant, which kicked off my career as lecturer and independent researcher in epidermal biology at UNSW.

### **What were the milestone steps on that path and why?**

My first contact with *Xenopus* embryos!

Meeting Ronald Plasterk and experiencing the dynamic research atmosphere at the Netherlands Cancer Institute.

Meeting my partner Tjarco, who was keen to take on the international adventures with me - he came globetrotting wherever I went. I am immensely lucky to share my life with him.

A Cold Spring Harbour course I took during my PhD. We were immersed in Developmental Biology taught by absolute stellar researchers in the field. It was here that I met Koops, who was a course instructor. Working for him was another milestone for me - a steep learning curve in research and how science works beyond the lab.

Working with Brian Key, who allowed me tremendous freedom and was very generous with research project ownership, which was important to kick start my career. I am also very grateful for his patience during the early years with my two little boys.

ComBio 2011, just after I stepped back into the world of science post full-time child rearing. It was there that I met several key people with whom I collaborate and are still in close contact. I also became QLD state rep at that meeting under Edna's ANZSCDB governance.

Starting my lab at UNSW in 2013 and winning that first NHMRC grant.

### **What is the hardest thing about setting up as an independent researcher/academic?**

For me it was starting from scratch in an environment where I did not know the people, the systems or the culture. I also had no research money, no mouse lines to work with yet, and no people in my lab, not to mention finding research students as somebody new to UNSW? Luckily Edna Hardeman and my office mate Stephen Palmer have been very supportive and tirelessly helped me to get me wired into this new system.

I worked hard on my visibility as a new group leader, and through the UNSW Research Gateway profile, I was lucky to find my first PhD student basically in the

## Member profile

first fortnight I was at UNSW, who was a perfect fit for my research plans! I couldn't believe my luck. Then, I secured my research grant, some Honours students, a second PhD student and an amazing RA...and all of a sudden I had six people doing experiments and thinking about the same questions I had been thinking about for a long time. Everybody is so enthusiastic and motivated, and over the past year, we have collected some really exciting new data that we are writing up for publication. I am very grateful to have this experience,



and I am super-proud of my lovely lab bunch.

### **What advice do you have for those starting off in cell and developmental biology?**

Be aware it is not going to be easy, especially with basic research for which is it very hard to find funding.

Find dynamic labs with supportive supervisors that have a strong reputation in your research field of interest. It is very important to work hard in the lab, set goals and publish papers... but also to get out as much as you can to visit conferences, hear about research in related fields, and talk with researchers from other labs about your work and theirs to establish networks beyond the lab. Be proactive, go to other labs and ask for advice from other leaders in the field, invite yourself for seminars. Be aware of what it takes to win fellowships and grants, read through the guidelines, criteria, read successful applications. Grab all opportunities for exposure and increase your visibility as a researcher however daunting they may appear. But do not forget that there is life outside of the lab, which is essential to find balance and achieve more.

I also think it is very important to move labs as a young researcher, and experience many different research environments. You will establish networks everywhere you go, which will be helpful for your future as a researcher. And I know from experience that it is

a great adventure to pack up your life and start new in a completely different country. I am still adventuring really.

Lastly, do not despair in this era of (gen)omics. There is perhaps not as much interest in our research fields as we got to enjoy previously. But it is only a matter of time or people will want to understand what all these genes and proteins precisely do in development and cell biology. And then it is our turn again.

### **Who inspires you in science and in life?**

Many people really. My parents for making me believe that I could do anything in life. My mum is a bit of a feminist, who used to bring in the money while my dad completed his university degree. Mum made me aware of the still lingering gender imbalance in life, but she also instilled in me the idea that I could attain anything I wanted in life if I worked hard for it. My father was a very positive person who liked adventure, and really knew how to enjoy his life - I think I got a little bit of that from him. And during my academic career I have learned so much from peers and previous advisors, but also from the people that now work in my group, and from my beautiful little boys who can be so determined to learn new things and find out how they work.



### **The best and worst things about your job?**

Best things: Still getting very excited with every good result, even a PCR band on a gel...much to the

entertainment of my team. The microscopy imaging - seeing is believing, and the images we make as developmental and cell biologists are truly spectacular and beautiful! The freedom to pursue a direction I am interested in, in research, but also with other initiatives such as sitting on committees, organising seminars and meetings, etc - usually a very rewarding and inspiring experience. Being challenged every day. But one of the best things is working with my students - watching them grow, produce data and develop into independent researchers.

Not so good things: Paperwork. The pressure to publish and win grants and have ruthless ambition, sometimes at the cost of early-career researchers in the lab.

**What is your burning question in science right now?**

I study how stem cells are regulated in the skin, and how this goes wrong in regenerative skin disease such as skin cancer. I recently identified YAP as a master switch in activating epidermal stem cell proliferation and differentiation, and I now want to understand how YAP interacts with other regulatory genetic networks that control epidermal stem cell proliferation. We have collected exciting evidence over the past year that YAP and beta-catenin undergo positive regulatory interactions of proliferating keratinocytes in vivo. My lofty goal is finding ways to manipulate the activity of YAP, and to find drugs that are effective in disease.

**How do you see the ANZSCDB playing a role in your scientific career?**

ANZSCDB has been incredibly important for me. As a state rep I have interacted extensively with the research communities in both QLD and NSW, and at times in the other states. In addition, this role provided much exposure to the NSW-based community, which has been immensely helpful in building a profile in a new state.

I really enjoyed organising state meetings for the ANZSCDB in the past 6 or so years. It is so nice working towards a goal with a small group of people, finding big name speakers, a good venue, sponsors... and then putting all the pieces in place. And the day itself is crazy busy, but such good fun to hear the science and see people interact. I find it a very rewarding experience.

**What would you do if you were not in research?**

Other than science, I might become a science writer so that I can learn a little bit about a lot of different things. It would be great to write a book such as 'A Short History of Nearly Everything' by Bill Bryson, in which he gives a very entertaining overview of many science fields. Imagine being able to do something like that!

**What do you do to relax?**

Bike riding! As a Dutch person I grew up cycling - usually on a comfy sit-straight-up type of bike. As a PhD student I owned a road bike and cycled everywhere at home, and through France and Italy on holidays. After many years of commuting by car in Brisbane between work, home and day care, I picked up cycling again once in Sydney and I now commute 20km every day, despite Sydney not being the most tolerant place for cyclists. On weekend, I am what they call a 'weekend warrior' - getting up at ridiculous hours on Sunday morning to beat Sydney traffic, but I also enjoy shorter rides with my family. We also love bush walks and spending days on the beach. At home I enjoy cooking up a storm with friends over a glass of wine or two.





# Hunter Meeting 2015

**Rohan Teasdale, Convenor, 1st Hunter Systems & 15th Hunter Cell meetings, Crowne Plaza Hunter Valley Resort, Hunter Valley, NSW, Australia**  
**16th -20th March 2015**

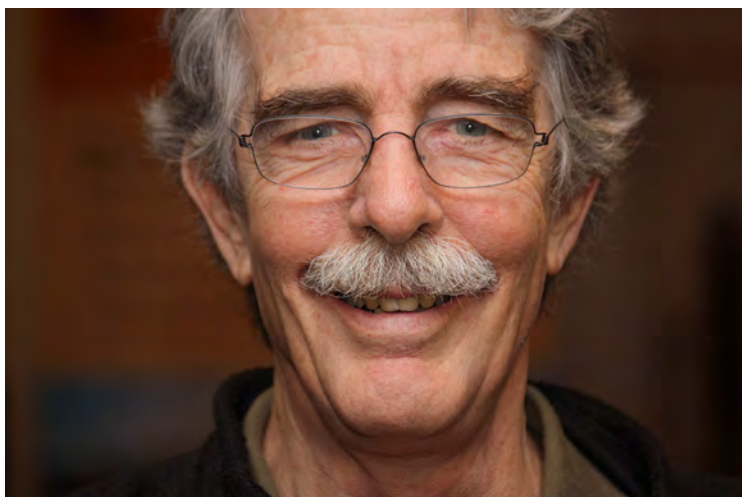
This year the Hunter meeting underwent some major changes but once again proved to be the premier annual meeting for Australia's cell and developmental biology community. This year's meeting was held back-to-back with the inaugural Hunter Systems meeting with shared sessions on the Tuesday. The program for the week had its traditionally broad scope covering various aspects in cell biology. The meeting attracted numerous high profile overseas speakers who presented some outstanding talks. This was complemented by the impressive science presented by our Australian-based investigators including many early-career researchers. The key ingredient to a successful conference is the engagement of those attending and this year did not disappoint. All sessions ended with vibrant discussions regardless of the topic and the high level of attendance was obvious throughout all sessions. This extended to the poster sessions, trade displays and well into the night.

Charlie Boone presented the **Systems Meeting** Keynote on the first night in which he outlined the massive project to map all the essential pair wise interactions in yeast with the ultimate goal of creating a model of the cell based on this functional interaction network. Hiroaki Kitano entertained both sets of delegates with the Keith Stanley Lecture on how artificial intelligence will transform the future including taking on the Brazilian soccer team to the way we will conduct biomedical research. Olivier Pourquie demonstrated the power of genomic approaches in the ANZSCDB lecture to define the molecular aspects of the development of the musculo-skeletal axis in vertebrates. Hans-Ulrich Dodt impressed with his application of light sheet microscopy to reveal the 3-dimensional neuronal network in the whole mouse brain in the Imaging Plenary Lecture. This years **EMBO Plenary Lecture** was presented by Jean Gruenberg (pictured right) who focused on the functional role of the unique lipid composition of the mammalian endosome system.



This year the international speakers were supported by LaVision BioTec, European Molecular Biology Organization, Australia and New Zealand Society for Cell and Developmental Biology, A\*STAR, University of Sydney and Monash University. Thanks to all the other trade exhibitors who supported the 2015 Hunter meetings. Your ongoing support for this meeting is greatly appreciated and makes a significant positive impact on the meeting.

This year the Hunter Meeting moved to the Crowne Plaza Hunter Valley Resort a larger venue that enabled all those attending to stay on site. While we had some teething issues with the new venue it certainly contained some wonderful extras. The new venue has multiple dining locations that provided some wonderful locations to continue the scientific discussions or catch up with friends. A personal highlight was the onsite Lovedale Brewery & Distillery, which provided some nice cold beer options to complement the wine at the Hunter meeting. Looking forward to the first batch of local



whiskeys due for release in a couple of years! The villas provided a cheaper option for bringing the lab to the meeting and the venue had plenty of recreational options. Many appreciated the high speed internet enabling them to finalize this year's grants while still attending the sessions.

Organization of the meeting requires a team effort and I need to thank those who helped this year. First and foremost I wish to thank Ros Barrett-Lennard and her team at MTCi for all the administrative and logistical support that makes the convenor's role that much easier. Special thanks to David James for providing the support and encouragement for the introduction of the Hunter Systems meeting; Peter Gunning for a great choice of a new venue; Patrick Humbert, my co-convenor for the ongoing support in getting the program organized. Finally, thanks to all the session and workshop chairs for their help in organizing the program.

Best wishes and see you all at next year's Hunter Meetings,

Rohan Teasdale  
JULY, 2015

*2nd Hunter Systems Meeting 11-12th April 2016  
Convenor: Roger Daly  
16th Hunter Cell Meeting 12-15th April 2016  
Convenor: Patrick Humbert  
Crowne Plaza Hunter Valley Resort, Hunter Valley,  
NSW, Australia*



<http://hcbm.mtc.com.au>





# ANCVDB 2015



University of  
South Australia



**3rd - 4th December, UniSA, Adelaide**

## **International Speakers**

**Guillermo Oliver**, Feinberg Cardiovascular Institute, Chicago, USA

**Jeroen Bakkers**, Hubrecht Institute, Utrecht, The Netherlands

## **National Speakers**

Robert Bryson-Richardson

Justin Cooper-White

Leigh Coultas

David Elliott

Mat Francois

Richard Harvey

Ben Hogan

James Hudson

Kazu Kikuchi

Enzo Porrello

Peter Psaltis

Mirana Ramialison

Kelly Smith

Samir Taoudi

Xiangjian Zheng



# Member Publications

Here we celebrate just some of the great work being published by our members. These highlights include the latest on Frizzled 7's role in intestinal stem cells, a new regulator of blood cell development in zebrafish, Snai1 and its job in stem cell maintenance, a tale of two genes in mouse viability and fertility, and how the ubiquitination of GluA1 and 2 regulate receptor fate. Our members continue to make high impact contributions at an international level.

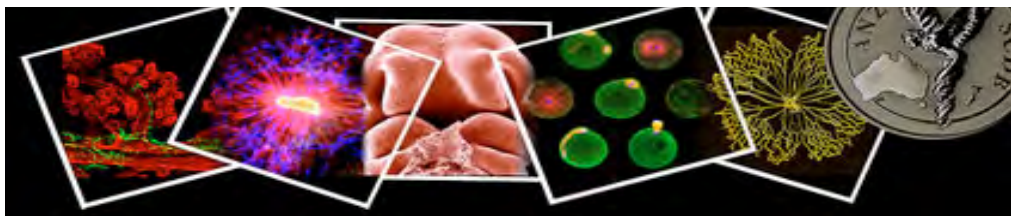
Flanagan DJ, Phesse TJ, Barker N, Schwab RH, Amin N, Malaterre J, Stange DE, Nowell CJ, Currie SA, Saw JT, Beuchert E, Ramsay RG, Sansom OJ, Ernst M, Clevers H, Vincan E. Frizzled 7 functions as a wnt receptor in intestinal epithelial Igr5(+) stem cells. *Stem Cell Reports*. 2015 May 12;4(5):759-67

Rasighaemi P.S.M. N. Onnebo, C. Liongue, and A.C. Ward. 2015. ETV6 (TEL1) regulates embryonic hematopoiesis in zebrafish. *Haematologica* 100:23-31.

Tang MC, Jacobs SA, Mattiske DM, Soh YM, Graham AN, Tran A, Lim SL, Hudson DF, Kalitsis P, O'Bryan MK, Wong LH & Mann JR. Contribution of the two genes encoding histone variant H3.3 to viability and fertility in mice. *PLoS Genet*. 2015 Feb 12;11(2):e1004964. doi: 10.1371/journal.pgen.1004964

Horvay, K, Jardé, T Casagrande, F, Perreau, V, Haigh, K, Nefzger, C Akhtar, R, Gridley, T Berx, G., Haigh, J. Barker, N., Polo, JM, Hime, GR and Abud HE (2015) Snai1 regulates cell lineage allocation and stem cell maintenance in the mouse intestinal epithelium *EMBO J* May 12;34(10):1319-35.

Widagdo J, Chai YJ, Ridder MC, Chau YQ, Johnson RC, Sah P, Hujanir RL, Anggono V. (2015) Activity-Dependent Ubiquitination of GluA1 and GluA2 Regulates AMPA Receptor Intracellular Sorting and Degradation. *Cell Rep*. 10: 783-795. PubMed PMID: 25660027.





## Craniofacial Morphogenesis & Tissue Regeneration

*Gordon Research Conference*

Insights into Gene Networks, Disease Models and Evolution Mechanisms in Craniofacial Morphogenesis

### Dates

March 13-18, 2016

### Location

Four Points Sheraton / Holiday Inn Express  
Ventura, CA

### Organizers

Chair:  
**Patrick Tam**

Vice Chair:  
**Ophir D. Klein**

URL: <http://www.grc.org/programs.aspx?id=13289>

### Application Deadline

---

Applications for this meeting must be submitted by **February 14, 2016**. Please apply early, as some meetings become oversubscribed (full) before this deadline. If the meeting is oversubscribed, it will be stated here. *Note:* Applications for oversubscribed meetings will only be considered by the Conference Chair if more seats become available due to cancellations.

### Meeting Description

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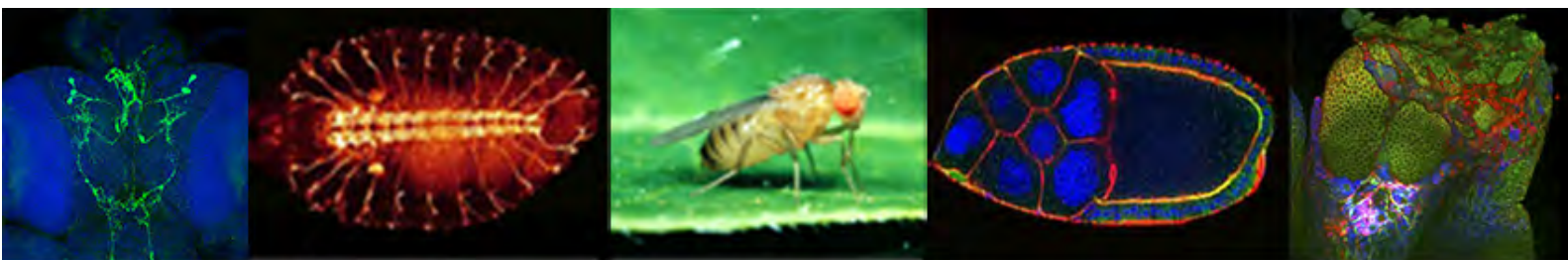
The ultimate aim of craniofacial research is to understand the causes underlying craniofacial malformations and to develop diagnostics and therapies for these disorders. An in-depth, interdisciplinary understanding of the developmental biology and disease processes is an essential foundation for insights into the mechanisms of craniofacial morphogenesis and the translation of scientific outcomes to the clinical management of developmental disorders of the head and face. Such in-depth work probes the cellular events and molecular switches that control tissue patterning and the morphogenetic processes that shape craniofacial tissues and organs. The scientific program will highlight recent advances in the knowledge of the genetic and epigenetic mechanisms that control the specification of craniofacial cell populations and tissue architecture and the functional output and the evolutionary changes in gene networks. This will be accompanied by discussions on how these processes drive tissue diversity and the formshaping process, and how distinctive features of the vertebrate head evolved. There will be invited presentations by leading researchers on new findings in craniofacial morphogenesis, with specific focus on the functional attributes of the gene network and the intersection with signalling activity. The meeting will also feature sessions on the functional genomics of craniofacial syndromes, development of animal models and the disease-causing mechanism and on the application of tissue engineering in regenerative repair.

### Related Meeting

---



This GRC will be held in conjunction with the "Craniofacial Morphogenesis & Tissue Regeneration" Gordon Research Seminar (GRS). Those interested in attending both meetings must submit an application for the GRS in addition to an application for the GRC. Refer to the [associated GRS program page](#) for more information.



Join us for the  
**Australian Fly Meeting**

**August 27-29, 2015**

@ The Alpine Retreat Hotel  
Warburton, VIC

Keynote speaker: **Professor Barry Dickson,**  
Janelia Research Campus, HHMI

**STUDENT TALK AND POSTER PRIZES!**

For more info: <http://www.ozdros.com/ausfly2015/>

Organisers: Mike Murray (Uni. Melb.), Travis Johnson (Monash Uni.)





## Plenary Speaker

**Masatoshi Takeichi**

RIKEN | Japan

## Public Lecture

**Bob Weinberg**

WHITEHEAD INSTITUTE | USA

## Keynote and Invited Speakers

**Marianne Bronner** | USA

**Melissa Davis** | Australia

**Arjun Deb** | USA

**Erica Golemis** | USA

**Greg Goodall** | Australia

**Richard Harvey** | Australia

**Roberto Mayor** | UK

**Keith Mostov** | USA

**Celeste Nelson** | USA

The EMT (Epithelial Mesenchymal Transition)  
International Association



# TEMIA-VII

October 11-14, 2015

Pullman Melbourne Albert Park  
Victoria, Australia

**James Osborne** | UK

**Claudia Palena** | USA

**Sandra Peiro** | Spain

**Guojun Sheng** | Japan

**Jane Visvader** | Australia

**Arial Zeng** | China

Now incorporates the 2nd Thomas Ashworth  
CTC Symposium - CTC biology, advances in  
molecular analysis and precision oncology

October 11-14, 2015

Melbourne, Australia

[www.emtmeeting.org](http://www.emtmeeting.org)

conference@emtmeeting.org



### Convenors

**ERIK (RIK) THOMPSON**

**DON NEWGREEN**

Convenor CTC Symposium

**KEVIN SPRING**

### Themes of TEMIA-VII include:

Systems Biology of EMT

Post transcriptional regulation

Mathematical modelling and Biophysics

Partial EMT and modes of migration

Plasticity and tissue morphogenesis

Polarity | MET | Clinical EMT

EMT and stemness | CTC |

ctDNA Clinical Utility and Molecular Analysis

Epigenetic Regulation & Chromatin

Metabolism and EMT / Hypoxia / Stress

<http://temtia.mtci.com.au>

The EMT (Epithelial Mesenchymal Transition) International Association

# ANZSCDB

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



## Brisbane Cell and Developmental Biology Meeting

October 2<sup>nd</sup>  
2015 – 9am to 5pm

Institute for Molecular Biosciences  
The University of Queensland

### Professor John Wallingford

*Howard Hughes Medical Institute and Dept of Molecular  
Biosciences, University of Texas at Austin.*

### Assoc. Professor Massimo Hilliard

*Queensland Brain Institute.*

### Dr Fiona Simpson

*University of Queensland, Diamantina Institute.*

### Dr Suyinn Chong

*Mater Medical Research Institute.*

Abstract Submission is OPEN NOW & closes FRIDAY, 28<sup>th</sup> August

To register & submit your abstract please visit:  
[www.anzscdb.org/state-meetings/queensland/](http://www.anzscdb.org/state-meetings/queensland/)

4 postdocs and 4 PhD students will be selected from abstracts to present a 15 min talk:  
**PRIZES WILL BE AWARDED TO THE BEST TALKS AND POSTERS**

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# 7 BAROSSA MEETING

18–21 November 2015  
Barossa Valley, South Australia

Centre for  
Cancer Biology



## Cell Signalling in Cancer Biology and Therapy

**Conference Themes** Angiogenesis, apoptosis, carcinogenesis, epithelial-mesenchymal transition, genomics, leukaemia, melanoma, metabolomics, microRNAs, proteomics, signalling networks, stem cells, translational medicine, cancer therapeutics, and structural biology.

Invited Speakers				
	Rafi Ahmed	Atlanta, USA	Roger Daly	Melbourne
	Ivan Dikic	Frankfurt, Germany	Katharina Gaus	Sydney
	Vishva Dixit	San Francisco, USA	Marco Herold	Melbourne
	Richard Marais	Manchester, UK	Jeff Holst	Sydney
	Gerry Melino	Leicester, UK	Ricky Johnstone	Melbourne
	KJ Patel	Cambridge, UK	Ben Kile	Melbourne
	Fred de Sauvage	San Francisco, USA	Kellie McDonald	Brisbane
	John D Scott	Seattle, USA	Michael Parker	Melbourne
	Inder Verma	La Jolla, USA	Mark Smyth	Brisbane
	Xiaomeng Wang	Singapore	Renea Taylor	Melbourne
	Junying Yuan	Boston, USA	David Thomas	Sydney
	Qi Zeng	Singapore	Jane Visvader	Melbourne

### Organising Committee and Local Speakers

**Co-convenors** Sharad Kumar, Stuart Pitson, Greg Goodall and Angel Lopez  
**Committee** Claudine Bonder, Lisa Butler, Michael Brown, Richard D'Andrea, Michele Grimbaldston, Natasha Harvey, Timothy Hughes, Yeesim Khew-Goodall, Ian Lewis, Michael Samuel, Quenten Schwarz and Hamish Scott

### International Advisory Committee

Vishva Dixit, Richard Flavell, Wanjin Hong, Tony Hunter, John D Scott

### Registration, program updates and further information

[www.centreforcancerbiology.org.au](http://www.centreforcancerbiology.org.au)  
Seed Events: [signalling2015@seedevents.com.au](mailto:signalling2015@seedevents.com.au)

**Registration and abstract deadline 31 August 2015**



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