

Healthy Development Adelaide

A Research & Innovation Cluster in South Australia

Volume 4, Issue 2

April 2008

Newsletter

www.adelaide.edu.au/hda

Upcoming Events...

• **20 - 23 April**

12th annual Perinatal Society of Australia & New Zealand (PSANZ) congress will be held in Queensland.

• **6 - 9 May**

3rd Asia-Pacific Nutrigenomics conference: diet-gene interaction in human health and disease will be held in Melbourne.

• **16 May**

A seminar titled Facilitating Superior Chronic Disease Management through Information Communication Technologies will be held at The University of Adelaide's Business School. *More info on page 2.*

• **17 - 22 May**

International Society for the Study of Fatty Acids and Lipids (ISSFAL) Conference will be held in Kansas City, Missouri, USA.

• **2-8 June**

ASMR Medical Research Week will be held in Adelaide, South Australia.

• **7-12 June**

SLEEP 2008 will be held in Baltimore, Maryland, USA.

• **15-18 June**

Endocrine Society Annual Meeting will be held in San Francisco, California.

For further information visit our events page at:

www.adelaide.edu.au/hda/events

LATEST NEWS

A RESEARCH & INNOVATION CLUSTER IN SOUTH AUSTRALIA

A Research and Innovation Cluster in South Australia

From 2008, HDA will have added financial support towards our activities. Major contributions will still come from the University of Adelaide where HDA was initiated in 2004.

Other contributors are the University of South Australia, Women's & Children's Health Research Institute, DFEEST,

Department of Health, and Department of Education & Children's Services. We would also like to thank the Channel 7 Children's Research Foundation for their contribution.

Supporters of HDA are Flinders University, Department for Families & Communities, CYWHS.

Welcome to New Members

Dr Shirley Yates. School of Education, Flinders University.

Mr Hassan Bakos. Discipline of Obstetrics & Gynaecology, University of Adelaide.

A/Prof Irene Hudson. School of Mathematics & Statistics, University of South Australia.

Intergenerational Health

HDA will have a major new role in the strategy to further develop the research agenda for the Centre for Intergenerational Health. *Full story on page 2*

EARLY NOTICE

4TH ANNUAL HDA RESEARCH DAY FRIDAY 23 MAY

HDA's 4th Annual Research Day will be held on Friday 23 May at the University of Adelaide and will focus on four priority health areas relevant to healthy development. The program will include expert speakers from universities, institutions and government in a forum that can provide opportunities to identify cross-disciplinary links, collaborations and networking.

Morning sessions

PERICONCEPTIONAL INFLUENCES ON HEALTH

- ▶ Sperm DNA damage and its reproductive consequences
- ▶ Environmental influences on preimplantation embryo development
- ▶ Small babies and cardiovascular health
- ▶ Exposure to endotoxin in the first few weeks of pregnancy

INDIGENOUS RESEARCH

- ▶ Engaging aboriginal communities through maternal health
- ▶ Evaluation of the Aboriginal Maternity Care program in Southern metro Adelaide
- ▶ Making the most of population surveys: measuring Indigenous health outcomes
- ▶ Reducing infant mortality in at risk groups

Afternoon sessions

INHERITED DISORDERS

- ▶ Turner and Leigh syndrome mouse models
- ▶ Genes in practice: turning genetic research into cancer care and prevention
- ▶ Huntington's disease and Fragile X syndrome
- ▶ Detection and treatment of lysosomal storage disorder patients

HEALTH DEMOGRAPHY

- ▶ Life course effects on health at the individual and population levels
- ▶ Recent fertility trends in Australia
- ▶ Overweight children: where and why?
- ▶ Making the most of population surveys: measuring child health outcomes

Program will be out in two weeks and will also be posted on our events page at www.adelaide.edu.au/hda/events



Background

For several years discussions have been occurring as to how to best improve South Australia's performance in health and medical research and to increase international recognition of South Australia as a world class centre for health, medical research and development and education.

As a result of these discussions, a major collaborative concept identified as a potential niche capability for the State was Intergenerational Health. In late 2005, an Intergenerational Health Focus Group comprised of senior representatives from the three universities and Government was established to explore how best to:

- Implement and progress the concept of Intergenerational Health as an internationally recognised niche capability for South Australia
- Define research themes and focus areas for the capability
- Develop strategy for establishing a Centre for Intergenerational Health.

Last year, HDA was involved in bringing together a proposal that included four strategic research theme areas under the theme of 'Intergenerational Health' which are linked to health targets identified within South Australia's Strategic Plan. The themes are:

• Healthy Reproduction

Theme leader - Prof Julie Owens/Prof Jeffrey Robinson, University of Adelaide

• Healthy Weight

Theme leader - Prof Robyn McDermott, University of South Australia

• Healthy Ageing

Theme leader - Prof Mary Luszcz, Flinders University

• Psychological Health and Wellbeing (child & adult components)

Theme leaders - Prof Michael Sawyer, CYWHS (child component). Prof Helen Winefield, University of Adelaide (adult component).

The proposal was successful and funding has been jointly allocated by DFEEST (under Constellation SA) and the Department of Health to appoint a Centre for Intergenerational Health Program Director to develop a business and governance model, development of the research agenda, liaise with HDA and build linkages between universities, research organisations and industry. The identification of linkages between the themes, niche research areas and potential directions for new research are intended to place SA researchers at a competitive advantage nationally to attract Program grants and other large national collaboration grants. It is intended that the Centre will initially be a virtual centre and will provide a contact point for research activities that fall under the 'Intergenerational Health' framework and research themes. **72% of HDA members fall within the four research theme areas.**

Staff

The Centre will be situated within the Department of Health with staff having commenced last week. Staff Strategies are already underway and HDA will keep you informed on new developments and we look forward to an exciting year for both HDA and IGH.



Ms Tricia Berger is the newly appointed Program Director for the Centre for Intergenerational Health:

Having worked for the last six years as Executive Director of the Australian Herpes Management Forum (AHMF), Tricia recently made the move back to Adelaide to commence work in the newly created position of Program Director Intergenerational Health. Tricia's main role as Program Director is to further develop the proposal for a Centre for Intergenerational Health which is a collaborative initiative between the Department of Health, DFEEST, University of Adelaide, Flinders University and the University of South Australia. As part of that role Tricia will focus on developing a collaborative business model and plan for the Centre, the further development of an active research agenda/program building upon existing research activities in unique niche research areas and the provision of support for three new Post Doctoral Fellows appointed under the Centre for Intergenerational.

☎ 8463 6198 or 0402 455 441

✉ Tricia.Berger@health.sa.gov.au



Ms Anne Jurisevic is HDA's Network & Communications Officer : I will be working two days per week (Tuesday & Wednesday) with the Centre for Intergenerational Health assisting Tricia in the further development of the Centre's research agenda and networks. Part of my work will be to liaise, coordinate and facilitate communication with researchers across universities, government and health service sectors on matters relating to the Centre, facilitate the development of linkages between HDA and assist in the development of a communication strategy (website, research meetings, workshops, etc).

Centre for Intergenerational Health

☎ 8226 7291 (Tues & Wed)

✉ anne.jurisevic@health.sa.gov.au

Healthy Development Adelaide (HDA)

☎ 8303 8222 (Mon, Thurs & Fri)

✉ anne.jurisevic@adelaide.edu.au

MEMBER PROFILE - A/PROFESSOR JANE SCOTT

DEPARTMENT OF NUTRITION & DIETETICS, FLINDERS UNIVERSITY



Associate Professor Jane Scott commenced her appointment in the Department of Nutrition and Dietetics at Flinders University in May 2007.

Jane initially worked as a clinical dietitian before accepting a position as Course Coordinator of the Graduate Diploma in

Dietetics in the School of Public Health at Curtin University, where she worked for 13 years. During this time she was promoted to Senior Lecturer and completed a MPH as well as her PhD through the School of Public Health at Curtin University.

In 1996, Jane moved to Scotland where she worked initially as a Project Manager with a multi-national Clinical Research Organisation in Edinburgh and was responsible for coordinating multi-centre clinical drug trials across the UK and other EU countries. In 2000, Jane was

appointed as the inaugural lecturer in Public Health Nutrition in the Faculty of Medicine at the University of Glasgow and was promoted to Senior Lecturer in 2004.

Jane's research interests are in public health nutrition and in nutritional epidemiology in the area of infant feeding practices. She has been an investigator on a number of longitudinal studies including the first and second Perth Infant Feeding Studies, the Wellcome Trust funded Mastitis in Glasgow Study and more recently on the

EU funded multi-centre IN-FABIO project investigating the effect of diet and lifestyle on gastrointestinal infection and allergy in early life.

Since taking up her position Jane has continued to collaborate with colleagues at both the University of Glasgow and Curtin on projects related to infant feeding and is actively pursuing research opportunities with colleagues within the Flinders School of Medicine and CSIRO.

A/Professor Jane Scott

☎ 8204 6678

✉ jane.scott@flinders.edu.au

AUSTRALIA 2020 SUMMIT

HDA MEMBERS REPRESENTED

The Prime Minister of Australia Kevin Rudd will convene an *Australia 2020* Summit at Parliament House on 19 and 20 April to help shape a long term strategy for the nation's future. The Summit will bring together 1000 of the best and brightest brains from across the country to tackle the long term challenges confronting Australia's future.

A LONG-TERM NATIONAL HEALTH STRATEGY

- ✿ Professor Caroline McMillen (HDA Co-Convenor) - Deputy Vice Chancellor & Vice President: Research & Innovation, University of South Australia
- ✿ Professor Gary Wittert - Head, School of Medicine, University of Adelaide
- ✿ Professor John Spencer - Director, Australian Research Centre for Population Oral Health, University of Adelaide
- ✿ Dr Beverly Muhlhausler - School of Pharmacy and Medical Sciences, University of South Australia

STRENGTHENING COMMUNITIES, SUPPORTING FAMILIES AND SOCIAL INCLUSION

- ✿ Professor Barbara Pocock - Director, Centre for Work + Life, University of South Australia

SEMINAR:
16 MAY

FACILITATING SUPERIOR CHRONIC DISEASE MANAGEMENT THROUGH INFORMATION COMMUNICATION TECHNOLOGIES (ICT)

A/Professor Nilmini Wickramasinghe researches and teaches in several areas within information systems including knowledge management, e-commerce and m-commerce, and organizational impacts of technology with particular focus on the applications of these areas to healthcare and thereby effecting superior healthcare delivery. Dr Wickramasinghe is the U.S. representative of the Health Care Technology Management Association (HCTM), an international organization that focuses on critical healthcare issues and the role of technology within the domain of healthcare. She is the Associate Director of the Center for the Management of Medical Technologies (CMMT), a unique research-oriented center with key research foci on knowledge management, healthcare, and the confluence of these domains and holds an A/Professor position at the Stuart School of Business at the Illinois Institute of Technology.

Abstract

To date the adoption and diffusion of technology enabled solutions to deliver better healthcare has been slow. There are many reasons for this. One of the most significant is that existing methodologies that are normally used in general for ICT implementations tend to be less successful in a healthcare context. This presentation will report upon a longitudinal study in which development of an appropriate business and delivery framework as well as a knowledge-based adaptive mapping to realization methodology were constructed as a means to traverse from idea to realization rapidly and yet without compromising rigor so that a unique and successful ICT enabled, patient centric value drive healthcare solution may ensue. The solution is discussed in connection with trying to implement superior ICT enabled approaches for facilitating superior chronic disease management.

The University of Adelaide's Business School seminar will be held on Friday 16 May, 11.00-12.30 in room 1301 at 10 Pulteney Street. Those who wish to attend should RSVP to margaret.lightbody@adelaide.edu.au or phone 8303 3104.



Discovering developmental pathways for healthy life

The ARC/NHMRC Research Network in Genes and Environment in Development (NGED) is a national scientific network comprised of around 500 researchers from more than 60 laboratories in 24 Australian institutions.

NGED was established in 2004 and is being co-funded for 5 years by the Australian Research Council and the National Health and Medical Research Council to:

- ▶ Enhance the scale and focus of research in the previously distinctive fields of developmental biology and developmental physiology;
- ▶ Encourage more inter-disciplinary approaches to research; and
- ▶ Facilitate collaborative and innovative approaches to planning and undertaking research.

NGED research aims to better understand developmental regulatory networks and how environmental factors impinge on them. Recent landmark studies in molecular genetics, developmental biology, developmental physiology and animal cloning have highlighted the critical importance of environment-gene interactions in early life, such as the epigenetic modification of imprinted genes, the determination of normal development and the genesis of pathology, such as diabetes, in later life.

NGED researchers are collaboratively working to address some of the most important medical issues of our time including disease prevention, regenerative medicine and stem cell biology, placing Australia on the world stage. NGED members based at The University of Adelaide are also members of Healthy Development Adelaide and are actively contributing to these fields.

NGED captures the strength of Australian research to ensure that the network is positioned to make a major contribution to the National Priority Goal: "a healthy start to life".

For more info about NGED, visit the website www.nged.adelaide.edu.au or contact **Dr Marina Delpin** - Marketing & Communications on 8303 4047 or marina.delpin@adelaide.edu.au

HDA TRAVEL GRANT RECIPIENT CONFERENCE REPORT



Dr Denise Furness. Discipline of Obstetrics & Gynaecology, University of Adelaide.

The Society for Maternal Fetal Medicine (SMFM) Annual Meeting was held in Dallas, Texas on 28 January - 2 February 2008. This conference brought together world leaders in the field of obstetric research. It was of great benefit to learn about current research topics and the technology that is being employed to perform these large multi-disciplinary projects.

The conference started with a full day workshop titled "Cutting Edge: The future of Perinatal Research". The workshop consisted of seven speakers and covered topics such as: High dimension biology including the use of genomics, proteomics and metabolomics in clinical trials.

A number of concurrent scientific forums were offered. I attended the "Hypertension scientific forum". This focused on pre-eclampsia and how it is currently managed. A large section of the workshop was aimed at the future of predictive markers for hypertensive disorders, predominantly pre-eclampsia, during pregnancy. In addition I attended a lunchtime workshop titled "Serum and soft markers: Not just markers for

aneuploidy screening". This workshop provided a brief background on a number of markers currently used, such as PAPP-A, in the prediction of adverse pregnancy outcomes.

I presented a sub-section of my data gained during my PhD project (Genome damage and folate nutrigenomics in uteroplacental insufficiency). I gave a short presentation which provided a brief background on folate metabolism and how genes which encode enzymes in that metabolic pathway may have an association with pregnancy complications caused by defects in the uteroplacental circulation.

I presented my work in the Genetics oral concurrent session and was awarded the SMFM Research Excellence award.

This conference directly related to healthy development in that it showcased the latest research in pregnancy health sparking discussion and debates and the best practise to treat pregnancy complications to benefit the health of both mother and baby. In addition predictive markers for, and knowledge about, possible mechanism of pregnancy diseases were shared with conference attendees.

I believe that this is an excellent conference for Research Scientists to attend as it provides the opportunity to network with Clinicians which stimulates thought and discussion on the practical use of one's research and how it can be implemented and integrated into the clinical arena.