



Healthy Development Adelaide

A Research and Innovation Cluster in South Australia

LATEST NEWS

HDA Women's Excellence in Research Award Winner 2019

Our congratulations to Dr Helen Stallman.

Helen is a Clinical Psychologist, Hospital Research Foundation Fellow at the Basil Hetzel Institute, and Senior Lecturer at UniSA.

Full story next page....

HDA High School Award Recipients 2019

Congratulations to Aubrey Asanon and Dayna Capel from the Roma Mitchell Secondary College. They have each been awarded \$1,000 over two years.

The HDA High School Award support adolescents enrolled in Year 11 and Year 12 in South Australian schools, with an aim towards obtaining a tertiary education in a field relevant to health or education.

We have a new Website!

Our website has been given a facelift. Let me know what you think or if you come across any issues.

new site homepage:

health.adelaide.edu.au/healthy-development-adelaide

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Healthy Mothers,
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MORE LATEST NEWS

Congratulations to Dr Helen Stallman winner of our HDA Women's Excellence in Research Award for 2019



Helen is a Clinical Psychologist, Hospital Research Foundation Fellow at the Basil Hetzel Institute, Senior Lecturer at the University of South Australia, and Director of the International Association for University Health and Wellbeing.

Helen has received research grants worth \$2.9M and published 42 peer-reviewed papers, 6 books/book chapters, and 10 peer-reviewed commentaries, mostly first authored, that have 1804 citations.

Helen's translational research is in the fields of parenting, university student health and wellbeing, suicide prevention and sleepwalking and has developed and evaluated 11 clinical interventions that are disseminated nationally and some internationally. These include:

Family Transitions Triple P (to promote healthy outcomes for children whose parents divorce), is used in more than a dozen countries and translated into Dutch.

thedesk (supporting the health and wellbeing of university students), is used in most Australian universities and in 2018 was chosen

as the recommended resource for students at the end of the annual Healthy Minds survey of College Students Mental Health that is done with over 180 colleges and universities in the USA and Europe.

Care · Collaborate · Connect: Suicide Prevention training (for health professionals and students) has been completed by more than 1300 health professionals and students in the 18 months since its launch and three universities have changed their counselling policies and procedures to use the innovative person- and strengths-focused approach to suicide prevention with young adults.

Dr Helen Stallman will be presented with \$1,000 and an award certificate at her presentation talk to be held on 3 July. More info on the interventions can be found at <https://health.adelaide.edu.au/healthy-development-adelaide/news/list/2019/04/03/2019-hda-womens-excellence-in-research-award-winner-announced>

HDA Member - research update

Major Milestone Reached in Study to Improve Iron Deficiency During Pregnancy

Researchers at the Lyell McEwin Hospital who are looking at optimal iron treatments for pregnant women have reached a significant milestone in their trial with all 300 patients finishing their appointments.

Iron deficiency is a very common condition amongst pregnant women and can be associated with many risks and potential complications if left untreated. This study, which began in 2015 and saw biomarkers collected from the 300 participants at four stages of their pregnancy (including delivery), aims to make recommendations around future iron treatments in pregnant women and ensure the safety and long-term outcome of both mum and baby.

"Iron deficiency during pregnancy is critical to diagnose and treat because it can lead to poor outcomes for the mother and can also be detrimental to her child's development," said study coordinator Dr Natalie Aboustate. Intravenous (IV) iron is an effective treatment option for iron deficiency and we are seeking to determine the dose of IV iron necessary to sustain optimal ferritin levels (the amount of iron in the blood) during the short to long-term perinatal period. Our ultimate aim is to optimise future iron treatments in pregnant women and ensure maternal and foetal safety and long-term outcomes."

The Hospital Research Foundation is proud to be supporting the next stage of the study, which will include biological analysis of all the biomarkers collected from the patients. <https://www.hospitalresearch.com.au>

"This analysis is incredibly important because it will allow us to characterise various aspects of iron metabolism during and after pregnancy, much of which is currently unknown. All of this research is aimed at improving health and pregnancy outcomes for mothers and their children."

HDA MEMBERS - NEW RESEARCH PAPER

Australian children's discourses of health, nutrition and fatness *authored by Stefania Velardo and Murray Drummond*

Appetite: Volume 138, 1 July 2019, Pages 17-22

Abstract

Talking to children about their health-related understandings and experiences can provide valuable information for public health practitioners who seek to improve children's dietary behaviours. To date, however, research on children's food consumption has generally prioritized the views of parents and caregivers, rather than children themselves. This paper reports results from a qualitative study that explored preadolescent children's attitudes and perceptions towards health and nutrition. 38 children aged 11–12 years, across three state government schools, took part in an individual interview or group interview. Interviews were recorded, transcribed verbatim and analysed using thematic analysis techniques.

Our results indicate that children inextricably linked the concept of health to diet and physical activity. They pondered the connection between different types of foods and physical implications for the body, emphasising nutrition and physical activity as a resource for preventing the onset of chronic disease and specifically the state of 'fatness'. Children collectively overemphasised the correlation between body size and health, and expressed that people should take responsibility for healthy choices to prevent fatness. In their discussions, they referred to aesthetic elements of the body and negative consequences of obesity.

Overall, we argue that children's discourses of health and nutrition are potentially problematic. Results suggest that it is important to reshape these ideas to encourage children to develop more positive relationships with food and physical activity.

Further information/access at <https://www.sciencedirect.com/science/article/pii/S0195666318311590>

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 in the form of thematic evenings, oration, seminars, workshops and forums.

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

Like us on Facebook and join the conversation on Twitter and LinkedIn.

HDA RESEARCH MEMBER PROFILE - DR SOPHIE POINTER

COLLEGE OF MEDICINE & PUBLIC HEALTH, FLINDERS UNIVERSITY



I'm currently a Senior Research Fellow and Deputy Director of the Research Centre for Injury Studies which is in the College of Medicine & Public Health at Flinders University. The Research Centre houses the National Injury Surveillance Unit, a Collaborating Centre of the Australian Institute of Health and Welfare (AIHW). With about ten thousand deaths and half a million hospitalised cases annually, injury is a major cause of mortality and morbidity in Australia.

I've been working at the Centre for over a decade having come from a background of mostly AOD research. My formal training is actually in neuropsychology and my PhD investigated the link between odours and memory! In my experience I have found injury studies attracts people from a wide variety of backgrounds and I have worked with amazing people from backgrounds as diverse as archaeology and animal behaviour.

Day to day work at the Centre involves producing high quality injury surveillance reports and research papers on a variety of topics. It's an interesting role that allows me to wear two hats; one as a Flinders University academic and the other as a representative of the AIHW.

I mainly work with the National Hospital Morbidity Database (NHMD) which is a dataset maintained by the AIHW, in collaboration with each state and territory, containing just about every episode of admitted patient care occurring in public and private hospitals in Australia. As well as administrative data, the NHMD contains diagnoses, procedural, and external causes of morbidity codes, using international standard classification systems. Australia is very fortunate to have a rich administrative database to draw on and it allows me to produce surveillance reports on a wide variety of injury topics.

My area of interest within injury surveillance is quite broad and reflects much of the work in the injury field. In the last year or so I have published reports on special interest groups such as Indigenous people, children and older Australians and tackled topics such as falls, burns, electrical injuries and assault. Every two years I produce a report on trends in all major causes of hospitalised injury in Australia and one specifically on trends in fall-related injuries among older Australians.

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NEW HDA MEMBERS

Dr Anna Roesler

School of Public health, University of Adelaide
Focus - nutrition, social & economic determinants

Megan Lim, PhD Candidate

School of Medicine, University of Adelaide
Focus - early reproduction

Dr Qian Tang, Research Associate

School of Pharmacy & Medical Sciences, UniSA
Focus - bone defects in childhood

Hannah Whittall, PhD Candidate

Department of Psychology, Flinders University
Focus - infant sleep

Najma Moumin, PhD Candidate

School of Medicine, University of Adelaide
Focus - nutrition, infant & young child

Dr Georgina Sylvia, Research Associate

Department of Chemistry, University of Adelaide
Focus - biophotonics

Dr Amanda Hutchinson, Senior Lecturer

School of Psychology, Social Work & Policy, UniSA
Focus - cancer prevention/support lifespan

Meg Pillion, PhD Candidate

Department of Psychology, Flinders University
Focus - adolescent sleep

Australian Early Development Census (AEDC)



With the release of the 2018 AEDC data, a number of resources have been released, including the 2018 National Report, fact sheet and infographic.

These provide information on AEDC results from all collections and are available to download at

<https://www.aedc.gov.au/resources/2018-aedc-results>

Sitting in front of the TV puts kids in the obesity hotseat

Media Release - 7 February, UniSA



The simple act of switching on the TV for some downtime could be making a bigger contribution to childhood obesity than we realise, according to new research from the University of South Australia.

The study investigated the impact of different sitting behaviours – watching television, playing video-games, playing computer, sitting down to eat, or travelling in a car – and found that watching TV is more strongly associated with obesity in both boys and girls than any other type of sitting.

While childhood obesity is a global issue, data from the Australian Bureau of Statistics 2017-18 show that in Australia almost a quarter of children aged 5-17 years are considered overweight or obese.

UniSA researcher, Dr Margarita Tsiros says the study provides new insights about the impact of sedentary behaviours on children.

“It’s no surprise that the more inactive a child is, the greater their risk of being overweight,” Dr Tsiros says. But not all sedentary behaviours are created equal when it comes to children’s weight. This research suggests that how long children spend sitting

may be less important than what they do when they are sitting.

“For instance, some types of sitting are more strongly associated with body fat in children than others, and time spent watching TV seems to be the worst culprit.”

The study assessed the sedentary behaviours of 234 Australian children aged 10-13 years who either were of a healthy weight (74 boys, 56 girls) or classified as obese (56 boys, 48 girls).

It found that, excluding sleep, children spent more than 50 per cent of their day sitting, with television dominating their time for 2.5 – 3 hours each day.

Dr Tsiros says that the study also found differences between the sitting behaviours of boys and girls.

“Boys not only watched more TV than girls – an extra 37 minutes per day – but also spent significantly more time playing video games,” Dr Tsiros says.

“Video gaming and computer use are popular past times, but our data suggests these activities may be linked with higher body fat in boys. Boys who are sitting for longer than 30 minutes may also have higher body fat, so it’s important to monitor their screen and sitting time and ensure they take regular breaks.”

Dr Tsiros says that setting children up on a path towards a healthy weight is extremely important to their health now and in the future.

“When we look at adult obesity, almost two thirds of Australians are overweight or obese, which is causing many serious health issues,” Dr Tsiros says.

“An overweight child is more likely to grow up into an overweight adult, so the importance of tackling unhealthy behaviours in childhood is critical.

“Children who are obese have an increased risk of developing serious health disorders, including type 2 diabetes, high blood pressure and cholesterol. They may also experience reduced wellbeing, social and self-esteem issues, along with pain and difficulties with movement and activity.

PhD Scholarship Opportunity - Annual Rhythms in Adults’ Weight Gain, Activity and Diet

Project

Australia is facing an obesity crisis. Diet and physical activity are key, but we don’t know how these fluctuate throughout the year due to cultural celebrations, vacations, and seasons. A new NHMRC funded project will use remote assessment methods to identify temporal patterns in weight gain, activity and diet in Australian adults. It will also examine how patterns of weight change in Australian adults are associated with weight change in their children, as well as other outcomes such as mental health.

Candidate

We have up to two PhD Scholarships available, commencing mid 2019. The positions will be based in Adelaide, South Australia, and include full fees, living allowance and generous stipend. Candidates with a background in biostatistics, psychology, health promotion, nutrition or health science are encouraged to apply. To be eligible, candidates must be Australian citizens, and have completed MRes or Hons (1 or 2A).

Better sleep tips for children and families

Media Release - 26 February, Flinders University



Anxiety over childhood sleep problems affect everyone in a family unit – parents, siblings and the child enduring sleep issues. Flinders University research-supported techniques have come to the rescue with a new book that teaches parents step-by-step treatments and strategies to introduce in the home environment.

Paediatric sleep expert Flinders University Psychology Professor Michael Gradisar says the issue of sleep difficulty among school-aged children is rarely explored in book or online advice, so this new book aims to offer clarity for parents wrestling with the concerns of what is abnormal in sleep patterns, or what should be ignored.

Half of all children experience sleep problems at some point, so the book provides step-by-step instructions to help children aged 5-12 years. It identifies a range of sleep problems that the authors have most commonly seen in clinical work – led by children who find it difficult to sleep without a parent present, or who are very anxious at night time.

Professor Gradisar says sleep problems are rarely caused by a single issue, which is why the book – *Helping Your Child with Sleep Problems: A self-help guide for parents*, by Rachel Hiller and Michael Gradisar (published by Little Brown Book Group, a Hachette UK company) – presents a range of possible solutions for specific issues.

Prof Gradisar says parents are often fixated on sleep difficulties with babies, yet they are often less timely

seeking help with older children's sleep issues, or are confused about where to seek appropriate advice.

He speaks about this issue with significant authority, being part of a global panel of experts for World Baby Sleep Day, a US Initiative run for the past three years by the Pediatric Sleep Council. Professor Gradisar will again join a team of international paediatric sleep experts on March 1, 2019, to participate in a World Baby Sleep Day question and answer event on Facebook.com/pedsleep.

At the same time, the new book is devoted to techniques for helping older children with sleep difficulties that have been tested via research studies, and it aims to provide practical advice that parents and children can understand and adopt.

"Ultimately, our hope is that this book helps parents to feel more confident and empowered to help their child's sleep problem, so the whole family can get a better night's sleep," says Professor Gradisar.

The release of this book builds on Professor Gradisar's 16 years' expertise in this area. In 2005, Professor Gradisar opened the Child and Adolescent Sleep Clinic at Flinders University, where he pioneered the development of cognitive and behavioural treatments for childhood sleep disorders.

Book co-author and Flinders University graduate Rachel Hiller joined the clinic in 2011, and specialised in cognitive and behavioural treatments, before relocating the UK to continue her research and clinical work in the area of clinical child psychology.

Part 1 of the book identifies and defines sleep problems, addressing such questions as how do sleep problems develop, and why do they stick around?

Part 2 explains step-by-step techniques to help resolve sleep problems related to anxiety. This includes new paediatric techniques called bedtime restriction and sleep restriction therapy, that help a child to fall asleep faster, and to stay asleep during the night. It also explains techniques that help children to face their fears, and deal with night terrors, sleep-walking and bed-wetting (that are collectively part of a group identified as parasomnias).

Part 3 explains tips and techniques to help a child maintain good sleep, especially as they become a teenager.

Telethon Kids Institute - two new full-time research assistant positions available *Language in Little Ones study based here in Adelaide*

The research assistants will be prominently undertaking assessments with families in their home and completing relevant data entry tasks. The role would be suitable to someone with at least an undergraduate qualification and has experience working with children and families.

Any queries can be directed to Mary Brushe (mary.brushe@telethonkids.org.au).

For further information <https://www.telethonkids.org.au/be-involved/career-opportunities/current-vacancies/research-assistant-child-education/>

Baby step towards breath-testing for gut disorders

Media Release - 21 March, Flinders University



Small children may one day avoid invasive, painful and often traumatic oesophageal tube-testing for gut damage and coeliac disease with a new method of simply blowing into a glass tube to provide effective diagnoses.

Research just published online in international journal *Scientific Reports*, describes an exciting new breath test that could have global implications on how to detect gastrointestinal damage.

In the first study of its kind, Flinders University researchers will trial the new Dipeptidyl peptidase-4 (or 'DPP4') breath test to measure a digestive enzyme found in the small intestine and is associated with gastrointestinal damage and coeliac disease.

Lead researcher Dr Roger Yazbek says the specific DPP4 enzyme is produced in the small intestine and breaks down dietary proteins that have been associated with coeliac disease and associated gut damage.

"This breath test represents a potentially new way to

non-invasively measure gut health," says Flinders research fellow Dr Yazbek, who is looking to commence the first trials at the Women's and Children's Hospital in Adelaide, South Australia.

"Not only will these tests improve patient quality of life but potentially save the health care system time and money, particularly if adapted for point-of-care testing in rural and remote areas," says Dr Yazbek, Catherine Marie Enright Kelly Research Fellow at the College of Medicine and Public Health.

Funded by the Channel 7 Children's Research Foundation, it is one of several similar projects by Dr Yazbek and the SA Breath Analysis Research Laboratories to replace invasive endoscopic procedures with high-tech validated breath-tests to accurately test and treat various human conditions, including cancer.

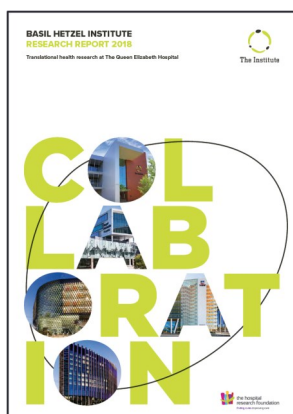
In Australia, while about 400,000 endoscopic procedures are performed at a cost of almost \$500,000,000, more than 14% of these procedures prove unnecessary.

The breath test could have broad translational applications, with DPP4 inhibitors also used to treat type-2 diabetes. There is emerging support for the style of '13C isotope' breath test for detecting changes in liver or exocrine pancreatic function, gastric emptying and even the potential to identify specific infections and an individual's response to certain drugs.

"Some research groups have suggested that DPP4 is involved in the breakdown of gluten, and that people with coeliac disease have a reduced amount of the DPP4 enzyme along their small intestine. However, the tools to measure this in coeliac disease have not been available," Dr Yazbek says.

"This breath test will help us to answer this question, and we are about to begin a trial at the WCH to shed some insight into this question."

The new paper, 'Development of a 13C Stable Isotope Assay for Dipeptidyl Peptidase-4 Enzyme Activity A New Breath Test for Dipeptidyl Peptidase Activity,' by Roger Yazbek, Simone Jaenisch, Michelle Squire, Catherine A Abbott, Em-



Basil Hetzel Institute Research Report 2018

Professor Guy Maddern, Director of Research at the Basil Hetzel Institute, The Queen Elizabeth Hospital, invites you to read the 2018 Basil Hetzel Institute Research Report which summarises the key findings of each research group.

A world map reveals that, during 2018, members of the Basil Hetzel Institute collaborated with researchers in more than 50 cities in 24 countries.

<http://www.basilhetzelinstitute.com.au/latest-news/research-reports/>

KICKING GOALS FOR KIDS WITH AUTISM: COACHING THE COACH TO COACH THE KIDS

Media Release - 29 March, UniSA



Ahead of World Autism Awareness Day on April 2, researchers from the University of South Australia are turning autism interventions on their head with a stand-out sports program that's training coaches how to best achieve results for students with autism.

Supporting Success is a school-based multi-sports program designed to help children with autism develop important life skills via regular organised sports. Yet it does so by focusing on the child's environment instead of directing the intervention to the child itself.

UniSA researcher, Emma Milanese says Supporting Success is unique in that it provides important first-line interventions and training for coaches as a means for helping children with autism.

"Coaches play a paramount role in providing the 'right' environment for students with autism to enjoy and participate in sport, yet the challenge is that they often feel unprepared to work in special settings.

"Our research shows that there are specific tactics that coaches can use to encourage students with autism to more effectively participate in sports and physical activities.

"These include using visual cards to communicate; demonstrating activities before students have a go; using distinct coaching aids to familiarise students with sports equipment; and various approaches for overcoming individual sensory challenges.

"We're very pleased to hear that both parents and teachers are reporting great improvements in physical and interpersonal skills, concentration, and general calmness, as well as increased interests in new experiences, new friendships, and a general feeling

of being more connected with the environment and community."

Autism Spectrum Disorder (ASD) is a lifelong developmental condition that can affect how a person communicates and interacts with the world around them. In Australia, the Australian Bureau of Statistics estimates approximately 164,000 Australians are living with ASD, with Autism Spectrum Australia indicating that prevalence of ASD could be as high as 1 in every 70 people.

Co-researcher, UniSA's Richard McGrath says the findings show how important it is to consider the world from the perspective of a child with ASD.

"Many kids on the spectrum struggle to process auditory commands which can make verbal instructions tricky, but add a visual cue card as a prompt, or actively show them what they need to do, and it's a completely different story," McGrath says.

"Similarly, we've found it effective to use plain words to describe activities. Instead of sports-specific lingo, like 'Throw the cricket ball at the stumps', we're suggesting coaches use literal words, like 'Throw the ball at the three sticks.' This was far more effective for kids with autism, especially when they were just learning about the sport."

Developed in partnership with Modbury Special School and not-for-profit organisation SportsUnited, Supporting Success was initially created for adolescents to help them build self-confidence and belief in their own abilities through sport. Now in its fourth year, the program has been extended to junior primary school children to help improve their gross motor skills, communication and socialisation skills.

Supporting Success partner, Ginny Pyatt from the Modbury Special School says the coaching interventions provide valuable strategies for encouraging children with ASD to participate in sports.

"Sport and exercise are extremely important for children on the autism spectrum," Ginny Pyatt says.

"We've seen Supporting Success deliver incredible improvements in students' physical competencies and sporting skills, but also in their confidence, social capabilities and well-being.

"Plus, the new junior-primary program is not only helping children build their skills in climbing, jumping, running and balancing, but importantly it's also helping them build friendships, which is just beautiful.

"Through Supporting Success we've been able to positively impact the lives of more than 50 children and families affected by ASD. This program has given these children a sense of normalcy, opportunity to have fun with their peers, and far-improved interpersonal skills, all which will hold them in good stead for the future."