Newsletter: Vol 19, Issue 6 - December 2022





To all our Partners, Members and Supporters we wish you all Happy Holidays and all the best for the New Year.

Thank you all for your contributions and support this year!

We look forward to bringing you another year of programs and opportunities in 2023.

Anne, Claire and Carol

OUR PARTNERS



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SOUTH AUSTRALIAN SCIENTIST OF THE YEAR PROFESSOR MARIA MAKRIDES



Congratulations to Professor Maria Makrides, HDA Member and HDA Steering Group Member for winning South Australian Scientist of the Year!

Professor Maria Makrides is the Theme Leader for SAHMRI Women and Kids and Deputy Director of SAHMRI. Maria is a National Health and Medical Research Council (NHMRC) Principal Research Fellow and also Professor of Human Nutrition at University of Adelaide.

Professor Maria Makrides leads one of the premier research centres at the forefront of mother-infant nutrition research in the world, leading a large, multidisciplinary team of more than 70 staff and students.

The SA Science Excellence and Innovation Awards showcases the critical importance of science, research and innovation to the development of industry and society as a whole.

For the full list of winners go here https://www.scienceawards.sa.gov.au/2022-winners

NHMRC SYNERGY GRANT SUCCESS HDA Co-Convenor



The objective of the Synergy Grant scheme is to support outstanding multidisciplinary teams of investigators to work together to answer major questions that cannot be answered by a single investigator. A total of 10 grants were awarded, \$5 million each for a total of \$50 million.

Using complex models of human trophoblast to study placental biology and disease

CIA - Professor Jose Polo CIB - **Professor Claire Roberts (Flinders University)** CIC - Professor Ryan Lister CID - Professor Guiying Nie CIE - Professor Geoffrey Faulkner CIF - Associate Professor Luciano Martelott

\$5 million, 5 years commencing from 2023, University of Adelaide

ARC DISCOVERY GRANT SUCCESS HDA Members

Associate Professor Melissa O'Donnell; Professor Amy Wright; Professor Sandra Eades; Dr Catia Malvaso; Dr Rhiannon Pilkington; Professor Barbara Fallon \$548,000, 3 years, University of South Australia

This study will fill the evidence gap by determining the typologies of families with multiple and complex needs and child protection involvement who face intersecting risk factors (e.g. family violence, mental health, intergenerational trauma, alcohol/drug use, justice involvement, disability, poverty and housing insecurity).

Professor Gerry Redmond; Professor Sally Robinson; Professor Joanne Arciuli; Professor Eric Emerson

\$386,000, 3 years, Flinders University

This project aims to examine opportunities that young people with disability and young carers (aged 12-24) value and access, and contributions they make to families, communities and society.

HDA PARTNER NEWS CHANNEL 7 CHILDREN'S RESEARCH FOUNDATION



Dedication to understanding early life origins and the social determinants of health and health equity for infants and children were recognised at this years Channel 7 Children's Research Foundation Achievement in Children's Research Awards.

Held to honor the achievements and outcomes of the research and researchers the CRF supports, these annual Awards are named after remarkable CRF visionaries who gave exceptional honorary service as Board members of the Foundation over many years.

The 2022 Achievement in Children's Research were awarded to:

Colin Matthews AO Award for outstanding achievement in children's health research

Awarded to Professor Sarah Robertson for her research in understanding the early life origins of infant and child health through a focus on conception and early pregnancy.

Professor Sarah Robertson is a graduate of the University of Adelaide and was an NHMRC Principal Research Fellow until appointment to Director of the Robinson Research Institute in 2013. Sarah stepped down from this role in 2021 to take up an NHMRC Investigator Award as Professorial Research Fellow.

Sarah's research goal is to advance understanding of the early life origins of infant and child health through a focus on conception and early pregnancy. Her work on the immunology of embryo implantation and placental development has provided new insights and discoveries that help explain the causes of preeclampsia and preterm birth, common pregnancy disorders that affect the lifetime health prospects of around one in five children. Her work is providing the foundation for new therapeutic interventions to reduce the incidence of these insidious conditions.

Dennis Earl Award for Outstanding Achievement in children's Welfare Research

Awarded to Associate Professor Anna Ziersch for her research focusing on the social determinants of health and health equity, with a particular emphasis on migrant and refugee children and young people.

Anna Ziersch is Associate Professor in the College of Medicine and Public Health at Flinders University in South Australia. Anna is a public health social scientist and her research focuses on the social determinants of health and health equity, with a particular emphasis on migrant and refugee health. This research has spanned an examination of employment, housing and neighbourhood, stigma and discrimination, immigration precarity, social inclusion, education, regional resettlement, family and domestic violence, HIV, disability, stillbirth, and access to primary, oral and maternal health care.

For the full story go to https://crf.org.au/2022-achievement-in-childrens-research-awards-announced/

HDA PARTNER NEWS Novita

2022 Novita Achievement Award winners



Eleven South Australians living with disability have been recognised for their commitment to achieving their goals at the Novita 2022 Achievement Awards presentation ceremony.

The 2022 Achievement Award winners and their stories can be found here https://www.novita.org.au/ stories/2022-novita-achievement-award-winners

HDA PARTNER NEWS CHANNEL 7 CHILDREN'S RESEARCH FOUNDATION

South Australian researchers will receive \$1.5million in grants from the Channel 7 Children's Research Foundation (CRF) throughout 2023 for research conducted into health, education and welfare of children.

Impact of the complement system on fetal brain and retinal development during viral infection. Chief Investigator: A/Professor Jillian Carr : \$98,679 : Flinders University

Can cognitive function be improved in childhood cancer survivors with use of a custom cognitive gaming suite? Chief Investigator: A/Professor Lyndsey Collins-Praino : \$99,926 : University of Adelaide

Reversing fetal growth restriction for better pregnancy and infancy health. Chief Investigator: Dr Macarena Gonzalez : \$100,000 : University of Adelaide

When should we vaccinate pregnant women against COVID-19 to offer the best protection to infants? Chief Investigator: Professor Helen Marshall AM : \$90,000 : University of Adelaide

Does the presence of lung infection impact the efficacy of cystic fibrosis airway gene therapy? Chief Investigator: Dr Alexandra McCarron : \$40,060 : University of Adelaide

Plasma activated hydrogel therapy as a novel treatment for paediatric burns. Chief Investigator: Dr Ainslie Derrick-Roberts : \$99,946 : University of South Australia

The Cool Brain Hall of Fame: Using examples from popular culture to de-stigmatise learning differences in primary schools. Chief Investigator: Dr Amy Wyatt : \$94,995 : Flinders University

Supporting adolescents on the waitlist for eating disorder treatment: A pilot randomised controlled trial. Chief Investigator: Dr Kathina Ali : \$36,124 : Flinders University

Providing school based eyecare to improve learning and promote equitable outcomes in South Australia. Chief Investigator: Professor Nicola Anstice : \$99,439 : Flinders University

High Quality Online Literacy Instruction for South Australian Children with Down Syndrome. Chief Investigator: Professor Joanne Arciuli : \$99,988 : Flinders University

A new therapy to mature preterm lungs without damaging the brain. Chief Investigator: A/Professor Kathryn Gatford : \$100,000 : University of Adelaide

Contributors to endocrine abnormalities in children and adolescents with sleep disordered breathing. Chief Investigator: Ms Amelia Noone : \$39,995 : University of Adelaide

Using genetic models to tackle epilepsy. Chief Investigator: A/Professor Cheryl Shoubridge : \$93,488 : University of Adelaide

Perfection is the enemy of progress and good mental health: A Randomised Controlled Trial of guided parent-delivered Cognitive Behaviour Therapy for children's perfectionism. Chief Investigator: Professor Tracey Wade : \$99,996 : Flinders University

Testing combined therapies as a powerful tool for controlling paediatric Glioblastoma multiforme invasiveness. Chief Investigator: Dr Sunita Ramesh : \$91,816 b: Flinders University

Optimising a synthetic scaffold for the in vitro bioengineering of bi-layered skin as a therapy for burn injuries and chronic wounds in children. Chief Investigator: A/Professor Marcus Wagstaff : \$100,000 : CALHN – Central Adelaide Local Health Network

Establishing a Sudden Infant Death Syndrome (SIDS) biobank. Chief Investigator: Professor Leanne Dibbens : b\$90,000 : University of South Australia

Development of the next-generation antimicrobial dermal matrix for the management of deep burn injury. Chief Investigator: Dr Zlatko Kopecki : \$100,000 : University of South Australia

RECENT HDA EVENTS



Healthy Development Adelaide and Women's and Children's Hospital Grand Round - Can stress influence our genes, now and in the future?

The grand round was presented by **A/Professor Sarah Cohen-Woods**, Matthew Flinders Fellow, College of Education, Psychology and Social Work / Flinders Institute for Mental Health and Wellbeing, Flinders University.

Chaired by Rachael Yates (HDA Ambassador), Executive Director, Nursing and Midwifery, Women's and Children's Health Network.



Healthy Development Adelaide and SAHMRI Women and Kids forum on **Diets of young Australians – are they starting off on the right path?**

Speakers included **Professor Tim Green**, South Australian Health and Medical Research Institute (SAHMRI); **Dr Merryn Netting**, South Australian Health and Medical Research Institute (SAHMRI) and **Najma Moumin**, School of Medicine, University of Adelaide.

Chaired by **Professor Rebecca Golley**, Deputy Director of Flinders Caring Futures Institute, Flinders University.

Pictured I to r: Tim Green, Merryn Netting, Najma Moumin and Rebecca Golley.



Healthy Development Adelaide and Novita forum on Neuro-affirmative practice for Autistic children and youth.

Speakers included **Dr Amy Laurent** and **Dr Jacquelyn Fede**, **Penny Miller**, Novita, **Rebecca Milton**, Novita. Chaired by **Petr Prasil**, Manager, Research and Development, Novita.



HDA MEMBER PROFILE - ALISON DESLANDES ROBINSON RESEARCH INSTITUTE, UNIVERSITY OF ADELAIDE



Alison Deslandes is a PhD candidate with the Imagendo group within the Robinson Research Institute at the University of Adelaide. She completed a Masters by research at the University of South Australia early in 2022. Her master's thesis focused on the accuracy of transvaginal ultrasound imaging in the diagnosis of endometriosis when performed by sonographers. Her PhD is being supervised by Professor Louise Hull and Dr Jodie Avery of the Robinson Research Institute and A/Prof George Condous from the University of Sydney, in conjunction with Dr Tim Chen from the Australian Institute for Machine Learning at the University of Adelaide.

Alison's PhD is investigating whether an artificial intelligence tool can be developed as a self-learning aid for sonographers trying to increase their skills in scanning for endometriosis. One

of the current barriers to using ultrasound to obtain a non-invasive diagnosis for endometriosis is a lack of sonographers with adequate training in this technique. Teaching ultrasound scanning is a difficult and labour-intensive task, typically requiring theoretical learning in combination with guided practical tuition, followed by supervised scanning with a mentor with suitable expertise. With more sonographers able to scan for endometriosis, access to this technique will be expanded. Furthermore, if the quality of images sonographers can obtain increases, this will mean it is more likely artificial intelligence tools may be able to interpret these images for diagnosis which the Imagendo group is also investigating currently.

Alison brings 14 years of clinical ultrasound experience to her research. She still does a small amount of clinical sonography, specialising in obstetrics and gynaecology alongside her research. Her main clinical interests are endometriosis, three-dimensional gynaecological ultrasound, infertility, monitoring of twin pregnancies and the psychosocial aspects of obstetric ultrasound.

Alison has been heavily involved in the ultrasound profession having sat on many committees and worked as an examiner for several organisations and universities over the years. She is currently the President of the Australasian Society for Ultrasound in Medicine. She is a highly sought-after speaker at many ultrasound conferences and workshops on the topics of gynaecological sonography and communication in obstetric ultrasound. She is also a board member of Through the Unexpected which is a health promotion charity focusing on supporting the mental health of people affected by a prenatal diagnosis of a congenital anomaly.

HDA MEMBER BRIEF NEWS



Congratulations to **Professor Jennifer Couper**, University of Adelaide for being elected as a Fellow of the Australian Academy of Health and Medical Sciences. Jenny is a practising clinician and researcher who finds innovative solutions to help children with type 1 diabetes, and those at risk.



Congratulations to **Dr Rosa Virgara**, University of South Australia for winning the Early Career Researcher Award for best oral presentation at the Asia-Pacific Society for Physical Activity conference last month.

Rosa's winning presentation was for her international Delphi survey. Read Rosa's conference report on the next page.

HDA TRAVEL AND DEVELOPMENT GRANT RECIPIENT REPORT

Dr Rosa Virgara

Research Associate (ARENA Group), Allied Health & Human Performance, University of South Australia

In late November, I attended the first face-to-face Asia-Pacific Society for Physical Activity conference. After many virtual meetings and conferences, this was an excellent opportunity to reconnect with colleagues and create new connections. The conference was attended by over 160 delegates, spanning the globe from Europe, the Middle East, Asia and New Zealand. As an early career researcher, it was an excellent opportunity to connect with other early career researchers and share the work from my PhD studies, during which I was supported by a Healthy Development Adelaide PhD excellence scholarship.

Day 1 opened the conference with a keynote presentation from Professor Heather McKay from the University of British Columbia. She spoke at length about implementation and dissemination trials, particularly with a focus on scalability and how to integrate scientific methods into real-world settings that translate into changes in health. There was also a key-note presentation from Dr Isaac Warbick from the Auckland University of Technology explaining how for the Māori people, interventions had more value and impact when focussing on holistic outcomes associated with health, such as connection and friendship, rather than biomedical outcomes, such as body fat percentage and cardiorespiratory fitness.

I had two oral presentations during the conference. On day 1, I presented the findings of the international Delphi study I conducted in 2019-2020, which led to the development of the first Australia Physical Activity and Screen Time Guidelines for Outside School Hours Care (OSHC) article link (https://doi.org/10.1186/s12966-020-01061-z). This was presented in the Policy stream and was well received by delegates, commenting on the rigour and excellent engagement with end-users throughout the process.

Day 2's key-note speaker was Adjunct Professor Trevor Shilton from the heart foundation. He discussed the ways in which researchers and academics have a role to not only do scientifically sound research, but use that research and intellectual understanding to advocate for the implementation of physical activity into government policy. He provided examples of how this has been successfully conducted with the World Health Organisation and the Australian and Thai governments.

During day 2, I presented the findings of the follow on work from my PhD exploring the gap between the newly developed guidelines and current practice in OSHC (https://doi.org/10.1186/s12889-022-13135-7). Again, the presentation was well received. The audience was keen to understand the next steps and how the newly developed guidelines will be implemented to change physical activity and screen time scheduling.

Overall the conference was an enlightening and excellent opportunity to share the fantastic physical activity research occurring and how that research is translating into practice. I look forward to ASPA 2023 in Auckland, New Zealand!

Department for Education Home internet scheme to get students online

A new program to ensure students have adequate internet access at home to help fulfil their educational potential is now open for families to apply for support in 2023. The Student Home Internet Program aims to provide disadvantaged students with the same opportunities as others to complete homework requirements and extended learning at home.

The program was first considered pre-COVID, when digital strategy consultations undertaken by the Department for Education found that some students had unsatisfactory or no internet available at home. Remote learning during COVID further highlighted the need for a support program.

This program, which is open to all SA government school students who don't have adequate home internet access, will see families supplied with a dongle (if required), SIM card and internet access until the end of 2023. The program will begin in term 1 of 2023, with applications for the service now open on the department's website.

Full details here https://www.education.sa.gov.au/department/media-centre/our-news/home-internet-scheme-to-get-students-online

HDA MEMBER PUBLICATION PARENTS OF PREMATURE BABIES NEED MORE INFORMATION



A new University of Adelaide study has found parents of babies who are born less than 32 weeks into pregnancy are concerned about the long-term impacts on their children's development.

The study published in the Journal of Paediatrics and Child Health is the first to examine the key areas of development that worry parents with children admitted to neonatal intensive or special care.

The publication can be found here https:// onlinelibrary.wiley.com/doi/10.1111/jpc.16030

Photo reproduced upon permission from Maria and Frankie.

"The study shows that very pre-term birth is associated with greater parent concern for child development and this is evident for many years after they bring their babies home from hospital" said lead author Megan Bater, a PhD Candidate at the University of Adelaide, and a Consultant RN with the Neonatal Growth and Development Program at the Women's and Children's Hospital.

"We found that during their hospital stay, parents expressed developmental concern for 49 per cent of babies born very premature. That number dropped to 22 per cent for babies born closer to their due date. Parents with newborns in the neonatal unit were six times more likely to report concern across multiple areas of development for very premature babies compared to babies born later in pregnancy. We also found that fathers raised very similar concerns to mothers about how their children will reach important milestones in their development".

The researchers surveyed 590 mothers and fathers across two separate cohorts with children who had graduated from any Australian neonatal unit, and with babies at the Women's and Children's Hospital and Lyell McEwin neonatal units in South Australia.

Uncertainty about their child's expected developmental milestones and confusion about developmental delays after very preterm birth were common.

"This shows the importance of improving information and educational support to parents with premature babies so that they have the tools, confidence and knowledge in place to assist their child's development over the early years of life," said Ms Bater, who is part of the Robinson Research Institute and the South Australian Health Medical Research Institute (SAHMRI).

"Listening to parents is helping us to bridge the information gap between parents and clinicians. Our research team are working to create pre-term specific educational resources detailing baby development and supportive strategies for mums and dads with babies born premature."

Megan Bater, PhD Candidate, University of Adelaide. Consultant Registered Nurse, Neonatal Growth and Development Program, Women's and Children's Hospital.

ROYAL COMMISSION INTO EARLY CHILDHOOD EDUCATION AND CARE

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HDA TRAVEL AND DEVELOPMENT GRANT RECIPIENT REPORT

Josh Robinson (HDA Scholar) - PhD Candidate, University of Adelaide

There is a refreshing uniqueness to the concept of having four different societies from across Australia and New Zealand come together for a conference from 13-16th November 2022, namely ESA-SRB-APEG -NZSE 2022. In particular, the Society for Reproductive Biology (SRB) was my main area of interest and the category under which I submitted my abstract. However, the added mix of the Endocrine Society of Australia (ESA) meant that I had immense exposure to the impacts of the endocrine system on reproductive biology. Much of my recent work has explored cortisol and other synthetic glucocorticoids and their impact on the developing fetal lung. It was great that my work was accepted and could be orally presented to an audience of experts in diverse specialties.

One of the huge takeaways for me was the methodology of good science. In his talk on "Science-Medicine partnerships: making a difference for infertile and cancer patients", Robert Gilchrist theorised two ways in which science was performed. His first comment was that some do good science and then find a clinical application of that science. The second way was to find a clinical problem and then approach finding a solution scientifically. He recognised that both were equally valid. Reflecting on my PhD experience, most of my research has been to answer observable clinical questions and so exposure to this other way of performing good science first was eye-opening. Many excellent presentations showed how the research progressed through a series of logical questions, which explored multiple variables individually before bringing the results back together to construct the 'big picture'.

The second area that will be invaluable for my research was the focus of multiple talks on the placenta. The Australian and New Zealand Placental Research Association (ANZPRA) was also highly represented and promoted at the conference. My research has previously focussed on the lungs, however, a couple of my new projects also involve the placenta. The conference gave me further insight into the anatomy and physiology of the placenta, key cell types, common pathologies, potential biomarkers, methods of morphology analysis and more. All of these will inform my research question about the placenta of asthmatic mothers and its response to endogenous glucocorticoids and glucocorticoid agonists.

The ECR Career development session was incredibly useful for PhD students and other Early Career Researchers (ECRs). In particular, the talk by Dr Yassmin Musthaffa on "Managing time for success" was empowering. It has motivated me to control my time better to have a better work-life balance and prevent burnout. Dr Musthaffa gave many practical tips on making the elusive work-life balance ideal a reality.

I am incredibly grateful for the support of Healthy Development Adelaide, both in providing travel funds to help me attend this conference and also in the constant support of their members. I also receive the CRF/ HDA PhD Excellence supplementary scholarship and have seen firsthand the diligence of the network to help its scholars and members.

BECOME A HDA MEMBER TODAY ...

Join us in fostering South Australian multidisciplinary research, policy and practice at basic, clinical, social and population levels to enhance the healthy development and wellbeing of Australia's future generations.

HDA membership is open to researchers, PhD students and professionals working in areas relevant to HDA's research.

Membership benefits

- Access to travel grants (PhD students and early career researchers)
- Access to PhD scholarships
- Eligibility to apply for HDA awards
- Free HDA event attendance certificates towards your continuing professional development points
- Build relationships with people working in areas relevant to the health and development of young children and adolescents
- Contribute your knowledge and expertise to make a difference
- Support HDA into the future

1 year (2023) for \$20 or 3 years (to 31 Dec 2025) for \$50 (excluding GST). https://health.adelaide.edu.au/healthy-development-adelaide/get-involved

Happily ever after? A new chapter for traditional fairy tales

Media Release - 24 October, University of South Australia



From *Little Red Riding Hood* to the *Ugly Duckling*, fairy tales have long been read to children across the ages. Yet despite criticisms of being outdated and sexist, new research shows that fairy tales still hold an important place in primary education.

In a new review from the University of South Australia, researchers found that fairy tales are a valid resource for teaching primary students about social justice and emotional intelligence.

Experienced teacher and UniSA Education Doctoral candidate, Glenn Saxby, says that when fairy tales are presented in a critical and inclusive manner, they can help explain complex issues to children.

"Once upon a time, fairy tales were the main way to teach children about the world and their place within it, but over time – and especially post early 'Disneyfication' – people have become more critical about them," Saxby says.

"While there's no denying that some fairy tales present unrealistic expectations or stereotypes, when fairy tales are used in a critical and inclusive manner, they can be an effective teaching resource in the contemporary classroom.

"Fairy tales offer many positive opportunities for children to learn about empathy, kindness, ethics, and cooperation. But also, when fairy tales portray outdated or gender-ignorant representations, teachers can use these instances to confront and discuss ideas with their students."

The review outlines many benefits of fairy tales for modern learning – from understanding the structure of a compelling tale, to teaching literacy or even STEM, and understanding gender stereotypes. For example, questions such as 'Could have Rapunzel built a zip line using her hair to escape her tower prison?" can frame discussions.

Saxby says while teachers should be encouraged to feel confident about using fairy tales in the classroom, they should do so with a creative and critical lens.

"Active discussion about the historical and sociocultural contexts of fairy tales can provide many teaching opportunities in the classroom, but there is still scope for teachers to extend beyond traditional boundaries," Saxby says.

"Multicultural fairy tales have enormous potential to increase cultural equity and understanding among primary children, so finding fairy tales from different cultural backgrounds would be an excellent resource for teachers. We need to look beyond the 'traditional tale', and through teachers, we can start a new chapter."

Commissioner for Children and Young People SA - Advocacy Agenda

At the core of my advocacy effort is the belief that children and young people are critical stakeholders who have a right to have input into the decisions that directly impact on their lives. By valuing and respecting the views of South Australia's children and young people, we acknowledge and legitimatise their importance in our community. When we listen and act upon their advice wherever possible, we demonstrate that we have their best interests at heart and build intergenerational trust.

Hearing directly from children and young people about their lives has been central to my advocacy approach from the outset. It is what enables me to confidently represent their interests and concerns to those I know have responsibility and the authority to develop and implement the legislation, policy and processes they need to thrive.

I have compiled the priority issues and concerns that I have heard over the past five years into a plan of action across health, safety, wellbeing, education and citizenship. These are now summarised in my Advocacy Agenda.

To read my Advocacy Agenda email CommissionerCYP@sa.gov.au or go here https://www.ccyp.com.au

Innovative partnerships improving pregnancy outcomes

Caring Futures Institute - 26 October, Flinders University



The power of productive partnerships is helping health experts arrive more swiftly at treatment breakthroughs – with Professor Annette Briley's studies into pregnancy and childbirth being a significant beneficiary.

Professor Briley's joint-appointment with NALHN (Northern Adelaide Local Health Network) and the Caring Futures Institute at Flinders University is proving highly beneficial, with combined resources of both big organisations being harnessed to help improve pregnancy outcomes for women, babies and families, build research capacity and develop infrastructure to undertake further research that's relevant to local population and workforce.

A shared-appointment is something Professor Briley had done previously in the UK, so she knows how beneficial the arrangement could be for both partner organisations. "With me being the conduit between a clinical service and the university, it helps to establish clinical research that is relevant to the local population," she says.

In London, Professor Briley investigated problems of women suffering excessive bleeding, that affects 34% of all births, noting that only a small percentage go on to be serious. However, without immediate treatment a healthy woman would bleed out in 10 minutes.

"It remains a major cause of maternal deaths worldwide, with most occurring in developing countries, but in Australia women still die from this every year," she explains. "In this country, 49% of women have labour are induced, which can increase the risk of bleeding after the baby is born."

More attention needs to paid to this serious problem, because the circumstances for women giving birth in developed countries are changing; they are older and heavier when giving birth, which compounds potential bleeding problems during childbirth. To examine this, Professor Briley has created complex models to identify risk factors – which also includes such things as high BMI ratings, the presence of fibroids, and whether twins are onboard – and her guidelines have had an immediate effect.

"When these factors were identified through putting a sticker on the handheld notes, midwives have been able to pick women at risk and reduce the incidence of catastrophic bleeding. Some clinicians hadn't been acting quickly enough. Now we have checks that ensure much greater efficiency."

Significant improvements have also come through Professor Briley's work with Microlife to help create the Cradle VSA blood pressure measuring device, which instantaneously calculates the shock index of patients, so rather than relying on visual estimation of blood loss, or measuring drapes and pads, maternal compromise can also be assessed through shock index – and is vital in emergency situations.

Her continuing work includes measuring the effects of women taking iron infusions during pregnancy (to determine whether such high boosts for women with low iron counts carries unexpected side effects), and an international trial looking at whether women at risk of pre-term birth can be helped by limited doses of steroids, to ensure foetal lung maturity.

Professor Briley is also involved in an international study examining post-traumatic stress disorder and psychological disorder affecting women after childbirth, and she is part of the Begin Better Consortium, which is a major study looking at women who are prepared to delay pregnancy if they are overweight or obese, to see whether lifestyle intervention can improve pregnancy outcomes.

Professor Briley says working on such a spread of diverse health research material simultaneously is only possible due to strong bridges that are built through joint-appointments. "They are tricky to manoeuvre, because a university and a clinical facility have quite different demands, but the benefit is that someone in my position can bring credibility to work of both organisations simultaneously," she says.

"Having the backing of a university is particularly important in these roles, because it brings the academic rigour required for effective research that can then be introduced to clinical practice."

It also means that, having a foot in both camps, Professor Briley's outcomes are more likely to be readily accepted by clinicians. It therefore provides a valuable means of accelerating the transition of research into practice. "The transition becomes more seamless, which ultimately means – in the case of my work – that women who have problems with childbirth get better outcomes."

Improving hearing health for Aboriginal and Torres Strait Islander children

Media Release - 11 November, Flinders University



Combining Indigenous and western research methods, a new Flinders University project is aiming to stop Aboriginal and Torres Strait Islander children from falling through the cracks when it comes to their hearing.

Recently awarded over \$1.1 million from the National Health and Medical Research Council, the project will provide culturally appropriate pathways to ensure children are not missing out on crucial ear health checks.

"All children have the right to hear well as it is vital for language development," says project Chief Investigator Dr Jacqueline Stephens, an epidemiologist from Flinders University's College of Medicine and Public Health.

"For Aboriginal and Torres Strait Islander children this is especially important as language is a key component of their identity and for the passing on of history and knowledge, as well as building relationships with family and Country."

Aboriginal and Torres Strait Islander children have the highest prevalence of poor hearing health in the world, experiencing earlier, more frequent, more prolonged and more complicated ear disease and consequent hearing loss than other children, despite ongoing efforts to address the issue.

"Pathways for patients trying to access hearing services can be complex and without an overarching strategy, children can be lost from the system and miss out on important ear and hearing health checks," says Dr Stephens.

"The ongoing high rates of ear disease among Aboriginal and Torres Strait Islander children clearly demonstrate current approaches are ineffectual. We need to implement multifaceted strategies that are co-designed with community and implemented

in culturally appropriate ways, to ensure they are effective, sustainable and successful."

Together with project partners the University of Sydney, UNSW, Tharawal Aboriginal Corporation and Yadu Health Aboriginal Corporation, the team will review existing research and clinical data and run a trial across four sites in SA and NSW, designed to increase documented health examinations of children.

This will then be combined with Aboriginal yarning methods, to further understand lived experience, before creating clear actions to be implemented, in line with the Roadmap for Hearing Health, to ensure improved services.

The research team brings together early, mid and senior researchers and community members, who identify as both Aboriginal and non-Aboriginal people, with a wide range of expertise, skill, and lived experience, ensuring the research is communityfocussed, flexible, and evidenced-based.

"Together we will determine how the system is currently being used by Aboriginal and Torres Strait Islander children and gain a greater understanding of access to care, delivery of treatment, and patients' physical and emotional wellbeing," says Dr Stephens.

"From there we will then design, implement, and evaluate a multifaceted strategy to address hearing health surveillance and management for Aboriginal and Torres Strait Islander children, starting with four communities across South Australia and New South Wales.

"Key to this will be engaging frontline staff and patients in the design and rollout of new digital health tools to improve healthcare processes and uptake."

The project – Pathways For Aboriginal and Torres Strait Islander Hearing Health: The PATHWAY Project – has been funded as part of the NHMRC's 2021 Hearing Health Evidence Based Support Services grant scheme.

The scheme will see the Australian Government provide \$7.5 million across nine projects to improve hearing health outcomes in Australia, with Dr Stephens project the second largest grant awarded.

Support from Flinders Foundation, along with funding from a Bank SA Foundation grant, helped to produce preliminary data that enabled Dr Stephens to apply for the NHRMC funding.

SA leading the world with preterm birth prevention initiative

Media Release - 16 November, SAHMRI news



South Australian researchers predict the state could soon reduce rates of preterm birth by around 14% if enough pregnant women opt-in for the pioneering omega-3 test and treat screening program led by SAHMRI and SA Pathology.

More than 100 local women with single pregnancies are now engaging with the program each week, but SAHMRI Women and Kids Theme Leader, Professor Maria Makrides says that number must be doubled to realise optimal results.

"Our studies have shown that having an optimal omega-3 status in pregnancy will increase the chances of having a full-term pregnancy and therefore reduce the risk of prematurity," Prof Makrides said.

"Omega-3 testing is now available to pregnant women in SA at the time of other antenatal screening tests. Those with low or depleted levels are advised to take the appropriate supplements to reduce their risk of having a preterm baby."

In Australia approximately one in 12 babies is born prematurely. Babies born too soon, especially those born before 34 weeks of gestation, are more likely to have lengthy hospital stays and may have longer term health and developmental problems.

Omega-3 levels in the body are believed to play a role in determining timing of labour and birth. Women with low levels of omega-3 fatty acids tend to have shorter periods of gestation, while women with sufficient omega-3 levels tend to have longer gestations.

"Our trials have shown that correcting the omega-3 status of women with low omega-3 levels also lengthens their gestation and reduces prematurity

risk," Prof Makrides said.

"We're evaluating our omega-3 test-and-treat program as part of standard pregnancy care to see if we can emulate the results of clinical trials in the community. If we do, we'll expect to see a reduction of about 14% in babies born before 34 weeks of gestation."

Soon-to-be mother, Rachael Protzman recently opted-in for the omega-3 screening following a discussion with her doctor.

"It wasn't something I really had to think much about," she said.

"My GP explained it was an additional test that was included with the SAMSAS blood tests and I didn't need to have any extra blood taken.

"I figured if this was something I could check without getting jabbed again, that could lead to a better outcome for my baby, why wouldn't I do it?"

It's not the case that all pregnant women should take omega-3 supplements, as studies have shown that higher dose supplementation for women who already have sufficient omega-3 levels may increase their risk of prematurity.

Many who opt-in for the test are found to have optimal levels and aren't required to take any further action.

"I got my results during a telehealth appointment and was in the normal range. They just told me to keep doing what I was doing and that I didn't need any further tests," Mrs Protzman said.\

"I was just reassured and had better peace of mind that I was already doing what I could to protect my baby."

"If having the right levels of omega-3 in our bodies helps our babies have a better chance at making it to full term, it seems obvious that we would want to check how much we have so we can adjust our diets or take supplements."

Program leaders are encouraging women with single pregnancies to opt-in by ticking the box on their standard pregnancy care form and say 80% must take part if the program is to achieve the best possible reduction in prematurity rates.

Interstate and overseas groups have shown significant interest in reproducing the SA born program, with the Hunter area in NSW already starting on a small scale.

Words Grow Minds - CAMPAIGN

While everyone wants the best for their little ones, sometimes it's hard to know what they need. The Words Grow Minds campaign gets straight to the heart of how parents and caregivers can help babies and young children thrive – it's as simple as talking, reading, playing and singing together from birth.

The campaign was launched in Oct 2022 by the Early Years Taskforce, which brings together early years services from across South Australia, and is being piloted with families and early years services in Mount Gambier and Whyalla.

The Early Years Taskforce, set up in 2021, is charged with improving early childhood developmental outcomes for South Australian children. Members include government and non-government services working with young children and their families.

Taskforce members are working to improve developmental outcomes by:

- Increasing collaboration across services
- Forming clear and consistent messaging for parents and caregivers on the importance of brain development in the early years
- Showing families simple things they can do to literally grow babies' and young children's brains.

The Early Years Taskforce and Words Grow Minds campaign are funded by the South Australian Department for Education.

Read more here https://wordsgrowminds.com.au



Have yourSAy on the state's first Autism Strategy 25 November - 20 February

State Autism Strategy - Discussion Paper Survey

These questions relate to the development of South Australia's first Autism Strategy (the Strategy). The State Government is committed to creating a more inclusive and fairer society for all, bringing meaningful change to the community and our workforce through the development of the Strategy in addition to the creation of an Autism Charter.

Your feedback will provide meaningful insight into the key priority areas which autistic and autism communities consider to be most important.

The survey can be taken here https://yoursay.sa.gov.au/state-autism-strategy/survey_tools/survey

Guardian for Children and Young People 2021-22 Annual Report

The report has revealed that Australians are requesting advocacy for children and young people in state care at a higher rate than ever. This follows a trend that has seen requests for the Guardian's assistance nearly triple over the last 10 years.

Importantly, one third of requests in 2021-22 came directly from children and young people, with nearly 4 in 5 living in residential care – a placement type where population numbers continue to grow. Consistent with previous years, the most common issue they raised was the safety and stability of their living arrangements.

Read the report here https://gcyp.sa.gov.au/news

The National Plan to End Violence against Women and Children 2022-2032

On 17 October 2022, the Australian, state and territory governments released the *National Plan to End Violence against Women and Children 2022–2032* (National Plan).



The National Plan is the overarching national policy framework that will guide actions towards ending violence against women and children over the next 10 years. It highlights how all parts of society, including governments, businesses and workplaces, media, schools and educational institutions, the family, domestic and sexual violence sector, communities and all individuals, must work together to achieve the shared vision of ending gender-based violence in one generation.

The National Plan sets out actions across four domains: **Prevention** – working to change the underlying social drivers of violence by addressing the attitudes and d shildren to step it before it starts

systems that drive violence against women and children to stop it before it starts. **Early intervention** – identifying and supporting individuals who are at high risk of experiencing or perpetrating violence and prevent it from reoccurring.

- **Response** providing services and supports to address existing violence and support victim-survivors experiencing violence, such as crisis support and police intervention, and a trauma-informed justice system that will hold people who use violence to account.
- **Recovery and healing** helping to reduce the risk of re-traumatisation, and supporting victim-survivors to be safe and healthy to be able to recover from trauma and the physical, mental, emotional, and economic impacts of violence.

The full information and report can be found here https://www.dss.gov.au/ending-violence