



emcrforum

Science Pathways 2021 Sustainable careers

LAUNCH EVENT

25–26 November 2021

University of Melbourne and online

Welcome from the 2021 Chair of the EMCR Forum

Dr Yee Lian Chew

2021 Chair of the EMCR Forum Executive Committee



I am incredibly honoured to welcome all of you to Science Pathways 2021: Sustainable careers. It is wonderful to have this conference finally happening despite the challenging times that we have faced these past two years. Indeed, it is the challenges that we will continue to face that are the focus of this year's conference.

What is a sustainable career? The Early- and Mid-Career Researcher (EMCR) Forum thought long and hard about this when planning this conference. We found that a sustainable career comes in many shapes and forms and can be defined by avoiding burnout and looking after our mental health, being in a position where opportunities for professional growth are available and achievable, fostering an inclusive environment at all career stages, and most of all, empowering EMCRs to create a robust and diverse research future. Considering the disruption and anxiety triggered by the pandemic, we think these topics are more important than ever. We hope our speakers, panellists, workshops and networking opportunities will be the start of some great conversations on these themes.

The EMCR Forum, supported by the Australian Academy of Science, has grown and evolved for 10 years now. In these 10 years, we have grown our membership in terms of numbers and representation, connected with peak bodies and decision makers in funding and advocacy, and continued to promote our values of equity, diversity and inclusion for EMCR professional development. This year, the EMCR Forum Executive Committee consisted of 12 amazing and passionate EMCRs who worked extremely hard to advocate for a more inclusive and equitable research sector. I am so proud of my colleagues and grateful for their hard work, and I am also so thankful to members of the EMCR Forum and the Australian Academy of Science for their continued support.

Thank you for coming to Science Pathways 2021! We look forward to working with you to build a sustainable STEM future for all.

Program

Day one – Thursday 25 November 2021 UNIVERSITY OF MELBOURNE AND ONLINE

12.30 – 1.00 pm AEDT	Registration ARRIVAL TEA AND COFFEE
1.00 – 1.05 pm AEDT	Welcome Dr Mohammad Taha University of Melbourne
1.05 – 1.20 pm AEDT	Welcome to Country
1.20 – 1.30 pm AEDT	University of Melbourne welcome and address Professor Mark Cassidy University of Melbourne
1.30 – 1.45 pm AEDT	'Share your thoughts' activity for attendees
1.45 – 2.15 pm AEDT	Opening address Dr Cathy Foley AO FAA FTSE PSM Australia's Chief Scientist
2.15 – 2.45 pm AEDT	Ben Chuwen keynote address Dr Marguerite Evans-Galea AM Australian Academy of Technology and Engineering
2.45 – 3.00 pm AEDT	EMCR Forum presentation Dr Yee Lian Chew 2021 Chair of the EMCR Forum Executive
3.00 – 3.30 pm AEDT	AFTERNOON TEA
3.30 – 4.45 pm AEDT	Exploring the non-academic research path Facilitator: Dr Zsuzsa Banhalmi-Zakar Responsible Investment Association Australasia Dr Cathy Foley AO FAA FTSE PSM Australia's Chief Scientist Dr Damien Chong Defence Science and Technology Dr Megan Sebben CSIRO Dr Catherine de Burgh-Day Bureau of Meteorology
4.45 – 4.50 pm AEDT	Diversity and inclusion partner presentation Mark Stickells Pawsey Supercomputing Centre
4.45 – 5.00 pm AEDT	Closing remarks Dr Vanessa Moss EMCR Forum Executive Dr Timothy Lau EMCR Forum Executive
	ONLINE EVENT CONCLUDES
5.30 – 7.30 pm AEDT	Social event for in-person attendees Science Gallery Melbourne

Day two – Friday 26 November UNIVERSITY OF MELBOURNE

8.30 – 9.00 am AEDT	ARRIVAL TEA AND COFFEE
9.00 – 10.30 am AEDT	Professional development workshops Science communication Dr Jen Martin University of Melbourne Prevent burnout – promote positive mental health Dr Elizabeth Pritchard and Ms Christine Burns WALT Institute
10.30 – 11.00 AEDT	MORNING TEA
11.00 am – 12.30 pm AEDT	Professional development workshops Science communication Dr Jen Martin University of Melbourne Prevent burnout – promote positive mental health Dr Elizabeth Pritchard and Ms Christine Burns WALT Institute
12.30 – 1.30 pm AEDT	Panel discussion Current challenges in the university landscape and how EMCRs can move forward Dr Brooke Farrugia University of Melbourne Dr Cat Vreugdenhil University of Melbourne Dr Jingge Zhu University of Melbourne
1.30 – 2.30 pm AEDT	LUNCH AND SOCIAL EVENT
2.30 pm AEDT	EVENT CONCLUDES



Ready when you are

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Curtin University

Message from the co-conveners

Dr Michelle Christie

Research Fellow, University of Melbourne

Dr James Gong

Lecturer, Deakin University

Dr Vanessa Moss

Postdoctoral Researcher, CSIRO

Dr Mohammad Taha

Research Fellow, University of Melbourne

On behalf of the Early- and Mid-Career Researcher (EMCR) Forum we are delighted to present to you Science Pathways 2021: Sustainable careers. Science Pathways is a premier professional development conference run by the EMCR Forum. It is organised by EMCRs for EMCRs to empower the future workforce of the Australian STEM sector.

EMCRs face unique challenges that were highlighted in a greater and more consequential way over the past 18 months in terms of job insecurity, the funding climate, additional carer responsibilities and mental health challenges brought on by the pandemic. The EMCR Forum continues to be committed to our advocacy and the professional development of EMCRs in the STEM sector. With that in mind, we have endeavoured to put together a substantial program that will equip and empower EMCRs to tackle the challenges we face as a sector, and we have designed the format to maximise the ability of EMCRs to be part of the conversation, no matter where you might be located. We hope that SP21 paves the path for a more nationally and globally connected EMCR community than ever before.

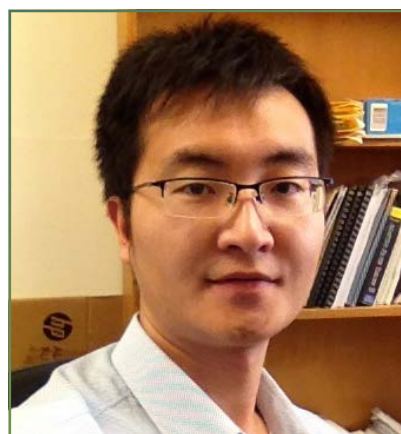
On a personal note, we would like to use Science Pathways 2021 as a message of renewal and to reiterate the Forum's commitment to all EMCRs. We acknowledge First Nations, Aboriginal and Torres Strait Islander people and their unique place as Australia's first scientists, and embrace the diversity represented by people from all ethnicities, cultural backgrounds, disabilities, religions, ages and gender identities that form the STEM EMCR cohort across Australia. The Forum aims to use Science Pathways to strengthen and support EMCRs to take on the challenges unique to us so that we are better able to create a better and more sustainable future.

We are grateful to our sponsors for their support, without which Science Pathways would not be possible. We are also grateful to our speakers and panel members who are so willing to be a part of Science Pathways 2021. We express our thanks to the Diversity and Inclusion team at the Australian Academy of Science, particularly Laura Navarro who has worked tirelessly behind the scenes to make this event a reality. Thank you to our fellow EMCR Forum executive team both past and present and to the EMCR Forum RepNet for involvement in organising the different workshops and panel discussions.

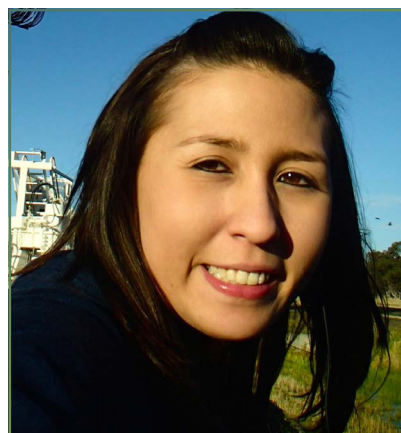
So let us meet, support and empower each other during and after Science Pathways 2021. We hope that you will find it to be inspiring, beneficial and memorable.



Dr Michelle Christie



Dr James Gong



Dr Vanessa Moss



Dr Mohammad Taha

Master of Ceremonies

Dr Mohammad Taha
University of Melbourne

Mohammad is a non-binary queer person of colour and researcher at the Faculty of Engineering and Information Technology at the University of Melbourne. They have experience in electrical engineering, flexible/wearable electronics, materials science/engineering, teaching and science communication. Mohammad is also a long-time champion for diversity, having worked for queer inclusion in several institutions, and they strongly believe in the vital role of diversity in experience and opinion in order to bring fresh perspectives to long-standing challenges, both in the scientific community and in broader society. They joined the EMCR Forum Executive Committee in 2021.



Dr Mohammad Taha

Welcome and address from University of Melbourne

Professor Mark Cassidy
University of Melbourne

Mark graduated in Civil Engineering from the University of Queensland, and as a Rhodes Scholar, attained a doctorate in Engineering Science from the University of Oxford. Prior to his appointment in Melbourne, he was an Australian Research Council (ARC) Laureate Fellow, Director of the Centre for Offshore Foundation Systems (COFS), Deputy Director of the ARC Centre of Excellence for Geotechnical Science and Engineering (ARC CoE CGSE) and the Lloyd's Register Foundation Chair of Offshore Foundations at the University of Western Australia.

Mark's research interests are in offshore geotechnics and engineering, predominantly in developing models for the analysis of oil and gas platforms, mobile drilling rigs, renewable wave and wind turbines, anchors and pipelines. Mark has published over 300 refereed journal and conference papers and jointly holds three international patents with Singaporean mobile jack-up builders Keppel Offshore and Marine and with Korean shipbuilders DSME. He has supervised over twenty-five PhD students. Mark has been an active consultant within the offshore engineering industry.

Mark is the 2015 Western Australian Scientist of the Year and is the 2007 recipient of the Malcolm McIntosh Prize for Physical Scientist of the Year, one of the Prime Minister's Prizes for Science. He is an elected Fellow of the Australian Academy of Science (FAA), the Australian Academy of Technology and Engineering (FTSE) and of Engineers Australia (FIEAust).



Professor Mark Cassidy

Opening address

Dr Cathy Foley AO FAA FTSE PSM
Australia's Chief Scientist



Dr Cathy Foley commenced as Australia's ninth Chief Scientist in January 2021 after an extensive career at Australia's national science agency, CSIRO.

Dr Foley is an internationally recognised physicist with major research achievements in superconductors and sensors which led to the development of the LANDTEM™ sensor system to locate valuable deposits of minerals deep underground, resulting in discoveries and delineation of minerals worth more than \$6 billion.

Dr Foley's scientific excellence and influential leadership have been recognised with numerous awards and fellowships, including election to the Australian Academy of Science in 2020, along with an Order of Australia for service to research science and to the advancement of women in physics. She is also a Fellow of the Australian Academy of Technology and Engineering (2008) and an honorary Fellow of the Australian Institute of Physics (2019).



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Ben Chuwen keynote address

Dr Marguerite Evans-Galea AM
Australian Academy of Technology and Engineering

Dr Marguerite Evans-Galea is the Industry Mentoring Network in STEM (IMNIS) Executive Director at the Australian Academy of Technology and Engineering. She is also co-founder and co-chair of Women in STEMM Australia.

Dr Evans-Galea has led research in cell and gene therapy at world-leading organisations in the United States and Australia. Her research and leadership have been internationally recognised with numerous awards. She is currently the Associate Editor Australasia with Gene Therapy, a Springer Nature journal. Dr Evans-Galea is the founding chair of the EMCR Forum.



Dr Marguerite Evans-Galea

The Chuwen Keynote Address
Benjamin M. Chuwen PhD, 1974–2012
Celebrating his life, commitment and passion

Dr Ben Chuwen completed his PhD at the Centre for Fish and Fisheries Research at Murdoch University in January 2010 and was a Postdoctoral Research Fellow with Dr Jeremy Lyle at the Institute for Marine and Antarctic Studies (IMAS) at the University of Tasmania. As an ichthyologist, Ben's work focused on the biological aspects of key fisheries species, such as the black bream, and how such biotic variables can change with fishing pressure and environmental change. Ben also developed quantitative ecosystem models for estuaries, published his research in international journals and presented at a number of international and national conferences.

Ben had completed the Fisheries Research and Development Corporation's Advance in Seafood Leadership Development Program and was the Tasmanian state representative on the board of the Australian Society for Fish Biology. Ben was proud of his ability to effectively communicate with a wide range of stakeholders and community members to enable the results of his work to be disseminated as widely as possible. Ben was a founding member of the EMCR Forum in 2011 and joined because he wanted to make a difference.

On Sunday 4 March 2012 Ben woke with a 'lightning bolt' headache that rapidly became life-threatening. Following multiple surgeries and several weeks in intensive care, Ben passed away peacefully on Friday 20 April 2012. Our thoughts remain with his family, especially his wife Nicole and their two daughters, Lila and Gracie. Ben's colleagues at IMAS described him as a dynamic and enthusiastic young scientist and they all strongly supported Ben's family through this difficult time. In celebration of Ben's life, commitment and passion for all things science, the Forum has held the Chuwen Keynote Address at its national meeting, Science Pathways, since 2012.



Dr Ben Chuwen

EMCR Forum presentation

Thursday 25 November

Dr Yee Lian Chew
Flinders University

A reflection on the EMCR Forum's efforts in actively championing for change in 2020 and 2021, supporting the EMCR community and future plans for driving improvements in the sector during a challenging time for EMCRs.



Dr Yee Lian Chew

Exploring the non-academic research path

Thursday 25 November

Skilled researchers remain in high demand in a range of sectors outside of traditional academia. In this panel discussion, we will hear tips and perspectives from four researchers who are leaders in the sector and who have carved successful careers in government and industry.

FACILITATOR

Dr Zsuzsa Banhalmi-Zakar
Responsible Investment



Dr Zsuzsa Banhalmi-Zakar

PANEL MEMBERS

Dr Cathy Foley AO FAA FTSE PSM
Australia's Chief Scientist

Dr Damien Chong
Defence Science and Technology

Dr Megan Sebben
CSIRO

Dr Catherine de Burgh-Day
Bureau of Meteorology



Dr Cathy Foley



Dr Damien Chong



Dr Megan Sebben



Dr Catherine de Burgh-Day

Diversity and inclusion partner presentation

Mark Stickells

Pawsey Supercomputing Centre

Mark Stickells is a research executive with more than 20 years' experience working at a senior level in innovative research and business development roles in complex, multi-stakeholder environments. Through national and international programs and joint-ventures, Mark had successfully led initiatives to accelerate the impact of research, development and education programs for Australia's key energy, mining and agricultural sectors.

He is a former Chief Executive of an LNG research and development alliance of CSIRO, Curtin University and UWA, partnering with Chevron, Woodside and Shell. Prior to his appointment at Pawsey Mark led the innovation and industry engagement portfolio at The University of Western Australia. In addition, Mark is the current Chair of the Board of All Saints' College and was appointed an adjunct Senior Fellow of the Perth USAsia Centre (an international policy think tank) in 2017.



Mark Stickells

Social event: Science Gallery Melbourne

Tilly Boleyn

Head of Curatorial Science Gallery Melbourne

Exploring the collision of art and science and playing a vital role in shifting our understanding of science, art and innovation, Science Gallery Melbourne is part of the acclaimed Global Science Gallery Network pioneered by Trinity College Dublin. Science Gallery Melbourne builds on the success of the Network, bringing a southern hemisphere flair to its innovative models of engaging 15–25-year-olds with science. Join us at this exciting event where Tilly Boleyn, the Museum's Head of Curatorial, will take us on an exciting and fun journey through the museum.

Science Gallery Melbourne is located in Melbourne Connect – a new innovation precinct developed by the University of Melbourne. The Gallery is part of the Museums & Collections department at University of Melbourne, forming connections with other collections, galleries and museums at the university as part of the Cultural Commons.



Tilly Boleyn



Enabling science and accelerating discovery

The Pawsey Supercomputing Research Centre is a Tier 1 publicly funded national supercomputing facility, located in Perth. The Centre provides free access to supercomputing, data, visualisation, cloud infrastructure, training and expertise to researchers across Australia and their collaborators.

Pawsey's new supercomputer, Setonix, the scientific name for Western Australia's iconic quokka, will be the fastest public research supercomputer in the Southern Hemisphere, with the equivalent power of more than 150,000 laptops working in parallel.



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pawsey.org.au

Professional development workshops

Friday 26 November

SCIENCE COMMUNICATION

Dr Jen Martin

University of Melbourne

Effective and clear science communication is a critical component of a career as a researcher. It affects how EMCRs do community outreach, media engagement, stakeholder engagement, grant applications, job interviews. Dr Jen Martin (@scidocmartin) will take you through the nuts and bolts of successful science communication and profile-building for EMCRs.

PREVENT BURNOUT – PROMOTE POSITIVE MENTAL HEALTH

Dr Elizabeth Pritchard and Ms Christine Burns

WALT Institute

Stress and burnout for EMCRs is on the rise and needs to be proactively managed to counteract the ripple effect it is having on individuals, families, teams and society as a whole. There is a way to approach the relentless demands and stressors on academics, researchers, clinicians and professionals, which will increase your energy, increase positive health and create stronger relationships.

At this workshop, EMCRs will learn and explore strategies to equip them with the tools to stop the downward spiral into physical and mental exhaustion and empower them towards calmness and positive wellbeing.

Current challenges in the university landscape and how EMCRs can move forward

Friday 26 November

Dr Brooke Farrugia

University of Melbourne

Dr Cat Vreugdenhil

University of Melbourne

Dr Jingee Zhu

University of Melbourne

Navigating some of the challenges of working in academia can sometimes be a daunting task for EMCRs, in this panel participants will hear about the journey and experience of different EMCRs in academia, learn more about the opportunities and solutions they have identified along the way, and look forward to what we envision academia to be in the future.



Dr Jen Martin



Dr Elizabeth Pritchard



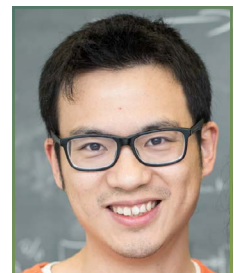
Ms Christine Burns



Dr Brooke Farrugia



Dr Cat Vreugdenhil



Dr Jingee Zhu

Partners

Science Pathways 2021: Sustainable careers is made possible with the generous support of our conference partners. Thank you for believing in and supporting the next generation of STEMM leaders in Australia to come together and work on a better future for the sector.

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Speakers and facilitators



Christine Burns
WALT Institute

Christine Burns is the CEO and Co-Founder of WALT Institute. As a former elite athlete in hockey for New Zealand, she has over 20 years of coaching, sport psychology and performance expertise

which she brings to the global arena of authentic leadership. Typically, she works with individuals and teams in STEMM to provide the strategies to bust through the status quo, be seen, be heard and be the best version of themselves every single day!



Dr Yee Lian Chew
Flinders University

Dr Yee Lian Chew is an NHMRC Research Fellow (Mary Overton Senior Research Fellow) at the Flinders Health and Medical Research Institute at Flinders University, trying to understand the chemical signals

in the brain that trigger learning and experience-dependent behaviours. She leads a young team of researchers who use the small invertebrate model *C. elegans* (the nematode worm) to address fundamental questions in neuroscience. The lab uses a combination of genetic tools, advanced imaging and behavioural assays in order to dissect pathways of neuronal communication important not only for learning, but also relevant to human disorders such as pain and neurodegenerative disease. Yee Lian always has time to mentor young researchers from underrepresented backgrounds who need help with job, grant and funding apps or just a little pep talk! She is part of the Flinders University College of Medicine and Public Health equity, diversity and inclusion committee and is passionate about creating a stronger, more diverse research community.



Dr Damien Chong
Defence Science and Technology Group

Dr Damien Chong completed his honours in biotechnology and PhD in bioscience (2008) under the supervision of Adrienne and James Paton at the University of

Adelaide. His thesis focused on how a new bacterial protein toxin bound to and entered mammalian cells which also yielded a publication in *Nature*. Joining DSTG in 2007, Damien currently leads the biotoxin medical countermeasures work program in the Chemical, Biological, Radiological and Nuclear branch.



Tilly Boleyn
Science Gallery Melbourne

Tilly is a massive nerd who is curious about the world and everything in it. She has a background in museums, galleries, education, festivals, broadcasting and research. Originally a microbiologist, Tilly

ran from the lab into the arms of the Australian Broadcasting Corporation, where she quickly discovered a natural talent as a science gossip – meaning she’s better at talking about other people’s science rather than doing her own. She has curated exhibitions on health, medicine, experimentation, the moon, play, the voice, engineering, waste, sustainability and is now working towards the opening show at Science Gallery Melbourne, MENTAL, and beyond. Tilly is currently delighted by blurring the boundaries between science, art, design, technology, maths, engineering, large-scale-batteries-powered-by-human-urine and doing things she’s told aren’t allowed.



Dr Catherine de Burgh-Day
Bureau of Meteorology

Dr Catherine de Burgh-Day is a research scientist at the Bureau of Meteorology specialising in Earth system modelling on all timescales from predicting the weather to predicting the coming

seasons. After completing her PhD in astrophysics at the University of Melbourne, Catherine joined the Bureau, where she has worked on all aspects of the forecast value chain, from development of the numerical models, understanding the underpinning science, model postprocessing and forecast product development, and engagement with users such as the agriculture industry. Catherine is Vice President of the Royal Society of Victoria and is passionate about science outreach and communication. She is an advocate for careers in science which support a healthy work–life balance, and is also a strong advocate for addressing inequality in science.



Dr Brooke Farrugia
University of Melbourne

Dr Farrugia has a multifaceted research background including biomaterial development and characterisation, wound healing, including in vitro models, molecular biology and glycobiology.

Dr Farrugia’s research interests lie in the fields of biomaterials and tissue engineering, through the development and characterisation of biomaterials and analysis of how they interact with various biological environments. Her research activities and interests lie in the fields of wound healing and tissue regeneration, the molecular mechanisms behind their occurrence, and the development of new therapies.



Dr Timothy Lau
University of South Australia

Dr Tim Lau is a Lecturer of Sustainable Energy Engineering at the University of South Australia. Prior to this role, he was Senior Research Associate at The University of Adelaide, having completed

his PhD in mechanical engineering in 2011 from the same university. His main expertise is in fluid mechanics, turbulence, combustion and renewable energy systems (solar, wind and wave), where he utilises a combination of state-of-the-art experimental techniques, laser diagnostics and computational modelling to advance fundamental understanding in these fields. He also has experience in designing green buildings, having worked both within the industry and academia to reduce the carbon footprint and improve indoor environment quality within the built environment. He was awarded an Endeavour Fellowship award from the Australian Government in 2015 to conduct research at Sandia National Laboratories in the US. He has also been featured in an episode of ABC’s Nexus program on the life of international students in Australia, which was broadcast within the Asia-Pacific region.



Dr Jen Martin
University of Melbourne

Dr Jen Martin worked as a field ecologist before founding the University of Melbourne’s Science Communication Teaching Program which teaches scientists across all disciplines to be

engaging and effective communicators. She also practises what she preaches: she’s been talking about science weekly on 3RRR radio for more than 15 years, hosts podcasts, MCs events, teaches as part of the Homeward Bound Faculty, writes for a variety of publications, and was named the 2019 Unsung Hero of Australian Science Communication. Jen’s first popular science book, ‘Why am I like this? The science behind your weirdest thoughts and habits’ will be published in 2022.



Dr Vanessa Moss
CSIRO

Vanessa is a radio astronomer based at CSIRO Astronomy and Space Science, working at the boundaries between astronomy, telescope operations and data science. She oversees science operations

for the innovative new Australian Square Kilometre Array Pathfinder (ASKAP) telescope, coordinating astronomical observations from specification to the arrival of the data at the Pawsey Supercomputing Centre. She is a strong advocate of a digital-first approach and for the process of optimising all interactions by maximising accessibility, inclusivity, and sustainability. Vanessa is also passionate about ensuring effective career structures for EMCRs, building stronger relationships and development opportunities between academia/industry, and providing equitable and flexible paths across academia.



Dr Elizabeth Pritchard
WALT Institute

Dr Elizabeth Pritchard is a leading international keynote speaker, author, leadership coach and facilitator who specialises in cultivating authentic leadership in STEMM. Her career

incorporates occupational therapy, management, leadership and research, achieving her PhD in 3 years through Monash University in 2015. Elizabeth is the Co-founder and Director of WALT Institute, typically working with institutes, health services and universities where she coaches and trains authentic leadership strategies that promote self-awareness, self-regulation, psychological capital and agency. She is renowned for her ability to empower women in STEMM to believe in themselves, be heard, accomplish greatness and stand out from the crowd.



Dr Megan Sebben
CSIRO

Dr Megan Sebben is the Kick-Start Program Manager in CSIRO’s SME Connect team. In her role she helps Australian start-ups and small businesses access dollar-matched funding and

facilitation to undertake a project with CSIRO, to help grow and develop their business. Megan has extensive experience in environmental research and consulting in both the public and private sectors. Her research interests lie in groundwater modelling, fractured rock, and coastal hydrogeology. Megan joined CSIRO in 2017, where she was a project officer in the STEM Professionals in Schools Program. Since 2019, Megan has been facilitating and supporting a variety of industry–research collaborations through CSIRO Kick-Start.



Dr Cat Vreugdenhil University of Melbourne

Dr Cat Vreugdenhil is a Doreen Thomas Postdoctoral Fellow in the Department of Mechanical Engineering, University of Melbourne. She completed her PhD at the Australian National University,

followed by a three-year postdoctoral research position at the University of Cambridge. Dr Vreugdenhil was recently awarded an ARC DECRA, which she will begin in 2022. Her research interests are Geophysical Fluid Dynamics and Oceanography, where she uses innovative and powerful engineering tools of turbulence-resolving computer simulations to better understand ocean physics with important climate change implications. Dr Vreugdenhil is on the committee for the FEIT Early Career Academic Network and on the Student/Early Career Researcher sub-committee of the Australasian Fluid Mechanics Society.



Dr Jingge Zhu University of Melbourne

Dr Jingge Zhu is a lecturer in the Department of Electrical and Electronic Engineering at the University of Melbourne. Dr. Zhu received his PhD degree from École Polytechnique

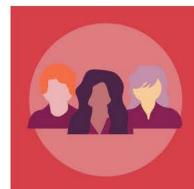
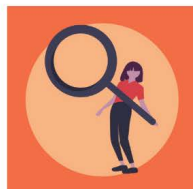
Fédérale de Lausanne (EPFL), Switzerland, and was a post-doctoral researcher at the University of California, Berkeley, USA. He obtained the B.S. degree and M.S. degree from Shanghai Jiao Tong University, China, and the Dipl.-Ing. degree from Technische Universität Berlin, Germany. Dr. Zhu received the Discovery Early Career Research Award (DECRA) from the Australian Research Council in 2021, the IEEE Heinrich Hertz Award for Best Communications Letters in 2013, the Early Postdoc. Mobility Fellowship from Swiss National Science Foundation in 2015.



Dr Zsuzsa Banhalmi-Zakar Responsible Investment Association Australasia

Dr Zsuzsa Banhalmi-Zakar has an extensive track record as a researcher, spending the last nine years in academia. She completed a PhD in sustainable

finance and worked extensively with investors and the not-for-profit sector in the region on topics such as climate adaptation finance, blue finance, and the identification of environmental risks and opportunities. Prior to moving to Australia, she was a senior consultant for Deloitte in Europe where she was first exposed to the power of responsible investment and lending to make a positive difference. Zsuzsa is passionate about helping capital move into ventures that make investments responsible and our world more sustainable for present and future generations. Zsuzsa is an experienced public speaker and a great networker, who is able to engage with multiple industry stakeholders. She has three children, and is passionate about supporting women, mothers and daughters through their careers, PhD and ECR journeys.



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About the EMCR Forum

The Early- and Mid-Career Researcher Forum (EMCR Forum) is the national voice of Australia's emerging scientists, representing researchers who are up to 15 years post-PhD (or other research higher degree), irrespective of their professional appointment or their discipline or research. The EMCR Forum's mission is to champion improvement in the national research environment through advocacy. Some of the main areas of focus for the EMCR Forum are sustainable and transparent career structures, gender equity, stable funding policies, career development opportunities, and raising awareness of issues facing the future of science.

Science Pathways is the national meeting of the EMCR Forum. It is the premier conference for career development of EMCRs from academia, industry and government, and provides a unique

opportunity for professional development, networking, and collaboration. Participants are able to meet and engage with leading scientific professionals from some of Australia's top organisations in public and private enterprise. It also provides EMCRs an opportunity to have a say on issues relevant to EMCRs themselves.

The EMCR Forum is supported by the Australian Academy of Science which provides secretariat and other support for the Forum and its activities. This is a key strategic activity of the Academy and underpins its commitment to support the future of science in Australia.

science.org.au/emcr-forum



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EMCR Forum Executive Committee members

Dr Yee Lian Chew (Chair)

NHMRC Fellow
Flinders University

**Dr Zsuzsa Banhalmi-Zakar
(Co-Deputy Chair)**

Research Manager
Responsible Investment Association
Australasia

Dr Timothy Lau (Co-Deputy Chair)

Lecturer
University of South Australia

Dr Vipul Agarwal

NHMRC Fellow
University of New South Wales

Dr Michelle Christie

Research Fellow
University of Melbourne

Dr Raffaella Demichelis

Senior Research Fellow
Curtin University

Dr Jinzhe (James) Gong

Lecturer
Deakin University

Dr Mary McMillan

Senior Lecturer in Biomedical Science
University of New England

Dr Vanessa Moss

Postdoctoral Researcher
CSIRO

Dr Maithili Sashindranath

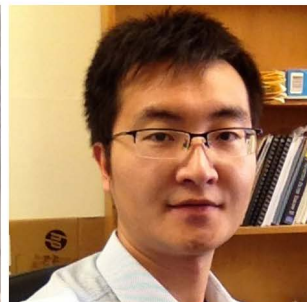
Deputy Laboratory Head
Monash University

Dr Patrick Taggart

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