

MEDIA RELEASE

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NATION'S LARGEST PHILANTHROPIC FELLOWSHIP AWARDS TOP \$100 MILLION

The Snow Medical Research Foundation's (Snow Medical) investment in medical research has topped \$100 million since 2020 with the announcement today of an additional \$16 million commitment to two new Snow Fellows, their teams, and their outstanding emerging biomedical research.

The two new Fellows each receive a million dollars a year, for eight years, creating an unprecedented level of long-term support. The Fellowships have been awarded to Dr Michelle Boyle at the Burnet Institute and Associate Professor Lining Ju at the University of Sydney. The prestigious Snow Fellowships are provided by the Snow Family, through Snow Medical, in recognition of the exceptional, visionary work of the Fellows and their teams in their chosen biomedical fields.

"Michelle Boyle and Lining Ju are amongst the best biomedical researchers globally. They join nine other truly outstanding Snow Fellows across Australia. Our Snow Fellows have the passion, dedication, and vision to make a real difference in the world, and we are excited to see how they will push the boundaries for science," Snow Medical Chair Tom Snow said.

"Snow Medical wants the best minds in the country focused on solving the world's big problems instead of being wasted chasing funding. The existing system of short-term funding cycles creates a rut for our brilliant researchers, cutting back their ability to make a difference. We wanted to change that. Our 11 Snow Fellows, and their teams, are changing the face of healthcare in Australia and globally."

Snow Medical Founder Terry Snow added, "I want this funding to change the status quo, I don't want our Snow Fellows wasting time applying for short term funding. I want them to take this opportunity, use it to do what they do best, and get on with the business of research; to push the boundaries of what's possible," Terry Snow said.

"Without investing in the people who will drive innovation and take risks, we're missing the point. By supporting Australia's brightest minds to lead the way, they'll find solutions that will make a real difference in people's lives."

The two Snow Fellows announced this year are:

- Dr Michelle Boyle – Cellular Responses to Disease and Vaccination Group, Burnet Institute
- Associate Professor Lining Ju - School of Biomedical Engineering, University of Sydney

(More information on the Fellows can be found below)



Dr Boyle's research aims to develop vaccines and therapeutics for malaria through novel insights in human immunity. Her research has made fundamental discoveries of specific types and functions of antibodies that protect from malaria, and the CD4 T cells that drive protective responses.

"The Snow Medical Fellowship is absolutely essential for the success of this research program which requires stable long-term funding for success," Dr Boyle said.

"I am incredibly grateful for the opportunity to now focus completely on my research and to develop my team's capacity with unprecedented support for eight years, free from the constant cycle of grant writing and stress of unstable funding opportunities.

"I am excited for the outcomes of this research program which will shed light on how the human immune response develops to infection, and the opportunity to develop therapeutics which can enhance immune responses in vulnerable individuals.

Associate Professor Ju added, "I am honoured to have been awarded the Snow Fellowship and I would like to express my sincere gratitude for their trust and support in our work. The road from research and development to the deployment of new medical devices is often challenging. The Fellowship, which provides unparalleled and sustained funding for eight years, will give us the necessary support to navigate this journey."

"Heart attacks are the leading cause of death globally. With the Snow Foundation's generous support we're hopeful we can make significant progress towards developing a finger prick test and device that can detect early signs of blood clots and alert individuals before a heart attack or stroke happens."

"The motivation for my research is personal. My father had a heart attack when he was just 54 years old, inspiring my personal quest to build a simple test to notify people at risk of developing a deadly blood clot."

The Snow Fellowship Announcement comes on the back of a recent announcement by Snow Medical of a new Gender Equality Benchmark that assesses gender equality in education institutions, across thirty-two gender equality measures in three key areas: women's inclusion in senior leadership, recognition of women through awards such as honorary doctorates, and the promotion and recruitment of women in scientific staff. Results of the benchmarking will determine eligibility for future Snow Medical funding.

The 2024 Snow Fellowship round is now open, including for international applicants.

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About the Fellows

Dr Michelle Boyle – Cellular Responses to Disease and Vaccination Group, Burnet Institute

Snow Fellowship: Towards Malaria Elimination – from biological insight to clinical impact



Dr Michelle Boyle is the Working Group head of Cellular Responses to Disease and Vaccination at Burnet Institute.

As a Snow Fellow, Dr Boyle will aim to transform our understanding of immune development to malaria by using best unique human samples and cutting-edge technologies. Malaria is a parasitic disease which remains one of the biggest killers in children under five years of age globally. In areas of high malaria transmission, disease also drives social and economic hardships. Part of the difficulty in malaria control is the lack of an effective vaccine for children. Dr Boyle's research will shed light on how immunity to malaria develops and is disrupted in children who

are infected with malaria. Using new tools to study the human immune system, Dr Boyle's team will then identify and test drugs that can be used to improve protection. Immune boosting therapeutics may have application to other intractable infections and in vulnerable communities such as the elderly.

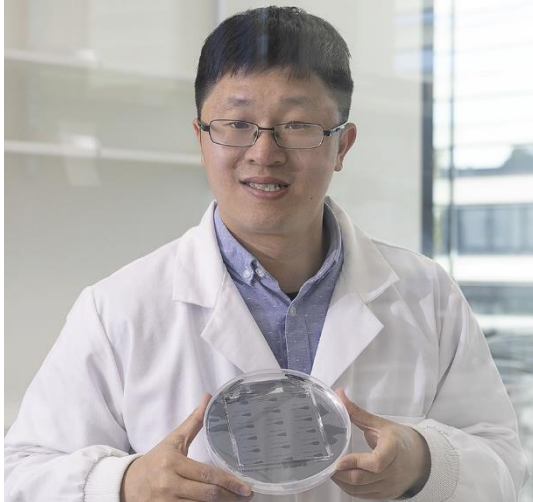
Dr Boyle completed her PhD in 2012 (University of Melbourne) and received the Victorian Premier's Award for Health and Medical Research, Commended Award (2013). From 2013-2015, she was an NHMRC CJ Martin Early Career Fellow at University of California, San Francisco. Returning to Australia, Dr Boyle developed an independent program focused on cellular mechanisms driving human immunity to malaria. She was awarded the AIPS Young Tall Poppy Science Award (2016) and was recruited to QIMR-Berghofer in 2018 as an EMBL-Australia Group Leader. Her current research at Burnet Institute is supported by a CSL Centenary Fellowship.

Dr Boyle has a focus on improving equity and diversity in research and will continue to focus on training research scientists from underrepresented groups including women, and researchers from malaria endemic areas.



Associate Professor Lining Ju - School of Biomedical Engineering, University of Sydney

Snow Fellowship – Solid and fluid mechanics of blood at a cellular and biomolecular level



Associate Professor Lining (Arnold) Ju is an award-winning engineer and biophysicist at the University of Sydney's School of Biomedical Engineering, heading the Mechanobiology and Biomechanics Laboratory (MBL). He applies engineering principles to understand the cardiovascular system at molecular and cellular scales, leading the development of microtechnologies to pick up early signs of heart attack or stroke.

The Snow Fellowship will support Dr Ju and his team to investigate cardiovascular mechanobiology at a cellular and biomolecular level, allowing them to gain insight into how sticky blood clots are triggered. This knowledge will be the foundation for the development of cutting-edge biomechanical nanotools and analyses that will form the

basis of a clinical grade microdevice to predict blood clot tendency.

Associate Professor Ju received his PhD in Biomedical Engineering at Georgia Institute of Technology and Emory University, before working at the Australian Centre for Blood Diseases and the Heart Research Institute. He has received numerous awards, including the Royal Society of NSW Edgeworth David Medal, and was recognised as an Innovator Under 35 by MIT Technology Review in 2021 and a Young Tall Poppy Science Award Winner in 2020.

Associate Professor Ju is motivated by his family's experience with heart disease and his desire to make a difference to the lives of those at risk of heart attacks and strokes. He believes that the Snow Fellowship will provide his team with the resources and freedom needed to develop a finger-prick test and microdevice that will enable the monitoring of blood for signs of dangerous blood clots, ultimately with the aim of helping to reduce the number of thrombotic deaths globally.

About Snow Medical Research Foundation

The Snow Medical Research Foundation (Snow Medical) is the creation of Canberra's Snow family and is a vision of businessman and philanthropist, Terry Snow. Snow Medical's pivotal program, the Snow Fellowships, targets emerging global research leaders that show the potential to drive, manage and influence the next generation of health and medical innovation.

The eight-year Snow Fellowship, funded at up to \$1 million per year, provides outstanding biomedical researchers the independence to focus on building ambitious multidisciplinary research programs and teams capable of changing the face of healthcare in Australia and globally.

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