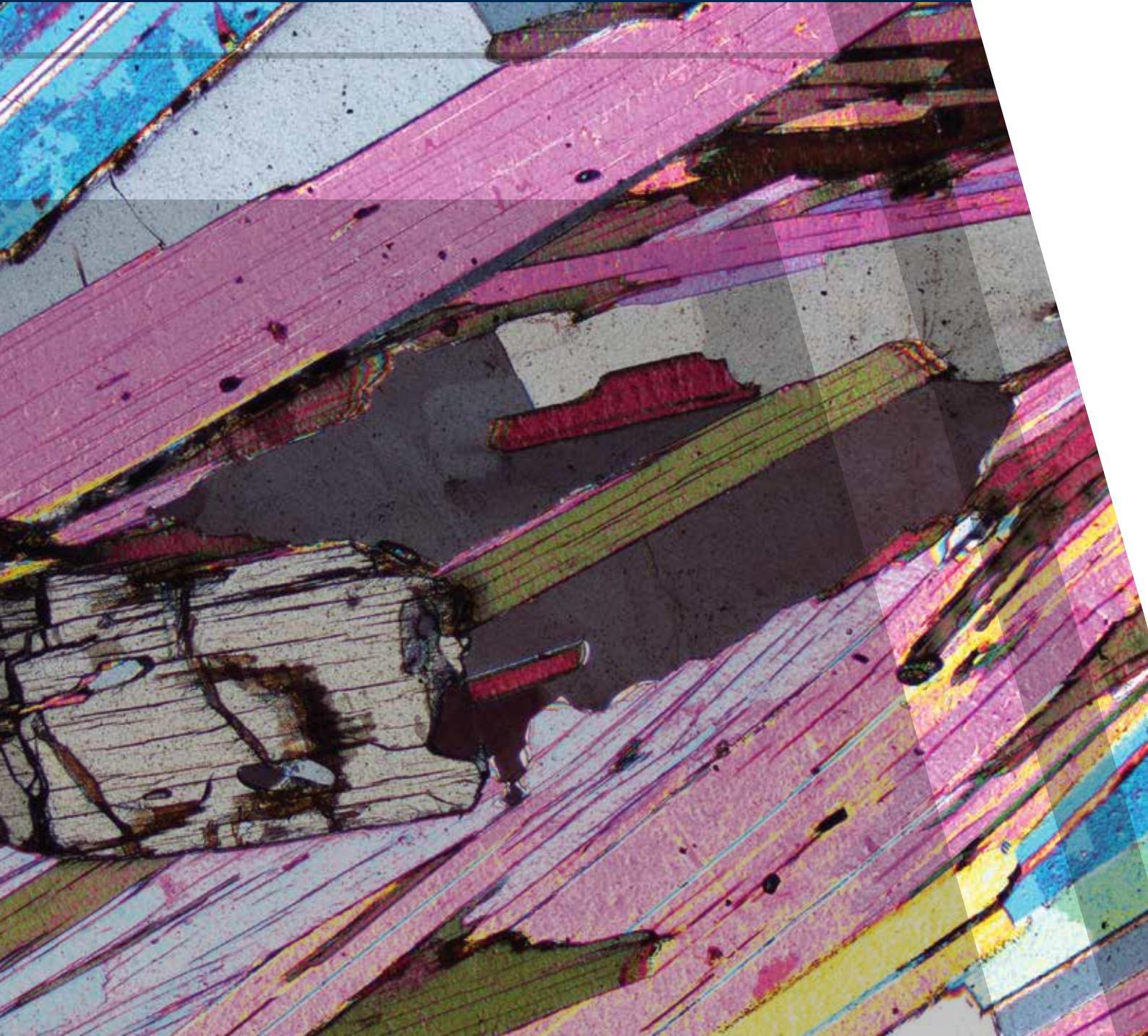




University of
South Australia

Enterprising

research



Contents

- 01 | Australia's university of enterprise**
- 02 | Research excellence**
- 04 | Our research vision**
- 06 | Health sciences**
- 08 | Education, arts and social sciences**
- 10 | Business and law**
- 12 | Information technology,
engineering and the environment**
- 14 | Research partnerships**

As Australia's University of Enterprise, the spirit of enterprise runs through everything we do. And that extends to our research.

At UniSA, our research is inspired by challenges and opportunities, partnered with end-users and communities, and underpinned by excellence. Our initiatives are focused on real-world impact, entrepreneurship and commercialisation, through an interdisciplinary approach to research and research outcomes.

We take particular pride in our effective partnerships with end-users. We work collaboratively right from the conception of a research idea, allowing our research directions to be shaped by the opportunities and challenges our partners face.

Our key to success is how well we listen and understand fundamental drivers and issues. Through listening we create optimal research teams that deliver ground-breaking yet practical solutions.

UniSA's strong commitment to cutting-edge research and engagement with industry has been well recognised, with 100 per cent of our assessed research rated at or above world-class (2018 Assessed Detailed Fields, Excellence in Research for Australia). This is an impressive result for a young university and we are proud of our achievements.

As a university, we are focused on extending our global reach and influence. We are building enduring and mutually beneficial relationships with our international partners, and have a globally diverse research community.

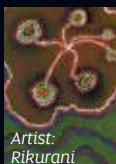
Our researchers are actively encouraged to work with international academic partners and our transformed PhD also draws participation from leading international researchers into postgraduate research training.



Professor David Lloyd,
Vice Chancellor and President



Professor Simon Beecham,
Deputy Vice Chancellor:
Research and Innovation



Acknowledgement of Country

UniSA respects the Kaurna, Boandik and Barngarla peoples' spiritual relationship with their country. We also acknowledge the diversity of Aboriginal peoples, past and present.

Find out more about the University's commitment to reconciliation at unisa.edu.au/RAP

ON THE COVER: IMAGES OF RESEARCH 2018, A JOURNEY INTO AUSTRALIA'S TUMULTUOUS GEOLOGICAL PAST AND INTO A GROOVY FUTURE, JAN VARGA, PHD CANDIDATE, SCHOOL OF NATURAL AND BUILT ENVIRONMENTS

Australia's university of enterprise

The University of South Australia is a globally connected and engaged university helping solve the problems of industry and the professions. Our teaching is industry-informed and our research is inspired by challenges and focused on creating a real impact.

Through our research, we create knowledge that is central to global economic and social prosperity. We are a young university, continuing to set the pace for world-class research and solutions for a changing world.

**RANKED 25th IN THE
WORLD'S TOP 50 UNDER 50**

2019 QS TOP 50 UNIVERSITIES AGED UNDER 50

**100% OF OUR ASSESSED
RESEARCH RATED AT OR
ABOVE WORLD-CLASS**

2018 EXCELLENCE IN RESEARCH FOR AUSTRALIA (ERA),
4-DIGIT FIELDS OF RESEARCH.

**RANKED No.1 IN
AUSTRALIA FOR INDUSTRY
RESEARCH INCOME**

2019 THE WORLD UNIVERSITY RANKINGS

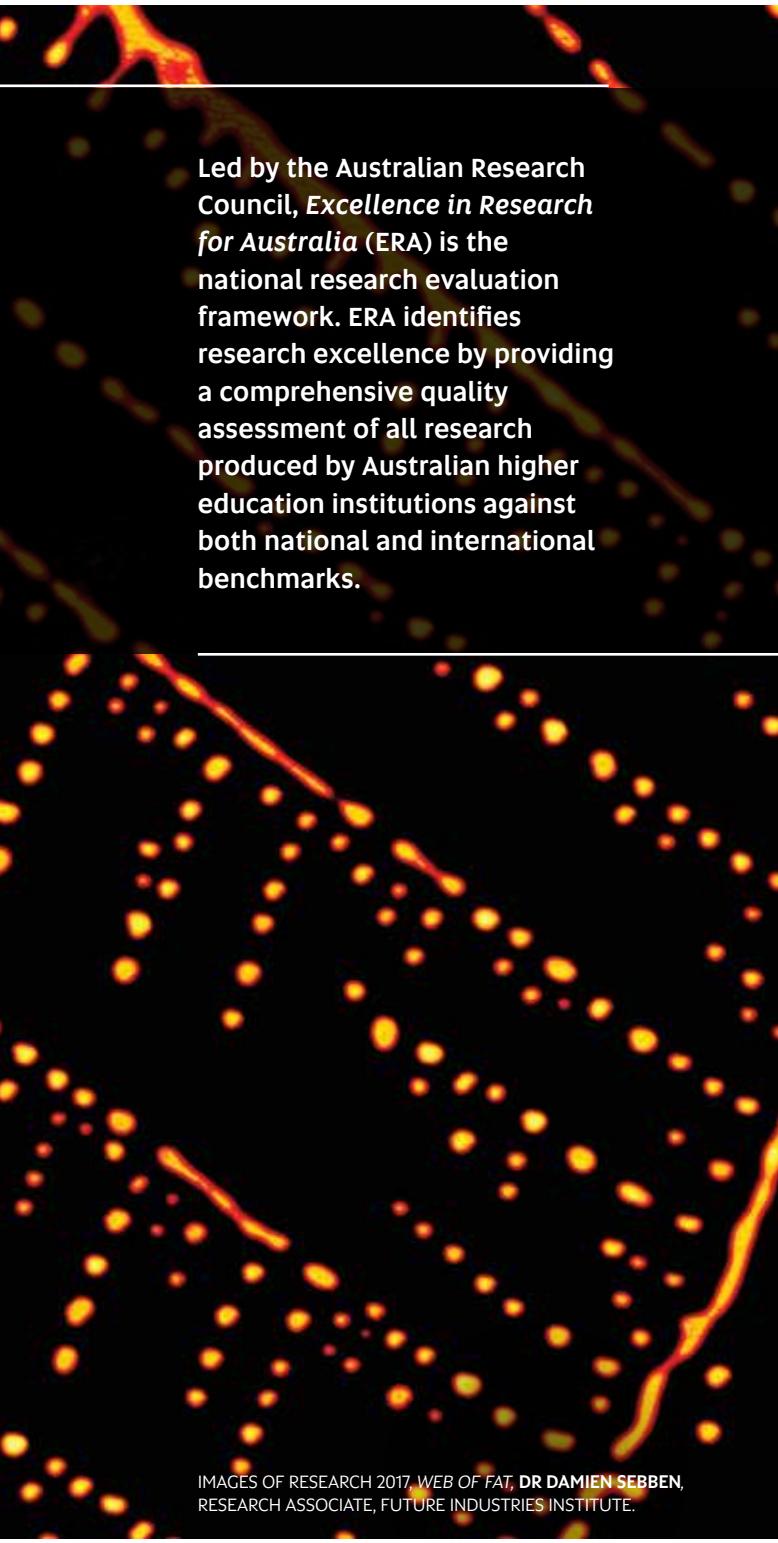
**AUSTRALIA'S YOUNGEST
UNIVERSITY TO RECEIVE
FIVE-STARS IN RESEARCH**

2019 QS STARS RATINGS

**No.1 IN AUSTRALIA FOR RESEARCH
IMPACT AND ENGAGEMENT**

2018 ARC ENGAGEMENT AND IMPACT ASSESSMENT
(EI), COMBINED IMPACT – APPROACH TO IMPACT AND
ENGAGEMENT ON ASSESSED FIELDS.

Research excellence



Led by the Australian Research Council, *Excellence in Research for Australia* (ERA) is the national research evaluation framework. ERA identifies research excellence by providing a comprehensive quality assessment of all research produced by Australian higher education institutions against both national and international benchmarks.

High level fields of research rated at or above world-class

BIOLOGICAL SCIENCES

BUILT ENVIRONMENT AND DESIGN

CHEMICAL SCIENCES

COMMERCE, MANAGEMENT, TOURISM AND SERVICES

EDUCATION

ENGINEERING

ENVIRONMENTAL SCIENCES

INFORMATION AND COMPUTING SCIENCES

LANGUAGE, COMMUNICATIONS AND CULTURE

LAW AND LEGAL STUDIES

MATHEMATICAL SCIENCES

MEDICAL AND HEALTH SCIENCES

PSYCHOLOGY AND COGNITIVE SCIENCES

STUDIES IN CREATIVE ARTS AND WRITING

STUDIES IN HUMAN SOCIETY

IMAGES OF RESEARCH 2017, WEB OF FAT, DR DAMIEN SEBBEN,
RESEARCH ASSOCIATE, FUTURE INDUSTRIES INSTITUTE.

2-DIGIT FIELDS OF RESEARCH, 2018 EXCELLENCE
IN RESEARCH FOR AUSTRALIA (ERA).

**100% OF OUR ASSESSED
RESEARCH RATED AT OR
ABOVE WORLD-CLASS**

2018 EXCELLENCE IN RESEARCH FOR AUSTRALIA
(ERA), 4-DIGIT FIELDS OF RESEARCH.

Detailed fields of research rated at or above world-class

ACCOUNTING, AUDITING AND ACCOUNTABILITY	DISTRIBUTED COMPUTING	PHARMACOLOGY AND PHARMACEUTICAL SCIENCES
APPLIED ECONOMICS	EDUCATION SYSTEMS	PHYSICAL CHEMISTRY
APPLIED MATHEMATICS	ELECTRICAL AND ELECTRONIC ENGINEERING	PSYCHOLOGY
ARTIFICIAL INTELLIGENCE AND IMAGE PROCESSING	ENVIRONMENTAL SCIENCE AND MANAGEMENT	PUBLIC HEALTH AND HEALTH SERVICES
BANKING, FINANCE AND INVESTMENT	HUMAN MOVEMENT AND SPORTS SCIENCE	RESOURCES ENGINEERING AND EXTRACTIVE METALLURGY
BIOCHEMISTRY AND CELL BIOLOGY	INFORMATION SYSTEMS	SPECIALIST STUDIES IN EDUCATION
BUILDING	LAW	SOCIAL WORK
BUSINESS AND MANAGEMENT	LINGUISTICS	SOCIOLOGY
CIVIL ENGINEERING	MARKETING	STATISTICS
CLINICAL SCIENCES	MATERIALS ENGINEERING	TOURISM
CULTURAL STUDIES	MECHANICAL ENGINEERING	URBAN AND REGIONAL PLANNING
CURRICULUM AND PEDAGOGY	MEDICAL PHYSIOLOGY	VISUAL ARTS AND CRAFTS
DESIGN PRACTICE AND MANAGEMENT	NURSING	
	NUTRITION AND DIETETICS	

Our research vision

Our research culture is vibrant, outward facing and responsive. We pride ourselves on our capacity to create interdisciplinary teams that can tackle significant real-world challenges, and our researchers strive to make a difference.

Inspired Partnered Excellence is the University's Strategic Plan for Research and Innovation for 2016 to 2020 aimed at expanding our commitment to deliver industry and end-user informed research, supporting an industry-relevant curriculum, building on our research strengths and delivering the transformed PhD, which ensures that our PhD candidates are well connected to industry.

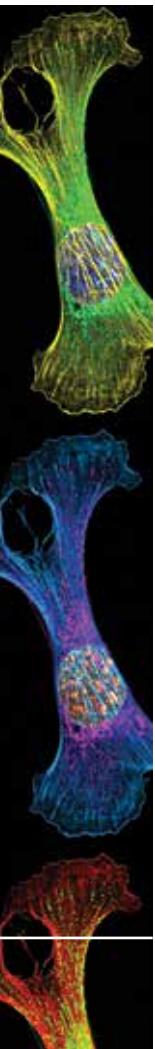
IMAGES OF RESEARCH 2017, CELL ART,
DR GENEVIEVE SECKER, RESEARCH
FELLOW, CENTRE FOR CANCER BIOLOGY.

Research inspired by challenges and opportunities, partnered with end-users and communities, and underpinned by excellence.

Higher degrees by research

The University offers a wide range of research degrees including a PhD, professional doctorate or masters by research. Our research environment is supported by highly experienced and engaged supervisors, with strong connections to industry, government and communities.

Research degrees at UniSA are focused on producing new knowledge, providing solutions to global challenges, and preparing candidates for competitive careers.



WORLD-CLASS RESEARCH WITH 100% ENGAGEMENT

2018 EXCELLENCE IN RESEARCH FOR
AUSTRALIA (ERA) AND ARC ENGAGEMENT
AND IMPACT ASSESSMENT (EI).

RANKED 22ND WORLDWIDE FOR OVERALL UNIVERSITY IMPACT

2019 THE UNIVERSITY IMPACT RANKINGS

Research themes

The rapid pace of global change is driving many new social, economic and environmental challenges. Research at the University of South Australia has been positioned around six key themes to ensure we can deliver innovative and sustainable solutions that respond to the most pressing needs of our world today.

AN AGE FRIENDLY WORLD

We will shed light on how individuals at every stage in the life course can achieve their potential. Our research will empower governments, community agencies, private businesses, care providers, regulators, the young, the middle aged and the old, to create a better, healthier and more productive society.

TRANSFORMING INDUSTRIES

In our increasingly digital world, our research needs to support the rise of Industry 4.0. To remain globally competitive, we need innovative industries and services that are focused, agile and fully integrated into global supply chains. By prioritising the sustainable use of our resources and by adding value where we have a competitive advantage, we can thrive in the changing manufacturing landscape.

SCARCE RESOURCES

Australia needs to develop management systems, capacity and know-how to support sustainable living under the conditions of changing demographics and demand for constrained natural and human resources; fragile and threatened ecosystems; commoditised cultural resources; and extreme climatic changes. We work with communities to create and implement sustainable strategies and solutions that restore, protect and optimise social, cultural, economic and environmental resources.

CANCER

Our research is focused on reducing the burden of cancer and its progression. This includes prevention, diagnosis and the impact of cancer and its treatment on physical, psychosocial/spiritual and economic wellbeing. Collaborators include the wider community, government and non-government organisations.

HEALTHY FUTURES

We take a holistic view of physical, mental, social, environmental, and community health research. We are focused on sharing insights about health, educating individuals and communities, and providing a framework for wellbeing across the lifespan. We do this across multiple research disciplines, from investigation at the cellular level to the analysis of populations.

TRANSFORMING SOCIETIES

Societies are in constant flux. Our research examines and evaluates changes in the world and how it impacts our lives as individuals, families, organisations and communities. The outcomes will challenge current thinking. They will guide and inform decision making to approach transformation for the benefit of all, especially the most vulnerable.

University institutes and significant alliances

FUTURE INDUSTRIES INSTITUTE

UniSA CANCER RESEARCH INSTITUTE

CENTRE FOR CANCER BIOLOGY

University centres

- Australian Centre for Child Protection
- Centre for Workplace Excellence
- Ehrenberg-Bass Institute for Marketing Science
- Australian Research Centre for Interactive and Virtual Environments (IVE)
- Quality Use of Medicines and Pharmacy Research Centre

Health sciences

Research in the health sciences contributes to practical solutions which address local, national and international health-related challenges.

We have an outstanding reputation within industry, government and the community for the education of quality health professionals, and the delivery of research excellence in the prevention, diagnosis and treatment of health issues, improving the overall health and wellbeing of society.

Research is focused on a wide range of health issues from healthy lifestyles and population health to neuroscience and mental health, pharmaceuticals, cancer and more.

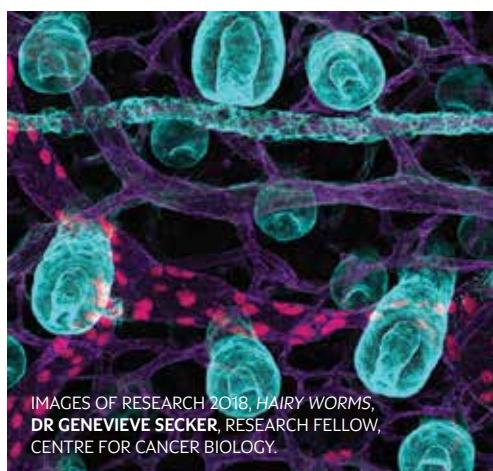
More than 500 clinical placement partners and over 500 research partners.

UniSA Cancer Research Institute

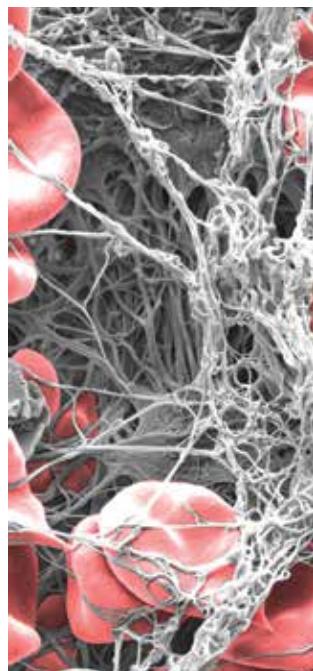
The UniSA Cancer Research Institute brings together some of the brightest minds from across the University to tackle cancer with a focus on personalised precision treatments, better diagnostics, prevention and survival.

Areas of strength include:

- Discovery and development of new cancer drugs
- Early detection and prognosis
- Side effects of chemotherapy
- Exercise and recovery from cancer
- Translating data evidence into practice
- Impact of cancer on the community
- Psychosocial impact of cancer
- Alleviating rural cancer disparities
- Improving cancer treatment access and outcomes for Aboriginal people
- Improving the delivery of radiotherapy



IMAGES OF RESEARCH 2018, HAIRY WORMS,
DR GENEVIEVE SECKER, RESEARCH FELLOW,
CENTRE FOR CANCER BIOLOGY.



**WELL ABOVE
WORLD-CLASS RESEARCH
IN HUMAN MOVEMENT
AND SPORTS SCIENCE**

2018 EXCELLENCE IN RESEARCH FOR
AUSTRALIA (ERA)

**WELL ABOVE WORLD-CLASS
RESEARCH IN PHARMACY**

RESULTS FOR PHARMACOLOGY AND
PHARMACEUTICAL SCIENCES – 2018
EXCELLENCE IN RESEARCH FOR
AUSTRALIA (ERA)

LOCATED IN THE ADELAIDE BIOMED CITY, THE \$247 MILLION UniSA CANCER RESEARCH INSTITUTE BUILDING IS THE LEADING DESTINATION FOR HEALTH RESEARCH AND TEACHING.



**Centre for
Cancer Biology**

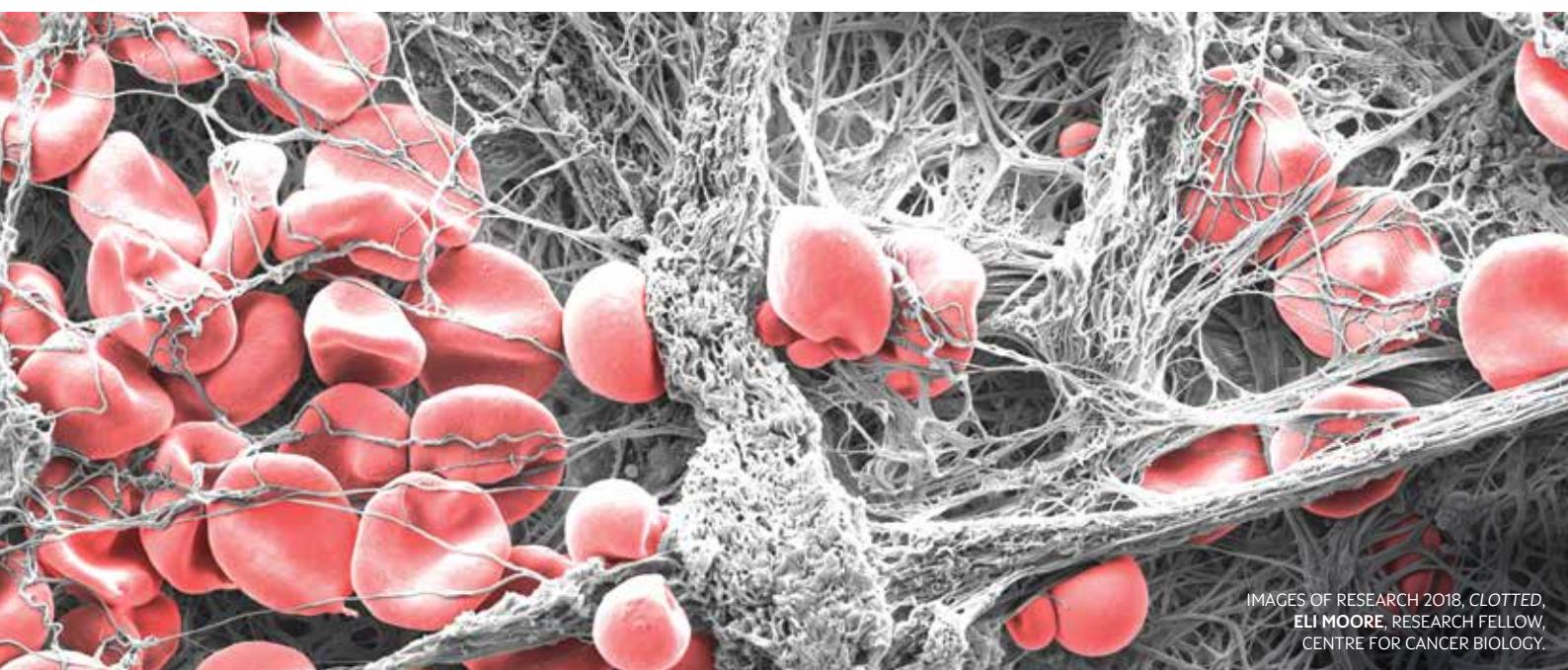
The **Centre for Cancer Biology** (CCB) carries out a world-class program of innovative research, making breakthrough discoveries in the fundamental causes of cancer, and translating these discoveries into new ways to prevent and treat this group of diseases. The CCB is an alliance between SA Pathology and UniSA, and boasts the largest concentration of cancer research in South Australia.

Positive futures

This national research unit is dedicated to improving the lives of Aboriginal children through rigorous research evidence that will influence policy and practice in child protection. Driven by Aboriginal and Torres Strait Islander people, the research team provide the leadership and expertise to address urgent challenges such as understanding the extent of abuse and neglect in communities and providing solutions around early intervention and community-led models that will influence practice delivered by Departments and agencies.

Tackling obesity

UniSA is enjoying national attention following a breakthrough in the fight against obesity. An investigation into the oral absorption of drugs in the body led to a fascinating discovery that showed clay materials attracting fat droplets and soaking them under mimicked gut conditions. This behaviour immediately signalled a significant finding and a potential cure for obesity.



IMAGES OF RESEARCH 2018, CLOTTED,
ELI MOORE, RESEARCH FELLOW,
CENTRE FOR CANCER BIOLOGY.

Education, arts and social sciences

UniSA's research in education, arts and social sciences has extensive national and international research links, and is focused on influencing culture and social change, and exploring meaning in our interconnected world.

Areas of research include a wide range of topics from creative industries, design, digital arts, humanities, and media and communication, to urban sciences and informatics, social care and social innovation, education, Aboriginal affairs, brain science, learning analytics and language development.

The power of language

New research is investigating how language can be used to predict cognitive outcomes in old age. The research aims to understand the relationship between linguistic complexity and cognitive decline in old age, and test the hypothesis that high linguistic complexity scores reflect the ability to strategically optimise one's processing capacity. Outcomes of this research have the potential to increase quality of life for the elderly and reduce costs of age-related cognitive impairment.

Engaged learning

The large disparity between Aboriginal and non-Aboriginal outcomes at school is an urgent problem. Our researchers are examining how teachers in mainstream middle school classrooms can teach young Aboriginal Australians in a culturally sensitive way and improve attendance and learning outcomes. We are working with teachers, Aboriginal Education Officers and Elders to develop an Australian theory for culturally responsive pedagogy that draws on international indigenous and Australian Aboriginal studies, pedagogy studies, and empirical work in schools. This project will inform theory, policy and practice in schools and teacher preparation courses.

Creative micro-economies

The **Discovery Project** analyses a new workplace phenomenon – not simply the negotiation of work/life or public/private boundaries, but their deliberate collapse. Focusing on handmade creative micro-enterprise, the research examines how social media marketing requires the collapse of work/life boundaries; and the new risks creative producers face in regards to their loss of personal privacy. By identifying what is needed for a contemporary creative micro-enterprise to thrive, the Project will reduce the risks involved in pursuing a small business operation and improve the global competitiveness of Australian creative producers.

WELL ABOVE WORLD-CLASS RESEARCH IN PSYCHOLOGY

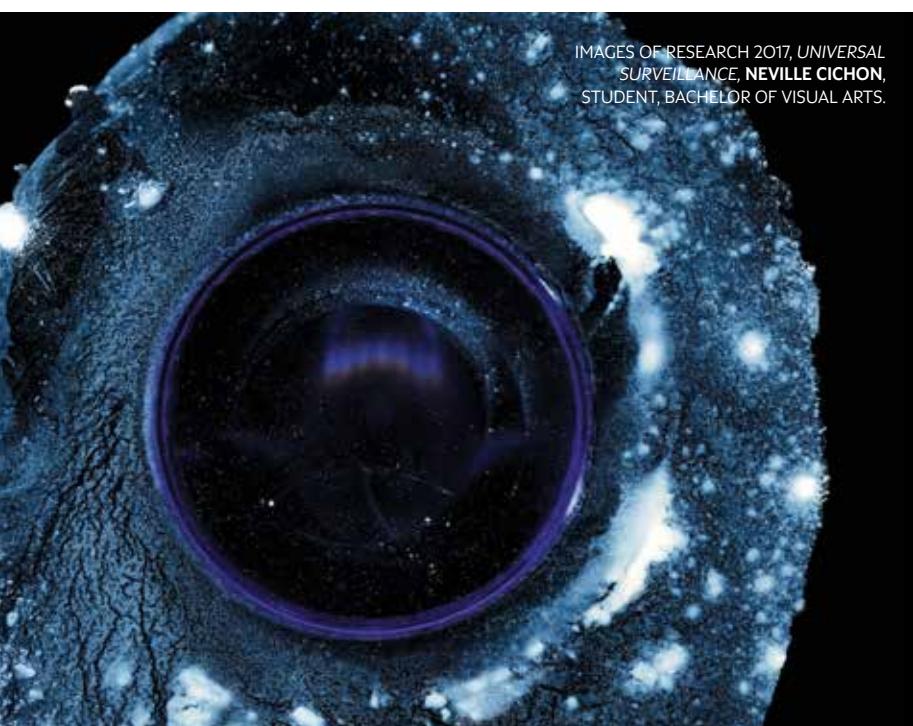
2018 EXCELLENCE IN RESEARCH FOR
AUSTRALIA (ERA)

ABOVE WORLD-CLASS RESEARCH IN EDUCATION

RESULTS FOR SPECIALIST STUDIES IN
EDUCATION – 2018 EXCELLENCE IN RESEARCH
FOR AUSTRALIA (ERA)



IMAGES OF RESEARCH 2017, THE LIGHT OF A FIRE,
MARIA FLOR GJERDE, STUDENT, BACHELOR OF VISUAL ARTS.



Research into child protection

The **Australian Centre for Child Protection** conducts national, award-winning research that supports the development of policy and practice solutions to make a real difference to the lives of vulnerable children and their families.

Supported over the past decade by a National Advisory Council of seven eminent Australians, the Centre is committed to strengthening the evidence that informs the design and delivery of services to children.

Through rigorous research, the Centre is rapidly expanding the Australian knowledge base about the impact of risk factors on children and families. The Centre provides policy advice, advocacy and professional education, which is informed by research, and then applied through strategic partnerships with government and community social service agencies across the country.

Business and law

By working closely with industry, UniSA is able to facilitate high quality research that tackles the real-world challenges impacting business and law. We are respected as global thought leaders and academic experts in the areas of marketing, applied economics, human resource management, tourism and international business.

We know that excellent results come from ethical and rigorous research. By supporting researchers to cross boundaries and take responsible risks, we facilitate breakthrough research that impacts industry, organisations and communities.

Global research into marketing

The **Ehrenberg-Bass Institute for Marketing Science** is the world's largest centre for research into marketing. The Institute's team of over 50 marketing scientists make fundamental discoveries about how brands grow and how buyers behave, and help companies all over the world to develop and benefit from a culture of evidence-based marketing.

The Institute's research tackles some of the biggest questions in marketing, and key research areas include:

- Advertising
- Branding and brand equity
- Buyer behaviour
- Loyalty
- Marketing metrics and accountability
- New and traditional media
- Pricing
- Service quality
- Shopper research
- Sustainable marketing
- Wine marketing

The Institute offers businesses access to a multi-million dollar program of R&D into marketing through the Corporate Sponsorship Program, providing access to decades of discoveries. Over 60 companies are part of this program, including many of the world's biggest brands like Google, Kellogg's, Unilever, Colgate-Palmolive, CBS, Procter & Gamble, ESPN and Nestlé.

Taking wine to the world

Finding out what Chinese consumers like in a glass of red wine has become a key research project, particularly with China's import market estimated at over \$1.7 billion and growing rapidly. The project aims to help Australian wine producers break into the Chinese market and is bringing together great minds from The Australian Wine Research Institute, the Institute for Business and Market Research, and the Ehrenberg-Bass Institute for Marketing Science. Research techniques have varied from sensory studies through to different consumer research projects, to help determine Chinese purchasing preferences.

**ABOVE WORLD-CLASS
RESEARCH IN BUSINESS AND
MANAGEMENT**

2018 EXCELLENCE IN RESEARCH FOR
AUSTRALIA (ERA)

**ABOVE WORLD-CLASS
RESEARCH IN MARKETING**

2018 EXCELLENCE IN RESEARCH FOR
AUSTRALIA (ERA)

PROFESSOR BYRON SHARP, DIRECTOR,
EHRENBERG-BASS INSTITUTE FOR
MARKETING SCIENCE.



IMAGES OF RESEARCH 2017, WHY SETTLE FOR A PIECE OF SKY,
WHEN YOU CAN FLY AND SOAR? **DR ARRY TANUSONDJAJA**,
RESEARCH FELLOW, SCHOOL OF MARKETING.

**Centre for Workplace Excellence
(CWeX)**

UniSA's **Centre for Workplace Excellence (CWeX)** brings together world-class researchers with a vision to empower organisations to achieve excellence in productivity and employee wellbeing.

The Centre integrates several key pillars, including People, Practices, Context, Leadership, and Work Health & Safety. It approaches challenges to productivity, employee wellbeing and health from a multilevel perspective, considering the organisational context, culture and climate, people management practices, leadership and team dynamics.

Its powerful research is developing new ways of thinking and understanding. Its also generating transformative workplace outcomes through evidence-based tools and recommendations to practitioners and policymakers.

Information technology, engineering and the environment

We have a proud history of furthering education and research in the fields of science, information technology, engineering and mathematics to promote innovation and productivity on a local, national and international scale.

We have a diverse and multicultural environment with more than 300 academic researchers and more than 320 PhD students. Key research disciplines include defence, wireless and satellite communications, natural resources and carbon living, environmental remediation, and new technologies in information technology, engineering, mathematics, and the natural and built environments.

The Future Industries Institute (FII)

FII brings business, academia and the community together to address real-world issues and build economic growth through innovation and genuine partnerships.

While many projects will align with FII's four primary research strands (biomaterials engineering and nanomedicine; energy and advanced manufacturing; environmental science and engineering; and minerals and resources) this is not a prerequisite for partnership.

With deep-seated cross-disciplinary connections across the University, FII offers a solution-driven approach developing mutually beneficial partnerships with industry to help translate research into commercial outcomes.

Innovation and ingenuity

UniSA has formed several significant partnerships, which have led to breakthrough research and innovation, including:

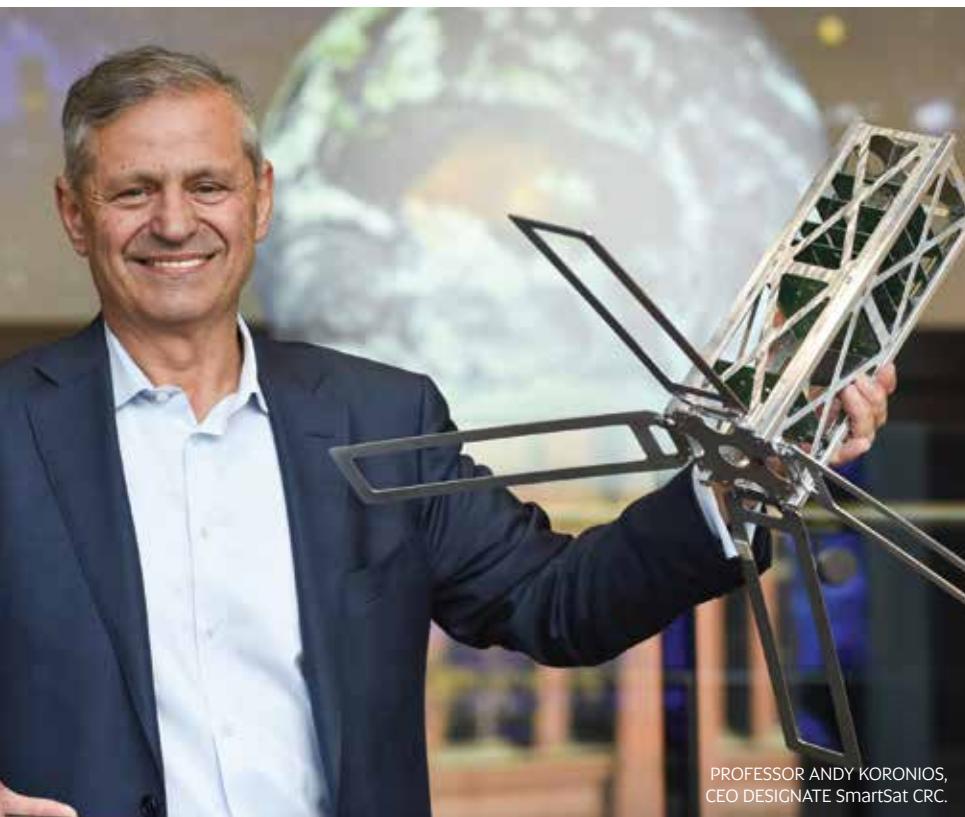
- Teaming up with SMR Automotive, researchers have produced the world's first lightweight plastic automotive mirrors. The same innovative thin-film technology is also being used with Adelaide-SA start-up Heliostat to make solar power generation more efficient, recently delivering \$1 million worth of product to Mitsubishi Hitachi in Japan.
- UniSA has been awarded a significant software grant from Siemens worth A\$450 million in commercial value. This is the largest software grant of its kind in Australia and gives students the opportunity to access the same software used to design and develop products by Space X, Maserati and the Mars Curiosity Rover.

WELL ABOVE WORLD-CLASS RESEARCH IN ENGINEERING

2018 EXCELLENCE IN RESEARCH FOR AUSTRALIA (ERA)

WELL ABOVE WORLD-CLASS RESEARCH IN ENVIRONMENTAL SCIENCES AND MANAGEMENT

2018 EXCELLENCE IN RESEARCH FOR AUSTRALIA (ERA)



PROFESSOR ANDY KORONIOS,
CEO DESIGNATE SmartSat CRC.

Transformative partnerships

SAAB – providing students and researchers in STEM related fields with placement and collaboration opportunities to build additional strength in the Australian defence sector, through the establishment of the Saab Australia-UniSA Defence Technologies Institute.

Defence Science and Technology – engaging with Australia's Department of Defence on projects worth more than \$4 million in the areas of aerospace, joint and operations analysis, maritime, national security and intelligence.

DXC Technology – partnering with the world's leading independent, end-to-end IT services company to support the next wave of IT innovators and entrepreneurs who can succeed on a global scale, integrating world-class education with internship opportunities through an IT honours program.

University College London (UCL) – a global partnership with UCL Engineering focusing on research inspired by real-world issues.

IMAGES OF RESEARCH 2017, BEAUTIFUL DELAMINATION, DR THOMAS MICHL,
RESEARCH ASSOCIATE, FUTURE INDUSTRIES INSTITUTE

Smart satellites

UniSA is proud to lead Australia's biggest investment in space industry R&D. Headquartered in South Australia, but with a network of national and global partners, the new **Cooperative Research Centre for Smart Satellite Technologies and Analytics (SmartSat CRC)** aims to lift Australia's space industry to \$12 billion and generate an extra 20,000 jobs by 2030.

Changing reality

The **Australian Research Centre for Interactive and Virtual Environments (IVE)** is a world leader in augmented and virtual reality technologies, bringing together a unique alignment of computer science, art and design, to transform industry and solve large-scale challenges.

IVE is focused on interdisciplinary AR and VR research and works with industry partners such as Google, Saab, Amazon and Siemens.

Our globally-recognised researchers are leaders in user interactions with technologies such as wearable computing, human-computer interactions, 3D visualisations and telepresence. They also have vast experience in manufacturing, the Internet-of-Things, interactive art, and design.

Research partnerships

We take particular pride in the effective partnerships we foster with end-users of our research.

Partnering from the earliest stages of a research idea allows our research directions to be shaped by the opportunities and challenges our partners face.

Our foundation of research excellence and ability to understand the needs of our partners underpins our capacity to engage effectively with end-users and deliver real value.

UniSA prioritises creating impact from our researchers' knowledge, which is enabled by our long-standing and distinctive approach to intellectual property. We offer a pragmatic and flexible approach to working with our partners, to ensure the outcomes of research have every opportunity to deliver economic, social and environmental benefits.

Contact us: unisa.edu.au/partner

Cohda Wireless

Cohda Wireless was founded by a group of highly regarded scientists working at UniSA's Institute for Telecommunications Research. The company was spun-out of the University in 2005 with initial investment from the venture fund, SciVentures.

Today, Cohda has a global leadership position in connected and autonomous vehicle technology with strategic partners and investors including Cisco Systems and NXP Semiconductors. Over 60 per cent of vehicles involved in global connected vehicle trials use Cohda technology and Cohda's software was successful in the first two automotive design wins awarded by GM and VW. In the last five years Cohda has sold products to over 600 customers across the globe and has established offices in Adelaide, Detroit, Munich and Shanghai plus distributors in Japan and Korea.

Myriota

Born out of advanced technologies developed by UniSA researchers, South Australian company Myriota is using low earth orbiting satellites to revolutionise machine to machine (M2M) communications across a wide range of industries from defence to agriculture. Using software hosted in the cloud the system makes messages accessible anywhere, providing invaluable technology for industries managing conditions and operations remotely.



DR PAUL GRAY,
CEO OF COHDA WIRELESS.

**COLLABORATING
WITH MORE THAN
2,500 COMPANIES
WORLDWIDE**

**UniSA's WORLD-CLASS
RESEARCH LED TO 72 NEW
PATENT FILINGS IN THE PAST
THREE YEARS**



Jumbo Vision

Working in collaboration with Professor Bruce Thomas from UniSA's Wearable Computer Lab, and in partnership with the company Jumbo Vision, a new technology in the field of Spatial Augmented Reality (SAR) has been developed and licensed to the company.

Called CADwalk, the technology allows for the projection and real-time adjustment of objects onto a variety of 2D and 3D surfaces that enable a SAR application for visualising layouts of control panels, floor plans and buildings in real-time. Jumbo Vision has built and operates facilities in Technology Park, located in Mawson Lakes (South Australia) and Forrestfield (Western Australia), and is now looking to deploy CADwalk worldwide.

Partnerships and commercialisation

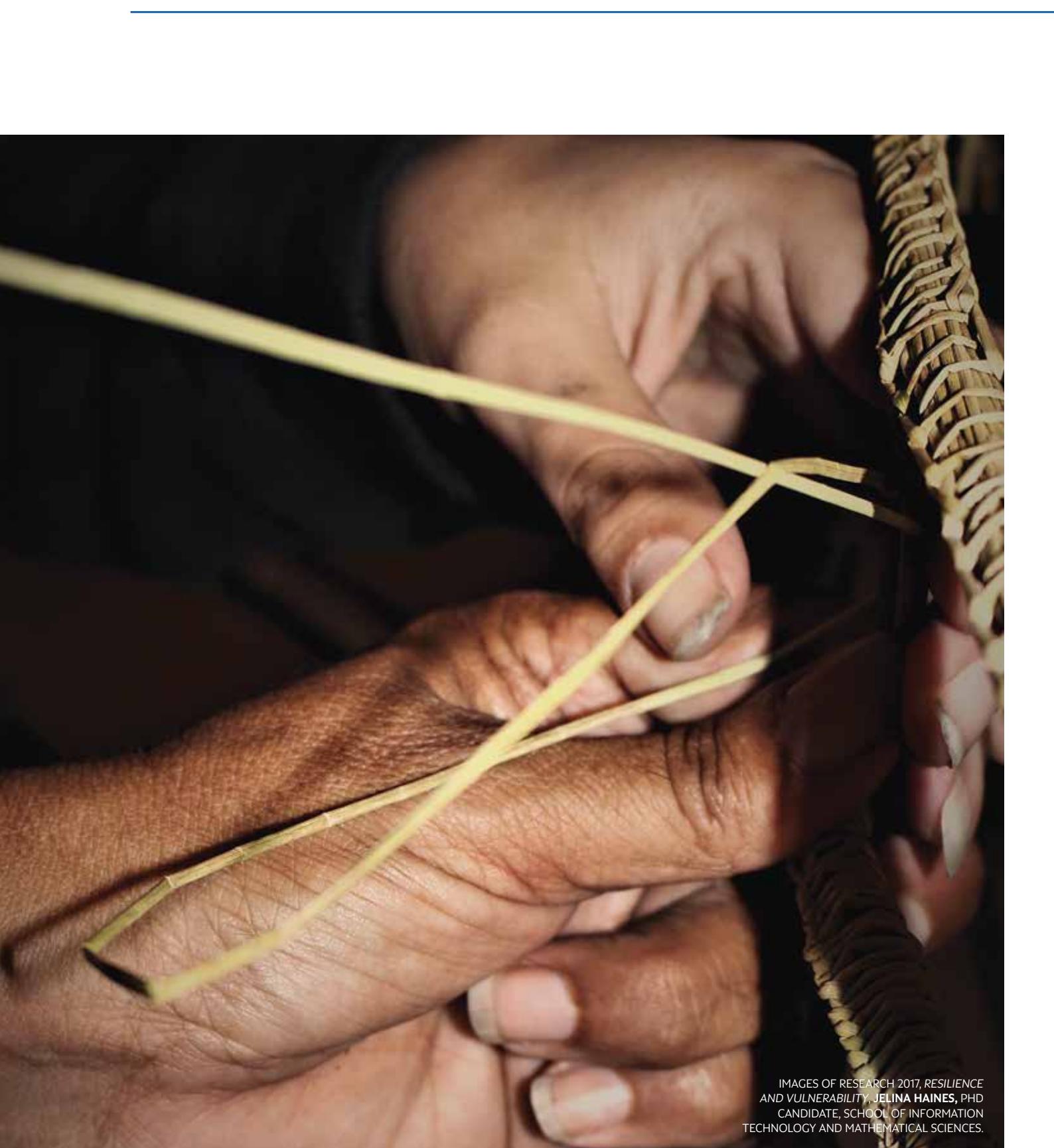
UniSA Ventures is focused on creating business opportunities through innovation. By leveraging the needs of industry against the core capabilities and intellectual assets of our world-class research, UniSA Ventures creates opportunities for industry to engage with the University and secure commercial interest in innovative technologies that have commercial applications.

UniSA Intellectual Property (IP) Principles

Our approach to managing intellectual property is based on the following principles:

1. We actively encourage students and staff to undertake research that is relevant to challenges faced by society and in partnership with industry, government and community groups.
2. As guided by our industry partners, we encourage them to own and take the lead in commercialisation of intellectual property generated from industry-funded research when they are best placed to do so.
3. Where access to university owned or jointly owned IP is necessary or beneficial for commercialisation we support access to the IP based on fair and equitable terms, in a timely manner.
4. Our interactions with industry will be governed by a transparent, flexible and user-friendly system that supports and encourages engagement using a range of IP models.
5. Each university will make public our Intellectual Property Policies and Standard Commercial Agreement templates, to provide a simple and transparent framework.
6. We actively encourage and promote an entrepreneurial culture for our staff and students. This includes a system of support to facilitate the creation of new ventures where our staff and students are appropriately involved.
7. All partnerships and resultant commercial agreements will be developed and negotiated in a prompt manner and in keeping with these core principles.

The commercialisation of IP and spin out companies for UniSA is managed by **UniSA Ventures**, a wholly owned entity of the University of South Australia.



IMAGES OF RESEARCH 2017, RESILIENCE
AND VULNERABILITY, JELINA HAINES, PHD
CANDIDATE, SCHOOL OF INFORMATION
TECHNOLOGY AND MATHEMATICAL SCIENCES.



**University of
South Australia**

University of South Australia
GPO Box 2471, Adelaide
South Australia 5001
Australia

Telephone: +61 8 8302 5300
Facsimile: +61 8 8302 5301
unisa.edu.au/research

The information provided in this publication is for general information only, and the University of South Australia makes no representation about the content, suitability, accuracy or completeness of this information for any purpose. It is provided "as is" without express or implied warranty.

Information correct at time of printing (May 2019)

CRICOS provider number 00121B

Australia's University of Enterprise