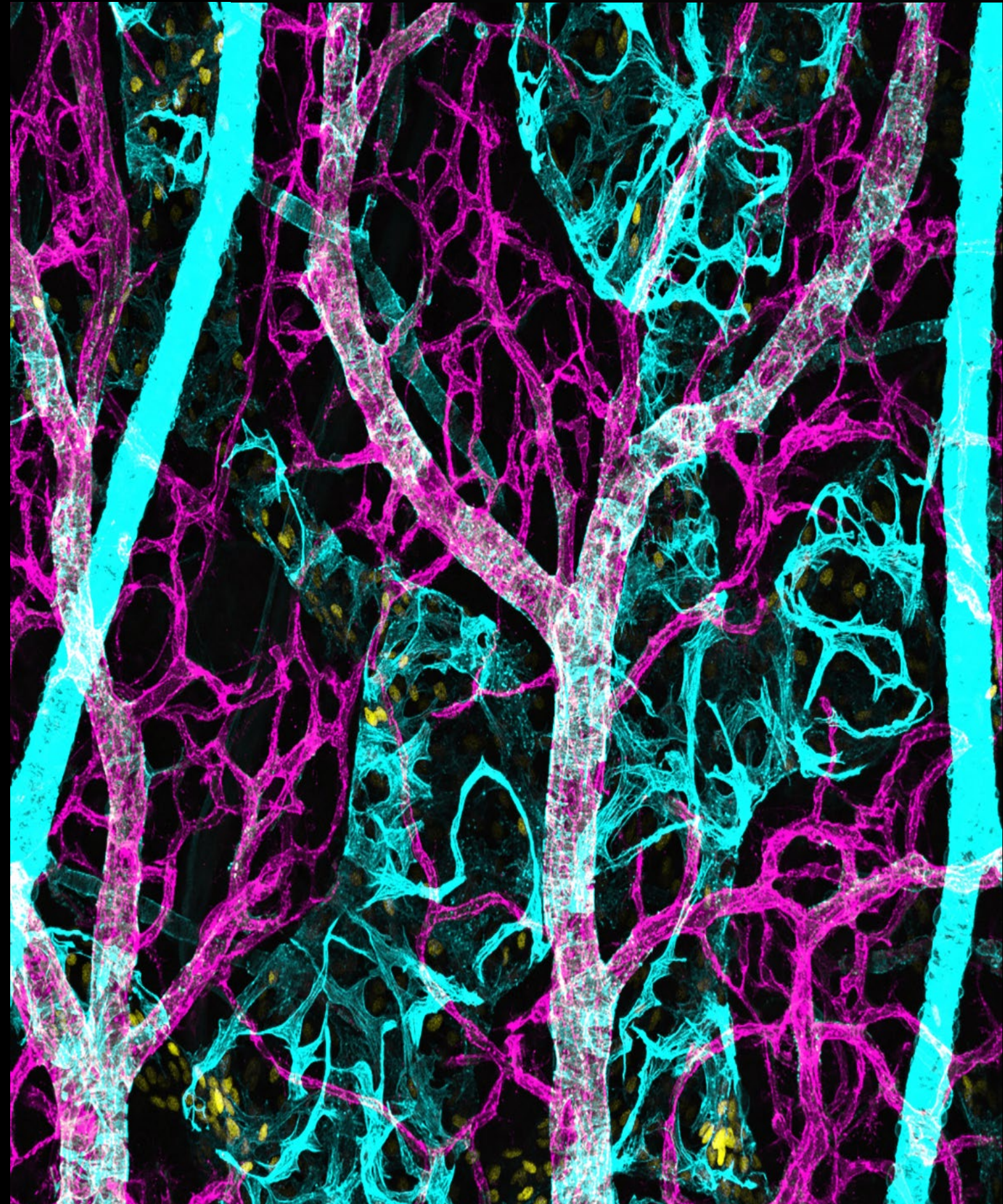


# ANZSCDB

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



**AUTUMN NEWSLETTER 2021**

# ANZSCDB

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



## Autumn NEWSLETTER – March 2021

Dear ANZSCDB members,

ANZSCDB welcomes you to 2021, the year we emerge from the shadow of COVID-19 and work towards a return to the 'normal' routines of science, academia, research and industry. The local and global emergence from the pandemic is perhaps slower, more sporadic and less 'normal' than is ideal, and it still comes with significant hardship for many. However, hope abounds.

We at ANZSCDB are committed to reconnecting with our members this year through a series of newsletters, satellite meetings and other forums, as detailed in this newsletter. While travel is still impeded, in-person conferences remain impractical and so we will be reaching out through locally held meetings which offer bi-national online access. We really hope that members will reach out and interact through these satellite meetings. Our interactions and shared science this year are critical to seed the planning of future meetings and conferences. Next year is the target for returning to full, in-person meetings, notably with ComBio planned for a return in 2022. The exceptional dedication and hard work of our Executive, Committees and State representatives will be on display through this year, 'making it happen' for all of us.

Many are still in the midst of grant writing season and/or starting the year's teaching. Both can be stressful for many reasons at this time, including our dwindling levels of government research funding and pressures on university budgets. I hope that this year also sees some improvement in this landscape.

### *In this issue*

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- [State Reports](#)
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A reflection on the how the pandemic has unfolded and the world's response over the past year, has profound missives for scientific research. First, I am sure that as scientists, we are all awed and delighted that in the space of one year the world has diagnosed a new virus and produced more than 4 FDA-approved, life-saving vaccines that will help to quell this pandemic. The normal time course of such events is years or even decades. A clear message now is that if the world throws enough money and scientific power at a problem, we have the knowledge and technology for a rapid solution. Another message is that the 'red tape' normally hindering the progress of medicines through development and approval can be hastened if necessary.

The final message from 2020 is that the biggest hurdle we have faced through the pandemic is having the voice of science heard and heeded. The major roadblocks that have disrupted the effective management of public health, the medical treatment of critically ill patients, and scientific progress on the development and deployment of vaccines, have all involved science being ignored, not trusted or eschewed for political, social or economic reasons, and even for self-interest or personal gain. For some parts of the world, this turning away from the scientific messaging has had dire consequences. Indeed, Australia and New Zealand have been incredibly fortunate in that our governments have been guided readily by experts in science, public health and medicine, and this is reflected in our relative safety and well-being during the pandemic.

The real message for us in research, including at the level of our Society, is that biomedical research has to develop a stronger, more effective 'voice' that resonates and connects with those in government, industry, other sciences and the public. Our ability to accurately, reliably and conspicuously convey scientific capabilities and limitations to the public is vital for delivering our impact to end-users and society. Finding ways to improve our 'voice' should be a priority for the Society and turning some of our attention from being 'inwardly focused' to a more 'external focus' may be important for how our Society has impact. Should ANZSCDB have a 'Publicity Officer'? Should we publish and promote a list of 'experts' in key fields? Should we have an ECR competition around messaging the public? How should the Society endorse important research progress? I would be interested to hear your ideas, and more of this conversation will be happening through the year.

Finally, we should all be buoyed by the fantastic research that has emerged throughout the past year from our members and our fields of cell and developmental biology. Some of it has contributed to the findings on COVID-19, while other results have been ground-breaking in many other ways. We should be proud of each other. Another important discourse in society at present surrounds inequality, workplace abuse, sexism, racism and lack of respect. These traits do not belong in our Society, and I hope that ANZSCDB can be a beacon of respect and a safe haven for those who feel threatened in other environments. If you identify ways the Society can improve its standards or its ability to reach out to others, please let me know.

The tragic loss of some of our precious members this year, is another poignant reminder that valuing each other is something we should do every day, it cannot wait.

Be strong with us through 2021,

My best wishes to you all,

**Jenny Stow**

## Key Meeting Dates


### Novel Mechanisms in Cell and Developmental Biology

#### QLD Satellite Meeting

**22<sup>nd</sup> April 2021**

12:00 to 16:00 AEST

Plenary presentations by Dr Sarah Boyle (UniSA), A/Prof Mathias Francois (Centenary Inst),  
Dr Jana Vukovic (UQ) & A/Prof James Hudson (QIMRB)



ANZSCDB  
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**Novel mechanisms in cell and developmental biology - QLD satellite meeting**  
22nd April 2021, TRI and Zoom

Event hosted locally at **Translational Research Institute Auditorium** (Brisbane) and on-line via **Zoom** for interstate and NZ.

\*FREE\* local registration and attendance via zoom

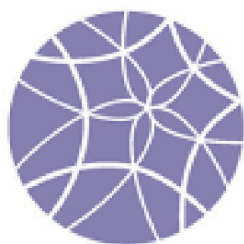
Zoom link: <https://us02web.zoom.us/j/83281362259>

**Cell signalling in development and disease**

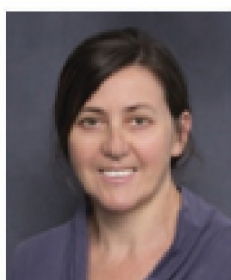
**SA Satellite Meeting**

**Save the date: 26<sup>th</sup> October 2021**

Confirmed speakers: A/Prof Ruth Arkell (ANU), A/Prof Archa Fox (UWA) & Dr Yoon Lim (UniSA)



**Centre for  
Cancer Biology**



**A/Prof Ruth Arkell**



**A/Prof Archa Fox**



**Dr Yoon Lim**

Event hosted at HB8-18, Centre for Cancer Biology, Bradley Building, University of South Australia

This meeting will also include selected short post-doctoral and student presentations

Registration details coming soon

For further information please contact ANZSCDB SA state reps:

[jantina.manning@unisa.edu.au](mailto:jantina.manning@unisa.edu.au) OR [winnie.kan@unisa.edu.au](mailto:winnie.kan@unisa.edu.au)

## **ComBio2022**

**27<sup>th</sup> September to 30<sup>th</sup> September 2022**

Registrations open April 2022



The image contains a promotional graphic for ComBio2022 Melbourne. On the left, the text "ComBio 2022" is written in orange and blue, with "MELBOURNE" in blue to its right. Below this is a stylized logo where the letter 'C' contains a blue icon of the Melbourne Convention and Exhibition Centre, and the letter 'B' contains a blue and white penguin. To the right of the logo is a photograph of a red Melbourne tram with "CITY CIRCLE" on its destination sign, stopped at a station. Below the images, the text "Melbourne Convention and Exhibition Centre" is written in orange, and "South Wharf, MELBOURNE 27 September - 30 September 2022" is written in blue.

Twitter: <https://twitter.com/ComBio2022>

## LEWIS WOLPERT MEMORIAL LECTURE 2021

### UCL Research Department of Cell and Developmental Biology

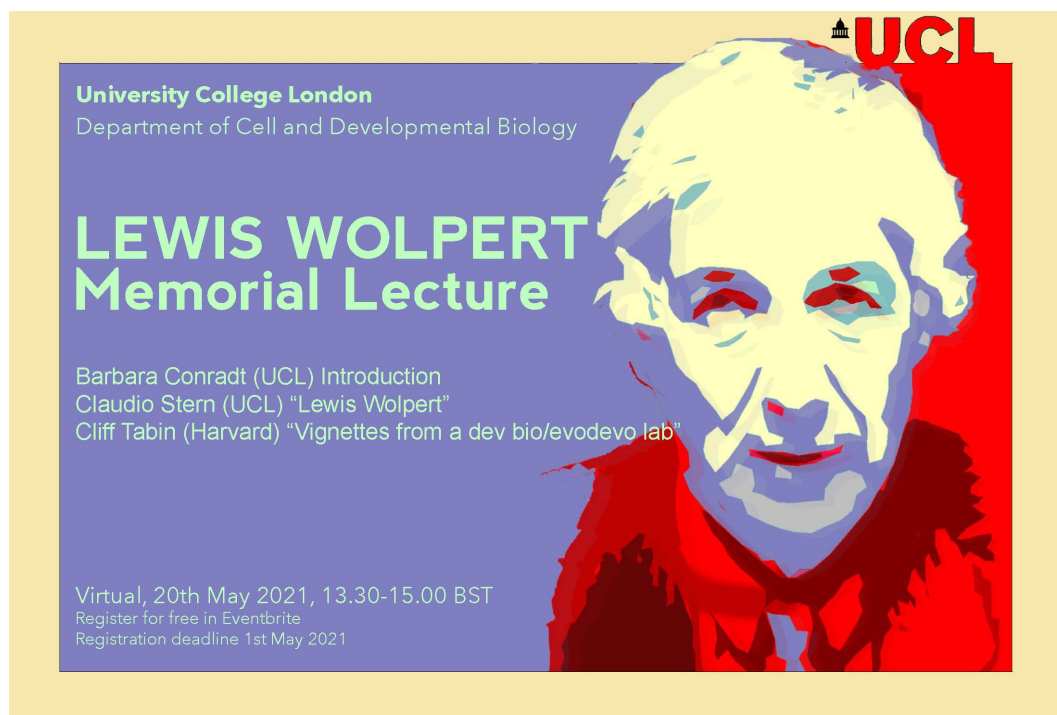
You are invited to the inaugural [Lewis Wolpert Memorial Lecture](#), presented by Prof Cliff Tabin (Harvard):

*"Vignettes from a dev bio/evodevo lab: What makes a limb cell a limb cell? and How did birds evolve the capacity to vocalize?"*

With an introductory talk on the life of Lewis Wolpert by Prof Claudio Stern (UCL CDB).

**Thursday, 20<sup>th</sup> May 2021**

13:30 to 15:00 BST



Event hosted on-line via Zoom and YouTube livestream. Register free at:

<https://www.eventbrite.co.uk/e/ucl-cdb-seminars-lewis-wolpert-memorial-lecture-tickets-141828929145>

UCL Research Department of Cell and Developmental Biology

<https://www.ucl.ac.uk/cdb>

Twitter [@uclcdb](#)

Facebook <https://www.facebook.com/uclcdbofficial>

## In Memoriam

### Vale Scientia Professor Katharina Gaus FAHMS

*- a visionary scientist, inspirational mentor, and much-loved colleague*

It is with great sadness that we mark the passing of Scientia Professor Katharina Gaus, who passed away on 3 March 2021. An esteemed immunologist and microscopist, Katharina was a valuable member of ANZSCDB and the wider Australian scientific community. She was an NHMRC Senior Research Fellow at UNSW and Deputy Director of the ARC Centre of Excellence in Advanced Molecular Imaging. Katharina was also a central figure in setting up the EMBL Australia initiative and an elected Fellow of the Australian Academy of Health and Medical Sciences.



Following undergraduate studies in physics and mathematics at the University of Heidelberg, Katharina completed her PhD at the University of Cambridge in 1999 before moving to Sydney and joining the Heart Research Institute as a cell biologist. In 2005, she founded the Cellular Membrane Biology Laboratory at UNSW to co-lead a team developing innovative single molecule microscopes to study the decision-making process of T cells. She later established the world-leading EMBL Australia node in Single Molecule Science at UNSW to further advance the field. Her research into T cell signalling using such ground-breaking microscopy has provided a strong foundation for developing the elusive quantitative understanding of cellular signalling.

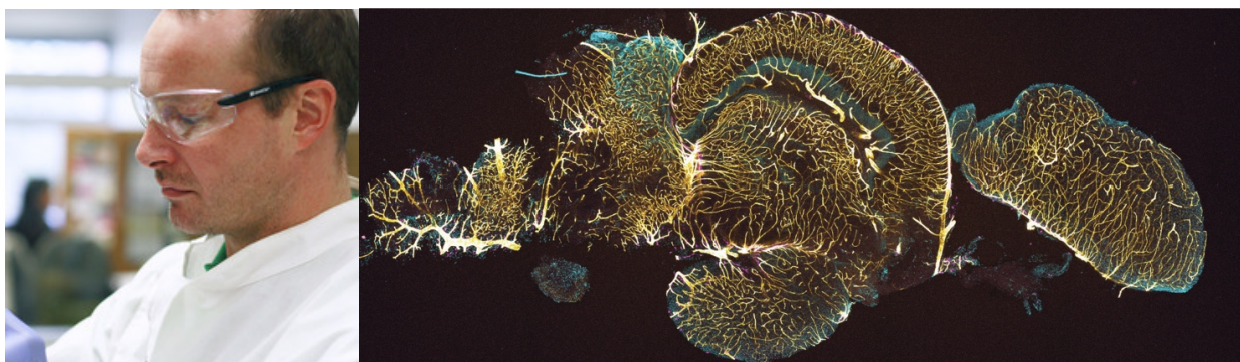
Among the many accolades she received for her contributions to research, Katharina was awarded the Gottschalk Medal from the Australian Academy of Science (2012), the NSW Science and Engineering Award for Excellence in Biological Sciences (2013) and the Khwarizmi International Award (2018). She also received prestigious fellowships such as the Alexander von Humboldt Fellowship from the ARC in 2005 and the Elizabeth Blackburn Fellowship from the NHMRC in 2014.

Katharina is remembered as an enthusiastic scientist who was a driving force and mentor for developing her field of research and the future of EMBL Australia in this country. Outside of the lab, she actively encouraged schoolgirls and young women to pursue science as a career through UNSW's outreach programs.

Katharina is survived by her husband, Scientia Professor Justin Gooding, to whom we extend our deepest sympathies. Our thoughts are also with her family, friends and close colleagues.



## A Tribute to Dr Neil Bower



It is with great sadness that we farewell Neil Bower who passed unexpectedly in January. Neil was a father of three boys and a loving husband to his wife Melissa. Our thoughts are with his family, friends and colleagues at this difficult time.

Over the last 10 years, Neil worked as a senior researcher in the Hogan laboratory, and more recently the Lagendijk laboratory, at the Institute for Molecular Bioscience at UQ. Neil was a dedicated contributor to the UQ scientific community, graduating from his undergraduate degree in 1997 and completing a PhD with UQ/CSIRO in 2006. He was also a significant contributor to ANZSCDB's Queensland chapter, exemplified in the above image titled "Tree of Knowledge".

Neil contributed significantly to his field of vascular biology in recent years, with his research opening up completely new areas of study and generating a deeper understanding of vasculature formation during embryonic development. Neil collaborated widely with other scientists both nationally and internationally and provided bench-side training to many students. His scientific legacy includes both his own research discoveries and much work still to come from those he taught.

Neil was universally respected as a colleague close friend to many within IMB and UQ. His ready provision of a laugh, a joke, his sharp wit, a helping hand or a word of support greatly enriched the experience of those around him. He has left us far too soon and he will be sorely missed.

Image by Dr Neil bower: "Tree of Knowledge" - Scavenging cells in the meninges (magenta) remove waste products from the brain, while the blood vessels (yellow) deliver oxygen and nutrients. Removing waste products from the brain is significant for neurological pathologies such as Alzheimer's disease.

## ANZSCDB Award Winners 2020

The society is proud and delighted to celebrate its award winners for 2020. Inspiring science, leadership and great ideas. We will be looking forward to many new applicants for the 2021 awards later in the year. Please see our [website](#) for more information on the 2020 winners and the award categories.

The President's medal and Emerging Leader talks will be presented at our ANZSCDB Symposia throughout 2021.

### ANZSCDB President's Medal Award

Prof Peter Gunning, School of Medical Sciences, University of New South Wales, NSW

Peter's distinguished career has centred around the key role of tropomyosins as critical cytoskeletal regulators. By focusing on both basic and translational research in cell architecture, Peter and his colleagues have developed first-in-class tropomyosin-based therapeutics. This novel treatment strategy has great potential to fill a much-needed niche in cancer treatment. Peter's trajectory through research and innovation is a beacon for ANZSCDB and a pointed reminder of what can be achieved now and in the future.



### ANZSCDB Emerging Leader Award



Prof Michael Samuel, The Tumour Microenvironment Lab, Centre for Cancer Biology, SA

Michael has built an exciting career studying cancer biology and the tumour microenvironment, elucidating Rho-ROCK signalling at the heart of extracellular matrix remodelling. Michael established his independent laboratory group in 2011 at the Centre for Cancer Biology and has recently been promoted to Professor. With his tenacity, innovation and leadership, Michael is dedicated to elevating Australian cancer research to the global stage.

### ANZSCDB Early-Career Researcher Awards

Dr Sarah Boyle, The Tumour Microenvironment Lab, Centre for Cancer Biology, SA

Dr Yoon Lim, Molecular Regulation Laboratory, Centre for Cancer Biology, SA

## **ANZSCDB Publication Award**

Mr Martin Estermann, Smith Group, Comparative Development and Evo-Devo Lab, Monash University, VIC.

“Insights into Gonadal Sex Differentiation Provided by Single-Cell Transcriptomics in the Chicken Embryo.”

## **Image Awards**

### **ANZSCDB Image Award (Best Still Image – Cell Biology)**

Dr Jennifer Zenker, Australian Regenerative Medicine Institute, Monash University, VIC.

“Embryo cells met their fate: to go inside, or stay outside?”

### **ANZSCDB Image Award (Best Still Image – Developmental Biology)**

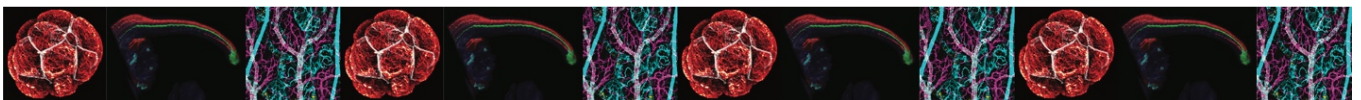
Dr Genevieve Secker, Centre for Cancer Biology, SA

“Vascular abnormalities within the skin of a mouse embryo due to the loss of the cell adhesion molecule, ESAM-1.”

### **ANZSCDB Image Award (Best Movie)**

Dr Jan Manent, Australian Regenerative Medicine Institute, Monash University, VIC.

“Patterning of a wild type mouse tail at the end of axis elongation.”



## State Reports

### SA State News and Activities 2020

This space would normally be reserved for providing a summary of the excellent presentations from interstate speakers and the student and postdoc prize winners at the annual SA state meeting of our Society. Unfortunately, due to the COVID-19 pandemic, we had to temporarily hit pause on our plans to organize a state meeting. Instead, we are using this opportunity to report on the many research activities and achievements of our SA members in the past year. We are excited to host an SA-driven meeting later in the year, with great science and networking opportunities (details below).

### Awards

Recognition of scientific and research excellence of our SA members has been demonstrated by several awards. At the 2020 SA Science Excellence and Innovation Awards ceremony held on February 12<sup>th</sup>, 2021, Professor Sharad Kumar (Molecular Regulation Lab, Centre for Cancer Biology, SA Pathology and the University of South Australia) received the prestigious SA Scientist of the Year 2020 award for his seminal discoveries in cell death and survival in health and disease, passion for research, leadership and mentorship. Professor Michael Samuel (Tumour Microenvironment Lab, Centre for Cancer Biology) won the 2020 ANZSCDB Emerging Leader award for his achievements in tumour microenvironment and cancer biology research and contributions to the scientific community. Dr Sarah Boyle (Tumour Microenvironment Lab, Centre for Cancer Biology) and Dr Yoon Lim (Molecular Regulation Lab, Centre for Cancer Biology) were the recipients of the 2020 ANZSCDB Early Career Researcher awards. Dr Sarah Boyle also received the National Association of Research Fellows Postdoctoral Investigator Award 2020.



## **Selected publications led by our SA members:**

### Tumour-directed microenvironment remodelling at a glance

Boyle, S.T., Zahied Johan, M., Samuel, M.S., Journal of Cell Science, 2021, 133(24), jcs247783.

### ROCK-mediated selective activation of PERK signalling causes fibroblast reprogramming and tumour progression through a CRELD2-dependent mechanism

Boyle, S.T., Poltavets, V., Kular, J., Pyne, N.T., Sandow, J.J., Lewis, A.C., Murphy, K.J., Kolesnikoff, N., Moretti, P.A.B., Tea, M.N., Tergaonkar, V., Timpson, P., Pitson, S.M., Webb, A.I., Whitfield, R.J., Lopez, A.F., Kochetkova, M., Samuel, M.S., Nature Cell Biology, 2020, 22(7), pp. 882–895.

### Uncovering Tumor-Stroma Inter-relationships Using MALDI Mass Spectrometry Imaging

Boyle, S.T., Mittal, P., Kaur, G., Hoffmann, P., Samuel, M.S., Klingler-Hoffmann, M., Journal of Proteome Research, September 2020, 19(10), pp. 4093-4103.

### Phosphorylation by Aurora B kinase regulates caspase-2 activity and function

Lim Y, De Bellis D, Sandow JJ, Capalbo L, D'Avino PP, Murphy JM, Webb AI, Dorstyn L, Kumar S., Cell Death & Differentiation. 2021 Jan;28(1):349-366. doi: 10.1038/s41418-020-00604-y

### Phosphorylation of PKC $\delta$ by FER tips the balance from EGFR degradation to recycling

Lonic, A., Gehling, F., Belle, L., Li, X., Schieber, N.L., Nguyen, E.V., Goodall, G.J., Parton, R.G., Daly, R.J., Khew-Goodall, Y., Journal of Cell Biology, 2021, Feb 1;220(2):e201902073. doi:10.1083/jcb.201902073.

### Identification of novel interacting partners of the NEDD4 ubiquitin ligase in mouse testis

Manning, J.A., Windley, S.P., Sandow, J.J., Shah, S. S., Western, P., Wilhelm, D., Kumar, S., Journal of Proteomics, 2020 Jul 15;223:103830. doi: 10.1016/j.jprot.2020.103830.

### Dietary sodium modulates nephropathy in Nedd4-2-deficient mice

Manning, J.,A., Shah, S.,S., Henshall, T.,L., Nikolic, A.,, Finnie, J., Kumar S., Cell Death & Differentiation. 2020 Jun;27(6):1832-1843. doi: 10.1038/s41418-019-0468-5.

### Cp1/cathepsin L is required for autolysosomal clearance in Drosophila

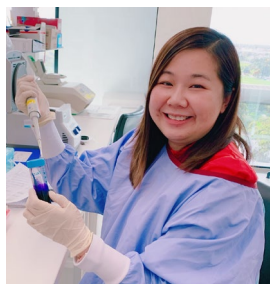
Xu T, Nicolson S, Sandow JJ, Dayan S, Jiang X, Manning JA, Webb AI, Kumar S, Denton D., Autophagy. 2020 Oct 28:1-16. doi: 10.1080/15548627.2020.1838105.

### Ecdysone controlled cell and tissue deletion

Xu T, Jiang X, Denton D, Kumar S., Cell Death & Differentiation. 2020 Jan;27(1):1-14. doi: 10.1038/s41418-019-0456-9.

## SA State Representatives

Dr Winnie Kan



Dr Jantina Manning



The SA representatives for 2020/21 are Dr Winnie Kan and Dr Jantina Manning. Winnie is a postdoctoral research scientist in the Cytokine Receptor Lab at the Centre for Cancer Biology. Under the mentorship of Professor Angel Lopez, her research interest is on how the assembly and functional activation of cytokine receptors governs cell fate in normal and aberrant haematopoiesis.

Jantina is an early career researcher also based at the Centre for Cancer Biology. She is a group leader within the Molecular Regulation Laboratory under the mentorship of laboratory head Prof Kumar and has made seminal research contributions in understanding the role of ubiquitination in cellular physiology and disease. Her current work is exploring how dietary salt and sodium transport influence kidney disease and has led to her award of the inaugural ANZSCDB Early Career Researcher Award for Cell Biology in 2019.

## 2021 Meeting

We are in the process of organising an SA-driven ANZSCDB meeting for Tuesday 26 October 2021, titled "Cell signalling in development and disease." This will be a one-day meeting with A/Prof Ruth Arkell (the John Curtin School of Medical Research, ANU), A/Prof Archa Fox (School of Human Sciences and the School of Molecular Sciences, UWA) and Dr Yoon Lim (ANZSCDB Early Career Researcher Award winner 2020, Centre for Cancer Biology) as confirmed speakers. There will also be excellent opportunities for students and early career researchers to present their work and to win prizes. We look forward to seeing all of our SA members at this event, which we can finally hold in person!

Report written by ANZSCDB State Representatives Winnie Kan and Jantina Manning.

## **ANZSCDB Corporate Member News:**

We would like to thank the following corporate sponsors. Please visit their websites below and peruse their advertisements at the end of this newsletter.

**[Promega Australia](#)**

**[Australian BioResources](#)**

**[NewSpec Pty. Ltd.](#)**

**[Pakair Cargo Specialists](#)**

**[ATA Scientific Pty. Ltd.](#)**

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# Microscopy shouldn't be tough

## ATA Scientific Pty. Ltd.

Over the years successive attempts to simplify, enhance and probe deeper has created new challenges. There is hope to achieve an effortless experience without losing valuable insights, and indeed expand on these.

### Evolution of microscopy

Modern microscopy is a convergence of technologies. Gone are the days of peering down some oculars using your eyes as the detector, instead the race to get better resolution has advanced detectors and indeed the modality of illumination, the humble light globe is now a Cool LED or a laser. What was a simple process, grab your sample, squirt a dye on it and throw it on the stage to see what you can see. Now you are arduously preparing the sample for the microscope's needs, a process of incubation with a fluorescence probe or laying down cells on to a media for a week-long live cell experiment. If it is the latter, your attention becomes the survival of the cells, tending to humidity, temperature, nutrition and CO<sub>2</sub>. If you have mastered the requirements for your cell line, then you may need to consider the focus over long incubation times, where the cells move around and not simply in one geometrical plane, it appears to be a random equidirectional movement. This is where a biological system meets physics. Cells can transition in and out of focus in a microscope ill-equipped for such variability with hundreds of image files saturating your computer storage in anticipation of what this experiment has elucidated.

### Reveal more with clever processing tools

Data acquisition was previously the final step, now it is just the beginning. Unfortunately, many microscope manufacturers have largely dropped the ball here, leaving you to figure out how to interact with your data. This is where computer programming gets interesting, where 0s and 1s attempt to create a solution enabling machine learning to grapple with cells doing weird things. Given a goal is to order entropy, to individualise cells in an effort to analyse changes postulated for a particular treatment a method of segmentation is needed. Manually doing this is truly a labour of love, digitally circling cells field after field, a process that takes an inordinate amount of time testing your determination for a result. Surely there is a better use of your valuable time, with years of experience under your belt, tertiary and higher degrees, years of training, yet here you are circling cells on a computer screen! Once circled, the next challenge is to track the cell's movements as this can open a world of kinetic motility information such as speed, displacement and directionality. Manually tracking cells makes segmentation look like a nice day on the beach. Determining track speed adds to the complexity and you are yet to touch on proliferation statistics like confluence, cell count, dry mass and cell doubling time. Consider throwing in mitotic rate and morphological attributes of sphericity, length width ratio, perimeter and area for the individual cell then the population; I think the day on the beach has evaporated.

### Achieve more - pain free

Imagine a world where sample preparation need not require fluorescence probes to enhance signal, where the cells pop from the background - you can reserve the fluorescence for molecular specificity. A simple CoolLED illumination system is cleaner, has a long lifetime and use less power and limiting the output to a 'gentle on your cells' level reducing perturbation. The entire system is designed from the ground up to be an incubator ensuring the cells are



kept just right not only for a few days, but for weeks if needed and clearly frees up incubators in the lab to perform their primary role. The CO<sub>2</sub> pod itself is a design feat, ensuring even distribution of CO<sub>2</sub> across the entire plate removing the dreaded 'dead-zones'. Weeks of imaging gives plenty of time for the system to lose focus, an unfounded concern if you can post-acquisitionally focus and the depth of field is 200µm. Load your 96 well plate with an entire assay encompassing controls, repeats, treatments, co-populations and probes, easily design the steps, define the duration and press start. You are free to continue your research. Once completed, you can access a plethora of information via the built-in dashboards, where a click can take you from proliferation to tracking in seconds, for every cell in every well. The data is organised to simplify the experience, enabling raw data to be accessed behind every graphical representation for publish quality results. The images are far from static, you can drill down to any cell interrogating behaviours, comparing treatments, confirming dose dependence for example. Once acquired, the data is available for any number of outputs and easily exported should you desire to analyse otherwise.



## Liveocyte answers questions that no other system can

This is not a dream nor a fictitious technology. The Liveocyte system has won Microscope Today Innovation Awards, and its core technology has enabled a Guinness World record for resolution in an electron microscope. It is changing the way cell biology impacts personalised medicine yielding answers not possible with other technologies.

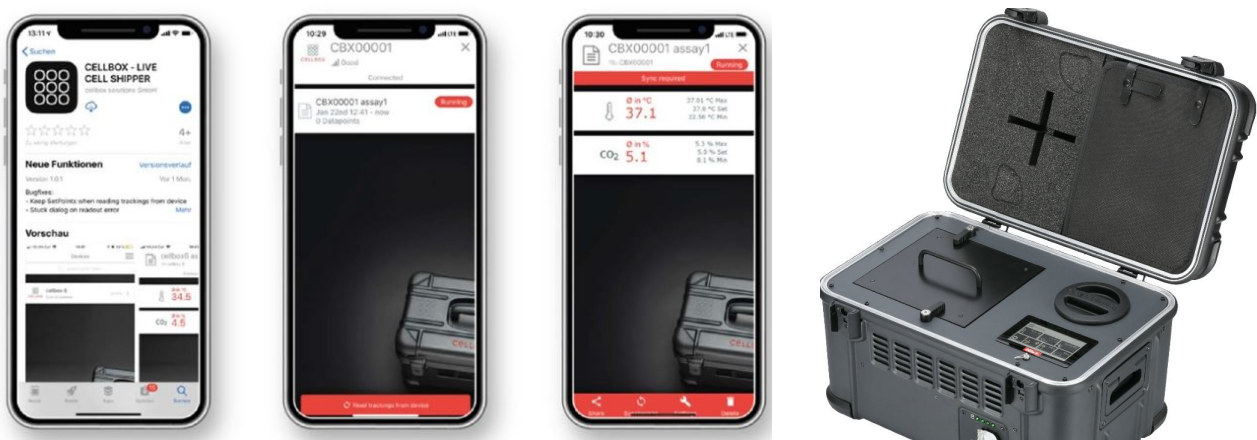
I commend to you the Phasefocus Liveocyte <https://www.phasefocus.com>  
 Contact Peter Davis at ATA Scientific for further information.

## Cellbox for temperature and CO<sub>2</sub> controlled live cell transport

Cellbox is now in Australia and ready for use – Contact us for a booking.

Transporting living complex cells while retaining their full viability and functionality can be challenging. Traditionally, cells and other biological material have been stored and transported at low to cryogenic temperatures. During this process, cells often suffer from exposure to sub-optimal life-sustaining conditions (e.g. temperature, pH, etc ) as well as damage due to shear stress. Not only does cell viability need to be considered, but inadequate cryopreservation may introduce variations between different batches or could even cause genetic and epigenetic modifications.

Cellbox is the first portable CO<sub>2</sub> incubator that enables safe shipping of intact cell/tissue constructs from one facility to another that overcomes these obstacles. Ideal for air and ground transport, Cellbox provides a regulated CO<sub>2</sub> environment and can maintain temperatures between 28 and 37° C while also monitoring the health of cells via the Cellbox App.



Specially developed for the transport of sensitive cells and cell cultures, the Cellbox is ideal for:

- iPSC's and iPSC-derived cells, such as sensory neurons, microglia and cardiomyocytes. Cells can be transported under laboratory conditions, in the Cellbox while avoiding unwanted changes in metabolism, gene expression and protein profiles.
- Long-term cell storage and biobanks can benefit from receiving fresh material and performing the cryopreservation in-house. Recipients can benefit from the Cellbox by receiving thawed and recovered cells from a biobank, ready-to-use.
- Lab-on-a-Chip or Tissue-on-a-Chip products can be seeded with living cells before shipping under laboratory conditions in the Cellbox.
- 

**For further details contact**

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[enquiries@atascientific.com.au](mailto:enquiries@atascientific.com.au)

[www.atascientific.com.au](http://www.atascientific.com.au)

Article linking url: <https://www.atascientific.com.au/products/cellbox-solutions-live-cell-shipper/>

## **Keeping up to date**

Remember to follow the **ANZSCDB** [Facebook page](#) for news updates and also on Twitter as [@ANZSCDB](#).

Please engage with us via social media for society news and updates and tag us in your work-related posts.

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## **Would you like to contribute to the ANZSCDB newsletter?**

Please send items to [Nathan Pavlos](#), the society Secretary.

The newsletter will be published approximately every three months and distributed to all ANZSCDB Members via e-mail.

Please ensure that your submissions are no more than 100 words and have been fact-checked.

**A special thanks to Mr Bryan Tay (UQ) for his excellent assistance with compiling the reports for the Autumn Newsletter.**