Newsletter: Vol 15, Issue 4 - August 2019



LATEST NEWS

HDA Women's Excellence in Research Award 2019

Winning Presentation



L to r: HDA Co-Convenor Prof Claire Roberts; Dr Helen Stallman with her award; and HDA Co-Convenor A/Prof Carol Maher.

Congratulations to Dr Helen Stallman. Dr Helen Stallman is a Senior Lecturer at the University of South Australia and Hospital Research Foundation Fellow at the Basil Hetzel Institute.

Helen presented her winning research on Care. Collaborate. Connect: A disruptive innovation in preventing suicide in children and adolescents.

The program provides a new framework to support parents (through Coping Kids) and schools (Coping Schools) help children learn and use healthy coping and prevent mental illness.

OUR PARTNERS

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BRONZE



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HDA Partner News - Novita

Could mindfulness apps reduce anxiety and stress for people living with autism?

Could mindfulness apps reduce anxiety and stress for people living with autism?

A University of Adelaide research project aims to discover if mindfulness apps that you can download onto your smartphone or tablet can help reduce anxiety, stress and depression for people living with Autism Spectrum Disorder (ASD) and their caregivers. Supported by Novita and the University's Faculty of Health and Medical Sciences, PhD student Matthew Hartley is now recruiting participants to take part in his study "Evaluating the Smiling Mind smartphone app for individuals with Autism Spectrum Disorder and their caregivers".

Matthew says he's keen to find out whether using mindfulness apps could supplement standard therapy for people living with autism.

"Some mindfulness apps such as Smiling Mind are based on standard mindfulness therapies and guide the user through a range of meditations and activities with the aim of developing mindfulness as a part of everyday life," he says. "There has been a lot of research conducted on the benefits of mindfulness among the general population, but not much has been done involving people living with ASD, as well as their caregivers, to see if these apps can help reduce the symptoms of anxiety, depression and stress.

"We want to find out whether the apps could possibly be used as an adjunct to normal therapy for people living with autism – whether they could use the apps between their normal therapy sessions."

Matthew says he's looking to recruit around 100 people to participate in the study.

"We are looking for children aged over 11 who are living with ASD and can understand and follow verbal instructions. We're also looking for adults living with ASD who meet the same criteria – they can understand and follow instructions," says Matthew. "Caregivers are eligible to participate by themselves or with their child, but children must participate with a caregiver.

"Caregivers participating with children also gives us an opportunity to investigate whether there are benefits for children and caregivers to undertake the mindfulness meditation and activities together. Participants will need to engage in at least three mindfulness sessions each week for five weeks. Smiling Mind mindfulness sessions are approximately 10 minutes in length and can be downloaded through the Smiling Mind app for free. Sessions can be completed at the participant's convenience. We understand this commitment could be an imposition for families – especially if they need to plan their week around the sessions – however we strongly believe this is important research to better understand the benefits for people living with autism of the many mindfulness apps coming onto the market."

Anyone meeting the participation criteria for the research project and would like to register their interest should go to https://health.adelaide.edu.au/mindful-asd for more information, and to sign the consent forms. You can follow the project at https://www.facebook.com/mindfulasd You can also contact Matthew Hartley at matthew.hartley@adelaide.edu.au

Recruitment of participants for the research project will remain open until September.

HDA Partner News - Robinson Research Institute SA NAIDOC Young Person of the Year Award



Congratulations to Courtney Hammond for winning the 2019 SA NAIDOC Young Person of the Year award!

Courtney is working in the Lifecourse and Intergenerational Health group within the Robinson Research Institute at the University of Adelaide.

Courtney received this award for her work on the Aboriginal Gender Study.

Additionally, Courtney is a member of the Gladys Elphick Committee which celebrates the work of Aboriginal women in SA and supports Aboriginal women through their Sisterhood Foundation Leadership Program.

2 August

UPCOMING SCIPUB & HDA EVENT: THE SCIENCE OF BEING HEALTHY

The team at SciPub, in association with Healthy Development Adelaide (HDA) are pleased to present **The Science of Being Healthy.**

Our panellists are:

- ◆Professor Timothy Olds Behavioural Epidemiology, School of Health Sciences, University of South Australia
- ◆A/Professor Alison Coates Registered Nutritionist, School of Health Sciences, University of South Australia
- ◆A/Professor Carol Maher Exercise, Nutrition and Activity (ARENA), School of Health Sciences, University of South Australia

Friday 2 August, 6.00-7.30pm (doors will be open from 5:30 pm for those who wish to arrive early for a seat).

Rob Roy Hotel (106 Halifax Street in the city).

Be quick!

Further details and registration at https://www.eventbrite.com.au/e/the-science-of-being-healthy-tickets-66010953539

6 UPCOMING NAPCAN & HDA EVENT: SEPT NATIONAL CHILD PROTECTION WEEK FORUM

You are invited to NAPCAN's official SA National Child Protection Week event. Organised by NAPCAN in partnership with the Government of South Australia and Healthy Development Adelaide.

Putting children first: Changing the way we frame parenting to improve child wellbeing in Australia

Friday 6 September, 9.30am - 1.00pm (including break for morning tea and networking), registrations from 8.45am.

Ball Room, Hilton Adelaide, 233 Victoria Square, Adelaide

Add value and power to your work by learning how to frame and become part of a growing network that is using framing to change the world for kids and families.

Join our international, national and local experts for a fresh, bold conversation including:

- The power of the 'child development frame' to effect positive change
- How supporting parents is the key to improving child wellbeing
- Real-life examples of how the research is changing the way we work
- Why myths and metaphors matter, and why images of boats and lighthouses are popping up all over the place.

Keynote speaker:

- Dr Nat Kendall-Taylor, CEO, FrameWorks Institute, United States Program also includes:
- Dr Annette Michaux, Director, Parenting Research Centre, Victoria
- Dr Prue McEvoy, Clinical Director, Women's and Children's Health Network, and Lead Psychiatric Director, Department for Child Protection
- Ms Lindsey Gough, CEO, Women's and Children's Health Network

For further information and to register go to https://www.eventbrite.com.au/e/national-child-protection-week-qa-forum-adelaide-tickets-64406253839

HDA RESEARCH MEMBER PROFILE - DR AMANDA TAYLOR SCHOOL OF PSYCHOLOGY, UNIVERSITY OF ADELAIDE



I am a clinical psychologist and lecturer who is working in the School of Psychology at the University of Adelaide. I have recently returned to an academic and research role, after almost a decade spent working in a range of clinical positions, both within SA and interstate.

I completed a combined Master of Psychology (Clinical)/PhD at the University of Adelaide in 2011. My PhD research focussed on examining the association between parenting and the weight-related outcomes of their children, and included an investigation of how to best measure relevant parenting practices.

After completing my PhD, I worked as a psychologist with the Child Protection Service, where I spent approximately two years conducting assessments and therapy with children who had experienced abuse and neglect. As part of this

role, I spent time working in remote Aboriginal communities in the Anangu Pitjantjtatjara Yankunytjatjara lands in northern South Australia. I then moved to Alice Springs, where I was employed by the children's services team within the Central Australian Aboriginal Congress Aboriginal Corporation. In this role, I was involved in developing an allied health service for young Aboriginal children living in Alice Springs, and their families and caregivers. Following on from this, I took up a research position in Canada, with Associate Professor Maureen Ashe in the Centre for Hip Health and Mobility at the University of British Columbia. This research focussed on developing interventions to increase everyday activity and facilitate well-being in older adults. After returning to Adelaide in 2015, I worked in therapy-focussed roles both with a non-government service for children who had experienced trauma and with a child and family focussed private practice (Developing Minds). I commenced my current academic role in November 2018 and, as part of this, have recently been appointed as the School of Psychology's academic lead for indigenous education and engagement.

My current research focusses on understanding some of the factors – including individual modifiable skills and features of parenting and the family system – that not only reduce psychological ill-health, but also promote positive mental health and wellbeing. I am also collaborating with researchers at the University of New England in NSW, and at the Centre for Appearance Research in Bristol, UK, on projects related to understanding and promoting positive, and reducing negative, body image.

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Get Involved with HDA!

Become a member

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

Member benefits

- Contribute your knowledge and expertise to make a difference
- Build relationships with people working in areas relevant to the health and development of young children and adolescence
- Access travel grants, awards and scholarships for researchers
- Your membership support will assist us to increase our public profile within the community and strengthen our partnerships

Attend our events

The varied and extensive HDA event program covers priority research and career development topics. Our events enable effective communication and interactions across disciplines, providing opportunities for networking and multidisciplinary research collaborations for researchers, students, government and health service personnel and educators, organisations, teachers and the general community.

Keep in touch

Follow us on Facebook, Twitter and LinkedIn.

No cost to join. The membership form can be found on the HDA website or contact anne.jurisevic@adelaide.edu.au

RECENT HDA EVENTS

HDA and the Australian Association for Infant Mental Health Inc. (AAIMH) joint forum on **Born to Connect: Infant Mental Health** as part of Infant Mental Health Awareness Week 2019 was held on 12 June.



L to r: Speakers Ms Sara Jones, Ms Meg Bater, Dr Heather Mattner, Dr Rosalind Powrie, and HDA Co-Convenor and Chair Prof Claire Roberts



HDA Grand Round in conjunction with the Women's and Children's Hospital, Women's and Children's Health Network on the **Prevention and management of child obesity**: **starting early with parenting our infants and children** presented by A/Professor Rebecca Golley from Flinders University held on 19 June.



L to r: Chair Dr Jenny Fereday with grand round speaker A/Prof Rebecca Golley



RECENT HDA EVENTS

HDA Seminar on The role of psychology in the management of pediatric pain by international guest speaker Dr Rachael Coakley was held on 31 July.





L to r: Guest speaker Dr Rachael Coakley with Dr Carolyn Berryman; some members of the audience.

NEW HDA MEMBERS

Cheow Yuen Tan, PhD Candidate School of Medicine, University of Adelaide Focus - early embryo development

Dr Carolyn Berryman, NHMRC Research Fellow School of Medicine, University of Adelaide Focus - chronic pain in children **Dr Shagufta Perveen,** PhD Candidate Discipline of Public Health, University of Adelaide Focus - maternal newborn and child health

A/Prof Louise Hull, Researcher & Fertility Specialist Robinson Research Institute, University of Adelaide *Focus - infertility, endometriosis*

HDA Travel Grant - Recipient Report 2019

Tara Crawford - Robinson Research Institute, University of Adelaide

This year I attended the Perinatal Society of Australia and New Zealand conference held on the Gold Coast. I applied for and was offered a 10 min oral presentation where I presented my most recent PhD work 'Does blood donor sex influence transfusion –related outcomes in preterm newborns'. The Perinatal Society of Australia and New Zealand conference has the largest number of attendees in Australia and New Zealand, focussing specifically on perinatal research. This is the third time I have been given the opportunity to present at this conference, each time presenting my transfusion work from my PhD. This has enabled me to build a network of other researchers that are interested in this field of research as well as make contacts with NICU unit directors that may be involved in a large national NHMRC trial looking at transfusion related morbidities.

Prior to the Perinatal Society of Australia and New Zealand Fetal conference, I attended the Fetal and Neonatal Workshop. This workshop is always a very interesting conference to go to. It is more of a basic science conference focussing on mainly animal models and the mechanistic pathways of common morbidities in the preterm and term infants. This year there was a large focus on the applicability of stem cells in treating a number of conditions. This is not an area I am well aware of, but it was fascinating to see where quite possibly modern day medicine will be heading and how conditions that were once devastating may be able to drastically reduce.

Overall, I enjoyed the conference. I find it very interesting to see what other researchers and neonatal units are interested in and researching, which helps with generating new ideas. In addition, the neonatal unit here in Adelaide participates in a number of national trials, so this conference also allows for national updates of how these are tracking.

HDA Travel Grant - Recipient Report 2019

Stewart McDougall - Australian Centre for Child Protection, UniSA

In March 2019, I was supported by Healthy Development Adelaide to attend the 8th International Conference on Fetal Alcohol Spectrum Disorder (FASD) in Vancouver, Canada. This conference aims to bring together a broad audience including researchers, clinicians, service providers, and stakeholders including caregivers of children living with FASD, and adults who themselves have FASD. Importantly, the conference is co-convened by a group of adults living with FASD who provide a critical perspective on the research being shared.

At the conference I presented a poster titled "Development and initial validation of a new screening tool for children with FASD". The poster provided an overview of my PhD program of research which aims to develop a screening tool to identify children between the ages of 4 and 12 who may have FASD and would benefit from referral to specialist assessment services. Many countries are grappling with the demand for diagnostic and assessment services for FASD far outstripping the availability of services. Consequently there is a need for tools which can assist in identifying children who may have FASD. One of the things I thoroughly enjoyed at this conference was the efforts taken by researchers and the session chairs to clearly translate the application of their research to a broad audience, and in plain English. Indepth plenary sessions examining biological and genetic pathways through which alcohol impacts the developing fetus were clearly summarized and implications presented in a way that was understandable to the very broad audience.

The conference was full of fascinating research and sessions being presented across four days and I found myself torn between which sessions to attend during the parallel sessions each afternoon. There were two standout presentations. Firstly, a series of presentations detailing the development of a rubric to better capture information about children's experiences of multiple prenatal and postnatal adversities, and then examining how multiple exposures may impact behavior and cognition later in childhood. Secondly, a study from the UK wherein a rapid upskilling and increase of diagnostic capacity for FASD was undertaken within the health system but had unintended consequences amongst the broader child welfare system. This research explored both the consequences and the actions taken to address them.

The International Conference on FASD provided an incredibly valuable opportunity to network with other researchers in the field of FASD from around the globe. Such networks will be of great value as I seek opportunities to collaborate with leading researchers in the field of FASD, both nationally and internationally. Throughout the conference, I was approached clinicians and academics with an interest in the tools from the University of São Paulo in Brazil, University Hospital in Ohio, USA, and FASD diagnostic clinics in Australia wondering when the screening tool would be available. Attending this conference has also provided a very timely boost to my energy and motivation during the final stages of my PhD.

I am incredibly grateful to Healthy Development Adelaide for the support provided to attend and take part in such an inspiring and rewarding conference.

BOYS' BODIES - SPORT, HEALTH & PHYSICAL ACTIVITY HDA MEMBER, PROF MURRAY DRUMMOND

This book uses a longitudinal dataset to give a real sense of evolving body perceptions over childhood.

This is a book about boys' bodies, masculinities, and the ways in which boys navigate their lives from early childhood through to the beginning of adolescence. Drummond focuses on sport, health and physical activity, and adds context to the history of male bodies, the social construction of masculinity and the role of sport as a potential rite of passage for young males. Using rich descriptive interview data with 33 boys from the ages of 5 to 13, collected over an 8- year period, Boys' Bodies identifies important issues including the significance of muscularity and strength as signifiers of masculinity and the need for boys to be involved in "blood sports" as well as "beat girls" in sporting competitions.

The meaning of health and the perception of boys' changing bodies over time are central to the discussion. The book will appeal to researchers, teachers, practitioners, policy makers and parents.

For further information go to https://www.springer.com/gp/book/9781137596536

HDA TRAVEL GRANT - RECIPIENT REPORT 2019

Chang Gao - SAHMRI Healthy Mothers, Babies & Children / School of Agriculture, Food & Wine, University of Adelaide

With the assistance of 2019 Healthy Development Adelaide Travel grant, as well as the Nutrition for Mothers and Children CRE travel funding from the SAHMRI Women and Kids theme, I attended the 23rd Perinatal Society of Australia and New Zealand (PSANZ) annual congress in Gold Coast, Queensland. My PhD research project is focusing on the changes to fat composition of expressed breast milk in neonatal intensive care units, therefore I am particularly interested in preterm birth, and infant health and nutrition related topics. I attended a breakfast session organized by the early life nutrition sub-committee, where the professionals discussed current available evidence in regard to the relationship between healthy eating and pregnancy outcomes and child development and how these works are translated into practice. The dietitian also shared some of the challenges she faced in daily practice (she shares free fertility and pregnancy nutrition tips via her YouTube channel, how innovative!). Many local and international health professionals shared their experience in preterm birth prevention, in term of creating community based care system for special needs, discovering preterm related biomarkers etc.

I also attended a dinner event sponsored by the infant formula company Prolacta as it is closely related to my research interest. At the event, Prof William Rhine, a neonatologist from the US talked about how to optimize feeding supply in the neonatal unit by creating supportive environment for the mothers, educating mothers with expression and collection techniques, and establishing track records for mothers' milk production. He also highlighted a perinatal quality care collaborative system in California, where all NICUs among the states of California share data focusing on very low birth weight infants, and sharing knowledge to improve evidence-based practice. I was fortunate to have the opportunity to chat with him about my research project, and some other potential interventions I should look further into.

I presented a poster on 'developing micro-sampling methods for analysing breast milk fat composition from dried milk spot' and it was well received with audience members asking for potential uses of the methods and discussing on how I would be able to address some of the clinically important questions by using these methods.

I would like to sincerely thank Healthy Development Adelaide for giving me the opportunity to present my work at PSANZ. I would like to recall that on the first day of conference, the keynote speaker started the plenary session by acknowledging a preterm baby that she looked after while working at the hospital. As a research student working in laboratory and being isolated from the clinical world for most of time, it is crucial for us to remember of why we are doing research and who we are caring for.

HDA MEMBER NEWS INDIGENOUS ORAL HEALTH INEQUALITIES BEGIN IN CHILDHOOD

Inequalities in oral health between indigenous and non-indigenous populations exist throughout the world and typically begin in childhood, according to researchers at the University of Adelaide. The researchers noted that there is limited documentation on the magnitude of oral health inequalities between indigenous and non-indigenous people across a range of nations and comparable oral health indicators that focus specifically on children. Their study compared relative oral health inequalities between indigenous and non-indigenous children and adolescents between ages of 5 and 15 from Brazil, New Zealand, and Australia.

Data were collected from the most recent nationally representative oral health surveys in each country, and gingival inflammation, dental caries experience, untreated decayed teeth, and missing and filled teeth were assessed in the primary and permanent dentitions. Parent-reported child oral health also was evaluated. Irrespective of country, indigenous children had worse oral health than their non-indigenous counterparts in all indicators. The magnitude of these differences was greatest in Australia for the proportion with dental caries experience, untreated decay, or gingival inflammation. For missing teeth, filled teeth, and poor parent-reported child oral health, the magnitude of inequality was greatest among Brazilian children. These findings suggest that indigenous and non-indigenous oral health inequalities begin in childhood, reinforcing the need for equity in social and economic policies along with culturally appropriate and early oral health interventions.

Dandara Haag, a research associate with University of Adelaide School of Public Health, presented the study, "Indigenous Oral Health Inequalities Begin in Childhood: A Multi-country Study," during the 97th General Session & Exhibition of International Association for Dental Research in Vancouver.

STUDY: PARTICIPANTS WANTED CHILD INHIBITION AND ATTENTION

The newly formed Adelaide Brain and Cognitive Development laboratory (ABCDlab) at the University of Adelaide is currently running a study investigating children's ability to switch between demands on attention.



Children aged 7 to 13 years, along with a parent, are invited to come to the ABCDlab (School of Psychology, Adelaide University, North Terrace, Adelaide) for one session of around 1-hour. Children will complete some computerized tests of attention and memory, while the parent completes some questions about their child's behaviour, media/technology use and general background (and perhaps enjoy a cup of tea or coffee as well!).

All participants will receive a \$40 voucher as an honorarium for their time, and all results will be kept strictly confidential. To participate children must:

- Be between the ages of 7 and 13 years
- Not have a current diagnosis of a psychiatric, neurological or learning disorder
- Not currently be taking medications which affect neurological function, such as antidepressants, antipsychotics, stimulants or sedatives
- Not have a motor impairment which affects their ability to interact with the computer tasks



If you and your child are interested in participating, or you would like further information, please contact Declan at:-

declan.shillabeer@student.adelaide.edu.au

This study is approved by the University of Adelaide Human Research Ethic Committee.

STUDY: PARTICIPANTS WANTED CHILD RESILIENCE AND WELLBEING AT SCHOOL

Mental health problems are increasingly affecting Australian children. Understanding the factors that build resilience and support mental wellbeing in the schooling years will be a key factor in combating this trend and providing effective early intervention.

Researchers from the University of South Australia and the University of Adelaide are currently conducting a project which aims to compare the effectiveness of different learning contexts at school in promoting child resilience, wellbeing and academic performance.



You can participate if your child is:

- Between 4-13 years old
- Without a significant ongoing medical, psychiatric or neurological condition

The survey asks parents/caregivers about their child's behaviour, social skills, and mental wellbeing, and typically takes less than 30 minutes to complete. Parents/caregivers can complete the survey online (links below), or using a paper copy that can be provided by contacting the research team (contact below). For participating children, we will also ask that their class teacher fill out a very brief survey about the school environment, and child's general performance. All information provided in the survey will remain strictly confidential. Participation is voluntary.

If you would like to participate, and for further information, please read the information sheet here: https://bit.ly/2RIIB6c

Then access the survey here: https://www.surveymonkey.com/r/RZBLH2H

The survey needs to be completed in one sitting and you will ideally need your child present to contribute to one small section of the survey (that will only take a minute or two). For paper copies of the survey (with reply paid envelope) to be sent to you please contact Angela Osborn (osbal004@mymail.unisa.edu.au).

STUDY: PARTICIPANTS WANTED ASSESSING HEALTHY MOTHER-INFANT OUTCOMES



We are seeking new mothers and their infants to participate in a study investigating a new tool to assess healthy mother-infant outcomes

We would like to hear from you if you:

- Are over 18 years old
- Have a child aged 2-5 months
- Did not have a multiple birth
- Are able to adequately understand and communicate in English

All volunteers will be screened and, if eligible, will attend one 30 minute appointment where two assessment tools, looking at mother-infant outcomes, will be administered. Participants will be reimbursed for travel costs.

For further information, please contact the UniSA Clinical Trial Facility

Email: unisa.researchvolunteers@unisa.edu.au

Phone: 08 8302 1365

This project has been approved by the UniSA Human Research Ethics Committee and the Women's and Children's Health Network Human Research Ethics Committee

Three ways to combat childhood obesity

Media Release - 20 June, Flinders University



What's the best way to prevent children from overloading on bad food choices? Flinders University researchers have found that promoting substitution is the answer to turn around children's excessive consumption of nutrient-poor foods and beverages – resulting in nutritional benefits that are even better than reducing intake of these discretionary food and drink choices.

Flinders University researchers studied the impact on the energy and nutrient intakes of more than 2000 Australian 2- to 18-year-olds through simulations of three dietary strategies.

They found that substitution (replacing discretionary choices for healthy foods) and moderation (reduction of discretionary choices) achieved the greatest differences in energy, added sugars, and sodium intake, although substitution had a smaller impact on protein, fibre and micronutrients readings compared with the moderation strategy.

A third strategy – reformulation, which is finding discretionary foods with reduced saturated fats, added sugars and sodium – is the least effective means of changing excessive intakes, but the researchers say it still has a role to play in changing children's diet choices and, with further food science adaptations, the potential for significant benefits.

"Each of three dietary strategies have a role in improving diet quality, with varied effects on energy, saturated fat, added sugars and sodium," says report co-author Associate Professor Rebecca Golley, Flinders University's nationally recognised expert in child obesity and nutrition promotion.

"The message is to replace discretionary choices with foods such as vegetables, whole grains and dairy. This will achieve similar benefits to moderation but will have the additional benefits of improving diet quality and micronutrient intake.

"Dietary approaches to reduce discretionary choices (moderation) or replace them with core choices (substitution) show promise in achieving meaningful reductions in energy intake for obesity prevention in Australian children."

This topic was covered at a Healthy Development Adelaide lecture this month, in conjunction with the Women's and Children's Hospital Women's and Children's Health Network.

The research into better parenting to manage and prevent childhood obesity highlights that almost one in four Australian children is overweight or has obesity by the time they start school, often leading to a lifelong trajectory of obesity, poor health and reduced achievement.

The study's dietary interventions involved a 50% reduction of intake (moderating), replacing 50% of discretionary choices with core foods (substituting), or choosing food and drink products with reduced target nutrients (reformulating).

Associate Professor Golley says findings from this study support messages from the latest 2015-2020 Dietary Guidelines for Americans, to shift to healthier food and beverage choices by replacing discretionary choices for core foods and beverages.

She says that future research and policies should consider how a combined application of the three dietary strategies can best target all discretionary food and drink choices to achieve the greatest potential impact in improving children's diets and combating childhood obesity.

"There is also great potential for these three strategies to be targeted at specific food and drink subgroups including cakes and cookies, French fries and takeaway foods, in addition to sugar-sweetened beverages," says Associate Professor Golley.

The paper 'Theoretical Reductions in Discretionary Choices Intake via Moderation, Substitution, and Reformulation Dietary Strategies Show Improvements in Nutritional Profile: A Simulation Study in Australian 2- to 18-year-olds,' by Brittany Johnson, Jessica Grieger, Thomas Wycherley and Rebecca Golley, has been published in the *Journal of the Academy of Nutrition and Dietetics* (DOI 10.1016/j.jand.2018.10.016).

Also see, 'Examining Constructs of Parental Reflective Motivation towards Reducing Unhealthy Food Provision to Young Children' (2019) by Brittany Johnson, Gilly Hendrie, Dorota Zarnowiecki, Elisabeth Huynh and Rebecca Golley published in *Nutrients* (DOI 10.3390/nu11071507).

Study indicates causal link between obesity and multiple diseases

Media Release - 31 July, UniSA



A new study, led by Professor Elina Hyppönen from UniSA's Australian Centre for Precision Health, presents the strongest evidence yet of a causal relationship between obesity and a wide range of serious conditions, including cardiovascular disease, diabetes, cancer, and neurological, musculoskeletal and respiratory afflictions.

The study, published in Lancet Digital Health, draws data from the UK Biobank – a research database holding health and genetic information from half a million volunteers – to analyse associations between body mass index (BMI) and a range of disease outcomes in 337,536 people.

"In this study we used a genetic approach to seek evidence for true health effects associated with higher body mass index, which assesses our weight against our height and is commonly used to measure obesity," Prof Hyppönen says.

Previous research has suggested that high BMI is associated with increased risk of chronic diseases such as type 2 diabetes, cardiovascular disease and cancer, but due to the difficulty of conducting clinical trials related to obesity, it has been hard to prove causation.

Prof Hyppönen and her team developed a multidimensional analysis in which genetic data was subjected to a suite of stringent examinations in order to deliver high confidence of causality. "We compared evidence from five different statistical approaches to establish how strong the evidence for causal effect actually is," she says. "Fully consistent evidence across all approaches was seen for 14 different diseases, and for 26 different diseases evidence was obtained by at least for four of the five methods used. What increases the confidence that these associations are largely reflective of real effects is the fact that those effects which came across with consistent evidence are also ones for which we have previous clinical evidence."

One key finding from the study was the extent to which it confirms existing concerns over the link between obesity and diabetes, with many of the diseases identified as related to high BMI known to be commonly associated with poorly controlled diabetes.

"For example, we saw evidence for effects on peripheral nerve disorders, chronic leg and foot ulcers, and even gangrene and kidney failure, which are all known to be diabetic complications. This suggests a key aspect to reduce comorbidity risk in obesity is careful monitoring of blood sugar and effective control of diabetes and its complications," Prof Hyppönen says.

The study also highlights the importance of genetic research to further our understanding of the role genes play in obesity, and the insights it can provide for the future management and treatment of obesity.

"There is an urgent need to find new approaches to manage and prevent obesity," Prof Hyppönen says.

"We know that obesity has a strong genetic basis, which can make weight management very difficult to some of us and same strategies for prevention may also not work for all. Genetic studies are giving us deeper insights into biological pathways which drive obesity, and hopefully these types of studies will also provide us with new strategies for prevention."

FRESH SCIENCE

HELPING EARLY-CAREER RESEARCHERS FIND THEIR SCIENCE STORY AND SHARE IT

Fresh Science is looking for: early-career researchers (from honours students to no more than five years post-PhD); a peer-reviewed discovery that has had little or no media coverage; and some ability to present ideas in everyday English.

What's involved in Fresh Science?

In each state, we will select the top ten applicants. If selected, you will get: **A day of media training** where you will: hear from working journalists about what makes science news for them; find the story in your research with guidance from two experienced science communicators; and practice being interviewed in front of camera and on radio; **A pitching session** with a panel of leaders from industry and government; **A short profile about your work** written in a media-friendly way, published online and via social media; The chance to step on stage and **present your science** to a friendly audience down at the pub.

Fresh Science SA is supported Flinders University, the University of Adelaide and hosted by the South Australian Museum.

Nominations close midnight on Wednesday 14 August. Further information at <u>freshscience.org.au</u>.

LLOYD COX MEMORIAL LECTURE ROBINSON RESEARCH INSTITUTE

This lecture series features international research and policy leaders tackling grand challenges in early life health. We are delighted to announce that Professor David Haig from Harvard University will present this year's Lloyd Cox Memorial Lecture on:

When fetal and maternal interests collide - an evolutionary conundrum

Wednesday 7 August; 5.30 - 7.00pm Wine & canapés served 5.30 - 6.00pm Adelaide Health and Medical Sciences G030 Lecture Theatre The University of Adelaide For further information and to register go to Eventbrite.

There is an intrinsic assumption that what is good for a pregnant mother, is also good for her developing fetus. The fetus is the mother's stake in the future, so her body will accommodate and function optimally for its healthy development. However, pregnancy doesn't function like this. The fetus has different DNA to the mother, and its needs for survival are different to its mothers. As the fetus grows it manipulates maternal physiology and metabolism to boost its own development.

Australian Association for Infant Mental Health National Conference Our Infants - Infant Mental Health is a Public Health Matter

Australian Association for Infant Mental Health National Conference theme of the meeting is Our Infants -Infant Mental Health is a Public Health Matter to be held 4-7 September at Adelaide Convention Centre.

The 2019 AAIMHI Conference is an event for professionals from a range of disciplines including health. education and welfare who are dedicated to the field of infant mental health.



Our Infants - Infant Mental Health is a Public Health Matter

Australian Association for Infant Mental Health National Conference

www.aaimhiconference.org

Helen Mayo House Annual Conference

Registrations are now open Early bird rates apply until 1st November 2019

We invite you to the 2019 PIMHS - Helen Mayo House Annual Conference

Parenting: Passions and Pain Monday 25th November 2019

followed by a full day workshop

Motherhood in the Face of Trauma: Vulnerability, Resilience and Therapeutic Interventions on Tuesday 26th November 2019

For further information and to register go to Eventbrite

Building strategies and systems to maximise family-school partnerships ARACY Event

16 August 2019, 9.00am-1.00pm, Melbourne, VIC

This purposeful event will bring educators, researchers, parents, funders, and others together to collaborate on the important issue of improving children's mental health and learning outcomes through parent education programs and family-school partnerships.

Speakers at the event including Dr Marie Yap, Professor Craig Olsson, and Professor John Toumbourou will examine the evidence on the benefits of family-school partnerships, and facilitators including psychologist Elizabeth Clancy will help attendees work on next steps – building strategies to maximise the potential of family-school partnerships in Victoria to improve the mental health of children and improve learning outcomes.

For further information and to register go to www.aracy.org.au

National Science Week

National Science Week events will be happening in museums, libraries, galleries, research institutions, schools, universities, parks and even shopping centres. Meet scientists, discuss the hot topics, do science and celebrate its discoveries. There are also online activities in which everyone can join.

Visit **ScienceWeek.net.au** for details of events and activities that run almost throughout the whole of August. Some highlights in South Australia include:

Launch of Science Alive!

Thurs 1 Aug, 5pm to 7pm in the Goyder Mezzanine of the Adelaide Showground.

Science Alive! 2019, the largest science event in SA, will be launched at this networking function that will also highlight the range of activities that will form part of National Science Week this year. The evening comprises free drinks and nibbles, thanks to the Adelaide Showground, and a thought-provoking presentation from special guest speaker, **Dr Geoff Rogers**, 2018 winner of the Prime Minister's Science Prize for New Innovators.

Tickets are free but required for entry.

Science Alive! 2019 STEM Day Out: Fri 2 Aug, 9am to 3pm, Goyder and Jubilee Pavilions

Science Alive! 2019: Sat 3 & Sun 4 Aug, 9am to 5pm

For all the latest Science Alive! information go to www.sciencealive.org.au

SA SCIENCE EXCELLENCE AWARDS GALA DINNER

Finalists and winners will be announced and celebrated at a gala dinner

Friday 9 August, 6.30 - 11pm Adelaide Convention Centre, Hall M, North Terrace, Adelaide

Book your tickets by 2 August https://www.scienceawards.sa.gov.au/dinner