Ovarian cancer kills approximately 750 Australian women each year. Response to chemotherapy varies widely - a few patients will be cured, most will respond initially but eventually relapse, and about one third will progress while on treatment.

Genetics could play a key role in surviving cancer, with scientists discovering that a particular gene combination is linked with a better prognosis for women with ovarian cancer. The findings could have a significant long term impact on the way women with ovarian cancer are treated as well as their long term survival.

Researchers from the Queensland Institute of Medical Research (QIMR) led an international team which analysed variations of the human ABCB1 gene – known to be responsible for the body’s ability to transport a broad range of anticancer drugs. They looked at progression-free and overall survival in over 300 women with ovarian cancer who were treated with chemotherapy drugs. The research team found that women carrying a specific combination of ABCB1 gene variations – and who also had minimal residual disease – went for a significantly longer period before relapsing following treatment.

Professor Chenevix-Trench, Head of the Cancer and Cell Biology Laboratory at QIMR and her team collaborated with researchers from Australia, London, Scotland and the United States.

Inside this edition of Lifelab:

Can you complete the Diseases and Disorders crossword? The first correct entry drawn will win a beautiful print by artist David Hart entitled “QIMR”. Please send your entry to us in our reply paid envelope by 30th June - remember to write you name and phone number on your entry. The answers will be published in the August edition of LifeLab.
Making headway in the fight against liver disease in children

New research findings from QIMR are paving the way for a potential new treatment for both rare and common liver diseases afflicting children. Head of the Hepatic Fibrosis Group at QIMR, Associate Professor Grant Ramm, led a study which identified a key therapeutic target with future potential for treating cholestatic liver injury in children. In Cholestatic diseases, such as Cystic Fibrosis and Biliary Atresia, liver injury occurs around the bile ducts when bile cannot flow into the intestine. Instead, it leaks back into the liver causing damage to the organ. Fibrous or scar tissue then forms as a result of excess collagen which is produced by specialised liver cells called hepatic stellate cells.

Previously, this same group of researchers identified these hepatic stellate cells as causing hepatic fibrosis or scaring of the liver. Now, they have discovered that a particular type of bile acid, called taurocholic acid, can trigger a key molecule, MCP-1, which recruits these stellate cells as well as inflammatory cells to the site of injury in the liver.

First Public Forum

To mark World Malaria Day, QIMR held a public forum about mosquito borne disease. The Westpac Auditorium at QIMR was packed to the rafters on Monday 27 April when scientists presented the latest information on the threat of mosquito borne disease in Queensland and methods of preventing these by controlling mosquitoes. As part of our ongoing commitment to community education, there will be a number of free public lectures held in the evenings at QIMR. For more information contact Jann O’Keefe on 3362 0249.

From the Director Professor Michael Good

QIMR continues to impact globally in many areas of medical research, particularly cancer research. In this, Queensland’s 150th year, we take enormous pride in being a major Queensland icon and the important role we play in improving the health of people, not only in our own backyard but in communities around the world. We have come an incredibly long way since we opened 64 years ago and this has been thanks to the dedicated efforts of many people. I would like to particularly thank our donors - the every day people who support us year after year.

Nothing we have achieved would have been possible without their support and encouragement. These are the people who keep us motivated and on behalf of all the scientists at QIMR I sincerely thank them. I hope you enjoy reading about some of our achievements in this edition of LifeLab. Please visit our website www.qimr.edu.au where you will see details on the hundreds of research projects conducted in our 44 laboratories and the exceptional returns we are delivering back to the community.
Raising the next generation of scientists

QIMR is committed to raising community awareness of medical research and inspiring tomorrow’s scientists. We believe it is critical to stimulate and motivate our children to pursue a career in science. Each year we open our doors to more than 2,000 Queensland students, from primary to tertiary level running an extensive and popular school-based education program, including an indigenous students’ week, a summer school program for university students and postgraduate positions for more than 100 Honours and PhD students. We hope to reduce the decline in university students entering a science profession.

Emma Whitelaw Australia Fellow

QIMR’s Professor Emma Whitelaw was recently awarded the prestigious Australia Fellowship by the National Health and Medical Research Council. These Fellowships are awarded to researchers with an exemplary record of achievements in their particular field. Each of the recipients has made an outstanding contribution to health and medical research and their research must have far reaching benefits, to not only Australians, but to the wider international community.

Professor Whitelaw is a world-leading researcher in the emerging field of epigenetics. She will use her fellowship to examine the complex gene-environment interactions which cause diseases such as obesity, heart disease, diabetes and cancer. This molecular genetic research aims to predict disease risk and develop novel targets for drug discovery.

Emma Whitelaw (right) receives her award from Senator the Honourable Jan McLucas who flew from Canberra to present this prestigious award.
Upcoming Events

Champers Ball
MAY 23

Annual Gala Ball raising funds for QIMR’s breast cancer research. Venue: Hilton Hotel, Brisbane. Tickets are $145 per person – includes scrumptious 3 course dinner and drinks package. Fabulous prizes and gift bags. Great band. To book please visit www.qimr.edu.au or call Margie on (07) 3362 0285. Proudly sponsored by MBF.

Comedy Night
JUNE 7

Annual charity comedy night organised by the Sit Down Comedy Club at the Paddo Tavern raising funds for QIMR’s research into depression. Tickets $30 each. For bookings please go to www.standup.com.au or call (07) 3369 4466.

Jade Hurley Show
JUNE 20

The King of Country and Rock ‘n Roll. Venue: Norths Leagues and Services Club, 1347 Anzac Avenue, Kallangur commencing at 7.30 pm. Tickets $30 includes light refreshments. Please contact organiser: Elly Squire 0439 709 116.

QIMR Crossword

ACROSS
1. A cheeky childhood infection (5)
4. A pulmonary disease spread by coughing, sneezing, speaking or spitting (12)
6. Piles and piles (12)
9. Yellowing of newborn babies skin (8)
10. Carried by Aedes aegypti (6,5)
12. Cancer of the blood
14. Comes in groups of A, C and G (13)
17. Fever from too much kissing (9)
21. Spinning or tilting when standing still (7)
23. The feeling that an amputated limb is still attached (7,4)
24. Up the nose of 70-90 percent of the population (14)

DOWN
2. Symptoms appear shaky (10)
3. Oedema
5. Gradual loss of memory, intellect, rationality, sociability and emotional responses
7. A build up of monosodium urate or uric acid around the joints (4)
8. Lazy, crossed or squinty eyes (10)
11. An arctic and antarctic disorder (7)
13. Seasonal affliction that sounds like its attached (3)
15. A nudge from Roger Federer (6,5)
16. Long-term lung disease which gradually destroys the alveoli (9)
18. Weak bones in youngsters (7)
19. Contagious blishers and sores on the skin (8)
20. White powder scare through the post (7)
22. Lockjaw (7)
You can help QIMR..... just by doing your grocery shopping!

Ritchies IGA supermarkets donate to many different charities through their Community Benefit Fund. QIMR has been nominated by some of their shoppers as their favourite charity but we need to have "our" shoppers spend a total of $1,000 per month to qualify. So we are asking all our supporters to spread the word to friends and family in the areas and ask them to consider buying their groceries at these stores.

All you have to do is ask for your free Community Benefit Card at your nearest Ritchies supermarket. Your individually bar coded card will be issued and can be used immediately.

There are also around 4,000 weekly specials that have extra discounts for Ritchies' Community Benefit Cardholders (look for “CB” specials).

The eligible stores are at Westfield Carindale, Mt Gravatt Central Fair, Logan Central Shopping Centre, Daisy Hill Shopping Village, Stones Corner Village arcade and Cavill/Ferny Avenue Surfers Paradise.

You can visit their website for more information www.ritchies.com.au

Xstrata marks the spot

“*Our aim is to develop a computer program that will determine your risk of developing skin cancer*”

Every year, almost 400,000 Australians are diagnosed with skin cancer, costing the nation around $300 million in treatments annually. The deadliest form of skin cancer, melanoma, claims the lives of over 1,200 Australians every year.

Given these alarming statistics, mining company Xstrata has partnered with QIMR to fund the Xstrata Post-doctoral Fellowship in Melanoma & Skin Cancer Research. Established in 2008, the 3-year fellowship supports a scientist within QIMR’s Cancer Control Laboratory to develop risk prediction tools for melanoma and other cancers of the skin.

Since being awarded the Fellowship, Dr Catherine Olsen has reviewed scientific publications relevant to melanoma risk factors and is developing a database that will later be used to design a computer-based program capable of determining an individual’s risk of melanoma and other skin cancers.

“We aim to develop a program based on the models successfully implemented for prevention of cardiovascular disease,” Dr Olsen said. “It will consider risk factors relevant to the individual’s situation such as their level of UV exposure, age and genes and then expresses their risk as a percentage.”

Dr Olsen and colleagues will be working closely with practitioners, government and community groups in the near future to test the program before it can be made available to the public.
Thanks to Vance and Toni Lendich and their Committee for organising the Old Rockers Get Together again this year. This fabulous “feel good” event is held each year at Riverside Receptions at New Farm to raise funds for QIMR.

QIMR’s Senior Fundraising Coordinator Alicia Hall accepts another wonderful donation from Chris Ketter of the Shop, Distributive and Allied Employees Association (SDA) who have very kindly been supporting breast cancer research at QIMR since 2002.

QIMR congratulates Quota International on its 90th birthday. We enjoyed taking part in the historical display organised by the Quota Club of Beenleigh and thank them for their ongoing support of medical research.