

Exploring the power of glass

Yhonnie Scarce

Bachelor of Visual Art Glass with Honours

Australian contemporary artist: This is no fantasy

Yhonnie Scarce is one of the first contemporary Australian artists to explore both the activist and the aesthetic power of glass. Born in Woomera, Yhonnie is a descendant of the Kokatha people from the Kati Thanda-Lake Eyre region and the Nukunu language group from the Port Augusta area. Through artwork that she describes as 'politically motivated and emotionally driven,' Yhonnie explores the historical and ongoing treatment of Aboriginal Australians. As seen in a diverse range of glass-based installations, Yhonnie particularly seeks to examine the on-going effects of colonisation on Aboriginal people, the impact of the removal and relocation of Aboriginal people from their homelands and the forcible removal of Aboriginal children from their families.



Yhonnie Scarce, *Thunder Raining Poison* installation view Art Gallery of South Australia. Hand blown glass yams, steel armature and nylon. Courtesy of the artist and THIS IS NO FANTASY + dianne tanzer gallery. Image credit: Janelle Low

In 2003, the University of South Australia awarded Yhonnie a scholarship for Indigenous achievers. She has been a highly successful ambassador for the University, having exhibited at the Harvard Art Museum, Massachusetts in 2016, as part of the Tamanthi Festival at the Art Gallery of South Australia in 2015, the 19th Biennale of Sydney in 2014 and the 55th Venice Biennale in 2013. Most recently, her work *Burial Ground* was shown alongside Auguste Rodin in the 2017 exhibition *Versus Rodin* at the Art Gallery of South Australia.

Yhonnie's extraordinary talent shines through her aesthetically stunning pieces. Through her work she expresses a powerful and thought-provoking message.

"Growing up Aboriginal in Australia was tough and is still tough continually fighting for equality," says Yhonnie.

"As an artist, I have the unique ability to draw attention to historical and current racism in Australia, and my intention is to prompt people to have honest and open conversations about the treatment of Aboriginal people.

"Not enough has been said, and still in this day Aboriginal people are prematurely dying.

"By addressing the problem, we – as Australians – can start to properly heal and mend existing wounds to move forward into a happier future."

Yhonnie's pieces reflect the overall issues facing Aboriginal people, which are derived from historic research, oral history, current political messages and actions, and from her personal experiences.

"As well as this, in the Aboriginal community we believe our country has memory. I visited Woomera last year and was receptive to the energy given from the land, which I have portrayed through my work.

Yhonnie's unique talent was recognised early. While studying a Bachelor of Visual Art at UniSA, she was the recipient of the Irene and David Davy Scholarship.

"The scholarship really helped me with my studies in many ways. One is that glass can be expensive, so the funding allowed me to purchase materials to explore this medium and improve my skills. The other is that it helped me establish myself in this competitive industry when I was first starting out."

"At the outset, Yhonnie impressed with her quiet determination to succeed and we have followed her career with great pride since that time, revelling in her achievements," says Margaret Davy, Trustee of the Irene and David Davy Scholarship.

"The aims of the scholarship are to help support our scholars in their first degree - and equally to ask of them to be role models for the next generation of indigenous students to start an academic career. In the last 17 years, all of "our" scholars have graduated and the majority have gone on to further successes in their chosen fields. We are so proud to number Yhonnie "one of ours" and bask in her reflected successes."

When Yhonnie looks back on her time studying at UniSA, she believes those four years were the best and happiest time of her life.

"Those years changed my life.

"I am forever grateful for Gabriella Bisetto, she is the head of the glass studio at UniSA and is an amazing and supportive person, and I am proud to call her my friend."



Yhonnie Scarce, *Only a Mother Could Love Them* Detail View, Hand blown glass bush plums. Courtesy of the artist and THIS IS NO FANTASY + dianne tanzer gallery. Image credit: Janelle Low

She believes her success is due to her consistent hard work, determination, considers herself extremely lucky.

"I have been working as an artist professionally for 12 years, and believe artists in Australia, and around the world, are some of the hardest working people – it is not an easy industry!"

Her advice to recent graduates and hopeful professional artists is to work hard, don't give up, be grateful, leave your ego behind, and continue to be humble.

"Humility will get you far in this industry as well as in life."

When Yhonnie first graduated she kept a two year plan. However, having achieving great success she is now at the stage where she would prefer to just continue what she is doing, while living happily and healthily.

Despite her global success, Yhonnie chooses to live in both Melbourne and Adelaide, and continually 'comes home' to create her remarkable glass pieces at the JamFactory.

"The JamFactory feels like home to me. Aside from the logistical benefit of the workshop being available seven days a week, I prefer creating glass pieces there as the crew are amazing, I feel inspired and excited in the space, and I am more productive.

"Ultimately, I hope my work is able to leave a legacy and create opportunities."

[Share](#) [Share](#)

[Back to Business Alumni News](#)

Cruising through racing’s McLaren Technology Group

Dr Caleb Sawade

Bachelor of Engineering (Electrical & Mechatronic) with Honours
Modelling & Decision Sciences Manager at McLaren Applied Technologies

While studying his degree in engineering at the University of South Australia, Dr Caleb Sawade was offered the opportunity to undertake an internship with the McLaren Technology Group in America – a household name in motorsport and Formula One since its creation in 1966. What happened next was a series of events that he could never have foreseen, landing him with a PhD to top it off.



Dr Sawade discusses his transition from technical intern to modelling and decision sciences manager, breaks down the inner workings of McLaren, and delivers some insightful advice for new graduates.

Please briefly describe your journey from studying a Bachelor of Engineering (Electrical & Mechatronic) with Honours, to where you are now

During my undergraduate studies at UniSA, I travelled to the USA to work for McLaren in a technical internship. It was a great experience and exposed me to the high-paced engineering of motorsport. Towards the end of the placement, they asked to sponsor my final year honours research project: a rehabilitation simulator for the GB (Great British) Rowing team.

After completing my degree, I began working as a Mechatronic and Systems Engineer at SMR Automotive in South Australia. The position allowed me to experience multiple areas of the business and understand in more depth the manufacturing in the automotive market.

A year later, McLaren offered to sponsor a PhD, in the UK, on one of many proposed ideas. The list was fascinating, but I declined as I wasn't interested in doing a PhD. After some persuasion from the technical director, Dr Caroline Hargrove, I decided to go for it, packed my bags and moved to the UK – not without my fiancé, of course.

It was the best career decision I have ever made. The PhD at Southampton University was an incredible experience. It was focused on how to use virtual environments and robotics, to accelerate the rate of elite athlete learning. I worked with TeamGB and UK Sport to develop simulators for extreme sport and Olympic programmes, subsequently leading to a gold medal at the Olympics. It was a slightly strange PhD, as although it was an Engineering Sciences Doctorate, there was a large amount of cognitive and neuroscience research, which was a steep learning curve. At the end of the PhD, I consulted for UK Sport and the English Institute of Sport on sports such as Rowing, Sailing, and Cycling, before joining McLaren Applied Technologies full-time.

Now, as the Modelling and Decision Sciences Manager, I manage the data science, simulation engineering, and business analytics disciplines within the business. It's amazing to work with such a talented group of people on some really exciting projects.

Please describe your position at McLaren Applied Technologies in the UK

McLaren Applied Technologies (MAT) is one of the McLaren Group companies, consisting of McLaren Racing (the Formula One team), McLaren Automotive (a high-end supercar and hypercar manufacturer), and McLaren Marketing (an exclusive brands and marketing company). MAT is mix between a consultancy and product company. We work on internal products, and with clients, across multiple industries to bring high performance engineering and software to the wider world. The business is focused on five key industry areas: motorsport, automotive, public transport, health and wellness, and strategic partnerships. Each are connected by common technologies we develop and scale across industries. We work closely with McLaren Racing and McLaren Automotive to help them develop the latest technical advancements in their respective fields.

Unfortunately I can't discuss most of what we do as we confidentially work for fortune 500 companies and interact on technical development years before they enter the marketplace. These technologies cover everything from autonomous vehicles, medical devices, transportation systems, and consumer goods. But there are a few examples I can discuss.



Born out of Formula One, we develop simulators for the automotive industry. Human-in-the-loop driving simulators are not a new idea for car manufacturers, however most of them are used for driver training, ergonomic assessment, or safety testing. Our latest simulator changes this, as it reproduces the sensations of driving very well, allowing engineers to develop the car not the driver. Performing vehicle dynamic assessment in a virtual world drastically reduced development costs. It means we have had to model the car in great detail and understand how humans perceive

driving. Our focus is to ensure the driver makes the same decisions they would in the real car. By making the same decisions, we can understand how to best manipulate the car to maximise driver enjoyment. McLaren Automotive is one of our clients who we help develop cars like the McLaren P1 and 720s.

We have worked with US bike manufacturer Specialized for years. Initially we took our Formula One know-how of composite materials and applied them to bike design and manufacture. This reduced the weight and increased the stiffness. But we didn't want to stop there, we wanted to know how and why an increase in stiffness alters the riding experience. So we built a dynamic computational model of a bike and rider. Every detail possible was added – from tyres rolling over stones, to the forces the rider exerts on the handlebars. The model allows Specialized to optimise key performance metrics of all their bikes before they even build one.



My focus at the moment is building and managing the Modelling and Decision Sciences team, soon to be around 40 engineers. We work on all areas of the business and are expanding fast. Our approach is novel because we mix Simulation Engineering, which is concerned with the fundamental physics and detail of how things work, with the newer field of Data Science, which is taking data and building machine learnt models to quickly understand problems. Most companies normally have one or the other, but our approach with both means we develop novel algorithms, which outperform those previously developed. We are the algorithm factory of the company, and together with our software development and hardware teams we create novel products you probably interact with daily.

What is your best piece of advice for recent graduates?

Learn as much software programming, data handling and mathematics as possible. All industries need it, and it will compliment all degrees.

Don't be afraid to go back to university, undergraduate or postgraduate degrees, as it will enable you to learn and be qualified in what you love.

Spend equal amounts of time building a good team, as worrying about your own career – people will follow you if you have their backs, and together you will succeed faster.



[Back to Business Alumni News](#)

[Postgraduate Study](#) | [Research Degrees](#) | [Alumni Giving](#) | [Career Services](#) | [Events](#) | [Contact Us](#)

© 2017 University of South Australia | [CRICOS Provider Number: 00121B](#) | [View our privacy statement](#)

DISCLAIMER OF LIABILITY: While every effort is made by the University to ensure that accurate information is disseminated through this medium the University of South Australia makes no representation about the content and suitability of this information for any purpose. It is provided 'as is' without express or implied warranty.

Identifying genes responsible for epilepsy

Associate Professor Leanne Dibbens

School of Pharmacy and Medical Sciences

University of South Australia

With 4 August marking this year's Jeans for Genes Day, people continue to unite in support of genetic research to help improve people's quality of life. This is also of utmost importance to researchers at the University of South Australia, who are dedicated to working towards identifying the genes that cause epilepsy, neurological disorders, and psychiatric disorders.

It is estimated that 10 per cent of the population are at risk of experiencing a seizure of the course of their lifetime, and roughly three to four per cent of people will be diagnosed with the brain function disorder, epilepsy.

Geneticist and Molecular Biologist Associate Professor Leanne Dibbens and her team of scientists are at the forefront of research which identifies the genes responsible for epilepsy. As well as this, the team has been able to identify genes responsible for a wide range of neurological and psychiatric disorders which are often inherited via genetic mutations, such as muscular dystrophy.



Over the past 20 years, Assoc Prof Dibbens has collected one of the largest pools of genetic data from those suffering from epilepsy. This continued research has led to the discovery of new gene mutations which cause the disorder.

"Our research group has already discovered around 30 new genes which are linked to a dozen different epilepsy syndromes," says Assoc Prof Dibbens.

"We've made a significant contribution to the field, but it can take years of research to uncover just one new gene."

In fact, Assoc Prof Dibbens and her team have estimated that researchers all around the globe have only found the genetic cause of just five to ten per cent of all epilepsy cases. Currently, there are roughly 30 known types of epilepsy, each causing different seizure frequency and severity. Assoc Prof Dibben's continued efforts are working towards finding the answers for those affected by the disorder, as well as preventing further deaths from it.

"Without a genetic diagnosis, patients are essentially medicated through a process of trial and error, but if we can locate the exact gene that has caused the epilepsy, then we can provide personalised medicine which targets the mutation and has a higher chance of being effective.

"We can also predict whether other family members are at risk of developing the disorder and provide genetic counselling."

The team have made significant findings in recent years, with the discovery of the PCDH19 gene which results in a type of epilepsy that affects only females being one of their more prominent breakthroughs.

UniSA's Epilepsy Research Group often collaborates with a wide range of people from around the globe including doctors, neurologists, and clinicians. These collaborators provide the team with blood samples from epilepsy patients, allowing the team to further their research.

The team is currently investigating other neurological disorders like intellectual disabilities and autism, as well as psychiatric conditions such as depression. It is approximated that 30 per cent of epilepsy sufferers also have clinical depression and are three times more likely to be prescribed antidepressant medications than the rest of the population.

"Moving forward, we're focussed on creating better therapies for the range of neurological conditions we work across.

"Much of the medication available to epilepsy patients is somewhat ineffective and around 30 per cent of sufferers cannot control their seizures through existing drugs.

"Some people take four or five medications concurrently to try to control their seizures but by this point people are often sedated and feeling nauseous; it is not uncommon for sufferers to stop taking medication altogether because the side effects can be so awful"

To donate to help UniSA continue their research in epilepsy, as well as a long list of other research, please visit: <https://donate.unisa.edu.au/donate-to-health-research>



Back to Business Alumni News

[Postgraduate Study](#) | [Research Degrees](#) | [Alumni Giving](#) | [Career Services](#) | [Events](#) | [Contact Us](#)

© 2017 University of South Australia | [CRICOS Provider Number: 00121B](#) | [View our privacy statement](#)

DISCLAIMER OF LIABILITY: While every effort is made by the University to ensure that accurate information is disseminated through this medium the University of South Australia makes no representation about the content and suitability of this information for any purpose. It is provided 'as is' without express or implied warranty.

Adding more than a gram of style to South Australia

Dave Bickmore

Bachelor of Architectural Studies, Masters of Architecture
Director at studio–gram

Initially starting out his career as a model maker at Adelaide’s HASSELL Studio, University of South Australia alumnus and one half of the creative brain behind studio-gram Dave Bickmore has spread his creative talent and style across South Australia to award winning acclaim.

Since its inception in 2014, studio-gram has churned out some of Adelaide’s most recognisable restaurants, cafes, and bars. The minimal sleekness of Pirie Street’s Abbots & Kinney, the smooth soulful tones of Union Street’s Mr. Goodbar, and the black and brass accents of the Barossa Valley’s St Hugo – Dave and his creative partner, UniSA Alumnus Graham Charbonneau, have been responsible for it all.

With each project they take on, they manage to consistently reinvent themselves, while still keeping a consistent style throughout each fit out, something they have become known for.

“We are probably known for our inventive use of space, material, and colour, but the thing that probably defines us the most is narrative – every project has a story that relates to the client and the people that will use the space.”

Their designs have become iconic across Adelaide’s landscape and the boys have gained significant attention from it. Their fit out for Pirie Street’s Osteria Oggi alone has won them the 2016 Robert Dickson Award for Interior Architecture and the prestigious 2016 World Interiors News Award for Restaurant Interiors. And this growing success has allowed them to start projects both interstate and overseas. Despite the success, Dave says studio-gram still critically considers which projects to take on.

“We only take on projects that interest us and offer something exciting. We don’t have projects that just pay the bills like some practices. Each project is treated with the same respect and investigations as the last, and are celebrated in their own way.”



Growing up in the Riverland town of Renmark, design has always been in his roots. His dad, a panel-beater turned winemaker, taught him to weld at the age of 10, and his love for making and creating only continued to grow from there.

“I’ve always loved making things and my friends remind me a lot that I had always said I was going to be an architect and I can only attribute this to my upbringing.”

During his time studying both a Bachelor and Masters of Architecture at UniSA, Dave was lucky enough to land a job at international practice HASSELL as a model maker. He worked on projects such as prototyping the roof structures of Adelaide Oval’s Western Grandstands, before being offered a fulltime position after graduating. He went on to work on a number of projects including the University of Adelaide Learning Hub and St Aloysius College Year 12 centre development.

After spending four years working at HASSEL, Dave decided it was time to move on, opening up studio-gram with Graham Charbonneau. Since its initial conception, the practice has grown to include three more staff members, all of which are UniSA graduates.

In 2012 Dave received the Jack Hobbs McConnell Fellowship, providing him with exposure to architecture in the Middle East, Europe, Norway, London, New York, and Hong Kong, with his research exploring the concept of architecture informing the identity of place. These travels helped inform Dave’s own work when he returned to Adelaide, citing it as a major influence in many of studio-grams projects.

“Travel has become one of the biggest influencers of our work. It inspires us, recharges us, and some of our best narratives are off the back of travel – the unexpected encounters, and the beautiful people we have met all over the world.

“It keeps us in touch with what is happening around the world, not just in the most recent design mag, but also in the backstreets of the most unexpected places.

“That is where our ‘real’ ideas are born.”

Despite Dave’s travels around the globe, he still decisively maintains that Adelaide is studio-gram’s main home.

“We are firmly grounded here in South Australia by family and friends, but choose to operate here in SA as we are surrounded by talented people.

“That said, we also aim to open a second office in New York within the next few years as a way of getting Graham closer to his family in Canada, and test ourselves against the best in the industry in what we consider to be the epicentre of the design world.”

So what does it take to be an award winning designer by the time you hit 30? Along with surrounding yourself with good people, and not being afraid to ask for advice, Dave says the main glistening golden key on the chain of success is being able to break the rules.

“We once read an article entitled ‘20 things not to do when starting your own architecture practice’. We did all 20 of them.”

[Facebook Share](#) [Twitter Share](#)



Back to Business Alumni News

New treatment for endometriosis

Catrina Panuccio

Bachelor of Medical Radiation (now Bachelor of Medical Radiation Science)

Graduate Diploma in Medical Radiation (now Graduate Diploma in Medical Sonography)

Managing Director of Specialist Imaging Partners

Catrina Panuccio is one of Adelaide's leading sonographers. She has been providing essential services to women and children in Adelaide for over 20 years, including being one of the first sonographers to offer new ultrasound practices for endometriosis treatment which avoids patients undergoing two invasive procedures.

Catrina values the opportunity she had working closely and independently with recognised specialists, and is passing her knowledge onto her fellow UniSA alumni who she employs at her own successful ultrasound practice [Specialist Imaging Partners](#).



“For the past four years I have been actively involved in promotion and awareness of endometriosis, and the importance of a detailed ultrasound,” says Catrina.

“Detailed endometriosis ultrasound has many advantages for patients with known endometriosis or who have symptoms of it, including the streamlining of patient management and the avoidance of two invasive procedures and anaesthetics.

“I have given various talks about the advancements in ultrasound to specialists, general practitioners and fertility centres, and I have been invited to present at the EndoMarch awareness week on various occasions.”

As well as helping people with the often debilitating condition of endometriosis, she also introduced new ultrasound procedures for people in Adelaide suffering from prolapse and incontinence.

“I worked with two internationally recognised urogynaecologists who together helped me introduce pelvic floor sonography to Adelaide.

“Today, I am still promoting the benefits of transperineal ultrasound for prolapse and incontinence in women and have spent much time educating and teaching others about its clinical applications.

“Pelvic floor ultrasound is being utilised for surgical planning for women with prolapse and incontinence, and is particularly helpful for those with recurrent prolapse symptoms.”

Despite this undeniably impressive success, Catrina believes her greatest career achievement has been opening and managing her own sonography-based ultrasound practice in North Adelaide, which employs four sonographers who studied at UniSA.

“Whilst successfully running my own ultrasound practice has been one of the greatest challenges of my life, the inspiration that drives this practice forward is to treat patients the way I would like to be treated. Be honest, be concise, friendly, compassionate and professional.

“At the same time, the focus is to provide a high quality standard of scanning embracing innovative advancements in the applications of ultrasound.”

“With a boutique focus on women's health and paediatric ultrasound, I have chosen a team of sonographers who are dedicated to their profession and respectful of others. They take pride in their work and are motivated to achieve the best possible results for our patients and referrers.

One of these sonographers is [Alison Deslandes](#), who completed UniSA's Graduate Diploma in Medical Sonography so she could get her accreditation, and later returned to complete the Master of Medical Sonography.

Catrina also employs Elodie Richards as a medical receptionist who is currently studying a Business degree at UniSA, and believes this employment is giving her a unique opportunity to gain invaluable skills in front desk management whilst still studying.

Catrina is grateful not only for the education she received at UniSA, but also for the confidence and interpersonal skills that helped her achieve her successful career.

“My competitive nature always means that I aim for 110 per cent and UniSA provided a great support for this, encouraging me to succeed further as a high achiever.”

Catrina has always enjoyed teaching others and still maintains a close relationship with UniSA by delivering guest lectures to current students. She has also participated in an education group for rural general practitioners and Emergency Department doctors to help them gain essential skills required for emergency or Focussed Assessment with Sonography (FAST) scanning, and has also been involved in teaching obstetric registrars and midwives the basics of ultrasound.

“When I engaged in my studies at UniSA 20 years ago now I never imagined I would be where I am now. This is a true example that you can make whatever it is that you want of your professional career. Studies give you all of the foundations to achieve great things – it's a big competitive world. Believe you can do it and your opportunities will be endless.”

Find out more about studying postgraduate Medical Sonography at UniSA [here](#).



[Back to Business Alumni News](#)

[Postgraduate Study](#) | [Research Degrees](#) | [Alumni Giving](#) | [Career Services](#) | [Events](#) | [Contact Us](#)

© 2017 University of South Australia | [CRICOS Provider Number: 00121B](#) | [View our privacy statement](#)

DISCLAIMER OF LIABILITY: While every effort is made by the University to ensure that accurate information is disseminated through this medium the University of South Australia makes no representation about the content and suitability of this information for any purpose. It is provided 'as is' without express or implied warranty.