

Banking on Volunteers

PHI researchers are seeking community support, especially from healthy older women, in building up a bank of stored biological samples.

The stored blood and urine will be an important tool in the development and testing of early detection technologies for ovarian cancer.

It is projected that over 1500 women across Australia will be diagnosed with ovarian cancer in 2009. Most women affected are only diagnosed at a late stage with the disease being well advanced and treatment options limited.



Clinical Nurse Nicole Fairweather and research participant Enid Pruyers

PHI researchers are focussed on "biomarker" technologies to detect ovarian cancer as early as possible. Head of the Ovarian Cancer Biomarkers Laboratory and NAB Ovarian Cancer Research Foundation Fellow Dr Andrew Stephens says that the identification of further ovarian cancer biomarkers will be critical in the development of a community screening program to detect ovarian cancer early.

"We are very hopeful that our intensive search for ovarian cancer biomarkers in blood will lead to fruition" he says.

In identifying the potential clinical value of cancer biomarkers the research team must carefully compare and analyse multiple blood and urine samples from ovarian cancer patients and healthy post-menopausal women.

In the last year dozens of women have given up a few minutes of their time for a short appointment, which involves collecting some basic health information and taking a small sample of blood and urine.

The researchers hope that the reference collection of healthy samples will grow to about 400. "Having a larger reference size from healthy women will enable and speed our detailed search and analysis of potential cancer biomarkers" says Andrew.

Are you a healthy postmenopausal woman interested in participating and helping us develop an early detection test for ovarian cancer?

Contact Nicole Fairweather on 03 9594 7910 to learn more.

Monash Health Research Precinct

In a major budget announcement that promises to transform the medical research landscape in Melbourne's South East the Federal government has announced \$71 million to fund a new translational research facility at the Monash Health Research Precinct.

The Monash Health Research Precinct is a partnership between Prince Henry's Institute, Southern Health, Monash University and the Monash Institute for Medical Research.

The funding will support the development of translational facilities for eight research areas (cancer, cardiovascular and metabolic diseases, endocrinology and metabolism, inflammatory and infectious disease, men's health, neuroscience and mental health, pediatrics and women's health), of which PHI is a participant in five of the themes.

PHI Director, Professor Matthew Gillespie said the commitment would be the catalyst to developing a brand new translational research precinct at the Clayton site.

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PHI research teams are making advances in understanding the normal changes in hormones and ovaries of older women. . . and what happens when things go awry.

Ovarian Health Study

A five year study of the ovarian health of 500 older Australian women is currently being completed by a research collaboration between PHI and our partners at Monash Medical Centre, Monash University and the Alfred Hospital.

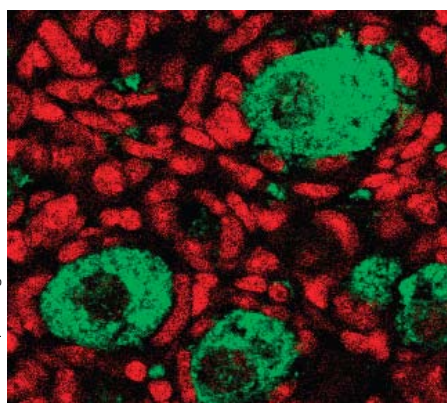
In the study, women's ovaries were assessed using ultrasound and two blood tests, known to indicate ovarian cancer risk, were also undertaken.

The hope is that by combing the results of these different health assessments doctors will be better able to identify ovarian health problems including cancer.

PHI researcher Professor David Robertson says that the findings take clinicians a step closer towards a community screening program which will have clear health benefits for post menopausal women. "What we are striving for is an effective clinical program which builds upon several detection technologies."

Mapping the Menopause

PHI researchers are building an understanding of the normal hormonal changes that take place in women as they approach menopause. Professors Henry Burger and David Robertson have been part of an Australian team mapping the fluctuations in women's cycles and blood hormone levels.



Microscope image: ovarian follicles

A younger women's cycle is usually about every month, but as menopause approaches cycles often become more irregular and unpredictable. Other menopausal symptoms can include hot flushes.

In the study of 77 women researchers were able to classify menstrual cycles in older women into three different types based upon their changes in hormonal levels.

The recent findings from the PHI team have relevance in understanding fertility, hormone disorders and other ovarian health issues associated with menopause transition.

A common question posed is whether we will one day be able to predict the precise onset of menopause.

PHI researcher and former Institute Director Professor Henry Burger says "our findings do show that significant changes in some hormone levels can occur up to five years before a women's last cycle however a universal test based on such understandings may be difficult since there is a great deal of variation between women."

Decoding DNA

The Gandel Charitable Trust Sequencing Centre is celebrating ten years. The expert technology services it provides are shared by PHI researchers and our partner organisations at the Monash Health Research Precinct.

DNA sequencing plays a central role in an increasing number of medical research applications and in clinical diagnostics.

A routine but critical aspect of the Centre's work is to check the integrity of DNA sequences that are used in laboratory experiments. Another commonly used research application of the technology is to analyse genetic differences in tumours and cancer cell lines.

In a recent PHI led study, DNA sequencing was used to "genetically dissect" some of the most serious types of ovarian cancer tumours.

The findings suggest that there are important DNA variations between different classes of ovarian cancer.

DNA technologies continue to advance and recent developments mean that it is now possible to decode thousands of DNA bases in hours which previously would have taken weeks or even months.

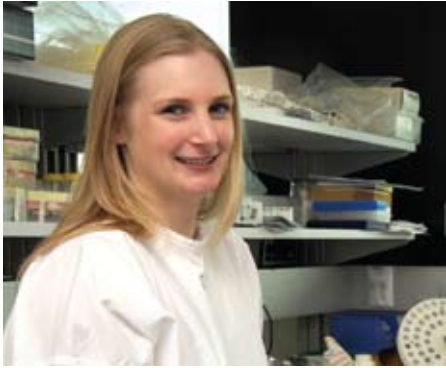
Such improvements to sequencing throughput and accuracy reflect consistent philanthropic support. In recent years Melbourne families have enabled several major technology upgrades.

In 2006 the Gandel Charitable Trust generously funded a major technology upgrade and in 2008 a grant from the Collier Charitable Trust broadened the capacity to deliver clinical DNA testing to Victorian patients and doctors.



Vivien Vasic, Manager of the The Gandel Charitable Trust Sequencing Centre

Lalor Fellowship



Ellen Menkhorst

PHI researcher, Dr Ellen Menkhorst has been awarded one of only eight prestigious fellowships from the US based Lalor Foundation.

The Lalor Fellowship will support Ellen's research on the regulation of human fertility and the development of novel contraceptives for women.

There is a significant unmet need for contraception worldwide. Of an estimated 210 million pregnancies worldwide each year, 40% are unplanned. More than half a million women die each year due to pregnancy and childbirth complications.

A single contraceptive method is unlikely to suit all men or women. Therefore, it is important to have a variety of contraceptive choices that meet the needs of a wide variety of people.

Ellen completed her PhD at The University of Melbourne and is now a member of the Embryo Implantation Laboratory at PHI.

Ellen's work focuses on two signaling molecules or cytokines, leukemia inhibitory factor and interleukin-11, which have been identified to have key roles in female fertility.

Her recent work, which suggests blocking these signals may be a route towards a new contraceptive approach was published earlier this year.

The Ovarian Cancer Research Foundation and Prince Henry's Institute are committed to a translational research program which seeks to develop an accurate and widely available test which can detect ovarian cancer early.

New Fellows



Simon Chu and Katie Meehan

Dr Simon Chu is returning to PHI as the L'Oréal Paris Research Fellow after two years studying overseas. In a new research project he will be exploring the origins of some of the most serious forms of ovarian cancer.

After Simon completed his PhD studies at PHI, his research training took him to the Molecular Virology unit at the Pasteur Institute in Cambodia.

There is increasing evidence that many of the most serious ovarian cancers may originate from the ends of the Fallopian tube, adjacent to the ovary. These tubes normally transport the mature eggs from ovary to the uterus.

An important research goal will be to grow in the laboratory the cells from the Fallopian tube. Simon then plans to build upon the well established PHI expertise in protein and DNA analysis.

A better understanding of the origins of ovarian cancer will be a key aspect in the joint quest of OCRF and PHI towards an accurate and widely available early detection test for ovarian cancer.

Dr Katie Meehan has been appointed as the Witchery / Madison Research Fellow. The support allows PHI to continue to utilise Katie's extensive research experience in cancer detection, protein analysis and biomarker technologies.

Katie completed her PhD in Western Australia and continued her research journey in Canada and the USA.

She joined the PHI team in 2008 and her focus has been on understanding some of the very rare but potentially serious side effects of IVF treatment in women.

These OCRF supported positions further build the ovarian cancer expertise in the Cancer Biomarkers and the Steroid Receptor Biology laboratories.



Events

Ride for Research 2009



L-R: Peter Wilson, Jyotsna Pippal, Brett Fisher, Morag Young, Vince Harley, Colin Clyne, Matt Gillespie, Kathryn Backholer, Andrew McCallum, Kara Britt, Simeon Airey, Natalie Hannan, Nick Fleming

A PHI team of 13 cyclists together with a dedicated support team has completed a sometimes gruelling cycle relay across Victoria. This was the fourth year a PHI team has participated in the organised Murray to Moyne event and fundraiser.

The ride started in calm conditions in country Victorian town Echuca on a Saturday morning in April. 24hr hours and 520km later the relay team arrived, weary but happy in the coastal town of Port Fairy.

By nightfall the weather conditions had deteriorated and in the later stages of the ride the riders were faced with 65 kph gusting headwinds, cold, rain and even hail. Some serious team spirit and the PHI support team

played a vital role in helping the riders push through to the finish with only minor delays.

Ride for Research organiser Andrew McCallum said he was especially grateful for the community support this year. "In the current climate there are so many calls on our philanthropy but I am delighted to see so many loyal PHI supporters continuing to support us in some fashion" said Andrew.

Sponsor's of this years ride were Melbourne construction company Boom Logistics, real estate agents Collins Simms and catering services were kindly provided by Zouki Café at Monash Medical Centre.

The PHI Ride for Research team are organising several related supporter events in coming weeks.

Tax deductible donations for the Ride for Research are open until 30 June 2009.

Thank you to our valued sponsors



DAVIES COLLISON CAVE

R4R Comedy Night Fundraiser

On June 11 the PHI Ride for Research team are organising a special night of laughs and enjoyment at the Comics Lounge in North Melbourne. Come and see five comedians in the one show. PHI supporters all welcome. 100% of ticket sales go towards PHI research.

Thursday 11th June, from 8 pm
Comics Lounge
26 Errol St
North Melbourne

Tickets \$20

For further information contact
Peter Wilson on (03) 9594 3569

Contact Us

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New PHI Board Members

The Institute is delighted to welcome three new members to the Prince Henry's Institute Board.

Dr Bob Edgar has been appointed as Chairman of the PHI Board. He succeeds John Robinson who served on the Prince Henry's Board for five years. In April Bob retired as long serving Deputy Chief Executive Officer of the ANZ Bank.



Other new board members are Ms Jennifer Joiner with an extensive background in Australian biotechnology businesses, and Mr John Weste a senior business manager with extensive expertise in management consulting.

In such an important task as appointing several new Board members PHI was very fortunate to have the excellent services of Chris Thomas and Dean Ireland from Egon Zehnder International Pty Ltd. The company's pro bono assistance in conducting executive searches has secured significant Melbourne business talent to the Board.

The new board members coincide with the departure of the former chairman John Robinson who has served Prince Henry's Institute for nearly 10 years and its progression to company status.

PHI Director Professor Matthew Gillespie thanked the outgoing Chairman and other outgoing members of the PHI Board for their dedication to the Institute's aims and in supporting our good governance.

In 2010 it will be fifty years since the medical research institute was established at Prince Henry's Hospital in South Melbourne.

Current PHI Board members:

Dr Bob Edgar (Chairman)
Mr Richard Amos (Deputy Chairman)
Ms Jay Bonnington (Treasurer)
Mrs Jane Bell
Prof. Matthew Gillespie
Ms Jennifer Joiner
Assoc. Professor Wayne Ramsey AM
Mr John Weste

Thank
you for
your
support

PHI is Australia's leading centre for hormones and reproductive medicine research. The institute has over 160 staff and students and our vision is to improve quality of life through the investigation of hormones in the fields of reproductive health, cancer, bone health, diabetes, obesity and cardiovascular disease. Research at PHI includes fundamental laboratory research understanding human biology, translational studies focussed upon developing better diagnostics and new treatments and clinical programs improving patient care. PHI is an independent not-for-profit medical research institute based at Monash Medical Centre in Victoria, Australia.



Tax Deductible Donation

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