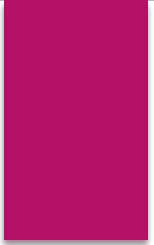


Empowering Connections in STEMM



www.womeninscienceaust.org





Women in STEMM Australia acknowledges, recognises and respects the Elders, families and forebears of the Boonwurrung and Wurundjeri people of the Kulin nation who are the traditional owners of the land where we are located.

We also recognise their continuing connection to country and community, and recognise them as Australia's first peoples.

We acknowledge and value Aboriginal science and Australia's first women in STEMM.



ACKNOWLEDGEMENT TO COUNTRY



Women in STEMM Australia

Women in STEMM Australia is a non-profit organisation founded in 2014 which has grown into a nationally recognised association for women in science, technology, engineering, mathematics and medicine (STEMM).

Our over-arching goal is to connect women in STEMM regardless of their discipline and profession. The momentum this has stimulated is exciting! Our website and social media profiles are our primary engagement platform and through these we connect with extraordinary people – hearing their stories, ideas and opinions, and networking.

Increased gender equity and diversity benefits everyone. If you identify as a woman in STEMM, or you are someone championing change in STEMM, then Women in STEMM Australia is for you. Men and women are encouraged to join - we welcome all. We adhere to the highest ethical standards and advocate increased diversity and respect amongst women in STEMM. Our philosophy is "Pay It Forward".

Visit www.womeninscienceaust.org to learn more.



Foreword

By Breana Galea

I have lived in the STEMM world all my life. With two scientists as parents, I constantly heard odd terms like 'haemoglobin' and 'lactic acid build-up' from an early age. Almost inevitably, my curiosity regarding my surroundings became unquenchable (as it is for so many in these fields). It is here that my passion for science was catalysed.

Yet, although I lived with a woman in STEMM in my own house, when asked to draw a typical scientist in class, I drew an aging, Caucasian male (complete with wild hair, glasses, a lab coat and test tubes, of course). I had Albert Einstein in mind, as did many of my classmates. Not once did Marie Curie, Rosalind Franklin, Mary Anning, nor the multitudinous other women in STEMM come to mind. I can assure you, this is no longer the case!

My mother is the co-founder of Women in STEMM Australia and she is a scientist to this day. It is through her experiences and my exposure to countless women in STEMM that my love for the world of science and technology is constantly renewed. I couldn't imagine my life without these endless sources of inspiration and I hope this book is able to offer this same sense of awe to other aspiring people in STEMM. The women contained within this book are truly brilliant, and they are just a few of the many.

STEMM is a field where people are united towards a common cause; advancing humanity as a whole. There is no doubt in my mind that the field of STEMM should reflect society's values; those of diversity and equality. Seeing women, of all unique backgrounds and lives, has continuously given me, and others, the courage to pursue STEMM. Anyone could be the next catalyst. Even me.



Phenomenal Women in STEMM

1. PROFESSOR SHARON LEWIN
2. PRAJAKTA BHAGWAT
3. SARAH CHAPMAN
4. JACINTA DUNCAN
5. ASSOCIATE PROF. MADHU BHASKARAN
6. MARNIE GRACO
7. MARIJA JOVANOVIĆ
8. KRISTINE HENDRY
9. DR MISTY JENKINS
10. DR REBECCA KOSS
11. DR ALDEIDA ALETI
12. DR ANNABELLA NEWTON
13. AMY SEARLE
14. CHARLES GRAY
15. DR ELAINE SAUNDERS
16. ASSOCIATE PROF. SALLY MALE
17. DR MAIA SAUREN
18. DR EMMA BURROWS
19. MICHELLE GALLAHER
20. DR MARGUERITE EVANS-GALEA

1. PROFESSOR SHARON LEWIN

 @ProfSharonLewin

*Director and Professor
Peter Doherty Institute for Infection and Immunity*

Professor Sharon Lewin FRACP FAHMS is the inaugural Director of the Peter Doherty Institute for Infection and Immunity, a Professor of Medicine at The University of Melbourne, a consultant infectious diseases physician at the Alfred Hospital, Melbourne, Australia, and a National Health and Medical Research Council (NHMRC) of Australia Practitioner Fellow.

Sharon is an infectious diseases physician and basic scientist and was previously Director of the Department of Infectious Diseases, Alfred Hospital and Monash University and co-head of the Centre for Biomedical Research, Burnet Institute.

Sharon is an infectious disease expert and leads a large multi-disciplinary research team that focuses on understanding why HIV persists on treatment, and developing clinical trials aimed at ultimately finding a cure for HIV infection. Her other research and clinical interests include understanding how the immune system recovers following treatment of HIV and the interaction between HIV and other important co-infections including hepatitis B virus. She is widely recognized for her innovative work in understanding how HIV hides on treatment using novel laboratory models and leading several early phase clinical trials of cancer drugs that alter HIV genes.

Sharon was the local co-chair of the 20th International AIDS Conference (AIDS2014), the largest health conference ever held in Australia. She is a member of the Council of the NHMRC and chairs the NHMRC Health Translation Advisory Committee. Sharon is a Fellow of the Royal Australasian College of Physicians (FRACP) and a Fellow of the Australian Academy of Health and Medical Sciences (FAHMS).



"... choose your battles, have confidence and stick with your vision and look after yourself, your colleagues and your younger staff at all times"



YEAR 12 SUBJECTS

Physics
Chemistry
English
Music (piano)

Pure Mathematics
Applied Mathematics
Hebrew



COLLEGE OR UNIVERSITY

Bachelor of Medicine, Bachelor of Surgery
with Honours (MBBS Hons)
Doctor of Philosophy (PhD)

2. PRAJAKTA BHAGWAT

*Engineer and Project Manager
Seqirus, CSL*

Prajakta is a Chemical Engineer in the industry sector. She did her Bachelor in Engineering in India, graduated with a Masters, and then worked in the United States for eight years. Prajakta recently moved to Australia with her family.

Prajakta is a Project Manager at Seqirus (a CSL company) which is a pharmaceutical world leader producing pandemic flu-vaccine, antivenins, antitoxins, and immunohematology products. She is an expert in people leadership, stakeholder management, feasibility studies, consulting and sustainability.

Drawing on an authentic and rigorous blend of communication, interpersonal and technical skills; she ensures results meet technical, quality, schedule and cost requirements. Prajakta enjoys sailing, community gardening, archery and hiking.

With a strong connection and commitment to her multicultural family, Prajakta is a proud daughter, sister and wife.



"My advice to students and early career professionals is learn to work with people of all backgrounds and trades. Embrace diversity and inclusivity. Believe in yourself and boldly approach experts with queries"



YEAR 12 SUBJECTS

Biology
Advanced Mathematics
Social sciences
English
Chemistry
Physics
Languages (four)



COLLEGE OR UNIVERSITY

Bachelor of Chemical Engineering (BEngg)
Masters of Chemical Engineering (MEngg)

3. SARAH CHAPMAN



Science Teacher, Head of Department
Department of Education and Training QLD

Ms Sarah Chapman is Head of Department at the Department of Education and Training (Queensland). She graduated from the James Cook University (JCU) with a Bachelor of Science (Honours Class 1) in 1999 and a Bachelor of Education in 2004.

Sarah has been instrumental in the development and implementation of the Australian School Innovation in Science, Technology and Mathematics project which aims to develop specific skills and an interest in science in middle school students. This project has promoted teacher confidence in teaching science and improved school links with the community and JCU, and has facilitated an easier transition for students from primary to secondary school.

Sarah's work has been recognised with a prestigious Peter Doherty, Outstanding Teacher of Science Award in 2008 and an Australian Award for Teaching Excellence in 2009 (Teaching Australia). In 2010 Sarah was awarded the James Cook University Alumni – Outstanding Early Career Award. In 2013 Sarah received the Prime Minister's Secondary Science Teaching Prize. In 2014 she was selected as a Queensland Government Science Champion and Sarah's innovative teaching strategies have been featured on ABC's Lateline.

Sarah serves on the Board of Women in STEMM Australia and has received the Barbara Cail STEM Fellowship with Chief Executive Women Australia. In 2018 Sarah became a STEM Ambassador with Science and Technology Australia.



"What I love most about science is that it is everywhere and so dynamic. It is a platform that allows me to always keep on learning, which is the best thing you can ask for, constantly challenged and constantly getting to experience that sense of wonder!"



YEAR 12 SUBJECTS

English
Biology
Physics
English
Mathematics B
Chemistry
Art



COLLEGE OR UNIVERSITY

Bachelor of Science with Honours (BSc Hons)
Graduate Bachelor of Education (GBE)

4. JACINTA DUNCAN

Director and CEO
Gene Technology Access Centre

Jacinta has 20 years' experience in education and instructional design, applying her passion for the life sciences to creating immersive learning journeys for teachers, students and the public.

Jacinta assumed the role of Director of the Gene Technology Access Centre (GTAC) in 2012. Working closely with the GTAC team, she has increased student participation in programs from 7,000 to 100,000 annually through strengthening on-site programs, developing outreach and virtual learning initiatives and growing capabilities and connections that position GTAC as a world class education facility.

Jacinta applies the tools of scientists, such as bioinformatics programs and the latest research technologies, to enhance the learning journey and increase awareness of convergence science, allowing students to experience the interdisciplinary nature of science in Victoria. Her experience in scientific research provides strengths in communicating with scientists and translating their research. She is a contributing author to Nelson Biology text books and has participated in committees that inform the development of the Australian Biology curriculum.

Jacinta brings together academics in education and science, providing a platform for education research to emerge from GTAC.



"Find your point of difference and build your vision around this"



YEAR 12 SUBJECTS

Biology
Chemistry
Mathematics
European History
English



COLLEGE OR UNIVERSITY

Bachelor of Biological Science (Honours)
Diploma of Education
Graduate Certificate in Principal Preparation

5. A/PROF MADHU BHASKARAN @madhu_bhaskaran

Engineer and Associate Professor
RMIT University

Dr Madhu Bhaskaran is an engineer and Associate Professor at RMIT University where she co-leads the Functional Materials and Microsystems Research Group. Madhu is also the Associate Dean for Higher Degrees by Research at the School of Engineering.

Madhu has won several awards and fellowships for her research including competitive Australian Research Council Postdoctoral Fellowship and Australian Research Council DECRA Fellowship. She has also won a Victoria Fellowship and was named one of Top 10 Innovators under 35 for Asia (MIT Technology Review 2016).

A staunch advocate for women in science, Madhu is a co-founder of the Women Researchers' Network at RMIT University. She is also a Board member with Women in STEMM Australia. In 2017 she was recognised with the Eureka Prize for Outstanding Early Career Researcher and also named as one of Australia's Most Innovative Engineers by Engineers Australia.

Madhu's research interests include functional oxide thin films, wearable technologies and stretchable electronics. She recently won the Australian Academy of Technology and Engineering's Batterham Medal, the APEC Science Prize for Innovation, Research and Education, and the Victorian QuickFire Challenge: Driving Device Innovation.



"What gives me happiness is that I have managed to do many things beyond research in my career so far – this includes mentoring PhD students and postdocs, holding leadership positions ... as well as contributing to the gender diversity space through my roles in Women Researchers' Network at RMIT [University], and nationally through Women in STEMM Australia"



YEAR 12 SUBJECTS

Mathematics
Biology
Physics

Biology
Chemistry
English



COLLEGE OR UNIVERSITY

Bachelor of Engineering (BE)
- Electronics and Communication
Master of Engineering (ME)
- Microelectronic Engineering
Doctor of Philosophy (PhD)
- Electronic Materials Engineering

6. MARNIE GRACO

*PhD Student and Physiotherapist
Spinal Research Institute*

Marnie is a physiotherapist with a Master of Public Health. She has over 12 years experience in the management of clinical research projects. Marnie currently works at the Institute for Breathing and Sleep as Program Manager of the Sleep Health in Quadriplegia research, and at the Spinal Research Institute where she is developing an international network of early career researchers.

Marnie is also a PhD student with The University of Melbourne, Department of Medicine, based at the Institute for Breathing and Sleep at Austin Health. Marnie received the Spinal Cord Injury Network's inaugural PhD Scholarship in 2014 and a National Health and Medical Research Council (NHMRC) Scholarship in 2015.

Marnie's research aims to understand the issues faced by individuals with spinal cord injury, and their clinicians and hospitals, in managing obstructive sleep apnoea. One component of Marnie's PhD involves developing a more practical approach to detecting obstructive sleep apnoea in acute tetraplegia.

Marnie was recently a grand finalist in The University of Melbourne's "3 minute thesis" (3MT) competition in 2018.



*"The best advice I've ever received is to
'Feel the fear and do it anyway'"*



YEAR 12 SUBJECTS

Biology
Chemistry
Mathematical Methods
Human Development
English



COLLEGE OR UNIVERSITY

Bachelor of Physiotherapy (BPhys)
Masters of Public Health (MPH)
Doctor of Philosophy (PhD)
- clinical research (in progress)

7. MARIJA JOVANOVIĆ

 @maz_jovanovich

*Wing Commander and Test Pilot
Royal Australian Air Force*

Marija joined the Air Force in 2001, and in 2004 graduated from UNSW with a Bachelor of Science majoring in mathematics and physics, with first class Honours and a University Medal in Physics. Presented with an opportunity for post-graduate study, she decided to delay it in favour of pursuing her dream of flying, and commenced pilot training in 2005.

After pilot training, Marija was posted to the AP3C Orion aircraft, based in Adelaide. Over the next few years, she flew Orions on operations all over the world. In the midst of her operational service, she earned her Masters in Systems Engineering in 2013.

In 2013, Marija attended the United States Air Force Test Pilot School, a prestigious institution that has graduated less than 3000 students in more than 70 years of operation. Test Pilot School combined a two-year MSc program compressed into 48 weeks with flying 23 different types of aircraft, in pursuit of the perfect balance of deep theoretical understanding and practical application.

Marija says the aircraft were effectively exciting (and sometimes terrifying) laboratories for exciting (and sometimes terrifying) experiments. Marija graduated in 2014 as an experimental test pilot and distinguished graduate of the Test Pilot School, and the first Australian in 25 years to complete the course.

On return from the US, Marija worked as a test pilot at the Aircraft Research and Development Unit. A highlight included turning an Orion into a flying wind tunnel by sticking thousands of tufts onto the airframe in order to explore some interesting aerodynamic phenomena. She currently works as a Wing Commander at No. 10 Squadron, flying Orions and teaching and leading the next generation of aviators.



"Early in my career, I tried to hide my intellectual bend. When I finally stopped, I became a much better operator and leader"



YEAR 12 SUBJECTS

Mathematics with Calculus
Mathematics with Statistics
Chemistry
Physics
English



COLLEGE OR UNIVERSITY

Bachelor of Science (Mathematics and Physics), 1st Class Honours (BSc Hons I)
Masters of Systems Engineering (MSE)
Masters of Science (MSc, Flight Test Engineering)
Air University USA [This degree is part of Experimental Test Pilot qualification]

8. KRISTINE HENDRY

Senior Executive Officer
Spinal Research Institute



Kristine is Senior Executive Officer at The Spinal Research Institute. Her role draws together her background in business management, her recent experience in the not-for-profit sector, and a desire to make a positive social impact.

Kristine's career began in industry at a global technology company where she managed large-scale client engagements, and held leadership positions in account management, program management and business development.

Changing direction to the not-for-profit sector, Kristine managed events and raised funds for a medical research funding body. She has also volunteered extensively with charities and organisations in her local community.

Kristine has been recognised for her service-oriented and collaborative approach, and thrives when she is building relationships and making a positive difference for her organisation, clients and community.



"I believe a team is more likely to pull together when their leader is "one of them" - someone who listens to them, acts with empathy, works along side them, and supports them"



YEAR 12 SUBJECTS

Mathematics A (Methods)
Chemistry
English

Physics
Art



COLLEGE OR UNIVERSITY

Bachelor of Applied Science
- computer science

9. DR MISTY JENKINS

 @DrMistyJenkins

Laboratory Head and Cellular Immunologist
Walter and Eliza Hall Institute of Medical Research

Misty has had a long standing interest in cytotoxic lymphocyte biology and has spent the past ten years investigating how killer lymphocytes acquire the ability to kill cancer cells, and how they deliver the lethal hit. After a successful PhD at the University of Melbourne, she went to the United Kingdom for postdoctoral training at The University of Oxford and the Cambridge Institute of Medical Research. Misty was awarded a CJ Martin Biomedical Fellowship and a RG Menzies Fellowship, and was appointed a Fellow of The University of Cambridge. Misty was the first Indigenous Australian to attend these prestigious Universities.

Misty investigates cancer and inflammation, including brain cancer. She has received many awards for her research and leadership including the L'Oreal for Women in Science Fellowship for Australia, the National Association of Research Fellows 'Investigator of the year' for Australia 2012, the 2015 Tall Poppy Award and the 2018 CSIRO Indigenous STEM Awards.

Misty is a passionate and engaging public speaker about the sciences and raising public awareness of the importance of medical research. She is involved with various programs aimed at increasing young peoples engagement in science and education, particularly Indigenous students. Misty serves on the Board of Directors for the Aurora Education Foundation (which supports Indigenous students to excel at school and into their university studies); the governing board and scientific advisory panel for the National Centre for Indigenous Genomics (NCIG) at Australian National University in Canberra, and the Federal government's expert working group for "Indigenous engagement in the sciences" which helps to shape public policy.



"I love the discovery, I love the creativity of brainstorming a problem, and designing an approach to tackle it. Science is all around us, and is just about making observations and interpretations. How could you not love that?"



YEAR 12 SUBJECTS

Physics
Chemistry
Mathematical Methods
English
Health
Theatre
Drama



COLLEGE OR UNIVERSITY

Bachelor of Science with Hons (BSc Hons)
- Microbiology, Immunology and Cell Biology)
Doctor of Philosophy (PhD)
- Immunology

10. DR REBECCA KOSS



Senior Science Writer
Office of the Commissioner for Environmental Sustainability

Dr Rebecca Koss has more than 17 years' experience in environmental and conservation policy and science. In September 2017, she joined the Office of the Commissioner for Environmental Sustainability as a Science Writer. As a marine scientist, Rebecca brings to the role an impressive amount of knowledge from within the water industry in Victoria. She is currently writing the 2018 State of the Yarra and its Parklands report. She served as a board member of the Central Coastal Board, one of three regional coastal planning advisory bodies appointed by the Minister for Environment, Climate Change and Water. Rebecca has a reputation for her knowledge across environmental stewardship; environmental policy and strategy analysis and implementation and stakeholder relations.

Rebecca has worked as an Environmental Strategy Coordinator with the Port Phillip and Western Port Catchment Management Authority, a Postdoctoral Fellow at Deakin University, a Knowledge Broker for the Environmental Protection Authority, a Postdoctoral Fellow at the University of Liverpool and a Sea Search Program Manager for Parks Victoria. Rebecca has contributed significantly to the field of environmental stewardship in nature conservation. She has also led research on public attitudes towards Victorian coasts and Australian Federal marine waters to address gaps in policy frameworks and evaluate current state of planning processes.

Rebecca has a PhD in Conservation and Environmental Management, a Bachelor of Science, and is currently completing a Global Executive MBA at Monash University. She is a 2018 Monash Business School Women in Leadership and Women in Sustainable Enterprise Scholarship recipient, a 2017 recipient of the Joan Kirner Young and Emerging Leaders Program and received the Parcs Canada CEO Awards for Excellence in 2015.



"Having mentors at each stage, and across various roles, of my career has facilitated my success"



YEAR 12 SUBJECTS

Biology
Chemistry
Advanced Mathematics
English
Hebrew
Physics



COLLEGE OR UNIVERSITY

Bachelor of Science with Honours (BSc Hons)
Doctor of Philosophy (PhD)
- Conservation and Environmental Management
Global Executive Masters of Business Administration (MBA - in progress)

11. DR ALDEIDA ALETI

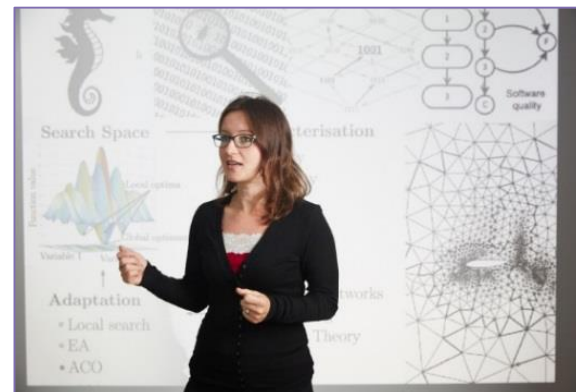
Information Technologist, Senior Lecturer
Monash University

Aldeida was born in communist Albania and during the time its leader isolated the country from the rest of the world. Aldeida attended high school in Tirana in the midst of the transition to democracy. As new opportunities opened up to study abroad, she was offered a scholarship to study computer engineering in Istanbul. After graduating summa cum laude, Aldeida went to Ilmenau in Germany, where she worked as a research assistant in a novel communication model for the development of distributed streaming platforms.

In 2008, Aldeida accepted a PhD scholarship offer to study in 'the lucky country' – Australia. Despite knowing very little about it, she was lucky enough to choose Melbourne as her next home, where she met her husband, Torgeir; another fortunate occurrence. Together they enjoy the outdoors, with a particular passion for cycling, running, and hiking, especially when mountain summits are involved.

Upon finishing her PhD in 2012, Aldeida was employed as Senior Lecturer at the Faculty of Information Technology, Monash University. While her work on using adaptive optimisation has had an impact on the research community and industry, it is her recent ideas about understanding what makes problems hard to optimise that seem poised to have the most enduring impact for their opportunity to change research practice. To further develop these ideas Aldeida was the recipient of a Discovery Early Career Researcher Award in 2013.

Having received excellent mentorship over the years from senior colleagues at Monash, she gives back by mentoring PhD students and Early Career Researchers at her Faculty and research community more broadly.



"When I doubt myself, I listen to those who don't"



YEAR 12 SUBJECTS

Biology
Chemistry
Algorithms
Programming

Mathematics
Physics
English



COLLEGE OR UNIVERSITY

Bachelor of Computer Engineering (BEngg)
Doctor of Philosophy (PhD)

12. DR ANNABELLA NEWTON

 @bellatronic

*Patent and Trade Marks Attorney
Phillips Ormond Fitzpatrick*

Annabella completed her PhD in Organic Chemistry at the University of Nottingham, where her studies were sponsored by AstraZeneca. In 2010, Annabella moved to Melbourne to take up a postdoctoral fellowship at CSIRO, based at Bio21. She also worked in partnership with the University of Sydney's Chemistry and Chemical Engineering departments. Her research career has produced several publications in high impact journals such as Chemical Science and the Journal of American Chemical Society.

In 2013, Annabella joined the Chemistry and Life Sciences team at Phillips Ormonde Fitzpatrick, one of Australia's leading intellectual property law firms. She completed a Masters in Commercial Law at the University of Melbourne and registered as a patent and trade marks attorney in 2016. Annabella is interested in the strategic role of intellectual property (IP) in the commercialisation process, and assists clients by providing tailored IP advice aligned with their business goals.

Annabella was a co-founder of the medtech startup Hemideina which led to the development of a new approach to hearing devices. Hemideina was an award winner at MedTech's Got Talent 2016. Annabella is now an Innovation Mentor with CSIRO's ON Program.

Annabella has always been involved in the wider scientific community, and is a member of the Board for Women in STEMM Australia and a past-President of the Royal Australian Chemical Institute's Women in Chemistry group.



"Network as much as you can, meet as many people as possible, and make the effort to build a network of contacts as this will help you as much as your technical skills"



YEAR 12 SUBJECTS

Chemistry	Physics
Mathematics 1 (Methods)	Biology
English	(A levels in UK)



COLLEGE OR UNIVERSITY

Masters of Chemistry (MChem)
Doctor of Philosophy (PhD)
- organic chemistry

13. AMY SEARLE

*Kamilaroi PhD Student
Baker Heart and Diabetes Institute*



Amy is a Kamilaroi PhD student at the Baker Heart and Diabetes Institute. She completed her VCE at Catholic Regional College Sydenham, in Melbourne's Western suburbs and after receiving a better ATAR than expected, she pursued a career in science – something she had always been interested in but never thought possible as science was for the 'smart kids'.

Being the first in her family to attend university, Amy embraced every opportunity available; she spent a semester studying abroad at State University New York and completed volunteer programs in India and Peru. Upon graduating, Amy completed her Honours at the Baker Institute where she explored the role of TCR gamma delta T cells in atherosclerosis development. She then went on to be a research assistant within the Atherothrombosis and Vascular Biology Laboratory at Baker Institute before starting a PhD.

Amy's PhD investigates novel, targeted therapeutics towards cardiovascular diseases such as heart attack, deep vein thrombosis and abdominal aortic aneurysm. She is a recipient of a National Heart Foundation Australian Indigenous Scholarship and has recently published her first manuscript in Molecular Therapy.



"We need to ensure STEMM women and those from under-represented groups have access to professional development, resources and mentorship so they can not only attain, but also succeed in a senior role"



YEAR 12 SUBJECTS

Health & Human Development English
VET – Hair & Beauty Biology
Further Mathematics



COLLEGE OR UNIVERSITY

Bachelor of Biomedical Science (Honours)
Doctor of Philosophy (PhD)
- In progress

14. CHARLES GRAY

PhD Student
La Trobe University

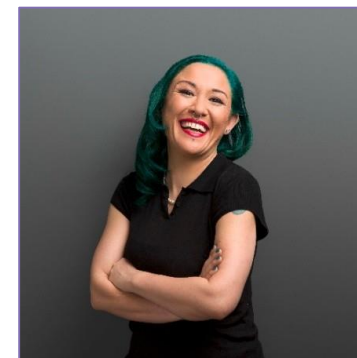


Charles is a Mathbassador with the Australian Mathematical Sciences Institute, statistical data scientist, and classically-trained pianist.

Charles changed her name because it felt like no-one believed, as a girl, she could play rhythm-section jazz.

Charles is a PhD student in mathematics at La Trobe University. She has been Secretary of the Victorian branch of the Statistical Society of Australia and is Treasurer of Supporting Women in Science.

Charles is a Choose Maths Ambassador with the Australian Mathematical Sciences Institute and the Student Affiliate with Women in STEMM Australia.



"Studying music forces you to work autonomously and work on unsolvable problems on your own - just like maths. Maths is for everyone – just like music"



YEAR 12 SUBJECTS

Music performance
Music history
English

Mathematics B (Methods)
Legal Studies
History



COLLEGE OR UNIVERSITY

Bachelor of Arts (BA)
- cinema studies and literature
Bachelor of Music (BMus)
- piano and musicology
Bachelor of Science with Honours (BSc Hons)
- pure mathematics
Doctor of Philosophy (PhD)
- pure mathematics

15. DR ELAINE SAUNDERS

*Entrepreneur and CEO
Blamey Saunders Hears*



Elaine Saunders is co-founder and Executive Chairman of Blamey Saunders hears, a profit-for-purpose hearing aid and telehealth company. Elaine is an advocate for people with hearing loss and aims to reduce the barriers to quality hearing care and hearing aids. In 2018 the Blamey Saunders' Facett® modular hearing aid won the Australian Good Design of the Year Award, CSIRO Innovation Award and was Best in Class for the Social Impact and Medical / Scientific design categories. It won a Gold Medal at the Melbourne Design Awards and three Australian Information Industry Association iAwards (VIC). In 2015 the Blamey Saunders IHearYou® self-fit hearing aid system received the Australian Good Design Award for Social Innovation.

Elaine has received the BioMelbourne Network's Women in Leadership Award, AFR/Westpac's 100 Women of Influence, and the ATSE Clunies Ross Medal for Entrepreneur of the Year. Elaine is Chair of Swinburne University's Innovation Precinct Advisory Board, and a Non-Executive Director of the Australian National Fabrication Facility, the Australian Innovation Research Group, and the National Foundation for Medical Research and Innovation.

Elaine's father, an engineer, lost his hearing when she was young, so she decided to volunteer as "house mother" at the Derby School for the Deaf during school holidays. She was so shocked at the poor outcomes available to the majority of the students that she wanted to do something to make a difference. Her father advised her she would need to study science to get into this research area, hence her high school subject and undergrad degree choices. She studied double maths, physics and chemistry for her "A" levels (final year of UK high school), majoring in Chemical Physics for her undergrad degree at Manchester University, to gain entry to the Masters program in audiology.



Elaine's father, an engineer, lost his hearing when she was young, so she decided to volunteer as "house mother" at the Derby School for the Deaf during school holidays. She was so shocked at the poor outcomes available to the majority of the students that she wanted to do something to make a difference



YEAR 12 SUBJECTS

Mathematics 1 (Methods) Physics
Mathematics 2 (Specialist) Chemistry
English (A levels in UK)



COLLEGE OR UNIVERSITY

Bachelor of Chemical Physics
Masters in Audiology
Doctor of Philosophy (PhD)

16. A/PROF SALLY MALE

*Engineer and Associate Professor
University of Western Australia*



Born in Western Australia, Sally completed most of primary school in the South-West coal-mining town of Collie, before attending schools in Wales and England, and returning to Perth for high school. Her background is in electrical engineering. Her qualifications are a Bachelor of Engineering with honours in control and communications, and a PhD on competencies required by engineers, are from The University of Western Australia (UWA).

Sally has taught electrical engineering at UWA, and at Curtin University where she also managed the Women in Computing and Engineering Project. She is currently Chair of Engineering Education and a Research Associate Professor leading her own competitive grants at UWA. Her research interests are curriculum development, development of capabilities for engineering practice, and gender inclusivity.

Sally collaborates with academics, students, industry, Engineers Australia, and the Australian Council of Engineering Deans. She enjoys the honour and responsibilities of being a Fellow, Engineers Australia; Governance Board Member, Engineering Institute of Technology; Editorial Board Member, Australasian Journal of Engineering Education; Advisory Council Member, Women in Oil and Gas – Perth, Governing Board Member, Research in Engineering Education Network; and as a Member of the UWA ATHENA SWAN Self-Assessment Team. Sally is also a Board member with Women in STEMM Australia.



“To improve gender balance in senior ranks of scientists and engineers, it is essential that women and men are supported to understand the factors that contribute to the imbalance. Women and men must recognise these factors to proactively eliminate the problems”



YEAR 12 SUBJECTS

Mathematics II (Methods) Chemistry
Mathematics III (Specialist) Physics
German English Literature
English



COLLEGE OR UNIVERSITY

Bachelor of Engineering – Electrical
with Honours (BE Hons)
Doctor of Philosophy (PhD)

17. DR MAIA SAUREN

 @sauramaia

*Business Analyst, Iteration Manager, Agile Coach
Thoughtworks*

Maia is often preoccupied with science education, diversity in technical fields, open information, and how emerging software interacts with science and biotechnology.

Maia was co-chair of Open Knowledge Australia, a not-for-profit organisation dedicated to helping individuals and organisations share data, information and resources. She has been heavily involved in forming the Open Knowledge community in Melbourne and beyond. In 2013, Maia started HealthHack, a weekend hackathon bridging the gap between scientists and software technologists, that has since grown into a national annual event.

Maia has also been an executive committee member of Australian Science Communicators, and has been involved in science communication in various media. Her PhD from RMIT University was determining the effect of anatomic variations on radiofrequency compliance of mobile phones.

Maia is a Business Analyst, Iteration Manager and Agile Coach for ThoughtWorks, an international software consultancy. Most recently she was part of an international team customising an open source medical records system for use on tablets, as part of the Ebola response in Sierra Leone. Maia serves on the Board of Women in STEMM Australia.



"My advice for being better at working with others is try to get better at 'humaning'. Get therapy. Learn about communication and conflict resolution. Poke through those management books everyone recommends. Read about privilege. Read stuff written by the underprivileged"



YEAR 12 SUBJECTS

Mathematics Specialist French
Mathematics Methods English
Physics
Chemistry



COLLEGE OR UNIVERSITY

Bachelor of Engineering (BE)
- Electrical and Computing
Doctor of Philosophy (PhD)
- Electrical Engineering

18. DR EMMA BURROWS



*Research Fellow and Team Leader
Florey Institutes of Neuroscience and Mental Health*

Dr Emma Burrows is a NHMRC-ARC Dementia Research Development Fellow and leads a research program aiming to understand the neurobiology underlying cognitive disorders, at the Florey Institute of Neuroscience and Mental Health.

Emma's research utilises animal models to investigate how genes and environment interact to produce phenotypic changes relevant to autism spectrum disorder. Her goal is to help improve treatments for major psychiatric illnesses through high quality basic neuropsychiatric research. Emma believes that breakthroughs in this field will be made by interdisciplinary teams embracing novel technologies, and intends to lead such a team in the future.

Emma is an ambitious scientist who has won a prestigious Victoria Fellowship and a Young Researcher Exchange Award from the Australasian Neuroscience Society and the Federation of European Neuroscience Societies.

Emma is co-founder of the Florey's Committee for Equality in Science, a founding executive member of the Women in Science Parkville Precinct, and a Board member of Women in STEMM Australia.



"Sometimes things might feel difficult. Don't fear these moments. It means you're doing something new. Something great. You are pushing the boundaries. The best will come from these moments"



YEAR 12 SUBJECTS

*Chemistry
Mathematics (Methods)
English
Photography*



COLLEGE OR UNIVERSITY

*Bachelor of Biomedical Science (Honours)
- neuroscience
Doctor of Philosophy (PhD)
- neuroscience*

19. MICHELLE GALLAHER

*Executive, Entrepreneur
The Social Science
Women in STEMM Australia*



Michelle is Co-Founder and Director at The Social Science and co-founder, co-Chair and Creative Director of Women in STEMM Australia. After 25 years in biopharma marketing and advocacy, Michelle recognised the emergence and strength of social media as one of the most powerful marketing communication and industry engagement tools since newsprint, founding The Social Science in 2014. Her expertise encompasses healthcare and biotechnology having worked in biotech start-ups, major teaching hospitals, research organisations and pharmaceutical companies throughout her career.

As former CEO of the BioMelbourne Network, Michelle developed an international professional network. An influential advocate who is passionate about small business and entrepreneurship, Michelle champions greater representation of women in science, technology, engineering, mathematics and medicine (STEMM) leadership roles in Australia to stem the tide of women dropping out of STEMM mid-career.

Michelle is also a TEDx Melbourne alumni, an avid blogger and tweeter, and regularly speaks on innovation in Australia and women in leadership. and is keen to encourage more women in STEMM to become entrepreneurs and innovators.

In 2017 Michelle was named Telstra Business Woman of the Year for Victoria at the Telstra Business Women's Awards, and inducted into the Victorian Honour Roll of Women.



"I'm officially reclaiming 'ambitious woman' and adding it to the list of positive feminine attributes for which to strive"



YEAR 12 SUBJECTS

*Biology
Legal
Politics*

*English Literature
Art*



COLLEGE OR UNIVERSITY

*Graduate Diploma of Business
Graduate Certificate of Marketing
Diploma of Applied Science (Orthoptics)
Your Leadership Voice
Australian Institute of Company Directors (AICD)
Masters of Business Administration (ongoing)*

20. DR MARGUERITE EVANS-GALEA @MVEG001

*Scientist, Executive, Entrepreneur
Australian Academy of Technology and Engineering
Women in STEMM Australia*

Marguerite is Executive Director of the Industry Mentoring Network in STEM with the Australian Academy of Technology and Engineering (ATSE), and co-founder, co-Chair and CEO of Women in STEMM Australia. She is also Honorary at the Murdoch Children's Research Institute and The University of Melbourne.

With a PhD in molecular biology and over 15 years experience leading medical research programs in cell and gene therapies at world-leading organisations in the United States and Australia, Dr Evans-Galea's research and leadership has been internationally recognised with numerous awards. She is currently Australasian Associate Editor for the Springer-Nature journal Gene Therapy.

An internationally recognised advocate for equity and equality, Marguerite is an active contributor to this debate through Women in STEMM Australia and the Asia-Pacific Economic Cooperation Women in STEMM initiative. She also served on the Science in Australia Gender Equity Expert Advisory Group since inception. She currently serves on the first Ministerial Council for Women's Equality in Victoria.

A strong advocate for STEMM research, education and innovation, Marguerite has served with advisory groups in State and Federal governments, and communicates regularly on a range of science-related topics via social and mainstream media. Marguerite has received an Australian Leadership Award, and is an Ambassador for the Victorian Honour Roll of Women, as well as the Scienceworks museum.



"We must move beyond the way things have been done for the past 50 years and embrace equality, equity and diversity in every aspect. People make research and innovation happen. People can drive transformational cultural shifts. Let's tune out the noise and proceed with gusto!"



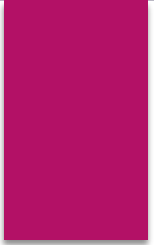
YEAR 12 SUBJECTS

Mathematics II (Methods) Physics
Biology Music
Chemistry English



COLLEGE OR UNIVERSITY

Bachelor of Music (BMus) Classical Performance
Bachelor of Science (BSc) Molecular Biology
Postgraduate Diploma of Science (PGDipSc)
Doctor of Philosophy (PhD) Genetics



Women in STEMM Australia thanks all contributors to this book for openly sharing their personal and professional experiences in science, technology, engineering, mathematics and medicine (STEMM) to inspire, advise, and motivate the next generation of women in STEMM



ACKNOWLEDGEMENT

