

# News



Snow Family, invited guest speakers, Snow Fellows and teams, and Snow Medical attending the Snow Medical Conference 2025, in Willinga Park

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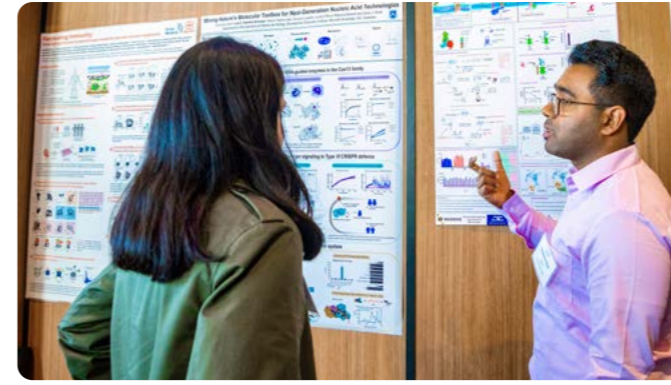
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# Snow Medical Conference 2025



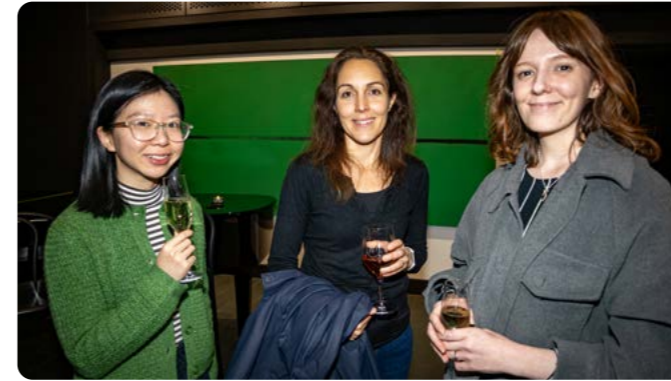
Professor Suzanne Cory (left) and Professor Andrew Wilks (right) delivering keynote addresses



Conference poster session (left) and Dr. Inken Martin addressing conference attendees (right)



Left image: Tom Snow (left) and Derek Van Dyk (right) addressing attendees at the conference dinner. Right image: Ginette Snow attending the Snow Medical Conference



3-Minute Thesis winners Dian Kwang (left image, alongside Associate Professor Marian Burr, centre), and Dr Janice Reid (right image)

In May we hosted our Snow Fellows and some of their teams at the 4th annual Snow Fellow Conference at Willinga Park. This year we welcomed close to 80 delegates to the amazing grounds on the South Coast of NSW at Bawley Point.

With a focus on Research Translation, we had the privilege to hear from three inspirational guest speakers: the outgoing chair of our Fellowship Scientific Review and Advisory Committee, **Professor Suzanne Cory**, the cancer scientist turned biomedical research investor and founder of SYNthesis BioVentures, **Professor Andrew Wilks**, and the research integrity expert **Dr Nitya Phillipson** from the Murdoch Children's Research Institute.

This conference was again a fantastic opportunity to foster the networks between Snow Fellows, their Program Managers, and academic scientist team members. For the first time this year, we held a popular **"Skills Expo"** alongside a Poster Session with **"3-Minute Thesis"**-style short presentations to foster scientific exchange between Snow laboratories, who are increasingly leveraging the cohort's joint expertise.

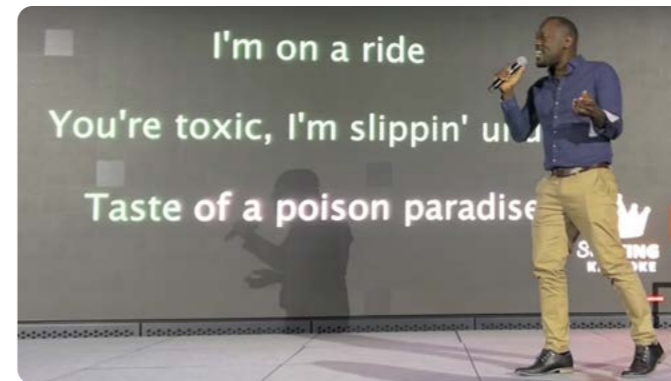
This meeting provided the first opportunity for our newest Snow Fellow, **Associate Professor Alisa Glukhova** from the Walter and Eliza Hall Institute in Melbourne, to meet the rest of the cohort and members of the Snow family ahead of commencing her Snow Fellowship in 2026.

A whole-hearted thank you to **Ginette Snow** who hosted our conference, along with the brilliant support of the events team at Willinga Park, for the first time without Terry, whose presence was sorely missed by all.

### 3-Minute Thesis Prize winners:

**Winner (PhD category): Dian Kwang**, Eckersley-Maslin lab – Bivalent chromatin is proposed to facilitate cellular plasticity in cancer

**Winner (Postdoc category): Dr Janice Reid**, Hudson Lab – Constructing a ligand transcriptome encyclopedia for the heart



Left image: Professor Loic Yengo enjoying the conference karaoke session. Right image: Snow fellows alongside invited guest speakers. From left to right: Professor James Hudson, Professor Andrew Wilks, Professor Suzanne Cory, Associate Professor Emily Wong, Dr Stephin Vervoort and Associate Professor Owen Siggs



Left image: Professor Suzanne Cory (left) with Professor Loic Yengo (right) Right image: Dr Nitya Phillipson presenting and discussing research integrity with attendees

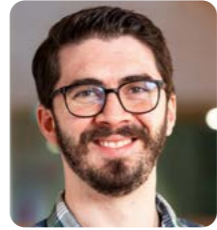
# Meet the Snow Fellows

## Snow Fellows from across Australia



Epigenetic plasticity in development and cancer

Melanie Eckersley-Maslin (2020), Peter MacCallum Cancer Centre



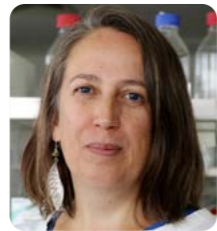
Innovative tools to transform RNA biotechnology

Gavin Knott (2021), Monash University



Understanding and targeting therapy-induced senescence in breast cancer

Shom Goel (2020), Peter MacCallum Cancer Centre



Towards malaria elimination - from biological insight to clinical impact

Michelle Boyle (2022), Burnet Institute



Discovering and targeting novel molecular regulators of transcription in cancer

Stephin Vervoort (2021), Walter & Eliza Hall Institute of Medical Research



Exploiting the Wnt Pathway for novel cancer therapies

Alisa Glukhova (2024), Walter & Eliza Hall Institute of Medical Research



Peptide therapeutics: Next-generation antibiotics, antimalarials and anticancer agents

Lara Malins (2023), Australian National University



Overcoming immunotherapy resistance in cancer

Marian Burr (2019), Australian National University



Harnessing genetic variation to transform the prevention and cure of common disease

Loïc Yengo (2023), University of Queensland



Using human cardiac organoids to identify new heart failure therapeutics

James Hudson (2019), QIMR Berghofer Medical Research Institute



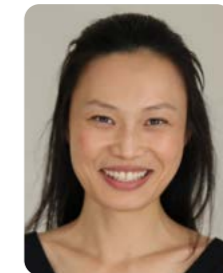
Role of inherited and acquired mutations in immune and eye diseases.

Owen Siggs (2019), Garvan Institute of Medical Research



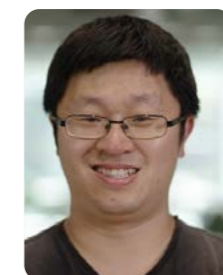
Precision oncology to improve pancreatic cancer treatment

Marina Pajic (2020), Garvan Institute of Medical Research



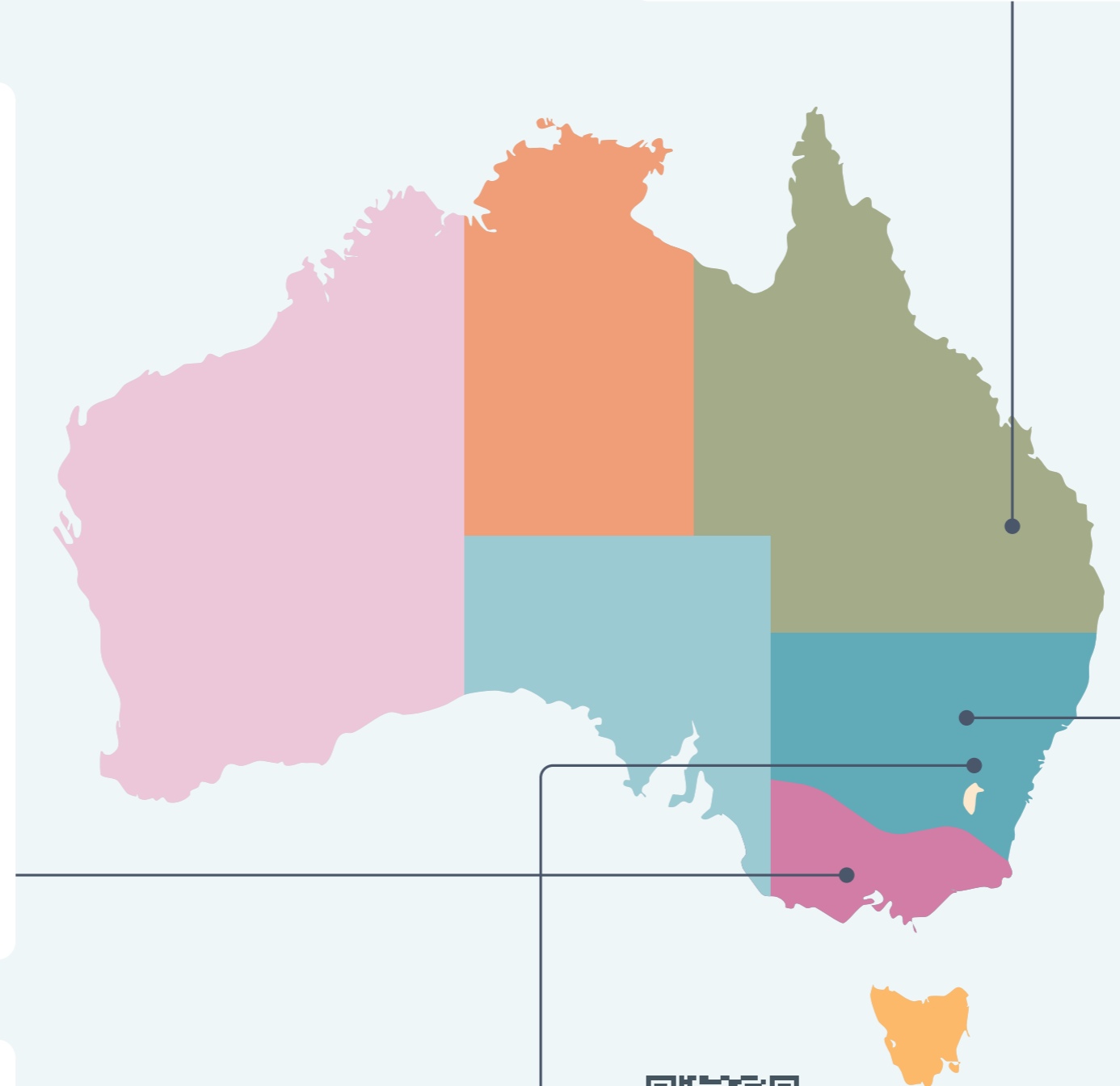
Decoding the dark genome to transform the diagnosis and treatment of cardiovascular disease

Emily Wong (2021), Victor Chang Cardiac Research Institute



Mechanobiology inspired anti-thrombotic strategies to prevent heart attacks and stroke

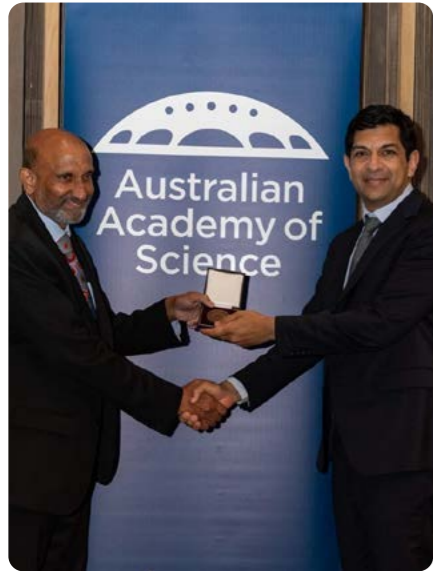
Arnold Ju (2022), University of Sydney



Scan here for more information about our Snow Fellows.

# And the award goes to...

## Australian Academy of Science Recognition



Associate Professor Shom Goel (right) receiving the Gottschalk Medal. Photo courtesy of the Australian Academy of Science



Professor James Hudson with the 2025 Jacques Miller Medal for Experimental Biomedicine (left), and presenting his research at the award ceremony (right). Photo courtesy of the Australian Academy of Science



Snow Fellows Professor James Hudson from the Queensland Institute for Medical Research Berghofer and Associate Professor Shom Goel from the Peter MacCallum Cancer Centre have received Australian Academy of Science medals at the 2025 "Science at the Shine Dome".

Associate Professor Shom Goel received the 2025 Gottschalk Medal, recognising outstanding mid-career researchers in biomedical sciences, and Professor James Hudson was awarded the 2025 Jacques Miller Medal for Experimental Biomedicine. As part of the event, James presented a talk on his cardiac bioengineering breakthroughs.



Associate Professor Shom Goel (right), alongside Australian Academy of Science Fellow, Professor Stephen Simpson, and Dr Derek Van Dyk. Photo courtesy of the Australian Academy of Science

### Associate Professor Alisa Glukhova part of team awarded 2025 Eureka Prize for Scientific Research

The 2025 Eureka Prize for Scientific Research has been won by the Walter and Eliza Hall Institute (WEHI) Parkinson's Disease Research Centre team, including our most recent Snow Fellow Associate Professor Alisa Glukhova. Eureka prizes are Australia's leading science awards, and are presented annually by the Australian Museum, celebrating excellence in research, innovation, leadership and science engagement.

In research recently published in Science, the researchers studied a key protein implicated in early-onset Parkinson's disease, PINK1. For the first time, they elucidated the structure of PINK1 by using cryo-electron microscopy, helping to understand why this protein is not switched on properly in Parkinson's disease, and how PINK1 enters the mitochondria.



Associate Professor Alisa Glukhova (right) at the 2025 Eureka Prizes, alongside the award winning team from the Walter and Eliza Hall Institute



Associate Professor Michelle Boyle (right) with Professor Ian Gust (left) at the Gust-McKenzie Medal Prize ceremony.

### Associate Professor Michelle Boyle awarded the Gust-McKenzie Medal, Burnet Institute

The Gust-McKenzie Medal is presented annually to an outstanding mid-career Burnet staff member in recognition of excellence in research and/or public health. The prestigious medal for 2025 was recently awarded to Associate Professor Michelle Boyle.

### Australia's top 250 researchers in 2026

The Australian's 2026 Research magazine names the top researcher and top research institution in each of 250 fields of research, based on the quality and impact of their work. The 250 fields of research are divided into eight disciplines. Search by discipline, field, researcher or institution.

Discipline	Field	Leading researcher in the field	Leading research institution in the field
Chemical and Material Sciences	Biochemistry	Gavin Knott, Monash University	Monash University

Photo credit: The Australian

Associate Professor Gavin Knott has been named Australia's leading biochemistry researcher, and one of Australia's top 250 researchers, in The Australian's 2026 Research magazine. This is the 8th edition of the

annual publication, naming the top research performers in 250 fields including science, business, engineering and humanities, based on an impact score assessing high quality research outputs. Congratulations Gavin!

Associate Professor Melanie Eckersley-Maslin has been elected Secretary for the Australasian Society for Stem Cell Research. This professional scientific society promotes

stem cell research across Australia and New Zealand, by providing access to information relating to scientific, medical and ethical advances in stem cell research.

# Snow Team Awards

## Conference prizes, grants, and even art awards!



Dr Chelisa Cardinez with her best oral presentation prize in Canberra, alongside ACT Health Minister Rachel Stephen-Smith (right)

**Dr Chelisa Cardinez**, a postdoctoral fellow in the lab of **Associate Professor Marian Burr**, has been awarded the **International Association for the Study of Lung Cancer (IASLC) Adi F. Gazdar Fellowship**. Chelisa was invited to the IASLC World Conference on Lung Cancer in

Barcelona, Spain to accept her award, for her work on targeting phagocytosis regulators to enhance anti-tumour immunity in small cell lung cancer. Chelisa was also awarded the best oral presentation prize at the Canberra Health Annual Research Meeting 2025.

Postdoctoral fellow **Dr Harley Robinson**, from **Professor James Hudson's lab**, was invited to give a keynote presentation for Olink Proteomics World 2025. Harley, along with **Simon Foster**, won the **Herston Health Precinct Symposium: Professor William Egerton Best Discovery and Innovation Research Award**, for their project on sepsis. Harley was also a finalist (top 4 of 60 nominees) in the 2025 7News Young Achievers Award QLD for the **Konica Minolta Career Development Award**.

**Dr Dannel Yeo** in **Professor Marina Pajic's lab**, has successfully secured a **2025 Ramaciotti Health Investment Grant**, for his project investigating biomarkers for tailored pancreatic cancer patient management. This project will identify specific signatures predicting patient response to standard chemotherapy regimens, and develop a liquid biopsy test to provide early detection of treatment response.

**Dr Rachel Woodhouse**, also from **Associate Professor Marian Burr's lab**, has been awarded a **Gretel and Gordon Bootes Medical Research Foundation Grant**, for the project "SmaRT RNAs for targeted elimination of cancer cells".



Dr Rachel Woodhouse (left)



"Life of a Scientist". Julia Forkgen

**Julia Forkgen** was awarded the Garvan's People's Choice Winner for her artwork "Life of a Scientist". This was submitted as part of the

2025 Garvan Art of Discovery exhibition, during her time in **Associate Professor Owen Siggs' lab**.

Congratulations to the postdoctoral fellows in **Associate Professor Gavin Knott's lab** on their recent promotions and awards; **Dr. Cyntia Taveneau** and **Dr. Luis Valentin-Alvarado** have been promoted to group leaders within the Monash Biomedicine

Discovery Institute. **Dr. Marjan Hadian-Jazi** was awarded the **2025 Monash University Advancing Women's Success Grant**, which she was able to use to attend an international conference in the UK.



Dr Dáire Gannon was awarded third place in the Emma Whitelaw ECR Publication Award

Postdoctoral fellow **Dr Dáire Gannon**, from **Dr Stephin Vervoort's lab**, was recently awarded third place in the **Emma Whitelaw Early Career Researcher Publication Award 2025**, by the Australasian Epigenetics Alliance.



Dr Janice Reid with her poster prize at the International Society for Stem Cell Research AI and Digital Biology Symposium

**Dr Janice Reid**, also from **Professor James Hudson's lab**, recently won the poster prize at the International Society for Stem Cell Research AI and Digital Biology Symposium.

# Snow Student Poster Prizes and Awards

## Celebrating the many achievements of our Snow Students



Erin Brotherton, a PhD student from Associate Professor Marian Burr's lab, has won a Centre for Personalised Medicine Student Catalyst Grant 2025, for her project on bolstering antitumour immune cell infiltration in small cell lung cancer.

Erin Brotherton (second from left), receiving the Centre for Personalised Medicine Student Catalyst Grant 2025.



Lucas Mitchell (right) with his Best Student Poster Prize alongside Helen Mountain (left), Chair of the Australasian Society of Genetic Counsellors.

Congratulations to Lucas Mitchell, a PhD candidate in Associate Professor Owen Siggs' lab, for winning best Student Poster Prize at the 2025 Human Genetics Society of Australasia conference. Lucas' PhD project is helping develop

the Genomics of Rare Disease Registry in Australia, aiming to connect affected participants with research studies and clinical trials, to subsequently understand the genetic causes of rare disease.

Dr Stephin Vervoort's first two PhD students gave talks at international conferences; Laura Corso at the FEBS Workshop 2025 on Conservation and diversity of gene regulatory

mechanisms across eukaryotes, Spain, and Oliver Ozaydin at the UK Transcription and Chromatin meeting. Oliver also received a travel grant from the organisers to attend the conference.

Congratulations to honours student Jacinda Nguyen from Associate Professor Gavin Knott's lab, for her best poster prize at the Monash University Biochemistry Student Symposium.



Veronika Petrova has recently won the outstanding poster award in Suzhou, China, at the 2025 Cold Spring Harbor Asia Systems Biology of Gene Regulation and Genome editing conference. Congratulations to Veronika, who is currently completing her PhD with Associate Professor Emily Wong.

Veronika Petrova (centre) receiving her Outstanding Poster Award in Suzhou, China.



Professor Lara Malins (centre) with PhD students Urvi Modak (left) and Caitlin Gare (right), with their poster prizes.

Professor Lara Malins served as co-chair of the 16th Australian Peptide Conference, held in Launceston, Tasmania, in October. Congratulations to lab members Dr Dhanya Karipal Padinjare Veedu, and PhD student Urvi Modak for their poster prizes

at this conference. Further congratulations to Urvi and fellow PhD student Caitlin Gare, for their poster prizes at the Australian Research Council Centre of Excellence for Innovations in Peptide and Protein Science Annual symposium.



Christopher Hunter with his best talk award.

PhD student Christopher Hunter from Professor James Hudson's lab won the best early career researcher talk at the Australian inflammation Centres meeting in Adelaide in November.

# International and National Conferences



Professor Loïc Yengo (third from the left on the table), during the Presidential Symposium at the 2025 ASHG conference.

## American Society of Human Genetics Conference, Boston, United States

Professor Loïc Yengo gave an invited talk at the Presidential Symposium of the American Society of Human Genetics (ASHG), in Boston, United States, in October 2025.

The Presidential Symposium is a special session organised by the ASHG President addressing a pressing theme in genomics, and this year focused on how evolutionary history continues to influence human disease.

Loïc was one of only four invited speakers in this prestigious session, and presented a talk titled “The genetic architecture of

complex traits through the lens of multi-ancestry genetic studies”. In a scientific landscape where >90% of genome-wide association study participants have European ancestries, Loïc’s talk highlighted the importance of studying multiple ancestries. Specifically, Loïc discussed the current evidence suggesting causal variants are largely shared between human populations.



Professor James Hudson (left) alongside his team at a conference in Brisbane.

## Professor James Hudson and lab attended conferences in Nara and Brisbane

Professor James Hudson and his lab travelled to Nara, Japan in May for the tri-annual International Society for Heart Research conference. This was an important chance to discuss recent advances in cardiovascular research, and to catch up with new and old

collaborators. The Hudson lab also attended the 73rd Annual meeting of the Cardiac Society of Australia and New Zealand, in Brisbane in August, for which James was on the organising committee, and Dr Janice Reid was an early career research finalist for her talk. Finally, James was also invited to give a plenary talk at the International Society for Stem Cell Research in Hong Kong earlier this year.

# American Society of Human Genetics Annual Meeting



Dr Jenny Qiao and her daughter attending the 2025 American Society of Human Genetics conference

At ASHG, Dr Jenny Qiao, a postdoctoral fellow in Associate Professor Owen Siggs’ lab, was selected as a finalist for the 2025 American Society of Human Genetics Trainee Research Excellence Award –

reserved for the top 18 of 800 international candidates. Jenny’s abstract was also selected for a platform session talk from over 3000 submissions (top 8% of abstracts). Jenny presented her research on

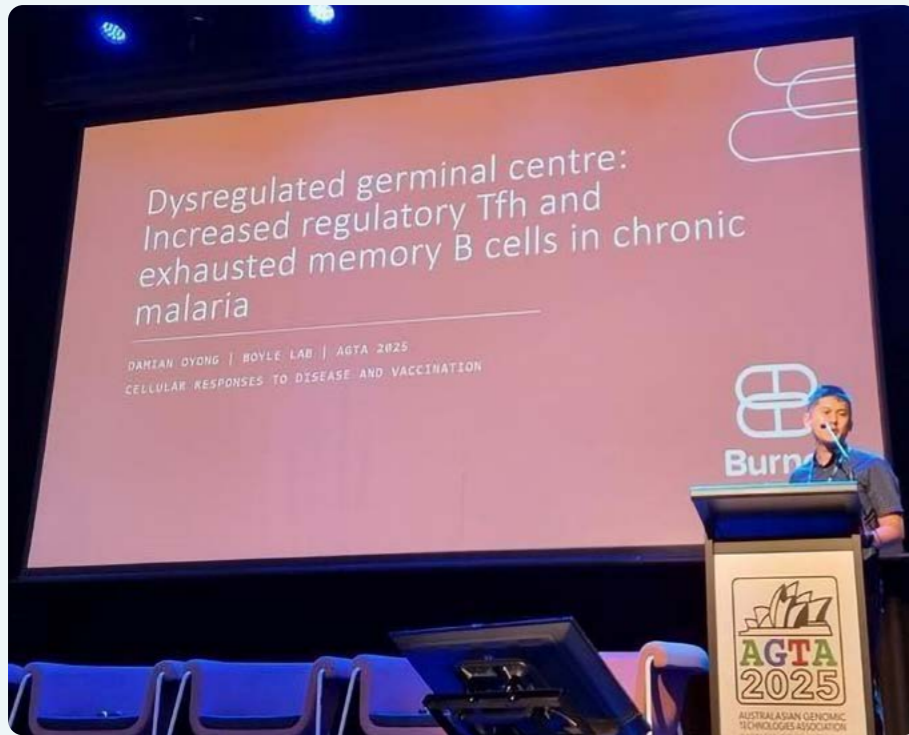
single-cell, multiomic analysis of clonal haematopoiesis, at a population-scale. The conference was also attended by one of its youngest members, with Jenny’s 6-month-old daughter accompanying her to Boston!



Associate Professor Emily Wong presenting at the 2025 Cold Spring Harbor Asia Systems Biology of Gene Regulation and Genome Editing conference, Yuzhou, China.

## Associate Professor Emily Wong

Associate Professor Emily Wong was invited to speak at the Cold Spring Harbor Asia Systems Biology of Gene Regulation and Genome Editing Conference in Suzhou, China, and was Symposium Chair at the International Society for Heart Research World Congress in Nara, Japan. Emily was also invited to present a Keynote talk at the “Cutting-Edge Methods in Omics”, Melbourne Integrative Genomics Symposium 2025.



Dr Damian Oyong's plenary talk at the Australasian Genomic Technologies Association conference

### Dr Damian Oyong presents plenary talk

In October, Dr Damian Oyong was invited to present a plenary talk, at the **Australasian Genomic Technologies Association conference**. Damian's research with **Associate Professor Michelle Boyle** revealed dysregulated immune cell responses in the spleen during chronic malarial infection. This research may ultimately help improve vaccine strategies.



Professor Marina Pajic's lab attending the PanKind 2025 Scientific Meeting.

### PanKind 2025 Scientific Meeting

The third annual PanKind 2025 Scientific Meeting was attended by **Professor Marina Pajic's lab**. Dr

**Diana Schuhmacher** presented a talk for her research on CK2 inhibition as a promising treatment for chemotherapy-resistant pancreatic ductal adenocarcinoma. Many members of the Pajic lab presented

posters, and the conference was a great chance to network with a dynamic mix of researchers, clinicians and translational scientists.



Professor Arnold Ju (right) at the Sydney-Yonsei partnership program, alongside Professor Wei Chen, the director of Education and Research Juhee Wong, and Emily Chung, director of Australian Research Commercialisation (from left to right)

### Professor Arnold Ju presents plenary talk in Perth, and participates in Sydney-Yonsei partnership program

The plenary talk at the **International Society of Blood Transfusion 2025** meeting was presented by Professor

**Arnold Ju**. This is the largest haematology conference in Asia Pacific and was held in Perth this year.

**Professor Arnold Ju** also recently travelled to Seoul, South Korea in October as part of the delegation for the **University of Sydney – Yonsei University Partnership**

**Program**. Arnold presented his Snow fellowship project and team to colleagues in Korea. Accompanying Arnold was the Australian Ambassador to the Republic of Korea, the director of Australian research commercialisation, and other consuls.



Dr Diana Schuhmacher (left) and Dr Deanna Miller (right) with their posters at the NSW Cancer Summit.



### The 7th OzMRS Scientific Symposium and NSW Cancer Summit 2025

The **OzMRS Scientific Symposium**, Wollongong, NSW was held in October, and brought together national and international

researchers to discuss metastasis research. **Dr Diana Schuhmacher** and **Dr Deanna Miller**, both from the Pajic lab were selected to each present talks on their research, on the selective targeting of integrins, and tracking of metastatic clones in pancreatic cancer. The **Pajic lab** also

attended the inaugural **NSW Cancer Summit 2025** in August, in Sydney, NSW. This summit united leading minds to help shape the future of cancer prevention, treatment and care.

# Snow Research Translation News

## Industry exchange program



Caitlin Gare completing her industry exchange at AstraZeneca in Gothenburg, Sweden.

Caitlin Gare, a PhD student in Professor Lara Malins' lab, is currently in Gothenburg, Sweden, completing

a 10-week industry exchange with their pharmaceutical collaborator AstraZeneca.

## Commercial success for Professor James Hudson

Professor James Hudson's lab was recently awarded a competitive Med Chem Australia and QIMRB Q-Accelerator grant, to progress their next generation bromo-domain inhibitor drugs in the context of cardiomyopathy. **Dynamics**, a cardiovascular focused start-up co-founded by James, has signed deals with multiple international pharmaceutical partners to explore new therapeutics for fibrosis and heart attacks.

## Small Business of the Year award for startup co-founded by Associate Professor Owen Siggs

**Seonix Bio**, a genetic risk prediction startup company co-founded by Associate Professor Owen Siggs, was recently awarded the **Small Business of the Year Award**, as part of the 2025 South Australian Premier's Business and Export Awards. Seonix Bio has developed a world leading glaucoma genetic risk prediction score, available for clinicians in Australia, the United States and New Zealand.

## Associate Professor Michelle Boyle's clinical trial into host-directed therapy has recently been published in *Science Translational Medicine*.

Associate Professor Michelle Boyle and her lab research how host inflammatory responses to malaria can lead to disease and interfere with vaccination responses. In this

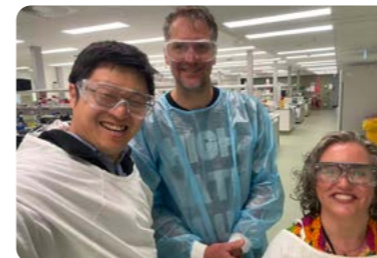
new clinical trial, researchers tested if the existing drug ruxolitinib, in conjunction with standard anti-malarial drugs, could reduce disease causing inflammatory responses. The combined treatment successfully reduced the inflammatory response and improved the immune system's memory to a second malarial infection. These discoveries open exciting new avenues to improve immune responses to vaccination and improve outcomes for patients with severe malaria.

# Training and networking



Inaugural AI Protein Design Workshop, hosted by Associate Professor Gavin Knott's lab.

**Australia's first AI Protein Design Workshop was run by Associate Professor Gavin Knott's lab**, in conjunction with the Rhys Grinter's lab. This one-day workshop at Monash Caulfield was attended by diverse researchers from around Melbourne, and delivered a course on the application and implementation of protein design in life sciences.



Professor Arnold Ju (left) hosted Professor James Hudson (right) in a visit to his lab at the University of Sydney, pictured alongside Arnold's lab manager Ana Esteves.

Associate Professor Melanie Eckersley-Maslin is hosting **Gyumin Park**, a PhD student from the Gwangju Institute of Science and Technology in South Korea. Welcome Gyumin, who will be learning about cancer cell biology and chromatin analyses from Melanie and her lab.



Nichelle Pires at the Precision Oncology School in Archamps, France.

**Precision Oncology School, European Scientific Institute:** Nichelle Pires, a PhD student in Associate Professor Shom Goel's Lab, was selected to attend the **Precision Oncology School at the European Scientific Institute** in Archamps, France. The two-week

intensive program exposed young international scientists from around the world to the latest developments in personalised cancer research, and innovative treatment strategies, and included a visit to the European Organisation for Nuclear Research.



Dr Stephin Vervoort and his lab at their retreat earlier this year.

**Dr Stephin Vervoort's** lab held a retreat, where they discussed projects and ambitions for the future of the lab, and bonded over some games

and activities. They were joined by a visiting international student, Kedhar.

# Snow trainees and graduates



Dr Mayimuna Nalubega in the lab

Congratulations to **Dr Mayimuna Nalubega** in the **Boyle lab**, who has graduated from her PhD. Mayimuna's research focused on the differences in immune cell responses to malaria

infection in children and adults- critical information for developing age-appropriate vaccines. Mayimuna and Michelle are currently working together to develop the first

organoid-like model to study malaria, aiming to identify immune responses providing better protection against malaria.

Congratulations to **Dr Reena Mukhiya** for her PhD graduation, also from **Associate Professor Michelle Boyle's** lab. Reena's PhD focused on investigating the role of cytomegalovirus infection, which is acquired early in life in malaria-endemic areas, on the immune response to malaria. By studying antibodies and T cell responses in samples from individuals with malaria, Reena found previous cytomegalovirus infection weakened the immune response to malaria. This research highlights the need to account for cytomegalovirus infection during malaria vaccine development.



Dr Janice Reid (centre) at her PhD graduation, alongside Professor James Hudson (back row), and lab.

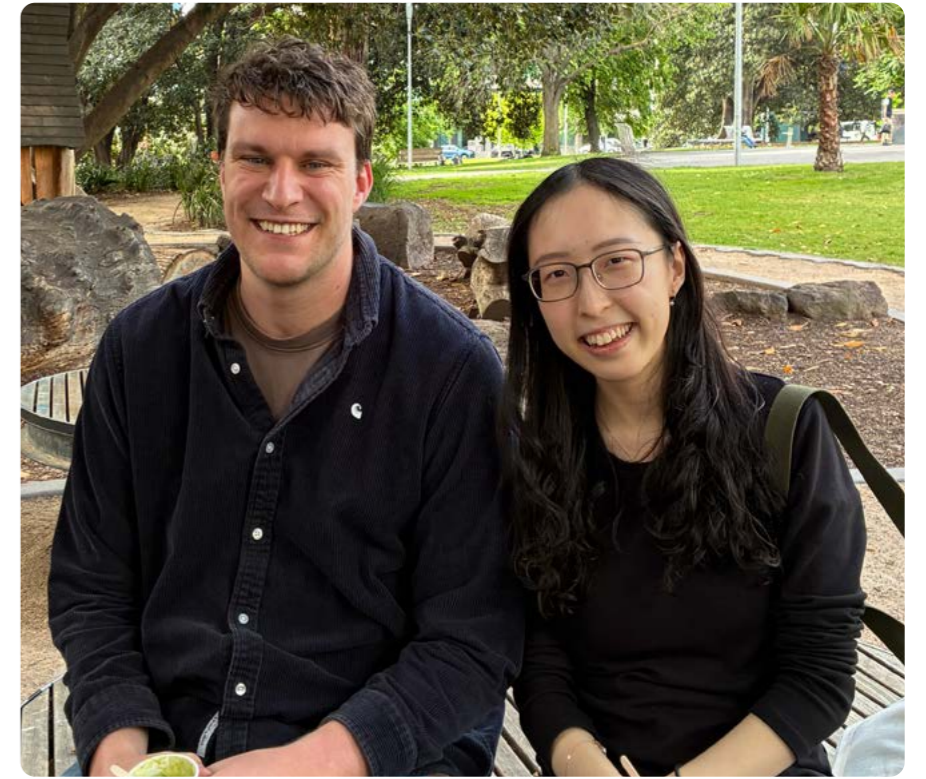
## Snow PhD Graduations

Congratulations to **Dr Janice Reid** for her PhD graduation from the University of Queensland, as supervised by **Professor James Hudson**. Janice's research focused on developing automated RNA-sequencing pipelines for human cardiac organoids. Particularly, Janice used these techniques to investigate transcriptional mechanisms of inflammation induced cardiac dysfunction, and is currently developing computational models to identify new therapeutic targets for heart disease.

## Congratulations to recent Honours graduates

**Olivia Voulgaris**, co-supervised by both Snow Fellows **Associate Professor Shom Goel**, and **Dr Stephin Vervoort**, completed her honours studying the cell cycle in October.

**Kristia Lam** has completed her Honours year project in **Associate Professor Melanie Eckersley-Maslin's lab**, understanding how genetic variants in a poorly understood DNA binding protein might be impacting neural development, resulting in microcephaly.



Kristia Lam (right), alongside her co-supervisor Dr Matt Neve.

## PhD Students in Professor Arnold Ju's lab

PhD students **Catherine Chen** and **Charles Zhao** in **Professor Arnold Ju's** lab have been busy with recent first-author publications

in the journals *Blood*, and *Advanced Materials* respectively. Congratulations to Catherine for receiving a **Heart Foundation PhD scholarship** in the 2025 round, which supports outstanding graduates with translatable research into cardiovascular health.

The **Heart Foundation Collaboration and Exchange Grant** has been awarded to Charles, to foster national and international networking, through site visits, development of collaborations and knowledge and skill exchange.



Congratulations to **Dr April Watt** for her recent PhD graduation from **Associate Professor Shom Goel's** lab. She will also receive a prestigious **Basic Science Scholars Award** and present a talk at the **San Antonio Breast Cancer Symposium**, Texas, US in December.

Dr April Watt (centre left), and her supervisor Associate Professor Shom Goel (centre right) at her PhD graduation ceremony.

# Snow Medical Advisory Committees

Snow Medical's investments into transformation programs as well as the Fellowship scheme are guided by input from three current advisory committees:

## Snow Centre for Immune Health Advisory Committee



Top row, left to right: Professor Sir John Savill, Professor Clara Gaff, Professor Dianne Campbell, Bottom row, left to right: Professor David Tarlinton, Professor John Tsang, Professor Anne Kelso

The Snow Centre for Immune Health advisory committee provides independent advice to Snow Medical and WEHI on matters relating to the operation and strategic scientific direction of the Snow Centre for Immune Health.

- **Professor Sir John Savill, FRCP FAHMS FRS | Chair**  
Professor, Executive Director of the Melbourne Academic Centre for Health
- **Professor Clara Gaff PhD, FHGSA | Deputy Chair**  
Professor, Executive Director of Melbourne Genomics Health Alliance
- **Professor Dianne Campbell, MBBS PhD FRACP**  
Professor and paediatric immunologist at the National Allergy Centre of Excellence, Murdoch Children's Research Institute
- **Professor David Tarlinton**  
Professor of Immunobiology and Biomedical Engineering at Yale University
- **Professor Anne Kelso AO FAA FAHMS**  
Professor Anne Kelso was previously Chief Executive Officer of the National Health and Medical Research Council

## Fellowship Scientific Review and Advisory Committee

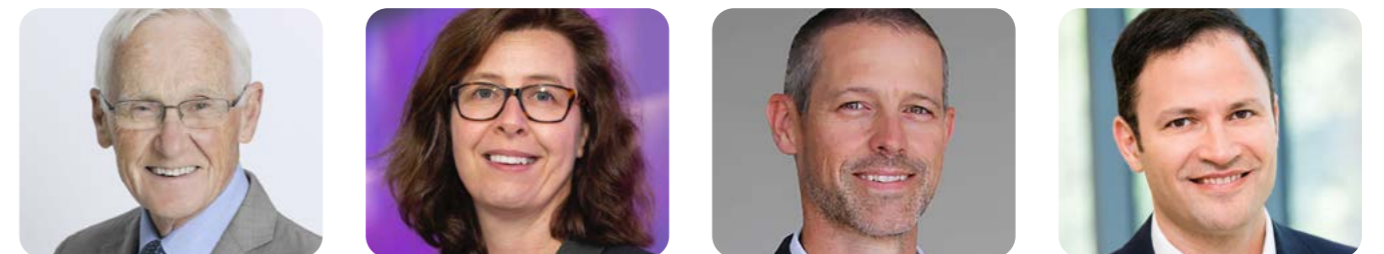


Left to right: Professor Stephen Simpson (Chair), Professor Christopher Goodnow, Professor Gordon Wallace, Professor Jane Visvader

The Fellowship Scientific Review and Advisory Committee provides independent advice to Snow Medical on matters relating to the operation and strategic directions of the Snow Fellowship program.

- **Professor Stephen Simpson AC, Chair**  
Professor in the School of Life and Environmental Sciences, University of Sydney
- **Professor Christopher Goodnow**  
Professor at the Garvan Institute of Medical Research
- **Professor Gordon Wallace AO FAA FTSE**  
Distinguished Professor and Director of Intelligent Polymer Research Institute, University of Wollongong
- **Professor Jane Visvader FRS FAA FAHMS**  
Professor, Joint Head of the Division of Cancer Biology and Stem Cells, The Walter and Eliza Hall Institute of Medical Research (WEHI)

## Snow Vision Accelerator Advisory Committee



Left to right: Professor Ian Constable, Professor Melanie Bahlo, Professor Nigel Turner, Dr. Jeffrey Goldberg

The Snow Vision Accelerator Advisory Committee provides independent advice to Snow Medical, the Snow Vision Accelerator and the University of Sydney on matters relating to the operation and strategic scientific direction of the Snow Vision Accelerator.

- **Professor Ian Constable, AO MBBS D Med Sc FRANZCO FAHMS D Sc (Hons) | Chair**  
Professor Ian Constable is a Patron and Founding Director of the Lions Eye Institute, Perth
- **Professor Melanie Bahlo AM FAHMS**  
Professor at The Walter and Eliza Hall Institute of Medical Research
- **Professor Nigel Turner**  
Professor at the Victor Chang Cardiac Research Institute
- **Dr. Jeffrey Goldberg**  
Professor and Chair of Ophthalmology and Director of the Byers Eye Institute, Stanford University

# Snow Medical is growing



Dr Zayra Millan

## Meet the new manager of the Cognition and Brain Health Program

Dr Zayra Millan is managing the developing Cognition and Brain Health program. Zayra has a PhD in Psychology/Neuroscience, a Masters

in Clinical Psychology, and over 13 years of postdoctoral research experience. She has trained at UCSF and John Hopkins University, has worked clinically with patients, and leads multi-institution research programs on treatments for alcohol use disorder at UNSW.



Pich Chhay

## Meet our newest Biomedical Research Analyst

Pich Chhay joined Snow Medical in 2023 and has transitioned to a full-time Biomedical Research Analyst.

Pich is responsible for managing and analysing data across Snow's research programs to guide program development. During her PhD at the University of Sydney, she developed expertise in cardiovascular research, quantitative analysis, and data integration.



Julia Forkgen

## Meet our newest Biomedical Research Analyst

Julia Forkgen is assisting Dr. Inken Martin with the operation and development of the Snow Fellowship

Program. Previously, she was a researcher at the Garvan Institute of Medical Research, studying genetic variation in rare immune diseases, in the lab of Snow Fellow Associate Professor Owen Siggs.



Joy Mulvey

## Meet our new Office and Events Manager

Joy Mulvey is responsible for managing office operations and event coordination. She is an experienced

senior executive assistant and operations leader with a background spanning not-for-profit organisations and clinical trials. Joy has a strong record of implementing strategic initiatives, optimising business processes, and fostering inclusive, high-performing workplaces.

# News from the Snow Vision Accelerator

## Launch and Progress

The Snow Vision Accelerator (SVA) officially commenced on 1 July 2025. Since then, Centre Directors and program leads have been driving transformative science while building strong teams through key appointments. We are delighted to introduce the newest members across our platforms and operations:

### Platform 1: Biology

- Associate Professor Benjamin Sivyer, Principal Investigator
- Dr Raaj Kishore Biswas, Biostatistician

### Platform 2: Pathway discovery

- Associate Professor Heejung Shim, Bioinformatics Lead

### Platform 3: Translation Accelerator

- Professor Susan Charman, Consultant, Translation
- Dr Russell Tait, Consultant, Translation

### Platform 4: Clinical Trials

- Dr Janelle Tong, Postdoctoral Research Fellow
- Laurence Ralston, Project Manager, NHMRC Clinical Trials Centre

### Snow Vision Accelerator Operations

- Unnati Anupam Sahay, Head, Operations

### The Snow Vision Accelerator continues to expand and is recruiting for:

- A Postdoctoral Research Fellow in RNA therapeutics
- The inaugural Snow Future Leadership Fellow, designed to attract outstanding early-career researchers

You can find more information on the Snow Vision Accelerator website, [snowvisionaccelerator.org.au](https://snowvisionaccelerator.org.au)



Professor John Prins

## Leadership Update

We are pleased to welcome Professor John Prins, Dean of the Faculty of Medicine and Health at the University of Sydney, as Chair of the Executive Coordination Committee. Professor Prins is a respected endocrinologist and senior leader with extensive experience across clinical, academic, and commercial organisations. His previous roles include Head of Melbourne Medical School, Director and CEO of the Mater Research Institute, CEO of Health Translation Queensland, and Chair of the Australian Health Research Alliance.

## Recognition

Congratulations to Dr Andrea Loreto, Principal Investigator and co-lead of the Biology Platform, who has been awarded the Sydney Early Mid-Career Academic Network (SEM CAN) Good

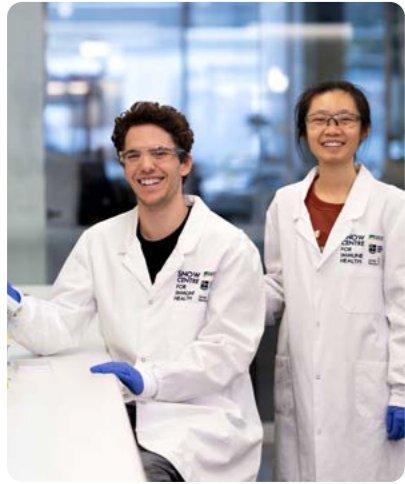
Mentor 2025 Award. Nominated by early-career researchers Elisa Merlini and Daniel Du Preez, Andrea was recognised for his commitment, generosity, and collegiality in mentoring.

The highly competitive University of Sydney-wide award includes A\$1000 and a certificate.

# News from the Snow Centre for Immune Health

## Meet the Snow Centre's rising stars

The Snow Centre is delighted to introduce our first PhD students - **Matthew Wierzbowski** and **Jasmine Yang**.



The Snow Centre's first PhD students, Matthew Wierzbowski and Jasmine Yang

### Matthew Wierzbowski

Matthew is on a mission to uncover why the immune system misfires and triggers allergies. By studying "class switching" in B cells, his research could revolutionise how we diagnose and treat allergic diseases, improving countless lives.

Matthew's work is personal, inspired by a close friend with severe allergies. "What I love about immunology is how it could make people's lives better in the future."

### Jasmine Yang

From Shenzhen to Melbourne, Jasmine's journey is one of courage and curiosity. Since joining the Snow Centre, she's exploring how T cells behave during immune responses.

She's aiming to selectively target disease-causing cells while preserving healthy ones - research that could lead to new treatments for immune deficiencies. Inspired by nature and her grandfather's love of biology, Jasmine's passion for science runs deep.



New Snow Centre director, Professor Jason Tye-Din

## New director joins the Snow Centre

Internationally renowned clinician scientist, **Professor Jason Tye-Din**, has been appointed director of the Snow Centre. Globally recognised for pioneering research into coeliac disease, Professor Tye-Din will lead the centre's strategic vision, driving innovation in immune health diagnostics and treatment.

Head of the Coeliac Research Laboratory at WEHI, gastroenterologist at the Royal Melbourne Hospital (RMH) and advisor to organisations includ-

ing the World Health Organization, Prof Tye-Din brings expertise spanning immune mechanisms, patient care, diagnostic discovery, and drug development.

"The Snow Centre presents a unique opportunity to deliver impactful immune research that benefits patients. By leveraging the strong partnership between WEHI and the RMH, we are in a fantastic position to translate basic science into real solutions for the key challenges faced by people with immune diseases," said Prof Tye-Din.



The Snow Centre Clinical Lead Immunology, Dr Samantha Chan (left) with RMH Associate Nurse Unit Manager, Kate Jester (right).

## First patients recruited to Snow Centre Research Clinics

The first patients have been recruited into a landmark study at the newly launched Snow Centre Research Clinics.

The clinics will enable patients to participate in cutting-edge research, while providing scientists with access to clinical data and biosamples

– including blood tests – that will accelerate the development of new therapies and diagnostics.

Based at the Royal Melbourne Hospital, the clinics will initially focus on four major disease areas: primary immune deficiencies, allergies and asthma, autoimmunity, and kidney transplantation. The team are also recruiting healthy participants to analyse samples from people with healthy immune systems.

"We're grateful to the patients for giving Snow Centre researchers access to rich data and providing us with this opportunity to understand immune health better. This first key step is a wonderful achievement for people with immune diseases in Australia." **Professor Jo Douglass AO**, Clinical Program Lead Snow Centre and Director of Research at the RMH.

## Building the future of immune health research

The Snow Centre for Immune Health is entering an exciting new chapter. We've **welcomed a new director, recruited our first patients to the Snow Centre Research Clinics, and welcomed our inaugural PhD students.**

These achievements strengthen our commitment to advancing immune health through research, innovation, and education.

# Hot off the press

## A selection of latest publications from Fellow Laboratories

### Nature publication by Professor Loïc Yengo

This paper led by Professor Loïc Yengo, Pierrick Wainschtein and colleagues at the University of Queensland, was recently published in the prestigious journal *Nature*.

In the largest study of its size, Loïc's team analysed whole genome-sequence data from the UK Biobank, to quantify the contribution of genetic variants to 34 human characteristics and diseases, including height, weight and heart disease.

The study estimated that on average **30 per cent of differences between people are explained by genetic factors**, across the traits studied. With modern whole genome sequencing technology, the authors were able to better delineate the contributions of genetic and environmental factors

### nature

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#### Estimation and mapping of the missing heritability of human phenotypes

[Pierrick Wainschtein](#) , [Yuanxiang Zhang](#), [Jeremy Schwartzentruber](#), [Irfahan Kassam](#), [Julia Sidorenko](#), [Petko P. Fizev](#), [Huanwei Wang](#), [Jeremy McRae](#), [Richard Border](#), [Noah Zaitlen](#), [Sriram Sankararaman](#), [Michael E. Goddard](#), [Jian Zeng](#), [Peter M. Visscher](#), [Kyle Kai-How Farh](#) & [Loïc Yengo](#) 

[Nature](#) (2025) | [Cite this article](#)

Professor Loïc Yengo's Nature publication

to each trait, compared to traditional twin or family-pedigree-based studies. These results suggest novel discovery of rare trait-associated variants can likely be determined using existing whole-genome sequencing technology.

The authors are hoping next to map genetic variants which may explain disease susceptibility.

### Professor James Hudson's lab-grown "tiny-hearts"

Professor James Hudson has led a study with lab-grown "tiny-hearts", published earlier this year in the prestigious journal *Nature Cardiovascular Research*, and disseminated with a media release reaching ~2 million Australians.

Cardiac organoids are lab-grown, three-dimensional models of heart tissue, which aim to replicate the structure and function of the heart. However, the induced pluripotent cells used to generate heart cells are typically immature, resembling juvenile cells rather than those from an adult.

To address this problem, James and colleagues identified conditions and pathways which drive maturation of these cells, and successfully created cardiac organoids better replicating mature heart tissue. Then, they used the cardiac organoids to model

### nature cardiovascular research

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Article | [Open access](#) | Published: 25 June 2025

#### Maturation of human cardiac organoids enables complex disease modeling and drug discovery

[Mark W. Pockock](#), [Janice D. Reid](#), [Harley R. Robinson](#), [Natalie Charitakis](#), [James B. Krycer](#), [Simon R. Foster](#), [Rebecca L. Fitzsimmons](#), [Mary Lor](#), [Lynn A. C. Deville](#), [Christopher A. P. Batho](#), [Natasha Tuano](#), [Sara E. Howden](#), [Katerina Vlahos](#), [Kevin J. Watt](#), [Adam T. Piers](#), [Kaitlyn Bibby](#), [James W. McNamara](#), [Rebecca Sutton](#), [Valerii Iaprintsev](#), [Jacob Mathew](#), [Holly K. Voges](#), [Patrick R. J. Fortuna](#), [Sebastian Bass-Stringer](#), [Celine Vivien](#), ... [James E. Hudson](#)  [+ Show authors](#)

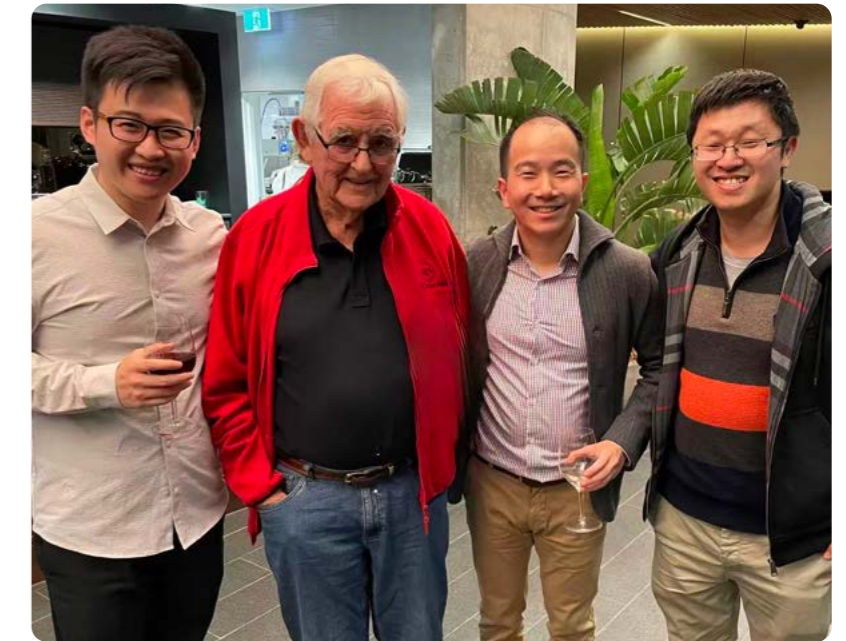
[Nature Cardiovascular Research](#) **4**, 821–840 (2025) | [Cite this article](#)

Professor James Hudson's research into human cardiac organoids, published in Nature Cardiovascular Research

a specific form of cardiomyopathy, screened possible treatments and identified a new type of drug to improve the heart tissue's function. These organoids will be crucial for better understanding cardiac biology, disease and drug screening.

**Professor James Hudson:** "There's huge benefit to studying heart diseases in this way. Using human cardiac organoids allows us to screen many more compounds, speeding up the process of drug development."

### 3D Printed "Artery-on-a-chip" by Professor Arnold Ju and PhD candidate Charles Zhao



Left: Advanced Materials journal cover artwork, depicting Professor Arnold Ju and Charles Zhao's microfluidic artery-on-a-chip-device. Right: Professor Arnold Ju (right) and Charles Zhao (left) alongside the late Terry Snow, at the 2023 Snow Medical Conference (image taken May 2023)

This recently published study by Professor Arnold Ju, his first student Charles Zhao, and colleagues at the University of Sydney, was featured on the journal cover of *Advanced Materials*, and in national newspaper the *Sydney Morning Herald*.

Cardiovascular disease is the leading cause of death in Australia. Blockages in the carotid artery, which supplies blood to the brain, result in stroke. Arnold and his team have developed a more accurate model of patient specific arteries, in order to better pinpoint the exact

causes of stroke in each patient. Researchers can now scan individual carotid arteries from stroke victims and accurately print these directly on glass slides, using a new type of 3D printing, all in under two hours! These 'artery-on-a-chip' devices can then be pumped with blood from the patient, to accurately model the individual's fluid dynamics, in addition to blood clot formation and other cardiac injuries.

Importantly, these revolutionary devices can be used to test and determine the best treatment for

each patient. This represents a significant advancement for the field, and will be crucial for vascular device development in personalised cardiac medicine.

PhD candidate Charles Zhao: "When a heart attack or stroke happens, patients cannot wait for a week." "In two hours ... we can quickly determine which treatment is best." (As quoted in the *Sydney Morning Herald*)

A full list of publications from Snow Fellows since April 2025 can be found at the end of the newsletter.

# Research publications by Snow Fellow laboratories from March – November 2025

These peer reviewed publications are important in disseminating Snow Foundation funded science to the international scientific community

## November 2025

Attard, F. C., Slobodianyuk, A., Bychek, R., Panasiuk, Y., Neigenfind, P., Massaro, L., Gardiner, M. G., Levterov, V. V., Baran, P. S., Mykhailiuk, P. K., & Malins, L. R. (2025). Dibromocarbene addition to bicyclo[1.1.0]butanes: **A facile route to substituted bicyclo[1.1.1]pentanes**. *Proceedings of the National Academy of Sciences of the United States of America*, 122(44), e2524130122. <https://doi.org/10.1073/pnas.2524130122>

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**Hot off the press feature: Professor Loic Yengo's prestigious Nature study estimated that on average 30 per cent of differences between people are explained by genetic factors, and current whole genome sequencing technology is likely sufficient to identify a large proportion of rare trait-associated variants.**

## October 2025

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**Hot off the press feature: Professor Arnold Ju's 3D printed “Artery-on-a-chip” devices provide better models of the carotid artery in individual stroke patients. This article was featured on the journal cover of Advanced Materials, and in the Sydney Morning Herald.**

## August 2025

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Jiang, F., Zhang, Y., Fang, G., Wang, Y., Dupuy, A., Jin, J., Shen, Y., Lim, K. S., Wang, Y., Zhang, Y. S., Cho, A. N., Lu, H., & **Ju, L. A.** (2025). **Intravasation-On-μDevice (INVADE): Engineering Dynamic Vascular Interfaces to Study Cancer Cell Intravasation.** *Advanced materials (Deerfield Beach, Fla.)*, 37(26), e2501466. <https://doi.org/10.1002/adma.202501466>

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**Hot off the press feature: Professor James Hudson's lab grown 3D tiny heart organoids more accurately model adult human heart tissue, and will be crucial for better understanding cardiac biology, disease and drug screening.**

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