

Healthy Development Adelaide

A Research & Innovation Cluster in South Australia

Volume 6, Issue 6

December 2010

Newsletter

www.adelaide.edu.au/hda

Upcoming Events...

- 16-19 March**
The Society for Gynecologic Investigation (SGI) 58th annual meeting on 'reproduction and regenerative medicine' will be held in Miami Beach, Florida, USA.
- 16-19 March**
The International Association for Dental Research general session will be held in San Diego, California.
- 24-26 March**
The 6th International Symposium on Diabetes and Pregnancy will be held in Salzburg, Austria.
- 10-13 April**
The Perinatal Society of Australia and New Zealand annual meeting will be held in Hobart, Tasmania.
- 19-22 May**
The American Society for Reproductive Immunology meeting will be held in Salt Lake City, Utah, USA.
- 4-7 June**
The Endocrine Society (Endo 2011) 93rd annual meeting will be held in Boston, USA.

Further information at
www.adelaide.edu.au/hda/events

LATEST NEWS

HDA Progress Report - 2009/10

HDA has had another busy and productive year in 2010 and we look forward to delivering another interesting year of our events and initiatives in 2011.

All our members, partners and affiliates should have received a copy of our annual progress report by now....*if not please let me know.*

HDA Travel Grants - NOW OPEN

HDA will provide financial support for final year PhD students and Early Career Researchers (up to 5 years post PhD) to further their research career by attending and presenting at an international conference in 2011.

Eligibility

* PhD students must be currently enrolled, and be either HDA members or supervised by a current HDA member: applicants and/or their primary supervisor must be members of HDA for at least 3 months at the time of application.

* Early Career Researchers must be current HDA members: applicants must be members of HDA for at least 3 months at the time of application.

* Applicants must be presenting either a research poster or an oral research presentation at the conference.

* All applicants will need to have made a past contribution to or have an involvement with HDA (ie: presented at a HDA event, attending HDA events on a regular basis, member of a HDA committee).

Previous recipients of travel grants will not be excluded from consideration, but preference may be given to first-time applicants.

For the full criteria, funding conditions and the application process go to the HDA website. Applications close at 5pm Thursday 9 December 2010.



HDA wishes you All a Merry Christmas and a Happy and Healthy New Year.

Thank you to everyone who has participated and supported HDA throughout the year....

A special thank you to our Partners !

We look forward to seeing you next year....



An initiative of University of Adelaide since 2004



HDA Partners



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CHANNEL 7
Children's
Research Foundation



Women's & Children's
Health Research Institute Inc.
Research for the future health of our children



Government of South Australia
Children, Youth and Women's
Health Service



Government of South Australia
Department of Education and
Children's Services

Winner in Excellence in Research Collaboration (SA Science Excellence Awards 2009)

RECENT HDA EVENTS

HDA Forum - Translating research within vulnerable populations

On 20 October, HDA held its third and final forum for the year on 'translating research within vulnerable populations' attracting ~80 people from diverse sectors. The event was chaired by Dr Janna Morrison, Sansom Institute for Health Research at UniSA. Speakers included A/Prof Leah Bromfield (UniSA) on *Using a national attitudes survey to raise awareness about child abuse and neglect*; Dr Andrea Gordon (UniSA) on *Substance use and pregnancy: journey of improving outcomes for mums and bubs*; Ms Vicki Wilson (DECS) on *Impact of research on inclusive policy development in education*; and Dr Julie Robinson (Flinders University) on *Using research to improve outcomes for child refugees in countries of asylum and countries of resettlement*.



after 30 years?'. The event was co-hosted with Perinatal Society of Australia and New Zealand (PSANZ-SA branch), Fertility SA and Flinders Reproductive Medicine. The event was co-chaired by Prof Robert Norman, Director of the Robinson Institute, University of Adelaide; and Mrs Megan Bater, Growth & Development Coordinator, Women's and Children's Hospital; and PSANZ Treasurer. Speakers included Dr Louise Hull (Fertility SA / University of Adelaide) on *ART and safety for the woman*; Dr Michael Stark (Women's & Children's Hospital / University of Adelaide) on *ART and the neonate*; A/Professor Michael Davies (University of Adelaide) on *ART and congenital abnormalities*; and Dr Gregory Pike (Southern Cross Bioethics Institute) on *ART and the new bio-ethical challenges*.

The talks can be viewed at www.adelaide.edu.au/hda/news.



HDA Thematic Evening - Outcomes for IVF treatments: what have we learnt after 30 years?

On 4 November, HDA held its fourth and final Thematic Evening for the year with ~90 attendees from university, government, relevant organisations and health service sectors for informative overview on the 'Outcomes for IVF treatments: what have we learnt



AWARDS Excellence in Paediatrics and Obstetrics & Gynaecology

HDA Members



Professor Jenny Couper, Head of the Discipline of Paediatrics and the Children's Research Centre at the University of Adelaide has been awarded the highly prestigious **Robert Vines Medal for Clinical Excellence in Paediatric Endocrinology**.

Professor Couper was presented with this award in recognition of her outstanding contribution to the field of childhood diabetes.

The Robert Vines Medal is awarded every two years by the Australasian Paediatric Endocrine Group (APEG) in honour of one of the fathers of paediatric endocrinology in Australia, Robert Vines, who was also the first president of APEG.

The Robinson Institute celebrated its 2nd Birthday in October, taking the chance to unite and recognise achievements with staff and students.

A/Professor Claire Roberts, Senior Research Fellow within the Robinson Institute at the University of Adelaide won the inaugural and prestigious **Robinson Institute Director's Award**.

Professor Robert Norman, Director of the Robinson Institute presented Claire with this award due to her Quality science; Translating into community benefit; Building staff and students (training, mentoring, creating a positive research environment); Volunteering - contributing to the Institute, its programs and events.



A/Professor Claire Roberts has been promoted to Professor as of January next year.

Congratulations to both *Claire & Jenny!*

More information on the Children's Research Centre and the Robinson Institute can be found at their websites below:

www.adelaide.edu.au/childrens_research

www.adelaide.edu.au/robinson-institute



I have an interest in a number of different research fields which is reflected in my long and varied research journey. I started off with an undergraduate degree with a Bachelor of Science majoring in Molecular Biology in 1998. I then completed a Bachelor of Nutrition and Dietetics in 2000 as I wanted to work face to face with people. When I completed this I realised that what I really wanted to do was research! So I decided to shift from clinical work back to science but utilising my dietetic skills, this was

complemented by my choice of research field in clinical dietary interventions in polycystic ovary syndrome (PCOS). I undertook honours and my PhD jointly with Discipline of Obstetrics and Gynaecology with Rob Norman and CSIRO Human Nutrition with Manny Noakes and Peter Clifton on the topics of dietary management of PCOS. Women with PCOS can have a varied presentation including impaired fertility, increased risk factors for type 2 diabetes and cardiovascular disease and a potential for increased weight or worsened symptoms with increased weight. Due to the variable features of PCOS I was able to do a range of projects including clinical weight loss interventions, modifying macronutrient composition, assessing changes in reproductive and metabolic parameters with weight loss and examining

physiological barriers to weight loss. I developed a long-lasting interest in PCOS and it was great to work with a population of women motivated to make healthy lifestyle choices with some really positive reproductive and fertility results.

When I completed my PhD I still wanted to work in PCOS but was looking to expand my skills into the cardiovascular and diabetic implications. I met Helena Teede when she visited Adelaide and spoke on her research at the university, she is an endocrinologist with an interest in women's health and PCOS working at Monash University, Monash Medical Centre and Jean Hailes Foundation for Women's Health. I was really impressed by her field of research, her ability to balance a clinical and research career and her enthusiasm for science and

moved to Melbourne in 2007 for a post-doctoral fellowship. My work here again covered a wide range of areas from evidence based medicine, guideline development, education and translation and clinical trials with collaborations with departments including public health, endocrinology and health services research. After 3 great years in Melbourne I recently returned to Adelaide. I've only been back a few months and am still settling in at the moment but looking forward both to continuing my work in PCOS and broadening my areas of interest. I'm currently working on evidence-based guidelines, Cochrane reviews and systematic reviews for assessment and treatment of PCOS and pre-pregnancy interventions to optimise fertility.

☎ 8313 1352
✉ lisa.moran@adelaide.edu.au

HDA TRAVEL GRANT RECIPIENT CONFERENCE REPORT 2010



Wee-Ching Kong

Research Centre for Early Origins of Health & Disease,
The Robinson Institute, University of Adelaide

With the support of HDA, I was able to attend the RNA interference (RNAi) and microRNA Europe Conference in September, which was held in beautiful city of Dublin. Quite different from conferences in reproductive biology and foetal development that I had presented at in the past, attending this meeting gave me the opportunity to learn about techniques used in general field of microRNA research, a field in which our research group is relatively new. I learnt about cutting edge small interfering-RNA (siRNA) technology being used to manipulate gene expression in investigation of disease development and was motivated to apply these to my own research in placental development. This meeting was also co-located with Epigenetics Europe meeting, where many people presented their work on how different perturbations during pregnancy altered epigenetic programming of offspring in relation to development of a broad range of diseases in adulthood.

Presenting my poster at this conference gave me opportunity to present my work in characterisation of microRNA expression in placental development to leaders in general field of microRNAs in development and disease. I received some great feedback on my work and advice on potential future directions of my work. I hope to utilise the advice given to me to investigate whether microRNAs are involved in trophoblast migration and invasion, both of which are important processes in placental development in first trimester

of pregnancy. A great feature of this meeting was the opportunity for delegates to speak to product specialists immediately after hearing about a technology being utilised by a presenter, as the meeting was well attended by many research technology companies which offered products in the RNAi, microRNA and epigenetics research. Many of these companies also held workshops throughout the conference, describing their new technologies and examples of how they're currently being utilised in research.

The highlight of this meeting for me was the presentation given by Dr Karen Forbes from the University of Manchester, who presented her work on the Role of microRNAs in Placental Development. Following on from her finding that Insulin-like growth factor 1 (IGF-I) and 2 (IGF-II) increased proliferation in primary explant cultures of first trimester placenta, she went on to investigate which microRNAs target molecules of the IGF signalling pathway. She has also found that that Dicer (an enzyme required for the production of mature microRNAs) is more abundant in cytotrophoblasts than in syncytiotrophoblasts of the placenta. So utilising siRNA technology, she knocked down the expression of Dicer in primary cytotrophoblast cultures, which resulted in the decrease of cytotrophoblast fusion into syncytiotrophoblast, showing that this process is dependent on Dicer-dependent microRNAs.

Attending this conference also facilitated opportunity for me to visit laboratories throughout the world, in the UK, Canada and USA to look for postdoctoral opportunities. So I am truly grateful to HDA for their contribution towards my travel costs and for their general support of students and young investigators.

Media release 28 October 2010 - University of Adelaide



Fertility Breakthrough for Female Cancer Patients

University of Adelaide reproductive health researcher Dr Kylie Dunning was last night named the 2010 Young Investigator Award winner for her work to help preserve the fertility of female cancer survivors.

Dr Dunning, a postdoctoral researcher from the Robinson Institute and the Discipline of Obstetrics and Gynaecology at the University of Adelaide, examined the role of fat metabolism in the growth and development of ovarian tissue in the laboratory.

"Major advances in medical research have led to improved cancer therapies and increased survival rates in patients, but the use of life-saving chemotherapy and radiation therapy often leads to infertility," Dr Dunning says.

"In Australia, girls as young as 13 years old affected by cancer can have a portion of their ovaries cryopreserved for future use. What we've discovered may increase the chances of these women starting a family later in life.

"The latest technology for female fertility preservation involves growing ovarian tissue in a three-dimensional ball of gel in the lab, enabling eggs to grow and develop surrounded by their support cells, known collectively as the follicle."

This technology enables the growth of eggs in the laboratory that can then be fertilised and form embryos as in traditional IVF. In the future, these embryos could be returned to the womb to form a pregnancy and a healthy baby. By using this technology it avoids

having to put back the cryopreserved ovarian tissue, which may contain cancer cells.

Dr Dunning says the use of 3-D follicle growth is extremely promising, however the growth of eggs capable of forming a healthy embryo and a baby requires further development.

"I've found that fats are a vital energy source for follicle and egg development. In fact, we've discovered that increasing the follicle and egg's utilisation of fat during 3-D follicle growth significantly improves subsequent embryo development," Dr Dunning says.

The Young Investigator Award, now in its 11th year, rewards scientific excellence in South Australia's young researchers and their ability to communicate and "sell" that science. The award final was held last night at The Sanctuary, at the Adelaide Zoo.

As winner, Dr Dunning received The Hon Carolyn Pickles Award of \$10,000. Prizes of \$3000 each were awarded to the two runners up, Chantelle McIntyre and Zlatko Kopecki, who are both PhD candidates from the School of Paediatrics and Reproductive Health at the University of Adelaide.

Chantelle is investigating replacing defective genes to prevent brain deterioration in children with Sanfilippo Syndrome, a rare inherited disease where the body cannot metabolise sugar.

Zlatko is researching the role of a specific protein involved in genetic blister formation in fragile skin disorders, looking at reducing its levels to improve wound healing.

The award is an initiative of the Children, Youth and Women's Health Service and the Faculty of Health Sciences at the University of Adelaide. The University of South Australia and Flinders University are also partners in the award together with the Women's and Children's Health Research Institute and the Women's and Children's Hospital Foundation.

Story from the *Adelaidean* - University of Adelaide magazine November 2010



Dr Alice Rumbold, a perinatal epidemiologist, has won a national award for her work helping indigenous women to overcome life-threatening reproductive diseases.

Dr Rumbold, a Senior Research Fellow in the Department of Obstetrics and Gynaecology and a member of the Robinson Institute, has been awarded a 2010 Future Justice Medal for demonstrating leadership and initiative in Australia's most disadvantaged sector.

For the past five years Dr Rumbold has worked with Aboriginal and Torres Strait Islander communities, researching why indigenous women are more susceptible to reproductive cancers and other health problems.

Dr Rumbold said indigenous people faced health setbacks on a day-to-day basis, with sexually transmitted infections such as gonorrhoea and Chlamydia unacceptably high in Aboriginal communities, compounded by other health problems such as diabetes, polycystic ovary syndrome and obesity.

"These are all having a marked impact on the reproductive health of Aboriginal women, particularly in pregnancy outcomes," Dr Rumbold said.

"Infertility, pelvic inflammatory disease and ongoing pelvic pain are the end result of these health issues and the tragedy is that most of these conditions are largely preventable," she said.

The Director of the Robinson Institute, Professor Rob Norman, said Dr Rumbold demonstrated leadership and achievement "beyond her years" as a researcher. Dr Rumbold is currently chief and associate investigator on several NHMRC grants that total more than \$2.4 million and was South Australia's Tall Poppy of the Year for 2009.

EVENT

FOODplus Research Centre



Public Event



FOOD FOR HEALTH separating myths from facts

Date 8th December 2010
Time 5.30pm - 7.00pm. Doors open from 5pm
Venue Elder Hall, North Terrace

ADMISSION FREE

Format An expert panel discussing and answering questions about the confusion in messages we are given regarding food and nutrition.

Panel members

Professor Bo Lonnerdal (UC Davis University of California, USA)
 Professor Peter Aggett (University of Central Lancashire, Preston, UK)
 Professor Dennis Bier (Baylor College of Medicine, Houston, USA)
 Professor Maria Makrides (Women's & Children's Health Research Institute)
 Professor Jennie Brand-Miller (University of Sydney)
 Professor Manny Noakes (CSIRO)

Moderator Professor Robert Gibson (University of Adelaide)

The panel members are some of the leading nutrition researchers from across the world. Most people think experts should know what foods are best for their health, but do they agree on what we should be eating?

Why are we seeing an increased prevalence of health problems related to overconsumption and nutritional deficiencies?

When it comes to nutrition information, what are we to believe?

Does food have a role in preventing disease?

Is there a concern about the quality of our food now that we prioritise food production over nutritional quality?

Is modern agriculture producing nutrient-rich or nutrient-poor food and how does that affect us?

This is an unique opportunity to hear from some of the world's finest researchers assembled together for the first time. Come along and hear what they have to say, and have your nutrition questions answered.

FOODplus
RESEARCH
CENTRE

GROUP OF EIGHT
MEMBER

Life Impact | The University of Adelaide

For any enquiries regarding this event please contact:

Anna Seamark

Business Development Manager

FOODplus Research Centre

Waite Campus, The University of Adelaide

Ph: 8303 8135

Email: anna.seamark@adelaide.edu.au

Web: <http://www.adelaide.edu.au/foodplus/>

Story from UniSA Magazine - Spring 2010

Child protection in Australia is moving beyond crisis response and towards a more sophisticated blend of prevention, early intervention, and best practice service provision and care.

If you believe the headlines, Australia's child protection systems are in perpetual crisis. The latest figures show more than 207,000 children were subjects of reports of suspected abuse made to the authorities in 2008-09, a 6.2 per cent increase on the previous year.* Parental drug and alcohol abuse, domestic violence and mental illness, along with decreasing housing affordability, are all contributing to more families needing support to meet their children's needs. This is, in turn, putting pressure on already stressed child protection services that are finding it hard to attract and retain experienced practitioners.

While there's no doubt that struggling families and those who are trained to care for our most vulnerable children are feeling the strain, the reality of what we as a society are doing to prevent abuse and protect children is actually a more complex – and cautiously optimistic – story than many might think.

Professor Marianne Berry, the recently-appointed director of UniSA's Australian Centre for Child Protection, is at the vanguard of a movement working to reduce child abuse and neglect by building an evidence base to inform policy makers, professionals and the public about what actually works to protect children from harm.

Prof Berry says one of the strengths of Australia's child protection strategy is a growing emphasis on acting early to

avert harm. "Something Australia is starting to do really well is invest in early intervention," Prof Berry says. "It's important not only to identify families in trouble where the children could be at risk, but also to offer services and therapies that will actually help them deal with the underlying problem – whether it's addiction, or homelessness or domestic violence – before it gets to the stage where the children are harmed or have to be removed from their parents."

With more than 20 years' experience designing and evaluating child protection strategies in the United States and around the world, Prof Berry is bringing a new perspective to the research and policy agenda at the Centre. Her expertise is highly sought-after, and in September Professor Berry was invited to Government House in Canberra to meet with the Governor-General of Australia (and patron of the Centre) Ms Quentin Bryce AC to discuss solutions to the problems that are putting children at risk.

Prof Berry says that child abuse report statistics should be interpreted against a background of increased community awareness of the signs and causes of child abuse. She likens the broadening awareness of the importance of child protection to the increased uptake of cancer screening after wide-spread attention on the issue.

"The number of cases of identified breast cancer has gone up, because we know how to look for it, to test for it, and to respond to it earlier," she says.

"Similarly, if your approach to child protection starts with prevention, I would argue that it is a good thing if you identify more children at risk earlier – if the system has capacity to serve

those children once identified."

That's a big if, but one that the Centre is working to address, with a national evidence based workforce development program to help service providers better meet the needs of children and their families and prevent abuse and neglect. The Centre is the only university-based national research concentration supported by the Australian Government to identify, produce and disseminate rigorous empirical evidence to help improve the lives of children who have experienced, or are at risk of experiencing, abuse or neglect.

One of Australia's top child protection researchers, Associate Professor Leah Bromfield, recently joined the Centre after leading child protection research at the Australian Institute for Family Studies for six years. She says that money spent on prevention and early intervention protects children and makes good social and economic sense.

"While the direct cost of Australian child protection services is around \$2.2 billion a year, the longer-term costs of child abuse and neglect to the community are far more substantial, not to mention the human cost of lives that are forever changed," Dr Bromfield says.

"Research has demonstrated various adverse impacts of child abuse and neglect, such as increased rates of mental illness, poor health, unemployment, homelessness and incarceration."

Prevention and early intervention-driven policy has been gaining traction in the five years since the Centre was founded, culminating in last year's release of the National Frame-

work for Protecting Australia's Children (2009-2020). Titled *Protecting Children is Everyone's Business* and endorsed by the Council of Australian Governments (CoAG), the framework recognises that child protection is not simply a matter for state-based child protection services, but something in which families, communities, governments, business and service providers all have a role to play.

It's a policy direction that Dr Bromfield applauds.

"There's a growing understanding that to get this right, we need to take a multifaceted approach and boost prevention and early intervention efforts as well as improving child protection services and supporting quality foster and residential care options," Dr Bromfield says.

"The reality is that even with the best prevention strategies in place, there will still be some children who are abused or neglected. The Australian Centre for Child Protection is working to ensure that those children receive best practice responses and all the help they need to recover."

By Charlotte Chalken

* *Child Protection Australia 2008-2009, Australian Institute of Health and Welfare*



The Australian Centre for Child Protection's Professor Marianne Berry, left, and A/Professor Leah Bromfield.

www.unisa.edu.au/childprotection

Media release 20 October 2010 - University of Adelaide

A University of Adelaide study has found no evidence that taking fish oil capsules during pregnancy can help reduce the risk of post-natal depression, contrary to international recommendations.

In an article published today in the *Journal of the American Medical Association*, Prof Maria Makrides says a study of 2400 pregnant women in five Australian maternity hospitals between 2005 and 2009 supports this finding. Prof Maria Makrides, who is Professor of Human Nutrition at the University of Adelaide and Deputy Director of the Women's and Children's Health Research Institute, says results also contradict existing recommendations that fish oil capsules taken in pregnancy help newborn babies' language and cognitive development.

In a five-year study led by Prof Makrides, half the women in the latter stages of pregnancy were given fish oil capsules and the other half vegetable oil capsules. There was no significant difference in either the incidence of post-natal depression or neuro developmental outcomes of their children. "These results show that recommendations to increase omega 3 fatty acids in pregnancy are being made without sound evidence," Prof Makrides says. She says previous findings from the United States and

Europe suggesting the benefits of fish and seafood during pregnancy were based on observational studies that could not separate influence of social variables from intake of fish and seafood.

"Despite the paucity of hard evidence, women are being recommended to increase their intake of fish oil fats in pregnancy and the nutritional supplement industry is successfully marketing products with fish oil, claiming they optimise brain function in both mother and infant. "Before omega 3 supplementation in pregnancy becomes widespread, it is important to establish not only any benefits, but also any risks to mother or child," she says.

While depressive symptoms were more common among women with a previous or current diagnosis of depression, there was no difference between the control group and those taking fish oil capsules. Similarly, 700 children from the study group who were assessed for cognitive and language development at 18 months of age showed no marked differences. The study was funded by a \$1.6 million National Health and Medical Research (NHMRC) grant awarded to Prof Makrides in 2004. Other University of Adelaide researchers involved in the study included Prof Bob Gibson from the School of Agriculture, Food and Wine; and Prof Philip Ryan and Lisa Yelland from the Discipline of Public Health.

Media release 19 October 2010 - University of South Australia

World-renowned early childhood expert Professor Pauline Harris highlighted the importance of literacy in the lives of young children at the de Lissa Oration at UniSA on 20th October. The de Lissa Oration launched Children's Week 2010 celebrations with Prof Harris' free public lecture for parents, educators and other professionals interested in early childhood education and development.

Professor Harris is the Lillian de Lissa Chair of Early Childhood Research at UniSA and the Department for Education and Children's Services. Drawing on current literacy research, her lecture will explore snapshots of young children's literacy in terms of three core themes of Australia's new Early Years Learning Framework for Australia – belonging, being and becoming.

"Being literate involves children's active participation, even when they are very young," Prof Harris says. "Therefore as educators, we need to recognise, acknowledge and nurture children's active and mindful engagement with texts and participation in literacy

events. "Children's sense of belonging is tied up with their sense of literate identity and place as they find their literate voices and engage in day-to-day literacy events. Therefore we need to nurture children's sense of belonging in our literacy programs, while acknowledging their ways of being literate and doing literacy in their diverse home and community settings.

"Where children belong, and the situations we create for them, shape who children become as literate people, now and in the future. So we need to be mindful of the kinds of pathways we are creating for children's future learning by virtue of the learning environments we create, relationships we nurture, and strategies we use to support children's ongoing literacy learning."

Prof Harris is a world-renowned early childhood academic with particular expertise in children's language and literacy. She has authored four books, the latest being 'Language learning in the baby and toddler years'.

The podcast can be viewed at www.unisa.edu.au/eds/past.asp

The Regional Alliance, with the support and assistance from the SA Office for Women, the Women's Information Service in particular, conducted a public phone-in in November 2008.

The purpose was to gather information from the community about prevalence and severity of children's and young people's violence and abuse towards parents and other family members, to determine where families may have turned for assistance and to gauge value of assistance and support provided.

The main findings from this research were:

- * child and adolescent family violence occurs in many different types of households; mothers are most likely to be targets of this violence and abuse; there is little community understanding of the issues faced by these families; victims of this violence are often held responsible and blamed for the behaviour.

For full report or more info contact Mary McKenna; Lecturer in Legal Studies, Flinders University - mary.mckenna@flinders.edu.au

Media release 29 October 2010 - University of South Australia

Australia's leading bullying expert, UniSA's Dr Ken Rigby, is appealing to schools to consider looking at more than just the traditional intervention method for dealing with bullying. "There are now several known methods of intervention that have been shown to be effective in many situations but they are simply not being employed in many schools," Dr Rigby said. "Cases of bullying are not all alike and therefore may require different methods. There are six major methods of intervention in cases of school bullying. Dr Rigby says that research in UK, Australia and the US shows that about 30 per cent of students report bullying to teachers, but around 50 per cent of students said reporting it did not improve the situation. "This is a really worrying statistic," Dr Rigby said. "It seems that schools are not accessing and making use of what is now known about countering bullying.

"Further research undertaken across many countries, including Australia, shows that the disciplinary approach is seen by about 75 per cent of school staff as the most appropriate way of dealing with most forms of bullying. "This approach seeks to prevent bullying by imposing sanctions or punishments on the offender. It also sends a message to other students about what will happen to them if they engage in bullying. This approach requires a high level of surveillance though, which is often impossible for teachers and counsellors to maintain. "There are five other ways to deal with bullying that should be considered. Interventions need to take into account the severity of the bullying but also whether there is group involvement. In addition, there must be available skills and training of staff, and interventions need to be consistent with the school's anti-bullying policy and philosophy."

The other five intervention methods which are examined and evaluated in detail in Dr Rigby's book, *Bullying Interventions in Schools: Six major methods*, published by the Australian Council for Educational Research, are:

- **Strengthening the victim:** this approach aims to help the victim to cope more effectively in interactions with the bully or bullies, for example by training targeted children to act more assertively.
- **Mediation:** students in conflict are invited to work with a trained teacher or peer-mediator to find a mutually acceptable way of resolving a dispute that may underlie the bullying behaviour.
- **Restorative practice:** this method requires offenders to reflect upon their behaviour, experience sense of remorse and act to restore a damaged relationship with both the victim and the school community.
- **Support group method:** previously called the 'no blame approach', it involves speaking with the victim and identifying the perpetrators, after which a group meeting is held which includes the bullies and several students who support the victim, but not the victim. The practitioner describes the victim's distress and then each person says how he or she will help. The situation is then carefully monitored.
- **The Method of Shared concern:** is a multi-stage process in which suspected bullies are interviewed individually to gain their cooperation in improving the victim's situation. The victim is then interviewed. Subsequently a meeting is convened with the group of suspected bullies who are required to make a plan to resolve the problem. The victim is then invited to join the group to bring about an agreed solution.

Media release 20 October 2010 - University of South Australia

Not getting enough sleep may possibly lead to obesity and even type-2 diabetes, a UniSA study has found. Dr Siobhan Banks, Research Fellow with UniSA's Centre for Sleep Research, says people who have chronically shortened sleep of just four or five hours' per night are at greater risk of being overweight and having related health problems. "Our study results have implications for people who only get four or five hours sleep a night, which is not uncommon for some busy people during the working week," she says. "What we have found suggests that sleep restriction may be a factor in the development of obesity and possibly type -2 diabetes as it disturbs regular, efficient metabolic functioning."

Dr Banks will present her research at 'Sleep Down Under 2010: Biodiversity of Sleep', the 22nd Annual Scientific Meeting of the Australian Sleep Association and Australasian Sleep Technologists Association being held in Christchurch, New Zealand, from October 21-23. Ten healthy young men aged in their early 20s participated in Dr Banks' study, where they had their sleep restricted to four hours a night for five nights, to simulate a busy working week. Their diet, activity and environment were strictly controlled for a total of eight days in the lab. At the start of the study and after the five nights' sleep restriction, they had blood sampled frequently during the day which was assayed for glucose

and insulin and the fat signalling hormone leptin.

"The short term sleep restriction induced a disturbance in glucose metabolism in these otherwise healthy men, with high glucose levels that were not controlled by increases in insulin," Dr Banks says. "There was a reduction in meal-related glucose tolerance in the morning which suggests that there must have been a rapid induction of insulin resistance. Insulin is the hormone of fat storage, so if insulin were to stay increased with chronic sleep loss, then there would be a tendency for the body to store more fat rather than breaking down energy.

"The other hormone measured, leptin, is a hormone primarily secreted by fat and it regulates energy intake and fat stores. Increasing levels of this hormone indicate that the individual has sufficient energy stored within the body. This study found that leptin increased with sleep restriction, which suggests that participants had a positive energy balance, possibly due to their sedentary behaviour in the laboratory. "High sustained concentrations of leptin can result in leptin desensitisation so body doesn't adequately receive the satiety feeling after eating, leading to further desire to eat." The study was funded in part by Dr Banks' fellowship for women in science from UniSA and in part by an international collaboration with Professors Hans van Dongen and Greg Belenky at the Sleep and Performance Centre, Washington State University, Spokane.

Below is a brief update on Siblings Australia - the national organisation dedicated to meeting the needs of siblings of children and adults with disability and chronic illness.

SibworkS 2nd edition

Thanks to our members and donors, we are excited to release the revised 2nd edition of our SibworkS peer support program for siblings aged 8-12 years. This program has been run successfully by a number of organisations all around Australia (and one overseas!), including schools. We are hoping to access funding to evaluate the program through a controlled study over two years. Even if you do not wish to follow this model, the facilitator manual will give you a range of ideas to consider when planning your program. And if you do decide to follow the model, the participant booklets are great for the sibs themselves. *Numbers are limited and orders taken through the website.*

Facebook

If you are on Facebook consider connecting with our page - it's great way to see updates of things related to sibling support from around the world. We have ~400 followers but would love more!

Website

There are regular updates on 'news' page of our website about our lobbying/submissions and *National Action Plan* for sibling support we developed with Families Australia. The resolution by delegates at the national sibling conference, *Creating Connections*, last November can be accessed. Please come back and check our website from time to time and share with your networks - there are a number of resources available to support families and professionals, including reports of recent projects.

Other projects

We will soon complete a DVD for parents (funded by Woodend Foundation) and a parent booklet (funded by the NSW government). We are also working with Ronald McDonald House Charities, Beyond Blue and the Navigate program (Centacare).

Funding

Unfortunately, much of our work involves lobbying for siblings to be included in policy and government funding. We appreciate very much those people who wrote to federal MPs leading up to the recent election. Regrettably, in spite of ongoing efforts, the federal government continues to overlook support for siblings; and so, once again, our future is uncertain beyond the end of this year.

Things you can do

Until we access sustainable funding from the federal government there are ways in which you can support Siblings Australia:

- * Become a **member** - there are several options for families, individual professionals and organisations. Members receive more regular and detailed updates of our work as well as discounts to various events etc where possible.
- * Make a tax-deductible **donation**
- * Purchase **books, music and movies** through our Fishpond link on our website and we will receive 10% of all purchases.
- * Highlight wherever you can the work we do and try to increase **awareness** about the need for greater national co-ordination of sibling support approaches.

Kate Strohm, Executive Director

Ph: 8357 1214, email: kate@siblingsaustralia.org.au

website: www.siblingsaustralia.org.au

The University of Adelaide expands the frontiers of knowledge more frequently, and in more disciplines, than any other institution in South Australia. Our leading researchers, many globally recognised, relentlessly seek answers that will positively impact life on earth.

The Research Tuesdays monthly presentation series is your chance to share in some of their most fascinating discoveries.



Research Tuesdays

SHARING GREAT RESEARCH WITH THE COMMUNITY

No Child in Vain.
How Preventive Pathology is saving our kids.

Professor Roger Byard

Tuesday 14 December, 5:30pm - 6:30pm
Napier Building Lecture Theatre 102
North Terrace Campus, University of Adelaide

Synopsis

The death of a child is always a tragedy. But although the emotional scars they cause may never fully disappear, some solace can be found in the knowledge that lessons learned from the loss may save the lives of others.

For this reason, Professor Roger Byard of the University of Adelaide has been researching forensic pathology cases for two decades, focusing on those involving children. Referred to as "Preventive Pathology", his work has led to many safety hazards being remedied, including unsafe cot designs.

In this fascinating presentation he will reveal how this research is conducted, what the recent data reveals and where the greatest possibilities appear to lie for further improvements in child safety.

About the Speaker



Roger Byard is currently the Marks Professor of Pathology at the University of Adelaide and Senior Specialist Forensic Pathologist at Forensic Science SA.

He is also a paediatric pathologist and has published, or has in press, over 450 papers in peer-reviewed journals.

Admission Free, bookings essential, register online:

www.adelaide.edu.au/researchtuesdays or call: 8303 3692

For more information please visit:

www.adelaide.edu.au/researchtuesdays/

About 40 years ago, Dr. Alfred A. Tomatis, a French ENT specialist, developed a method of Sound Therapy. Sound Therapy uses classical music that has been filtered through a specialist device – the Electronic Ear – using specific algorithms and activation filters so that it becomes a concentrated program to stimulate the entire auditory pathway, from the eardrum to the auditory cortex.

Ear and brain performance is comprised of six essential elements, namely: Hearing, Auditory mapping, Balance, Brain energy, Emotional balance and Auditory processing. By helping to enhance all of these elements, Sound Therapy can address many communication and integration difficulties, and for healthy individuals, can help raise their condition to sparkling.

After examining over 35,000 subjects, Dr. Levinson, psychiatrist and neurologist, concluded that 90% of learning problems originate in the ear. Children with a sensory processing problem will often achieve far below their intellectual and emotional capacity. ST has been shown to help thousands of children diagnosed with auditory processing problems, dyslexia, learning disabilities, attention deficit disorders, autism, and those with sensory integration and motor-skills difficulties. Sound Therapy can give any child a head start with learning and self confidence. It helps develop study skills, improve listening, focus and memory, and reduce ear infections. It can also improve musicality and singing, coordination and sports performance.

Babies whose mothers listened to Sound Therapy during pregnancy show a distinct lack of tension and anxiety as they grow. Studies have also shown that children exposed to classical music before birth are more intelligent.

By stimulating the auditory pathways and the brain, Sound Therapy improves hearing and auditory processing, reduces tinnitus, stress, fatigue and insomnia. Listeners report better hearing in a noisy room, better concentration, focus and memory, better learning and academic performance, better balance and co-ordination, relief of dizziness and vertigo and a general feeling that the brain is sharper and communication is easier.

People of all ages can benefit from Sound Therapy. Researchers have found that Sound Therapy, like meditation, activates certain centres in the left forebrain, which create feelings of optimism, serenity and wellbeing. Today, Sound Therapy is used in over 60 countries.

The latest technology has produced compact listening devices prerecorded with filtered music. Even small children can wear them. When you listen to low volume music on your headphone, your middle ear muscles are stimulated. The beauty of it is that you put on the tiny headset and forget about it, so you can get hours of treatment whilst doing other things. It's like having a workout without going to the gym. And you can carry on with your normal activities at the same time !

For more info go to
www.soundenergy.com.au
or contact Hera Sandison,
Sound Therapy Consultant.
Ph: 8353 4892

Email: hsandison@adam.com.au



REPORT

FLAWS

FLAWS in Our Lives: Fatigue Life and Work Strain

Sleep problems and fatigue are widely recognised as important issues not only for health and wellbeing, but also for safety and productivity in the workplace.

This report examines sleep issues and fatigue across all industries in the general South Australian (SA) working population.

The term 'FLAWS' was created to capture this work-life perspective on the intersection of work and life circumstances that pressure and strain workers' capacity to function effectively and maintain their wellbeing.

The main findings of the research include sleep issues and fatigue are common in the general working population and women are more likely to report being fatigued than men, regardless of work hours or parenting status.

To read the report visit the Centre for Work + Life webpage at www.unisa.edu.au/hawkeinstitute/cwl/

Written by: Natalie Skinner, Someyah Parvazian & Jill Dorrian
Published by: Centre for Work + Life, University of South Australia

REPORT

SACOSS

SACOSS Anti-Poverty Statement & Survey Results 2010

As part of Anti-Poverty Week 2010 SACOSS released an Anti-Poverty Statement with the results of a statewide survey.

SACOSS undertook to survey South Australians right across the state on their perceptions and understanding of poverty in their home state. Results from across metropolitan Adelaide, and regionally from Mt Gambier to Whyalla, revealed that while many people know that poverty is an issue in SA, they are underestimating what it takes to live on.

The Poverty Statement provides the following information:

- facts about poverty in South Australia
- perceptions vs reality of poverty
- definition of the 'poverty line'
- rising cost of living
- employment

The Anti-Poverty Statement and Survey Results report is available from the SACOSS website at www.sacoss.org.au

Written by: South Australian Council of Social Service
Published by: South Australian Council of Social Service

Minister for Mental Health and Ageing Mark Butler announced **\$447.5 million** for medical research, through the National Health and Medical Research Council. 745 research projects across Australia will be supported by **NHMRC Project Grants**, with funding of \$408.7 million over three to five years. Universities and independent research institutes will also receive \$38.8 million toward the indirect costs of health and medical research, through NHMRC Equipment and Infrastructure Grants.

University of Adelaide

Prof Jozef Gecz, Prof Hilger Ropers, Prof Thomas Becker, **Prof Eric Haan**.

Identification of genes for Xlinked mental retardation. \$ 653,390

Dr Taher Omari, **Prof Geoffrey Davidson**.

An objective screening test for deglutitive aspiration and swallow function in children with dysphagia. \$ 460,974

A/Prof Jeremy Thompson, Dr Robert Gilchrist, Dr Melanie Sutton-McDowall, Prof David Gardner.

Characterisation of Cumulus Cell Molecular Mediators of Oocyte Health. \$ 436,299

Prof Caroline Crowther, A/Prof William Hague, Ms Philippa Middleton, **A/Prof Peter Baghurst, Emeritus Prof Jeffrey Robinson**.

Dietary and Lifestyle Advice and Treatment for Women with Borderline Gestational Diabetes: The IDEAL Randomised Controlled Trial. \$ 632,979

Prof Caroline Crowther, Dr Lisa Askie, Dr Helena Oakey, Ms Philippa Middleton.

Prenatal Repeat Corticosteroids in women at risk of preterm birth for improving neonatal health - an individual patient data review. \$ 447,281

Dr Darryl Russell, Dr Rebecca Robker.

Cumulus cell invasive migration: clearing a path for the oocyte. \$ 395,544

Prof Julie Owens, Dr Miles De Blasio, **Dr Kathryn Gatford**, Prof Stefan Hiendleder.

Preventing insulin resistance and obesity following fetal growth restriction. \$ 891,732

A/Prof Simon Barry, Dr Doreen Krumbiegel, **Prof Heddy Zola**.

Peptidase inhibitor 16: a new biomarker for human Treg. \$ 377,931

Prof Michael Brown, Dr Ian Lewis, A/Prof Catherine Bollard, Prof Malcolm Brenner, **Dr John Hayball**.

CARPETS: A Phase I Open Label Study of the Safety and Immune effects of an Escalating Dose of Autologous GD2 Chimeric Antigen Receptor-Expressing Peripheral Blood T Cells in Patients with Metastatic BRAF-Mutant and GD2-Positive Melanoma. \$ 338,459

A/Prof David Kennaway, Dr Tamara Varcoe.

The consequences of simulated shift work exposure during gestation on the metabolic health of the adult offspring. \$ 536,706

Dr Robert Gilchrist, Prof Johan Smitz.

A novel procedure for efficacious gonadotrophin-free infertility treatment. \$ 421,273

A/Prof Simon Koblar, A/Prof Yingxi Lin, Dr Martin Lewis.

Brain repair following stroke: the role of Npas4, a neuralspecific transcription factor. \$ 590,048

Dr Paul Anderson, **Prof Howard Morris**, Dr Rachel Davey, Dr Peter O'Loughlin.

Vitamin D Activity to Regulate Bone Remodelling and Promote Bone Strength. \$ 478,654

Dr Jane Harford, Dr Liana Luzzi, Dr Haiping Tan, Gloria Mejia, A/Prof Kaye Roberts-Thomson, **Prof John Spencer**.

Intergenerational change in oral health in Australia. \$ 543,977

University of South Australia

Prof Cory Xian, Prof Peter Howe, Prof Ross McKinnon.

Pathophysiology and alternative preventative strategy for breast cancer chemotherapy-induced bone loss. \$ 521,706

Dr Ravinder Anand-Ivell.

Leydig cell status determines the aging male phenotype. \$ 339,182

\$125.7 MILLION TO SUPPORT 296 OF AUSTRALIA'S TOP HEALTH AND MEDICAL RESEARCHERS. Two hundred and ninety six researchers across Australia have been awarded National Health and Medical Research Council awards and fellowships in 2011 that will enable them to develop their research careers.

RESEARCH FELLOWSHIPS

Prof Raymond Rodgers

\$765,370 - University of Adelaide

CAREER DEVELOPMENT AWARDS

Dr Beverly Muhlhausler

Better nutrition for mothers and infants for healthier Australians \$384,160 - University of Adelaide

TRAINING (POSTDOCTORAL) FELLOWSHIPS

Dr Nicolette Hodyl

\$290,032 - University of Adelaide

The Channel 7 Children's Research Foundation allocated **\$1,138,200** for 2011 funding, supporting 22 projects. To date, via its annual Grants process, it has allocated almost \$18 million dollars to over 700 projects that focus on cause, prevention, diagnosis and treatment of conditions that may affect general health, education or welfare of children in South Australia and Northern Territory.

Full details of these projects can be found at www.crf.org.au

Children, Youth & Women's Health Service

Chief Investigator: **Dr David Parsons**

Optimised initial gene transfer for the lifetime correction of CF airway dysfunction. \$60,000

Chief Investigator: **Dr Cuong Tran**

Zinc supplementation as an adjuvant therapy for children with Coeliac Disease - 2nd YEAR \$40,000

Flinders University

Chief Investigator: **Dr Susan Krieg**

Combined child care and preschool: What level of participation is needed to improve school readiness for disadvantaged children? \$54,000

Novita Children's Services

Chief Investigator: **Dr Parimala Raghavendra**

Connective solutions: Facilitating social participation of children and adolescents with physical disabilities or acquired brain injury using Web 2.0 social networking and 3D virtual environments - 2nd YEAR \$46,000

University of Adelaide

Chief Investigator: **Dr Kylie Dunning**

Preservation of Female Fertility For Young Cancer Patients: The Importance of Fatty Acid Oxidation in a 3-D Ovarian Follicle Culture System. \$35,000

Chief Investigator: **Dr Beverly Muhlhausler**

Blocking the Programming of Childhood Obesity by Maternal High Fat Feeding: A Role for Omega-3 Fatty Acids? - 2nd YEAR \$50,000

Chief Investigator: **Dr Julia Pitcher**

Motor cortex facilitation during speech listening in children born pre-term. \$70,000

Chief Investigator: **Emeritus Prof Jeffery Robinson**

Do maternal and infant obesity related genotypes influence efficacy of interventions to limit weight gain in obese pregnant women and obesity in their offspring? - 2nd YEAR \$50,000

Chief Investigator: **Prof Michael Sawyer**

Does Nurse Home Visiting Improve Infant Development in Rural and Remote Regions? - 2nd YEAR \$64,700

University of South Australia

Chief Investigator: **Dr James Dollman**

Exploring predictors of physical activity attrition and maintenance among females in early adolescence. \$65,000

Chief Investigator: **Prof Jonathan Newbury**

Aboriginal Families Study. \$58,000

ARC-Linkage Project Grants

Dr Viv Perry, **Prof Raymond Rodgers**, **Prof Isabella C McMillen**
Quantifying the effect of nutrient-gene interaction in utero in key tissues instrumental to productivity and sustainability of the beef industry.
2011-2013 \$340,000, University of South Australia.

ARC Discovery Grants

Prof Graeme Hugo, Dr Yan Tan, Prof Guishan Yang, Prof Naiang Wang
Climate change and migration in China: theoretical, empirical and policy dimensions.
2011-2015 \$710,000, University of Adelaide.

Prof Raymond Rodgers, Dr Helen Irving-Rodgers
Interactions between cells and extracellular matrix in the epithelial-mesenchymal transition of the ovarian follicular stratified epithelium
2011-2013 \$285,000, University of Adelaide.

Prof Barbara Pocock
The meaning of work, well-being and the changing terms, times and spaces of service sector jobs.
2011-2012 \$150,000, University of South Australia.

ARC Discovery Indigenous Researchers Development Fund

A/Prof Jennifer Baker, Dr Pat Dudgeon, Dr Alice Rumbold, **A/Prof Vivienne Moore**
Intersectoral collaboration and capacity building for better outcomes for Aboriginal people in Port Augusta.
2011-2012 \$105,756, University of Adelaide.

ARC Future Fellowships

A/Prof Michael Davies
Building child health through maternal wellbeing.
2010-2014 \$789,196, University of Adelaide.

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**CONGRATULATIONS TO ALL
SUCCESSFUL APPLICANTS IN
THE NMHRC, ARC AND CRF
ROUNDS**

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