

## The nation says thank you to medical research

An overwhelming 400,000 thank you messages were received from around Australia as part of the 2005 "Thank You" Day campaign.

Held every year in November, the "Thank You" Day campaign organised by Research Australia, raises awareness about the contributions medical researchers make to our everyday lives.

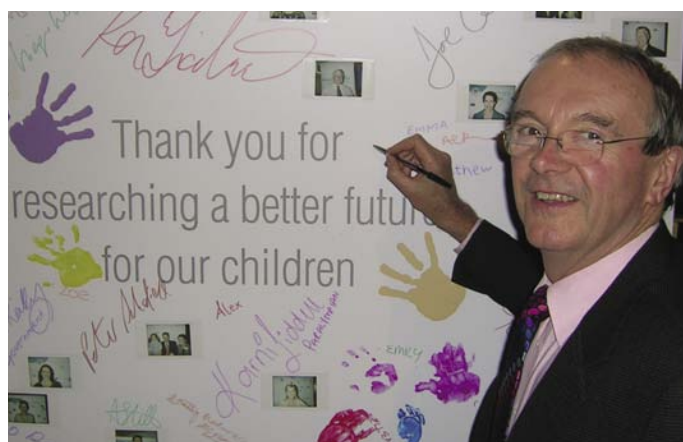
The enthusiastic public response was recorded via Research Australia's website, SMS texts and hand written notes. This result is a dramatic rise from when the campaign first began in 2003 when 6,000 messages were received.

A giant "Thank You" card toured around Australia and was signed by celebrities, leading researchers and children before taking pride of place at the "Thank You" Day Awards Dinner in Melbourne on 7 November.

Entertainer Delta Goodrem received the Celebrity Advocacy Award.



Delta Goodrem pictured with (from left) Hannah Cullen, Rosalind Gregory, Savannah Fielder and Alexandra Gregory in front of the giant Thank You day card



"To receive public messages of thanks makes our days in the lab that more rewarding," said Dr Craig Harrison of PHI who attended the dinner in Melbourne.

"It is a real sign of how much the community supports our work and is very encouraging," said Professor Evan Simpson, Director of PHI.

Prince Henry's Institute is a member of Research Australia.

Professor Evan Simpson supports the Thank You Day campaign and signs the giant card at the Melbourne Awards dinner

## Research Awards

### **Deputy Director wins distinguished UK award**

The Society for Reproduction and Fertility UK, acknowledges the work of premier scientists that have made major scientific contributions to the field of reproductive biology via the Distinguished Scientist Award. The winner of the Award presents a lecture at the Society's Annual conference.

Prince Henry's Institute would like to congratulate Professor Jock Findlay, Deputy Director and Head of the Female Reproductive Group, as the 2006 recipient of the Distinguished Scientist Award.

A pioneer in reproductive research, Professor Findlay has worked in the field for more than 30 years.

### **Young PHI scientists scoop awards**

Amongst the best in Australia, PHI scientists were the recipients of three major awards at the 2005 The Endocrine Society of Australia (ESA) meeting in Perth, WA.

#### **The Servier Young Investigator Award – Dr Simon Chu**

The Servier Award is made annually to recognise the best scientific paper published by a member of ESA in the previous year. Dr Chu's research investigates oestrogen and granulosa cell tumours in ovarian cancer.

#### **The Novartis Junior Scientist Award – Ms Agnes Kovacic**

This award is given for the best presentation at the annual conference. Ms Kovacic's work investigates the factor LHRH1 and how it contributes to the growth of breast cancer tumours. (This year's award was a shared award)

#### **The ESA Mayne Pharma Bryan Hudson Clinical Endocrinology Award – Dr Carolyn Allan**

Dr Allan is an endocrinologist and a scientist. She received the award for the best clinical research paper presented at the conference. Her clinical studies investigate testosterone decline and the role of its replacement in the ageing male.

## Research discovery for a healthy start to life

Development of a healthy placenta is critical for fertility, a successful pregnancy and a healthy start to life.

Currently there is no means of diagnosing endometrial infertility in women or establishing whether the placenta is developing adequately.

Thirty per cent of all pregnancies end in miscarriage. In addition, the major pregnancy disorder pre-eclampsia, can threaten the survival of mother and baby.

Pre-eclampsia is a condition of the placenta which is unable to be detected until late in the pregnancy. Indicators of the condition include high blood pressure, obesity and diabetes.

An under developed placenta can be linked to low birth weight and many major health disorders, including heart disease, later in adult life.

The Uterine Biology Group led by Professor Lois Salamonsen has developed a substantial program of work to determine molecular changes in the womb that are critical for establishing pregnancy.

The National Health and Medical Research Council has awarded Dr Eva Dimitriadis, of the Uterine Biology Group, a 2005 New Investigator Project Grant to investigate this important area of research.

Dr Dimitriadis will lead studies to explore the complex roles of two molecules, interleukin (IL) 11 and leukemia inhibitory factor (LIF), in early placental development.



*Senior Research Officer Dr Eva Dimitriadis*

This research will provide information for treatments for infertility in women and disorders of early pregnancy.

These studies will be conducted in collaboration with the Departments of Obstetrics and Gynaecology at Monash University and the University of Cambridge UK.

# Discovery links vitamin A to breast cancer

A research finding from Prince Henry's Institute has shown how a derivative of vitamin A may block breast cancer growth.

Seventy per cent of breast cancers are driven by the hormone oestrogen.

Prince Henry's Institute has previously shown that the factor LRH -1 activates oestrogen production in the breast and is a significant target for cancer treatment.

The latest findings by Dr Colin Clyne and Agnes Kovacic show for the first time that the actions of LRH1 action in breast cancer can be blocked.

The research discovery shows that a derivative of vitamin A blocks action of the LRH-1 and may have potential as a breast cancer treatment.

"These findings support previous research into vitamin A, which shows that it has an anti-tumorigenic action," said Professor Evan Simpson, Head of the Research Group and Director of PHI.

The work led Professor Simpson and Dr Clyne focuses on ways to stop oestrogen production in the breast without blocking its beneficial effects in other sites in the body.



Current breast cancer treatments block oestrogen action in multiple sites around the body and can result in memory loss, fatty liver and osteoporosis.

"Identifying ways to stop oestrogen production in the breast is essential for improving cancer treatments for women worldwide," said Professor Simpson.

Further avenues for targeting LRH-1 in the breast are being investigated in collaboration with St Vincent's Institute in Melbourne.

Prince Henry's Institute is a member of the Victorian Breast Cancer Research Consortium Ltd.



*Photo (top): Dr Colin Clyne with Professor Evan Simpson; Photo (inset): PhD student Agnes Kovacic*

# Exploratory hormone research reveals new disease cure

Research discoveries at Prince Henry's Institute have shown that the hormone activin may have potential therapeutic use in a range of health conditions.

Since the early eighties, scientists at PHI have been investigating the hormone families of inhibin and activin and their roles in male and female reproduction.

These hormones play a key role in the regulation of follicle stimulating hormone (FSH) which is secreted from the pituitary gland at the base of the brain. This in turn controls sperm production in the testis and egg production in the ovary.

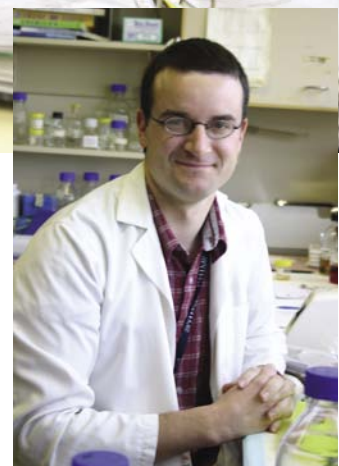
In collaboration with the Salk Institute (USA), Dr Craig Harrison of the Reproductive Hormone Group at PHI has discovered that disrupting the activin signalling system could have application in the treatment for conditions relating to fertility, muscle growth and wound healing.

Dr Harrison has recently been awarded with a 2005 New Investigator Project Grant from the National Health and Medical Research to further investigate work in this area.

Other studies have shown that activin also has a significant relationship

Studies have shown that if myostatin is blocked, muscle growth is enhanced.

This research may have particular significance for people with muscular dystrophy.



with profound muscle and fat loss in conditions associated with AIDS and cancer. It is hoped PHI studies will further clarify activin's role in these diseases.

Work at PHI has also shown that it is possible to block another member of the activin family, the protein myostatin. Myostatin negatively impacts muscle size and growth beginning in early embryonic development and continuing throughout life.

*Photo (top): PhD student Yogeshwar Makanji with Associate Professor David Robertson; Photo (Inset): Dr Craig Harrison*

# PHI volunteers support Melbourne Marathon

Congratulations to Prince Henry's Institute for winning the Charity category in the team relay event at the ASICS Melbourne Marathon on Sunday 9th October, 2005.

An enthusiastic contingent of PHI staff volunteered and competed with nearly 6,000 competitors in Melbourne's premiere running event, the Melbourne Marathon.

Our inspirational relay team led by our Director, Professor Evan Simpson included Alex Umbers, Dr Jayne Sierens and Dr Naomi Morison. Together they completed the 42.2km course from Frankston to the Arts Centre on St.Kilda Road, Melbourne in a time of 3 hours and 47 minutes.

The event was supported by 27 PHI volunteers including staff, students, Development Board members, family and friends who



*Relay team (L - R): Dr Jayne Sierens, Dr Naomi Morison, Professor Evan Simpson & Alex Umbers*

served as street marshals and aid station workers, contributing to the overall success of the marathon as well as the promotion of the Institute's new logo.

In reward for their hard work, the major sponsor of the event, ASICS, made a donation to the Institute.

Thank you to all our volunteers and

runners for representing the Institute so well. Special thanks to the organisers, Event Wizard, and to Nike for donating running shirts for the relay team.

## Interested in Medical Research? Tell a friend!

Keep your friends and family informed about the latest medical research at Prince Henry's Institute. Add their postal and email details to the form attached to this edition of Insight.

## New PHI logo launched at AGM

Prince Henry's Institute launched its new logo Science for Better Life, at the 2005 Annual General Meeting.

Over 60 supporters of the Institute attended the AGM held at the Royal South Yarra Lawn Tennis Club on 10<sup>th</sup> November 2005.

Guest speakers included Dr Sarah Meachem, a National Director of Australian Society for Medical Research and Senior Research Officer, Male Reproductive Endocrinology and Metabolism Group, PHI, with a strong message to increase research funding.

Compelling research updates were presented by PHI scientists Dr Margaret Jones, National Health and Medical Research Council RD Wright Fellow, on *Oestrogen, Fat and Metabolic Syndrome* and by Dr Christine White, Research Officer, Uterine Biology Group on *Preparing the Womb for Pregnancy*.



Speakers (L to R): Mr John Robinson, Dr Sarah Meachem, Dr Margaret Jones, Professor Evan Simpson, Dr Christine White, Mrs Janet Hibbins

One of our founding members of the Development Board, Mrs Janet Hibbins, made her debut with an inspirational speech entitled *Why I Support PHI*. The 2004/05 annual report which features a new design influenced by Heath Rudduck of Tribal DDB, project managed by the Public

Relations Coordinator Rebecca Scott, and designed by PHI Graphic Designer Sue Panckridge, received acclaim from all who attended.

## Raising funds for ovarian cancer research

The Ovarian Cancer Research Foundation has held yet again another spectacular annual Exposure Gala event to raise funds for ovarian cancer research.

Over \$130,000 was raised at the Gala event held at Carousel, Albert Park Lake on Saturday 12<sup>th</sup> November 2005.

The star studded evening included an impressive array of individual and corporate supporters. Australian Gourmet Traveller and Devaux Champagne presented the event which was proudly supported by Mercedes Benz.

The National Australia Bank is the founding partner of the Foundation.

Prince Henry's Institute has been the recipient of funds raised from the annual Silver Ribbon campaign organised by the Foundation.



Dr Kaye Stenvers, Yogeshwar Makanji, Professor Evan Simpson, and Rebecca Scott meet Master of Ceremonies Ms Catriona Rowntree on the Gala Night



# Your support inspires our research

## Your support inspires our research

**Yes**, I would like to support the work of Prince Henry's Institute (Donations are tax deductible)

Please indicate the amount you wish to donate:

- \$30       \$60       \$100  
 \$200       \$\_\_\_\_\_ (other)

My cheque made payable to

**Prince Henry's Institute of Medical Research**

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