

## Upcoming Events...

### 19 - 21 September

Australasian Research Management Society (ARMS) conference to be held in Adelaide.

### 24 - 26 September

Australian and New Zealand Adolescent Health conference to be held in Christchurch, New Zealand.

### 28 - 30 September

Perinatal Research Society meeting to be held in Savannah, Georgia.

### 6 October

30th National Conference of the Australian Association for Cognitive and Behaviour Therapy to be held in Queensland, Australia.

### 30 October - 2 Nov

11th Australasian Conference on Child Abuse and Neglect to be held at the Gold Coast Convention Centre, Australia.

### 6 - 9 November

5th world congress on Developmental Origins on Health and Disease (DOHaD) will be held in Perth.

For further information visit our events page at:

[www.adelaide.edu.au/hda/events](http://www.adelaide.edu.au/hda/events)

## SIBLINGS AUSTRALIA NEW AFFILIATE MEMBER



Siblings Australia is a unique national organisation committed to enhancing the wellbeing of the siblings of children with disabilities and chronic illness.

Kate Strohm is the founder of Siblings Australia which was originally established in 1999 within the Department of Psychological medicine at the Women's and Children's Hospital.

Siblings Australia aims to give siblings a voice and the knowledge that they are not alone; to

give their families and supporters a better idea of how they can help; and to raise the issue of sibling needs wherever and whenever possible.

Siblings Australia also aims to:

- Increase awareness amongst parents, siblings and service providers of the concerns of siblings of children with special needs
- Increase the provision of services to families and in particular siblings
- Improve networking opportunities for families and siblings to support each other
- Increase the opportunities for

service providers to network and share/improve their skills in supporting siblings

- Enhance the inclusion of sibling support as part of 'core business' of relevant organisations.

The organisation is attempting to create a research agenda for this group of children. If you are interested in being involved in this process or have any general enquiries contact:

**Kate Strohm**

Phone/Fax: 8361 8361

[info@siblingsaustralia.org.au](mailto:info@siblingsaustralia.org.au)

[www.siblingsaustralia.org.au](http://www.siblingsaustralia.org.au)

## EARLY NOTICE LAST 2 HDA EVENTS FOR 2007

### HDA Thematic Evening on *Good Food, Good Health - nutrition through the life cycle.*

Talks will cover issues of nutrition in pregnancy, nutrition in infancy, nutrition and physical activity patterns in children, and current research in the Whyalla community trial in managing obesity and health issues in the middle-aged population.

**When:** Thursday 11 October, 4.15-7.00pm at the State Library Lecture Theatre.

Proudly supported by the



### HDA with the Healthy Ageing & Computational Neuroscience Clusters will be holding a *Career Development Event - Forging a Research Career When the Going Gets Tough!*

The event includes presentations and a panel discussion by senior academics and researchers who have successfully navigated research career challenges in their chosen field. Topics will cover the work+life balance, being a woman in science and family issues, career interruption and illness, career change, developing an independent research career. The event will be open to all 3 Universities and ideal for post-graduate students and early-

mid career researchers to gain expert advice towards their career development.

**When:** Tuesday 16 October, 9.45am-1.00pm at the State Library Lecture Theatre.

A detailed program for both events will be emailed out in mid September. If you are not currently on the HDA mailing list please register your interest to [anne.jurisevic@adelaide.edu.au](mailto:anne.jurisevic@adelaide.edu.au) or ph 8303 8222.

Healthy Development Adelaide

Healthy Ageing Research Cluster

Computational Neuroscience Research Cluster

## MEMBER PROFILE - A/PROFESSOR CLAIRE ROBERTS

DISCIPLINE OF OBSTETRICS & GYNAECOLOGY, UNIVERSITY OF ADELAIDE



I am the Research Leader of the Placental Development Group in the Discipline of Obstetrics and Gynaecology at the University of Adelaide.

Our basic research focuses on cellular and molecular interactions in placental differentiation, invasion and function and their impacts on fetal and maternal health. These are then used to identify possible diagnostic and

therapeutic targets for pregnancy complications.

I am the Scientific Director of the SA SCOPE (SCReening for Pregnancy Endpoints) project which aims to develop predictive tests for couples' risks for complications of late pregnancy (preeclampsia, intrauterine growth restriction and pre-term birth). The SA SCOPE project was awarded \$2.37 million over three years from the Premier's Science and Research Fund.

The SCOPE program is currently in full swing; the final aim is to recruit about 1500 patients in South Australia, as part of the international cohort (overall aim of 15,000 first time preg-

nant women worldwide). SA SCOPE midwives have recruited 959 patients as at the end of August 2007 with over 500 babies delivered. The SCOPE database will have a wealth of very detailed clinical information. The global program laboratory approaches used to test SCOPE biobank samples include targeted genomics (SA), proteomics (Auckland, NZ, San Francisco, USA) and metabolomics (Manchester, UK).

The final aim of SCOPE is to arrive at clinically robust and useful predictors for the main pregnancy complications so that antenatal care can be tailored to suit.

I am active in promoting scientific and career development of young investigators in my capacity as a member of the judging committees for SRB, ANZPRA and IFPA New Investigator Awards and the Women's and Children's Hospital Young Investigator Award. I also sit on the Discipline's post-graduate research management committee and Chair the HDA Research Synergies Working Group that brings together the Thematic Evenings.

A/Professor Claire Roberts can be contacted on 8303 3118 or [claire.roberts@adelaide.edu.au](mailto:claire.roberts@adelaide.edu.au)

## BITING ISSUES IN HEALTH AND DISEASE

On 1 August, HDA held a Thematic Evening on 'Biting Issues in Health and Disease' chaired by A/Prof Claire Roberts from the University of Adelaide.

Speakers from the University of Adelaide and Queen Elizabeth Hospital provided evidence that oral health is associated with general health to a far greater extent than has previously been appreciated. Although poor oral

health is itself not necessarily causal, there may be a common underlying imbalance between pro-inflammatory and anti-inflammatory cytokines in some of these diseases with a shared genetic basis.

**Prof Mark Bartold** from the Colgate Australian Clinical Dental Research Centre discussed the relationship between oral health and rheumatoid arthritis.

**Dr Toby Hughes** from the Craniofacial Biology Research Group elucidated on the interactions between genes and environment in tooth emergence and dental caries demonstrated by his studies in twins.

**Dr Patrick Phillips** from the Queen Elizabeth Hospital showed us that periodontitis is the 6<sup>th</sup> complication of diabetes.

**Prof Gary Slade** from the Australian Institute of Health and Welfare's Dental Statistics and Research Unit discussed the evidence that periodontitis predisposes pregnant women to pre-term labour.

The presentations are available at [www.adelaide.edu.au/hda/news](http://www.adelaide.edu.au/hda/news)



## THE REPRODUCTIVE REVOLUTION: HAVE WE GONE TOO FAR?

On 14 August, the fifth talk in the University of Adelaide's Research Tuesdays seminar series was presented by Professor Robert Norman on 'The Reproductive Revolution - have we gone too far?' to an audience of over 100 people.

The event was introduced by The Vice-Chancellor, Professor James McWha with VIP guests attending that included the Chancellor - Hon John von Doussa QC, Deputy Chancellor - Mr Ross Adler, and the Minister for Health - Hon John Hill.

Professor Norman is Co-Convenor of Healthy Development Adelaide and Director of the world renowned Research Centre for Reproductive Health in the School of Paediatrics and Reproductive Health, University of Adelaide.

Professor Norman brought together a fascinating historical story balanced with world class research taking place in South Australia and the continuing ethical, social and legal considerations that reside in the world of reproductive technology.



Professor Norman's presentation can be found at [www.adelaide.edu.au/hda/news](http://www.adelaide.edu.au/hda/news) and is also available for audio download at [www.adelaide.edu.au/lifeimpactresearch/researchtuesday/](http://www.adelaide.edu.au/lifeimpactresearch/researchtuesday/)



## HDA SYMPOSIUM WINNERS - FEEDBACK

On 2 November 2006, HDA held an *Early Career Research Symposium*. Postgraduate students and early career researchers across all disciplines and the 3 Universities showcased their latest research in healthy development.

**Ms Siew Lim (HDA Scholar - CSIRO Human Nutrition/University of Adelaide) received the \$500 award for the Most Outstanding Multidisciplinary Presentation proudly sponsored by the 3 Universities - University of Adelaide, University of South Australia and Flinders University.**

It was a pleasant surprise to be the recipient of the Multidisciplinary Presentation at the HDA Early Career Research Symposium last year. The award has been great in providing funding for expenses which are not usually covered by university departments or research institute for students. Firstly, this award enabled me to take up a pro-

fessional development course in scientific writing, which provided valuable skills in thesis and manuscript writing. The award will also be funding professional memberships with associations such as the Nutrition Society of Australia and the Australasian Society of the Study of Obesity throughout the study period.

The remainder of the award is intended to be used in other professional development courses in the near future. At this point, further training in statistical analysis or counselling seems highly desirable for final stages of PhD and beyond!

In Summary, this award has been a great value-adding gift to my career development and I would like to thank the sponsors for that!

**Ms Brooke Summers (Hanson Institute/University of Adelaide) received the \$250 award for the Most Outstanding Presentation by a**

**PhD student sponsored by CSIRO Human Nutrition.**

I have been concentrating on finishing my PhD, planning to finish end of 2007. I will be starting a post-doc position with Prof Julie Owens in the Discipline of Obstetrics and Gynaecology, University of Adelaide and will be planning to use the money to go towards a conference in 2008.

**Dr Beverly Muhlhausler (University of South Australia) received the \$250 award for the Most Outstanding Presentation by an Early Career Researcher proudly sponsored by CSIRO Human Nutrition.**

I was fortunate to be the recipient of the \$250 Early Career Research Award.

As a Post-Doctoral Fellow, one of the most important aspects of my career development is to ensure that myself and my work receive good exposure on the international scientific

arena. Clearly, this requires that I attend and present work at national and international conferences in my research field. In early 2007 I applied for, and was successful, in securing a position as an invited participant to the exclusive Stock Conference of the International Association for the Study of Obesity. This conference invites 12 of the world's leading experts in a select field of obesity research along with 12 invited participants to discuss current concepts and the latest methodological and intellectual advances in this research area. The award from HDA assisted me in travelling to Bangkok, Thailand, to attend this meeting.

The opportunity to attend this conference was invaluable to my research, and provided me with a unique opportunity to engage in animated and insightful discussions with leading researchers in an area of direct relevance to my current work.

## HDA SCHOLAR PROFILE - ANNE RAIMONDO

### DISCIPLINES OF BIOCHEMISTRY AND GENETICS, UNIVERSITY OF ADELAIDE



**Anne Raimondo is in her second year of a Healthy Development Adelaide PhD scholarship. Anne is supervised by Prof Murray Whitlaw (Discipline of Biochemistry) and Dr Simon Koblar (Discipline of Genetics) at the University of Adelaide.**

During the second year of my PhD I will continue to focus on the primary aim of my project, which is the identification of the direct targets of the basic-helix-loop-helix/PAS transcription factor Single Minded 1 (SIM1).

Ultimately we hope to shed light on the precise molecular activities of SIM1 in terms of its relatively undefined role in early onset obesity.

The majority of information concerning SIM1 in the literature revolves around its role in the generation and/or survival of certain secretory neurons located in the hypothalamus, which synthesise and secrete peptide hormones critical for regulation of the feeding response in adults. To this end, we have successfully obtained a number of immortalised, clonal cell lines derived from the hypothalamus of embryonic mice. We have confirmed that these cell lines possess a neuronal morphology and endogenously express SIM1 and its obligatory DNA-binding partner factor Aryl Hydrocarbon Receptor Nuclear Translocator 2 (ARNT2). We aim to knock down endogenous SIM1 protein using a vector system designed to inducibly overexpress short

hairpin RNA (shRNA) molecules which specifically bind and degrade endogenous SIM1 transcripts, thus depleting the cell of its natural levels of SIM1 protein. We will adopt a microarray approach to identify those gene products which respond to shRNA-mediated SIM1 knockdown. We intend to verify the results of this screen using Real-Time PCR and Chromatin Immunoprecipitation (ChIP) assay techniques, as well as a secondary microarray screen outlined below. The initial stages of this work will be carried out in collaboration with the Microarray facility associated with the University of Adelaide.

SIM1 is expressed in the kidney and skeletal muscle as well as the brain. To this end,

we have also successfully generated human embryonic kidney-derived cell lines which inducibly overexpress SIM1 and ARNT2. Microarray analysis of these cell lines will indicate those gene products which respond to high levels of SIM1/ARNT2 overexpression.

This additional series of experiments has the potential to supplement data obtained by the first set of microarray experiments mentioned above, as well as supply us with a list of genes which may be regulated by SIM1 in a kidney-specific context.



# AUSTRALIAN RESEARCH ALLIANCE FOR CHILDREN & YOUTH

WWW.ARACY.ORG.AU

The Australian Research Alliance for Children & Youth (ARACY) is a national organisation with more than 850 members including individuals and organisations across Australia.

ARACY's mission is in working together to enhance the wellbeing and life chances of children and young people.

ARACY and HDA are closely aligned in that we both encourage collaboration between researchers, policy makers and practitioners from a broad range of disciplines.



Professor Robert Norman, HDA Co-Convenor holding the **Commitment to Young Australians** statement. The Commitment is a way of unifying the diverse organisations forming ARACY.

For more information on the statement of seven principles go to the website.

### Opportunity for New Collaborations for Seed Funding:

Applications are open for third round of seed funding (of up to \$40,000 per collaboration) to support formation of new multi-disciplinary, multi-sector collaborations that are better able to address complex problems affecting the health, development and wellbeing of young Australians.

The following areas have been identified as priority issues:

1. Impact of work conditions and policies on child and youth health, development and wellbeing
2. Research with children (from child/youth-centred perspective)
3. Children and youth as consumers
4. Economic evaluation of interventions (including cost-benefit analyses)
5. Successful dissemination of evidence-based interventions.

The closing date for applications is 12 October.

Further information is available on the Network's website at [www.aracy.org.au/AM/Template.cfm?Section=Seed\\_Funding](http://www.aracy.org.au/AM/Template.cfm?Section=Seed_Funding)

### Funding Support for Regional Activities:

A new funding program to support capacity-building activities hosted by regional organisations.

Funding of up to \$10,000 is available to support staging of seminars, workshops, conferences and other activities in rural and regional areas which address critical issues of relevance to child and youth health, development and wellbeing.

Activities in the following categories are eligible for support:

Skills development activities: how to evaluate programs and interventions; how to engage communities; how to build sustainability; how to engage youth knowledge-transfer activities: such as evidence-based interventions to support vulnerable children; how to run effective mentoring programs. Activities focused on building new local coalitions to address critical issues in the area.

Applications can be made any time, further info and criteria at [www.aracy.org.au/AM/Template.cfm?Section=Support\\_for\\_Regional\\_Activities](http://www.aracy.org.au/AM/Template.cfm?Section=Support_for_Regional_Activities)

### New Funding Initiative between Research Networks:

The ARACY ARC/NHMRC Research Network – Future Generation – is partnering with another Research Network (the ARC/NHMRC Research Network in Genes and Environment in Development - NGED) to provide funding support for the development of new collaborations that meet the complementary goals of each Network's fields of enquiry.

Seed funding of up to \$10,000 per collaboration will be provided to support the development of "new cross-network, multi-disciplinary collaborations, with the goal of producing useful resources and successful grant applications".

The topic for which new collaborations are invited to submit proposals is: *The interaction between biological, genetic, environmental and social determinants of healthy development.*

The closing date for applications is Wednesday 31 October 2007.

Further information and criteria [www.aracy.org.au/AM/Template.cfm?Section=NGED\\_Support](http://www.aracy.org.au/AM/Template.cfm?Section=NGED_Support)

## BRAIN SEMINARS

### NEUROSCIENTISTS & TEACHERS DISCUSS THE LINKS BETWEEN THE BRAIN AND LEARNING

Many of us are aware of educators' keen interest in the brain and what secrets it might hold that would enable us all to understand more about how we learn. And there is growing acknowledgement that this understanding will be enriched by neuroscientists and educators together constructing ideas and doing the thinking in interdisciplinary forums.

Two seminars are planned to think, feel and learn our way into *the adolescent brain and the role of emotion in learning.*

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**The adolescent brain: the research and practice**

Wednesday 5 September, 4.30 - 6.30pm at Union House (Level 4, Equinox Room) University of Adelaide.

Professor Richard Clark and teachers who have studied the Graduate Certificate in Neuroscience (Learning) share the research and implications for classroom practice.

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**Does what you feel affect how you learn?**

Tuesday 13 November, 4.30 - 6.30pm at the Education Development Centre Hindmarsh (room G11A).

Professor Ian Gibbins and teachers who have studied the Graduate Certificate in Neuroscience (Learning) share the research and implications for classroom practice.

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To register contact Monika Nowak on 8226 1812 or [nowak.monika@saugov.sa.gov.au](mailto:nowak.monika@saugov.sa.gov.au)  
**Cost:** \$10 per seminar

For further information contact Loris Glass, Manager Neuroscience and Learning Partnerships on 8226 8869 or [glass.loris@saugov.sa.gov.au](mailto:glass.loris@saugov.sa.gov.au)

