

# FALLING WALLS

# LAB

# AUSTRALIA

Tuesday, 8 September 2020  
Online event



Australian  
Academy of  
Science

## **CONCEPT**

The Falling Walls Foundation founded the Falling Walls Lab in 2011 in order to

- ... connect aspiring innovators
- ... discover and develop talents
- ... support interdisciplinary dialogue and international cooperation
- ... develop new ways of scientific communication
- ... build new and strong networks

## **TIMELINE**

- |       |  |
|-------|--|
| 14:00 | <b>Welcome by Ms Anna-Maria Arabia</b><br>Chief Executive, Australian Academy of Science                                   |
| 14:05 | <b>Introductory remarks by Professor Hans Bachor AM FAA</b><br>Master of Ceremonies, FWL Australia 2020                    |
| 14:10 | <b>Opening remarks by HE Dr Thomas Fitschen</b><br>Ambassador, Federal Republic of Germany to Australia                    |
| 14:15 | <b>Pitches (scholar presentations 1-10)</b>  |
| 15:05 | <b>Jury deliberation (confidential)</b><br>Networking break (invitees only)<br>Q&A with previous FWL winners (live stream) |
| 15:30 | <b>Address by Professor John Shine AC PresAA FRS</b><br>President, Australian Academy of Science                           |
| 15:40 | <b>Winners announced</b><br>Audience award<br>Jury award   |
| 15:50 | <b>Farewell by Professor Hans Bachor AM FAA</b>  |

# FALLING WALLS LAB

## WELCOME MESSAGE

The Australian Academy of Science is pleased to host the fifth Falling Walls Lab Australia in partnership with the Embassy of the Federal Republic of Germany in Canberra.

Falling Walls Lab Australia will provide a virtual platform for 10 emerging researchers, academics, entrepreneurs and professionals in Australia who will present their research work, business model, innovative project, social initiatives or idea to a distinguished audience from academia and business. Three of those presenting were selected at the Brisbane Falling Walls Lab, which was organised by Study Queensland and took place on 6 August. The remaining seven presenters were selected through a competitive call organised by the Academy.

Falling Walls Labs take place globally throughout the year. Last year, 90 Falling Walls Labs were held in 63 countries. This year, due to the pandemic, the winners of each international Falling Walls Lab will not be able to travel to Berlin to participate in the Falling Walls Lab Finale, held each year on 8 November. However, they will participate in the virtual conference, Falling Walls Remote 2020: Breakthroughs of the Year, and have their pitch video shared on the Falling Walls platforms to a global audience and the Falling Walls Remote 2020 jury panel.

The top 10 global finalists will compete in the virtual live event, the *Emerging Talents Category* day on 4 November, from which one presenter will be awarded the title: *Breakthrough Winner of the Year* in the *Emerging Talents Category*. The winner will pitch their breakthrough project alongside nine other luminaries on the grand stage during the virtual live Falling Walls day on 9 November, in front of an audience of industry leaders, decision-makers, investors and international media representatives.

Events such as this one can only happen with the assistance of donors and sponsors, and we would like to thank EURAXESS for their generous support. We are also grateful to the eminent members of the jury for giving their time to select the winners of today's event, who will participate in the Falling Walls Remote 2020: Breakthroughs of the Year.

We thank all of those in the audience for their interest and support of this activity.

We wish the participants great success and hope that you find this event productive and enjoyable. The Australian Academy of Science and the Embassy of the Federal Republic of Germany look forward to working together to ensure that Falling Walls Labs Australia can offer this unique opportunity to young researchers and innovators in the future.



**Professor John Shine AC PresAA FRS FTSE**  
President  
Australian Academy of Science



**HE Dr Thomas Fitschen**  
Ambassador  
Federal Republic of Germany to Australia

# FALLING WALLS LAB

## JURY



**Professor John Shine AC PresAA FRS**  
**President**  
**Australian Academy of Science**

Professor John Shine was the Executive Director of the Garvan Institute of Medical Research from 1990 to 2011. He is a professor of molecular biology and of medicine at UNSW in Sydney.

The 'father of gene cloning', Professor Shine was the first to clone human hormone genes and the first to sequence the replication of a cancer-causing virus. These and other pioneering discoveries by Professor Shine helped to launch the biotechnology revolution that has transformed medicine and agriculture.

Professor Shine was appointed to the board of the biopharmaceutical company CSL Ltd in 2006 and then as Chair from 2011 to 2018. He has a longstanding commitment to the translation of research discoveries into advances in health care for the social and economic benefit of the community. He received the Prime Minister's Prize for Science in 2010 for his scientific discoveries and research leadership. He became President of the Academy in May 2018.



**Balbir Blassey**  
**Head of Corporate R&D Operations**  
**3M Australia**

Mr Balbir Blassey is 3M's Head of Corporate R&D Operations for Australia and New Zealand. He is responsible for the deployment of R&D, application development, regulatory and quality assurance strategies across health care, safety and security, electrical and energy, industrial and consumer market segments.

Over the last 28 years, Mr Blassey has developed expertise in innovation and commercialisation processes. Since 2006 he has pursued interests in health care and consumer retail, where he has been responsible for leading and developing disruptive solutions.

Apart from his diverse roles in R&D, Mr Blassey lead a marketing team to support infection prevention and wound management portfolios. Mr Blassey has also been instrumental in supporting PhD programs with a variety of universities from 2014 to 2016 and collaborated very closely with tertiary intuitions.

Mr Blassey completed his science degree and post graduate qualifications from RMIT and Macquarie Graduate School of Management, respectively. His professional interests include technology commercialisation, strategy implementation and technology roadmap development and diversification.

# FALLING WALLS LAB



**Kate Hart**  
**Partner ANZ**  
**A.T. Kearney Australia**

Ms Kate Hart is a Partner in Kearney Strategic Operations Practice based in Melbourne. Ms Hart has 18 years of experience in both industry and consulting roles in mining, oil and gas, retail, facilities management, manufacturing and telecommunications. She has enjoyed a diverse career, spanning roles in business development, general management, operations, strategy and transformation for multi-nationals.

Ms Hart is an entrepreneurial leader with a proven ability to develop and execute commercially focused business strategies and subsequent transformations. Ms Hart believes that motivating and building high energy, high-performance teams is the most effective way to deliver business results. Mentoring the next generation of talent is a passion of hers.

Ms Hart graduated from UNSW with a first-class honours degree in chemical engineering and holds an MBA degree (Deans list) from Melbourne Business School.



**Rosie Hicks**  
**Chief Executive Officer**  
**Australian Research Data Commons**

Ms Rosie Hicks is the Chief Executive Officer of the Australian Research Data Commons (ARDC). The ARDC is a transformational, sector-wide initiative supported by the Australian Government's National Collaborative Research Infrastructure Strategy. ARDC works with researchers from universities, government and industry partners to build a coherent national and collaborative research data commons.

Ms Hicks has expertise and extensive knowledge of the Australian research infrastructure sector, and leadership experience as the former CEO of the Australian National Fabrication Facility. Her career, spanning Japan, the UK and Australia, includes every aspect of scientific instrumentation, from product development and technical marketing to the management of multi-user facilities, working in environments that cross academic and industry domains.

# FALLING WALLS LAB



**Sue MacLeman** FAICD, FATSE, FACPP

**Chair  
MTPConnect**

Ms Sue MacLeman has more than 30 years' experience as a pharmaceutical, biotechnology and medical technology executive with senior roles in corporate, medical, commercial and business development. Ms MacLeman has served as CEO and board member of several ASX- and NASDAQ-listed companies in the sector.

Ms MacLeman is currently Chair of MTPConnect (Medical Technology and Pharmaceuticals Industry Innovation Growth Centre), Chair of Anantara Lifesciences (ASX:ANR), Chair of Tali Digital Ltd (ASX:TD1), Non-Executive Director of Palla Pharma Ltd (ASX:PAL), Non-Executive Director of Oventus Medical Ltd (ASX: OVN) and Non-Executive Director of Veski.

Ms MacLeman is appointed to a number of academic and government advisory committees including PM Digital Expert Advisory, CSIRO Health and Biosecurity, Genomics Health Futures Expert Advisory Committee, DMTC medical countermeasures and various COVID-19 taskforces. Ms MacLeman is also Chair of ATSE Health Technology Forum and the ATSE Policy Committee. Her broad commercial experience is underpinned by graduate qualifications in pharmacy and post graduate qualifications in corporate governance, commercial law, business administration and marketing.



**Professor Michael Schuetz**

**Director  
Jamieson Trauma Institute**

Professor Michael Schuetz is a practicing orthopaedic surgeon and research leader in the field of trauma care and orthopaedic trauma research.

In August 2018, Professor Schuetz commenced as the Director of the Jamieson Trauma Institute based at the Royal Brisbane and Women's Hospital campus in Brisbane, and Chair of Trauma at the Queensland University of Technology. The Jamieson Trauma Institute strives to advance the optimal trauma patient's outcome by focusing on the patient's journey to include the prehospital, acute care, rehabilitation and long-term outcomes for people who suffer a traumatic injury. Improvements can range from models of care to specific interventions and developing new devices.

Professor Schuetz is actively involved in clinical knowledge translation and commercialisation of novel orthopaedic surgery technologies across Australia and the world.

# FALLING WALLS LAB



**Dr Jack Steele, BSc(Hons) PhD**  
**Director, Science Impact and Policy**  
**CSIRO**

Dr Jack Steele is the Director of Science Impact and Policy for the Commonwealth Scientific and Industrial Organisation (CSIRO), the Australian national research agency. In this role, he supports the chief executive of CSIRO in interactions with government, a number of activities relevant to industry issues and is responsible for the analysis of the health of CSIRO's science performance. He is a member of the CSIRO Leadership Team.

Dr Steele was appointed to his current position in February 2017 after a career at CSIRO that has spanned more than 30 years, first as research scientist, then in various management roles, including General Manager for Science Investment and Science Excellence. He has a wealth of experience in science management, commercial management and governance, and was awarded a PhD in biochemistry from the University of Western Australia.



# FALLING WALLS LAB PRESENTERS



**BREAKING THE WALL OF misconceptions about pain**  
*Joshua Pate, University of Technology Sydney*

I aim to begin a paediatric pain 'conceptual revolution'. By implementing targeted education regarding the latest in the science of pain, it is now possible for the next generation to deal with pain in new ways to improve health outcomes.



**BREAKING THE WALL OF recycling CO2 in mining**  
*Jessica Hamilton, ANSTO*

I developed a relatively low-cost, low-energy input process to make valuable products from mining wastes, which has the potential to achieve carbon neutral mining operations.



**BREAKING THE WALL OF genetics for doctors**  
*Alan Robertson, ClearSKY Genomics*

I saw that people were being left behind by genomics, I left academia to use lessons from the innovation space to change this. Our team is building a doctor/patient-focused genome browser.



**BREAKING THE WALL OF confused composition**  
*Yael Leibovitch, University of Queensland*

I have designed a professional development program and 'teaching writing tool kit' centred on students' conversation and critical thinking that is transforming teachers' attitudes and classroom practices.



**BREAKING THE WALL OF ineffective cancer treatments**  
*Andrew Law, Garvan Institute of Medical Research*

ALTEN guides doctors to provide the best healthcare for cancer patients by developing personalised treatment strategies. We believe that everyone deserves affordable medical care and a healthy future.



# FALLING WALLS LAB



## **BREAKING THE WALL OF artificial intelligence in mental health**

*Sally Richmond, Monash University*

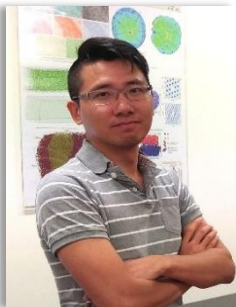
We are using artificial intelligence to create a mental health solution for parents – we have built a prototype and are currently assessing feasibility as we progress from the early stages of validation towards funding and, ultimately, impact.



## **BREAKING THE WALL OF aged care monitoring**

*Dashen Dong, RMIT University*

The introduction of soft electronic sensors in aged care facilities could enhance workforce productivity, avoid late diagnosis of diseases, improve elderly life quality and relieve the resident families' anxieties.



## **BREAKING THE WALL OF atomic hydrogen imaging**

*Eason (Yi-Sheng) Chen, University of Sydney*

Seeing is believing, so I will be pushing the limit of human's ability to observe the behaviour of hydrogen in materials by using cryogenic atom probe tomography.



## **BREAKING THE WALL OF movement disorders**

*Pamela Barhoun, Deakin University*

I will apply advanced brain stimulation over motor-related brain regions in individuals with atypical motor skill to examine whether this increases motor imagery ability and, by extension, motor functioning.



## **BREAKING THE WALL OF broken wounds**

*Eamonn McKenna, Queensland University of Technology*

I am reengineering diabetic foot ulcer repair, one cell at a time.

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# FALLING WALLS LAB



## FEEDBACK

What is your overall impression of the Falling Walls Lab Australia?

What are your concrete suggestions for improvement?

What was most challenging?

Please [email](#) us your responses directly or via participating in a short 2 minutes anonymous survey by [clicking here](#). The survey link will open on the lab day Tuesday, 8 September 2020.

Thank you for your time and participation.

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