

Herald Sun » FUTURE VICTORIA »

DR SARA WEBB

Award-winning astrophysicist, space scientist and science communicator Dr Sara Webb has proven she is a rising star in her field. The 30-year-old made the prestigious Forbes 30 Under 30 Asia list for healthcare and science last year and spends her time researching astronomical phenomena, teaching students at Swinburne University of Technology and educating the public about space. "I could not have predicted that I would not only be a scientist, but also a communicator who gets to talk to everyone from government stakeholders to schoolchildren sitting on the floor asking me questions about the moon, and has her own books sold worldwide," she said.

"I am the first person in my family to have ever gone to university, let alone become a scientist, and that is something that young Sara would have never predicted, and it's something I'm very proud of. "I love my job so much because it's different every single day. I could be looking at telescope data one day, mushrooms we've sent into space the next and mentoring students or talking to an MP on another day. "There's so much we have to learn in the field of astronomy and space science in general, so I never see an end to the career, and that's so exciting."



DR BEN MCALLISTER

Dr Ben McAllister is a 2025 winner of the Australian Institute of Policy and Science Young Tall Poppy Award for Victoria. He is a Discovery Early Career Researcher Awards Fellow at Swinburne University of Technology, where his research focuses on one of the central open questions in modern physics – what is the universe made of? "Dark matter isn't a small, niche problem, it's arguably the biggest unanswered question in modern physics," Dr McAllister said. "Dark matter reminds us that our picture of reality is still incomplete, that some of the most important things shaping the universe are things we can't yet see or touch. Understanding dark matter may completely reshape physics."



measurement. "One of the most surprising and rewarding things for me has been realising that we can do genuinely cutting-edge discovery science right here in Australia, and specifically here in Victoria," he said. Dr McAllister is a key contributor to two world-class dark matter experiments based in Melbourne,

"We don't know how yet, and that's exactly the point." The techniques developed in Dr McAllister's dark matter research feed directly into other areas, both in fundamental physics and in fields such as quantum sensing and ultra-precise

ORGAN and SABRE. Dr McAllister argues that fundamental research is essential for long-term progress. "New science is not a luxury add-on. It's the only way genuinely new discoveries are ever made."

SMART, SAVVY &

AMIE HINDSON AND NATASHA ROSE



Amie Hindson

Threatened species keeper Amie Hindson has dedicated the better part of her past decade to saving one of Australia's most critically endangered animals – the tiny leadbeater's possum. Threatened by bushfires and habitat change, both the highland and lowland varieties of the possum are facing high risk of extinction. In fact, there are fewer than 30 lowland possums left. At Healesville Sanctuary, Ms Hindson (left) is rescuing the endangered species as "possum matchmaker". She carefully pairs lowland and highland possums as part of the sanctuary's breeding program – and the result is a "magical" mixed joey with a



greater chance at survival. "Our aim at the moment is to try and hybridise the two and produce some mixed offspring, which have a mix of genetics to hopefully help improve the genetic diversity of that lowland population, which is quite inbred. "In the Leadbeater world, the girls are in charge so we want

Natasha Rose

Healesville Sanctuary is the only place where people can see the "forest fairies" up close, with a mama possum Moss and her two daughters Joan and Willow living in the nocturnal forest habitat open to visitors. Natasha Rose (inset) is one of the keepers who care for

the family. Ms Rose worked with the zookeeping team to incorporate a world-first clear tunnel over the heads of visitors and connects the nocturnal forest habitats. It means zookeepers can monitor the possums with minimal disturbance. "Leadbeaters' possums are an incredibly special animal. They were actually thought to no longer exist, and now that they have been rediscovered, we've got a second opportunity to save them," Ms Rose said. "My dream would be to incorporate live plants into every single one of our nocturnal habitats here at Healesville Sanctuary. "This gives our Leadbeater's possums the opportunity to convey the beautiful story of their foraging habits ... it's a really amazing opportunity."

GRACE BROWN

From trying to build her way out of lockdown isolation, to creating robot companions that combat loneliness for those most vulnerable, Grace Brown knows how to make a difference. The 25-year-old CEO of Andromeda Robotics invented Abi, a robot fluent in 90 languages that helps aged-care and assisted living residents experience joy, conversation and personalised companionship. "Abi started as a response to my own experience of isolation during lockdown. "I went five months without face-to-face contact, and as an engineer, my instinct was to build," Ms Brown said. "Loneliness shows up every day, especially for the most vulnerable."

"Technology had focused on capability and automation, but almost no one was designing for connection. "We're building the emotional intelligence layer of modern robotics, and that's why Abi has been able to become something meaningful, often a real anchor for people who don't have better options. "Many aged-care residents live with chronic isolation, limited visitors, language barriers from dementia, or physical constraints that keep them confined. "Abi ... listens, responds, remembers ... For many, Abi has become a friend. I'm incredibly proud of what my team at Andromeda has built so far, and we're just getting started."



BILL PURTON

Local inventor Bill Purton is a long-established name in the sector, having revolutionised the casino industry. He has now moved on to Australia's bustling coffee scene. Purton's creation, the Caffè Assist, is a machine that makes "perfect coffee" every time. With the push of a button, Mr Purton developed the technology that could be hooked up to any coffee machine to consistently heat and texture milk to a set temperature. Mr Purton is adamant his machine was built to "free up" workers bogged down on perfecting the temperature of the milk and should be used to help baristas on the job. The Caffè Assist is not his



only successful invention. In the late-1990s, Mr Purton revolutionised casino operations worldwide by creating the world's first card-scanning machines, saving dealers the tedious task of manually sorting about eight decks of cards at the end of the night. He also pioneered the

development of plastic casino chips. His inventions have eased pressures on demanding jobs, carving a path for a smoother shift on the clock. His creations are used to aid the next generation of young Aussies in the workplace, a perfect example of how technology can be used to help, not replace staff.