ANNUAL REPORT 2011-2012



Queensland Institute of **Medical Research**

Cover artwork: Water Memory is by Brisbane artist Judy Watson and features in the new QIMR building



Copies of this Annual Report are available on QIMR's website at www.qimr.edu.au/annualreport and at no cost by contacting QIMR on (07) 3362 0222, freecall 1800 993 000 or by emailing enquiries@qimr.edu.au.

Queensland Institute of Medical Research 300 Herston Road, Herston, Queensland Australia 4006 T: +61 7 3362 0222 F: +61 7 3362 0102 W: www.qimr.edu.au

QIMR is committed to providing accessible services to people from culturally and linguistically diverse backgrounds. If you have difficulty in understanding the annual report, you can contact us on (07) 3362 0222 and we will arrange an interpreter to communicate the report to you.

ISSN 1839 - 1877

© Queensland Institute of Medical Research 2012

ANNUAL REPORT 2011-2012



Queensland Institute of Medical Research

CONTENTS

| Letter of compliance 2 |
|-------------------------|
| Research highlights |
| Awards and achievements |
| QIMR at a glance 8 |
| Chairman's report |
| Director's report |
| Our organisation |
| Our people |
| Our governance 17 |

| Our management | 23 |
|---------------------------|----|
| Our performance | 29 |
| Our research achievements | 45 |
| Supporting our research | 69 |
| Financial statements | 73 |
| Supporting information1 | 15 |
| Compliance checklist 1 | 46 |
| Acronyms 1 | 48 |

LETTER OF COMPLIANCE

Queensland Institute of Medical Research

31 August 2012

The Honourable Lawrence Springborg MP Minister for Health Parliament House BRISBANE QLD 4000

Dear Minister

I am pleased to present the Annual Report 2011–2012 and financial statements for the Council of the Queensland Institute of Medical Research.

I certify that this Annual Report complies with:

- the prescribed requirements of the *Financial Accountability Act 2009* and the *Financial* and *Performance Management Standard 2009*; and
- the detailed requirements set out in the Annual report requirements for Queensland Government agencies.

A checklist outlining annual reporting requirements can be found on the final pages of this annual report or accessed at our website:

http://www.qimr.edu.au/page/About_us/Annual_Report/.

Yours sincerely

QIMR Council

CHRISTOPHER COYNE

300 Herston Road, Herston Q 4006 Australia | QIMR Locked Bag 2000, Royal Brisbane Hospital Q 4029 T (617) 3362 0222 F (617) 3362 0111 W www.qimr.edu.au

Pane 2

QIMR is dedicated to translating discoveries into treatments, diagnostics and prevention strategies.



RESEARCH HIGHLIGHTS

Cancer

- Recruited more than 43,000 Queenslanders for the QSkin study.
- Developed clinic-based risk prediction tools for Barrett's oesophagus, a precursor to oesophageal cancer.
- Completed Phase I clinical trial on adoptive immunotherapy for stage IV nasopharyngeal carcinoma (in collaboration with University of Hong Kong).
- Developed a new T cell based therapy for the treatment of glioblastoma.
- Published the first analysis of 20-year survival rates for people diagnosed with thin melanomas measuring less than 1mm in thickness.
- Discovered that a mutation in the BRCA1 or BRCA2 genes can improve five-year survival in ovarian and breast cancer.
- Identified several new genes and gene mutations that increase the risks of melanoma, and cancers of the breast, ovary, prostate, and endometrium.

- Completed the third year of a correlative laboratory study in a multi-centre Phase II lymphoma trial.
- Developed an analytical method for the novel anti-cancer drug EBC-46, pending Phase I clinical trial in humans.
- Began the national Ovarian Cancer Prognosis and Lifestyle study (OPAL) looking at how lifestyle factors may influence patient outcomes.
- Found that overweight and obese women are at increased risk of some subtypes of ovarian cancer.
- Generated the first stem cells from patients with ataxia-telangiectasia.
- Discovered novel tissue based biomarkers for lymphoma.
- Developed new diagnostic tools for the rapid screening of genes involved in iron metabolism.

Infectious Diseases

- Expanded clinical trials of new malaria drugs and vaccines on humans.
- Completed the first-ever screening for anti-transmission blocking agents for malaria.
- Collaborated on the successful north Queensland release of Wolbachia bacteria to reduce dengue transmission.
- Found that a soil-based fungus kills dengue mosquitoes in semi-field testing conditions.

- Established a new collaboration with CSIRO to screen the CSIRO compound library of more than 20,000 substances, for antimalarial activity.
- Completed a five-year longitudinal study of schistosomiasis transmission in China.
- Conducted vaccine trials against a protein from the schistosome parasite, showing moderate protection.

Mental Health / Complex Disorders

- Reported four novel risk genes for migraine without aura.
- Created a stress test that could have application in predicting the risk of developing dementia.
- Created a new model of human eye movement, to be translated as a tool for the diagnosis of psychotic disorders.
- Discovered a brain imaging marker of genetic risk for bipolar disorder.
- Contributed to the world's largest study of the human brain, which discovered genes that affect brain size may play a role in intelligence and memory function.
- Established a clinical trial to test the rheumatoid arthritis drug, tocilizumab, as a new treatment for asthma.
- Led significant advances in understanding genes and pathways contributing to risk of endometriosis.
- Discovered that women with a history of endometriosis can have up to three times higher rates of ovarian cancer.



AWARDS AND ACHIEVEMENTS

QIMR's new research facility was completed in time and under budget, with laboratories commencing their move into the new building in June 2012.

The inaugural Rio Tinto Ride to Conquer Cancer benefiting QIMR was held with over 2,000 registered riders participating and raising \$4.7 million for cancer research at the Institute.

Professor Michael Breakspear (Mental Health and Complex Disorders Program Coordinator) won a 2011 Australian Society for Medical Research (ASMR) Queensland Clinical Researcher Award.

Professor Nick Hayward (Oncogenomics) was awarded a William Rudder Travelling Fellowship by the Cancer Council Queensland to promote cancer research in Queensland.

Professor Barbara Leggett (Conjoint Gastroenterology) received a Distinguished Research Award from the Gastroenterological Society of Australia. Only one of these is awarded each year.

Associate Professor Penny Webb was awarded a National Health and Medical Research Council (NHMRC) project grant of \$1.7 million to conduct the world's first comprehensive study of lifestyle factors that might improve survival for women with ovarian cancer.

Dr Manuel Ferreira (Asthma Genetics) received the Ruth Stephens Gani Medal in Human Genetics from the Australian Academy of Sciences for his work on the genetics of asthma.

Dr John Miles (Human Immunity) was awarded an NHMRC Career Development Fellowship.

Thomas Partridge was awarded a Nuffield Department of Medicine Prize Studentship by University of Oxford.

Dr Daniel Buchanan was a finalist in the Gastroenterological Society of Queensland's 2012 Young Investigator Awards. QIMR's new research facility was completed in time, with laboratories commencing their move into the new building in June 2012



AT A GLANCE

Research agreements



Patent portfolio



NHMRC grants awarded (\$ millions)







Scientific publications

Staff numbers

Page 9

CHAIRMAN'S REPORT

The last year has heralded a time of great change and growth for QIMR. Brisbane residents will notice a change to the lay of the land at the Herston precinct, with QIMR's new 15 floor, state-of-the-art facility now complete, with laboratories and staff beginning the move to their new premises in June 2012. The new building forms a link between the Bancroft Centre and the Clive Berghofer Cancer Research Centre and will offer the Institute exciting new research and staffing opportunities in the years to come.

The new building has been made possible thanks to the incredibly generous support of Mr Chuck Feeney and The Atlantic Philanthropies and funding from the Commonwealth and Queensland Governments. With construction of our new facility complete, the Bancroft Centre is now undergoing renovation with laboratories being updated and upgraded. This time of transition brings great excitement to the Institute, as we look forward to carrying out more research in the areas of cancer, infectious diseases and mental health/complex disorders.

I am very pleased to see that construction of our new facility was completed on time and under budget and we look forward to its official opening in late 2012.

We have also celebrated the ongoing adoption of QIMR's strategic plan for 2011–14, by Director and CEO, Professor Frank Gannon. The Roadmap provides a focus for the Institute's strategic operations.

2011–12 also saw the launch of our signature fundraising event, the Rio Tinto Ride to Conquer Cancer. More than 2,000 registered riders and hundreds of crew and volunteers raised \$4.7 million, a record for a single fundraising event in our state. Only a year on, these funds are making a big difference to our researchers. There are currently 27 projects underway, thanks to the Ride. These projects are looking at ways to better treat, diagnose and prevent up to 13 different types of cancers including, skin, melanoma, breast, ovarian, prostate, colorectal, brain, blood and lymphoma. Medical research is a lot of small steps to an outcome, but the Rio Tinto Ride to Conquer Cancer has made these projects possible.

We also celebrated 10 years of dedication to cancer research by Clive Berghofer. His ongoing support has ensured our researchers could continue their quests to improve the prevention, detection and treatment of cancer.

2011–12 also saw the retirement of our former Chair of Council, Professor John Hay AC, in May 2012. Professor Hay guided QIMR with great support during an important period of change for the Institute, including the construction of the new building and the appointment of the new Director and CEO. He made an enormous contribution to the future of the Institute and the important work carried out by QIMR. Members of Council and QIMR staff are grateful for the lasting impact he has made and wish him well in his retirement.

QIMR Acting Chairman Mr Christopher Coyne

DIRECTOR'S REPORT

Queensland Institute of Medical Research

It is with great pleasure that I reflect on another 12 months of achievements at QIMR, and global recognition of the quality of our work. Since its inception in 1945, QIMR has had an enormous impact on the health of society, and as the Institute enters a period of huge growth, will continue to make a real difference to the lives of people across the world.

In 2011–12, researchers at QIMR secured more than \$17 million in funding from the National Health and Medical Research Council (NHMRC), an important vindication of the quality of our research, and its relevance to Australians. This funding went towards the total of almost \$36 million in funds for research in 2011–12 and provides the much needed support to continue valuable work across the Institute's three programs: Cancer, Infectious Diseases and Mental Health/ Complex Disorders.

In June 2012, staff began the move into QIMR's new state-of-the-art facility, with new purpose built laboratories. This will increase our research capacity in areas such as tropical diseases, vaccine development, cancer and genetics. It will allow our mental health research to expand. Our highly successful Education Program will also be bolstered as we encourage the scientists of tomorrow.

QIMR will continue recruiting to further strengthen priority areas such as computational biology, imaging, mental health, and infectious diseases. We can provide current and new researchers with world-class facilities, the best equipment and training and clear career paths.

To make a real difference, our research has to go beyond the laboratory, and be translated into the clinical setting. Our location, in the heart of the Herston medical campus, positions QIMR perfectly to bridge the gap between scientists and clinicians. In 2011–12 we also announced important new collaborations. The Australian Infectious Diseases Research Centre will bring together scientists from QIMR and The University of Queensland to tackle global problems, including malaria, dengue fever and schistosomiasis. And in a joint partnership with the Princess Alexandra Hospital and the University of Queensland, QIMR will carry out research to understand, prevent, diagnose and treat head and neck cancer in Australia and internationally.

It's also a year to celebrate the community's connection with QIMR, through the increasing demand for tours and speaking engagements, and the record number of donations, despite tough economic times. The inaugural Rio Tinto Ride to Conquer Cancer was also enormously successful. Riders, sponsors and over 39,000 Ride supporters heard the call, and their extraordinary efforts have funded dozens of new research projects. I will be joining them on the Ride again this year.

Finally, a thank you to the dedicated scientists whose hard work delivers research with consequences, and the committed corporate staff who support them on a daily basis. QIMR's greatest asset is its people, and with such strong foundations, QIMR can only build on its world-class reputation.

Professor Frank Gannon Director and CEO





Our Organisation

QIMR has a long and prestigious history, spanning more than 65 years

OUR ORGANISATION

Role and main function

QIMR was established under the *Queensland Institute of Medical Research Act 1945* for the purpose of research into any branch or branches of medical science.

QIMR is a world leading medical research institute. Our research focuses on three areas: cancer; infectious diseases; and mental health and a range of complex disorders. Working in close collaboration with clinicians and other research institutes, our aim is to improve health by developing prevention strategies, new diagnostics and better treatments.

Government objectives for the community

QIMR research aligns with the Queensland Government's objective of *growing a four pillar economy*. The planning and construction of the new research facility created 360 jobs – supporting Queensland's building and construction industry.

With the opening of the new facility, QIMR is preparing for a period of accelerated growth. QIMR will actively recruit researchers in areas of high importance to Queensland - including tropical diseases, vaccine development, cancer and genetics - to increase its capacity to approximately 1,000 staff and students, offering more than 300 new jobs here in Queensland.

QIMR is a translational research facility, where research develops from the laboratory bench through to the patient's bedside. QIMR's research supports different Queensland scientific and medical sector by researching and creating new and improved treatments and screening programs for various diseases and disorders.

QIMR receives over \$13 million in funding from the Queensland Government and leverages more than four-fold funds from other sources, including salaries for our researchers.

Our vision

To be a world renowned medical research institution

Our mission

Better health through medical research

Our philosophy

QIMR supports scientists who perform world-class medical research aimed at improving the health and well-being of all people

Strategic plan

QIMR has adopted a new Roadmap as a strategic plan for the 2011–14 period to guide operations of the Institute in a competitive and changing environment.

The strategic focus of the Roadmap is driven by the following:

- QIMR will become a world leader in medically relevant research and the transfer of this knowledge and understanding to the clinic;
- The Institute will focus on areas that are of high importance to Queensland and that will include regionally relevant diseases and those that are major causes of mortality and morbidity to the community;
- Excellence in research and researchers will characterise QIMR;
- The research programs of QIMR will be firmly underpinned by outstanding fundamental research of direct relevance to the research that is closer to translation.

All operations underpin the Institute's vision, which is to be a world leader in medically relevant research and to transfer this knowledge and understanding to the clinic.

The Institute's strategic priorities for 2011–14 are to:

- Sharpen the scientific focus in our three program areas: cancer, infectious diseases, and mental health/ complex disorders;
- Strengthen research activities;
- Introduce a career development structure;
- Support researchers to promote retention;
- Clarify organisational structures;
- Provide a career structure for all researchers;
- Increase inter-institutional collaborations;
- Strengthen collaborations on the Herston campus;
- Diversify income sources for QIMR;
- Increase the focus on outputs.

These priorities are achieved by meeting the following measurable objectives:

- Translation;
- Scientific quality;
- Commercial consequence;
- Societal impacts;
- International reputation.

Progress

For details on how QIMR's research has met the objectives of translation, societal impact, commercial consequence, scientific quality and international reputation in 2011–12, see page 29.

Operating environment and strategic challenges

Rapid growth and recruitment

QIMR is preparing for a period of accelerated growth with the new research facility recently completed. QIMR will be actively recruiting researchers in specific areas in order to increase QIMR's capacity to approximately 1,000 staff and students.

QIMR is undertaking recruitment to attract more of the world's best scientists. As a society that relies on medical research to improve our health, QIMR must ensure a continual supply of researchers into the future. The Institute is committed to inspiring the scientists of tomorrow through its Education Program (see page 34).

Competition for funding

QIMR operates in a competitive environment with much of its research funded by competitive grants obtained by researchers. For 2011–12, QIMR achieved a 31.4% success rate for grant applications funded by the NHMRC, which is above the national average of 25.5%.

Economic climate

The global financial crisis has impacted philanthropic giving for both individuals and the corporate sector. In this environment, with a large number of charities competing for the fundraising dollar, securing funding to support operating costs has been even more challenging. QIMR also focuses on value for money by delivering clinical, reputational, education and public health outcomes.

OUR PEOPLE

QIMR has 550 employees and 130 students. Due to the reliance on short-term grant funding, 82.9% of employees (including casuals) are employed on fixed-term contracts.

In 2011–12, 88.5% of permanent full time equivalent (FTE) staff who were employed with QIMR as at 1 July 2011 were retained (i.e. still employed at QIMR as at 30 June 2012).

Taking into account 1) the number of permanent FTE employees as at 1 July 2011, 2) a slight increase in recruitment for new positions over the reporting period, and 3) the number of employees who voluntarily ceased or resigned from the organisation, QIMR experienced a separation rate (or turnover) of 13.3% over the reporting period. These figures continue to reflect a stable and permanent workforce consistent with previous years.

61.8% of QIMR's workforce and 65.1% of the current student population are women. Women hold 36.3% of QIMR's scientific leadership positions. This compares to 15% in 2003.

Workforce planning, attraction and retention

Workforce planning initiatives at QIMR include:

- an Education and Higher Degrees Program to attract students to medical research and a career at QIMR;
- the ongoing support for a culture of work/life balance to attract and retain employees;
- maximising remuneration benefits for employees through highly effective salary packaging options; and
- provision of childcare arrangements for early year childcare places.

Resource planning is limited by short term funding cycles for research employees; however, within the Corporate Division, QIMR has planned resourcing requirements to ensure growth in research staff is effectively supported in the years ahead.

The strategic plan for QIMR has identified priority recruitment in the areas of bioinformatics, systems biology, basic immunology, and imaging in cell biology. Throughout 2011–12, scientific recruitment has targeted these areas and has attracted researchers from over 20 countries. Critical to QIMR's ability to attract and retain the best researchers is the high quality of infrastructure and specialist support.

The majority of QIMR staff are employed under the *QIMR Enterprise Agreement 2011*, which is complemented by a range of workforce policies that not only support the operation of the Enterprise Agreement and the achievement of strategic objectives, but fosters a high performance culture and promotes ongoing professional development.

Ethics and Code of Conduct

QIMR has a Code of Conduct which sets out expected workplace conduct, relationships and behaviour of staff. The Code of Conduct was reviewed in 2011 and updated to reflect changes made by the Queensland Government to the *Public Sector Ethics Act 1994*.

Carers Act 2008

QIMR's Human Resource policies are regularly reviewed to ensure that they comply with obligations set out for public authorities under the *Carers Act 2008*. QIMR provides access to flexible working arrangements, flexible leave options, a child care assistance policy, and definitions of a carer compliant with the Act. Employees have access to information regarding benefits and policy on the QIMR staff intranet.

OUR GOVERNANCE

Council purpose and membership

In accordance with Part 2, Section 4A of the Queensland Institute of Medical Research Act 1945, QIMR is controlled and governed by The Council of the Queensland Institute of Medical Research ("The Council"). Under the *Statutory Bodies Financial Arrangements Act 1982*, the QIMR Council is a statutory body.

Functions of the Council

The functions of the QIMR Council are to:

- (a) control and manage the Institute;
- (b) raise and accept moneys for the purposes of the Institute;
- (c) invest moneys raised or accepted by the Council for the purposes of the Institute; and
- (d) invest moneys derived from any property or other invested moneys of the Council for the purposes of the Institute.

Membership of the Council

The Council consists of the following members appointed by the Governor in Council:

- 1. The Chief Health Officer (an official member) Dr Jeannette Young
- Two nominees of the NHMRC, at least one of whom has expertise in health research – Professor Judith Clements + one vacancy
- One nominee of the Senate of The University of Queensland – Professor Nicholas Fisk from 9 September 2011
- One person with expertise in health research Professor Lyn Griffiths to 8 September 2011; Professor Alan Pettigrew from 9 September 2011
- 5. One medical practitioner with expertise in health research Associate Professor Paula Marlton
- 6. One person with expertise in health ethics Professor Bryan Campbell
- 7. One lawyer Mr Christopher Coyne
- Two persons with expertise in financial management, business or public administration – Professor John Hay to 18 May 2012; Mr Paul Fennelly to 8 September 2011; Mr Rod Wylie from 9 September 2011; Mr Greg Baynton from 9 September 2011

All members of the QIMR Council are appointed for a three year term. If at the expiration of the term of office of a member of the Council, the member's successor has not been duly appointed, the member shall hold office as a member of the Council until the member's successor takes up office.

Number of meetings

Attendance by Members of Council who held office during the 2011–12 financial year are as follows:

| Appointed Members | Meetings Attended |
|----------------------------------|----------------------|
| Greg Baynton | 3 / 7 |
| Bryan Campbell | 7 / 7 |
| Judith Clements | 5/7 |
| Christopher Coyne | 7 / 7 |
| Paul Fennelly | 0 / 7 |
| Nicholas Fisk | 4 / 7 |
| Lyn Griffiths | 0 / 7 |
| John Hay | 5/7 |
| Paula Marlton | 5/7 |
| Alan Pettigrew | 6 / 7 |
| Rod Wylie | 7/7 |
| Jeannette Young | 5/7 |
| Council Secretary: Donna Hancock | 7 / 7 |

Remuneration of Council

The aggregate remuneration for the QIMR Council for the 2011–12 financial year was \$51,534.

Members of Council



Professor John Hay AC

AC BA (Hons) (Western Australia and Cambridge), MA (Cambridge), PhD (Western Australia), Hon LittD (Deakin), Hon DLitt. (UWA), Hon DU (QUT), Hon LLD (Queensland), FAHA, FACE, FAIM, FQA (to 18/05/12)

Professor Hay was Vice-Chancellor of The University of Queensland from 1996 to 2007. In that time, he led the development of

many major new research institutes including the Institute for Molecular Bioscience and the Queensland Brain Institute.

He was also instrumental in securing funding for the Translational Research Institute to be built at the Princess Alexandra Hospital.

Under his leadership, both Deakin University and The University of Queensland were named Australian Universities of the Year by the *Good Universities Guide*.

Professor Hay was appointed as Chair of QIMR by the Queensland Government in September 2009 and stepped down on 18 May 2012.



Mr Christopher Coyne

Christopher Coyne is the Acting Chair of QIMR Council, a member of the QIMR Finance and Audit Committee and the Executive Salary and Remuneration Committee.

Mr Coyne is a solicitor of the Supreme Court of Queensland, an accredited specialist in the

field of commercial litigation, specialising in insurance law, health law, corporate governance and risk management. Following his admission as a solicitor in 1979, he practised law in Brisbane and was a partner in the national law firm Clayton Utz from 1984 to 2004.

Mr Coyne now practices on his own account. He was appointed an Adjunct Professor of The University of Queensland School of Law in 2002. Christopher is Board Chairman of Lexon Insurance Pte Ltd (Queensland Law Society, Singapore Captive Insurer), a Director of the Incorporated Council of Law Reporting for the State of Queensland, past president Medico-Legal Society of Queensland and Australian Insurance Law Association and former legal member Australian Health Ethics Committee. Christopher is a sessional member of the Queensland Civil and Administrative Tribunal and also a member of the QIMR Personnel Administration Committee.



Professor Bryan Campbell

AM MD BS FRACP FRACMA

Professor Campbell is Acting Deputy Chair of QIMR Council. He was formerly Chief Health Officer of Queensland and Head of The University of Queensland Medical School.

He has been a Councillor of the

Royal Australasian College of Physicians, the Royal Australian College of Medical Administrators and a member of the NHMRC. He was Deputy Chair of the Australian Health Ethics Committee and a member of the NHMRC Embryo Research Licensing Committee until June 2006.

Professor Campbell is the Chair of the QIMR Finance and Audit Committee and a Member of the Executive Employment and Remuneration Committee.



Professor Judith Clements

BAppSc MAppSc PhD

Professor Clements has over 20 years experience as a basic researcher in biomedical research, primarily in the general field of molecular endocrinology. Her current research seeks understanding of the molecular basis of hormone dependent

cancers such as prostate and ovarian cancer.

She is currently Scientific Director of the Australian Prostate Cancer Research Centre Queensland and Program Leader of the Cancer Program within the Institute of Health and Biomedical Innovation at the Queensland University of Technology (QUT). She coordinates the Australian Prostate Cancer BioResource, a national tissue bank for prostate cancer research. She is also an NHMRC Principal Research Fellow and an NHMRC Academy member since 2009. In 2007, Professor Clements was awarded the prestigious international Frey-Werle Foundation Gold Medal for her significant contributions to the kallikrein protease field.

Professor Clements is Chair of the QIMR Appointment and Promotions Committee.



Associate Professor Paula Marlton

MB BS (Hons I) FRACP FRCPA

Associate Professor Marlton is the Head of Leukaemia and Lymphoma Services at the Princess Alexandra Hospital where she is also Deputy Director of Haematology. Her previous appointments include three years at the MD Anderson

Cancer Centre in Houston, Texas. She has extensive experience in clinical research including the role of principal investigator for national multi-centre trials and supervisor of molecular translational research associated with trials. She was the founding Chair of the Australasian Leukaemia and Lymphoma Group (ALLG) Laboratory Science Committee and has established and continues to direct the ALLG Tissue Bank. Her other professional roles include Medical Advisor and board member of the Leukaemia Foundation, member of several drug advisory boards and government and college advisory committees as well as a wide range of academic and clinical service roles.

Associate Professor Marlton is also a member of the QIMR Appointments and Promotions Committee.



Dr Jeannette Young

MB BS MBA FRACMA FFPH AFACHSM

Dr Young is the Chief Health Officer for Queensland, a role she has filled since August 2005. Prior to this, she held the position of Executive Director of Medical Services at the Princess Alexandra Hospital in Brisbane and has previously worked in a range of positions in Queensland

and in Sydney. She has specialist qualifications as a Fellow of the Royal Australasian College of Medical Administrators and as a Fellow by Distinction of the Faculty of Public Health of the Royal College of Physicians of the United Kingdom. She is an Adjunct Professor at QUT and Griffith University.

As Chief Health Officer, she is responsible for such matters as health disaster planning and response; aero-medical retrieval services; licensing of private hospitals; organ and tissue donation services; cancer screening services; communicable diseases; environmental health and other population health services; and mental health, alcohol and other drugs policy and legislation.

Dr Young is a member of numerous state and national committees and boards, including the Queensland Board of the Medical Board of Australia, NHMRC, the Australian Health Protection Committee, the Clinical Technical Ethical Principal Committee of the Australian Health Ministers' Advisory Council, the Australian Population Health Development Principal Committee and the newly created Australian National Preventive Health Agency Advisory Council.



Professor Nicholas Fisk

MBBS PhD MBA FRANZCOG FRCOG DDU CMFM (from 09/09/11)

Professor Fisk is Executive Dean of Health Sciences at The University of Queensland. He practices as a maternal-fetal medicine specialist at the Royal Brisbane and Women's Hospital, and maintains a research group in The University

of Queensland Centre for Clinical Research (UQCCR).

Between 1992 and 2007 he was Professor of Obstetrics and Fetal Medicine at Imperial College and Queen Charlotte's Hospital, London, where his laboratory and clinical research program achieved an international reputation in fetal diagnosis and treatment. His main research interests have been in human fetal stem cell biology and monochorionic multiple pregnancy, but also span non-invasive prenatal diagnosis and fetal nociception. He has authored over 400 publications, is a past President of the International Fetal Medicine and Surgery Society, and is a member of several editorial boards including *PLoS Medicine*. He is passionate about driving clinical research in a bench to bedside environment, to link wet and dry laboratories with patients, and to foster the training of tomorrow's translational researchers.

Professor Fisk is a member of the QIMR Appointments and Promotions Committee.



Mr Gregory Baynton

BBus M Econ St MBA FFINSA (from 09/09/11)

Gregory Baynton is the founder and Managing Director of Orbit Capital, a boutique investment and advisory company. He comes from a background in merchant banking and Queensland Treasury, and has experience

in infrastructure investment, capital raisings, Initial Public Offerings (IPO), pre-IPO funding, corporate structuring and corporate governance.

Mr Baynton is currently Director of COALBANK Limited and NEXTDC Limited and was a Director of Tissue Therapies Limited and PIPE Networks Limited.

Mr Baynton holds a Bachelor of Business (Accountancy), a Master of Economic Studies (UQ), a Post-graduate Diploma in Applied Finance and Investment (SIA), and a Master of Business Administration (QUT).

Mr Baynton is a Fellow of the Financial Services Institute of Australasia.



Professor Alan Pettigrew

BSc (Hons) PhD FAICD (from 09/09/11)

Professor Pettigrew holds the degrees of Bachelor of Science and Doctor of Philosophy from the University of Sydney and is a Fellow of the Australian Institute of Company Directors. He has held a range of academic and senior executive appointments at a number of Australian

universities, having served as Deputy Chair of the Academic Board at the University of Sydney, Pro Vice-Chancellor (Biological Sciences) at The University of Queensland, and Deputy Vice-Chancellor (Academic) at the University of NSW.

In January 2001, Professor Pettigrew was appointed as the inaugural Chief Executive Officer of the National Health and Medical Research Council. In 2005, he was appointed as Vice-Chancellor and Chief Executive Officer of the University of New England. Professor Pettigrew retired from the university in 2009. He also served as a member of the Board of the Australian Universities Quality Agency until 2010.

Professor Pettigrew is currently an Adjunct Professor in the College of Medicine Biology and Environment at ANU and a Professorial Fellow of the LH Martin Institute at the University of Melbourne. He is a member of the Australian Government's Cooperative Research Centres Committee and the Board of the John Curtin Medical Research Foundation. He is Chair of the Advisory Committee for the NHMRC Centre of Research Excellence in Reducing Healthcare Associated Infection based at QUT. Professor Pettigrew is an adviser to the Chief Scientist of Australia and a consultant to the Organisation for Economic Co-operation and Development and universities on higher education leadership, management and research.

Professor Pettigrew is a member of the QIMR Appointments and Promotions Committee.



Mr Rodney Wylie

OBE BComm BA FCA FAICD (from 09/09/11)

Rodney Wylie is a Brisbane-based chartered accountant with substantial experience in investment, company management and corporate governance issues across a wide range of organisations, in many cases

with nationwide and international activities.

He has been involved through board or council membership in the administration of a number of professional and community not-for-profit groups.

Mr Wylie chairs the QIMR Investment Committee and is a member of the QIMR Finance and Audit Committee.



Mr Paul Fennelly

BA LLB (to 08/09/11)

Paul Fennelly has wide experience in financial management, business and public administration. He is an executive with Hastings Funds Management, which is a member of the Westpac Group. His focus is on major equity investments, primarily in social and economic infrastructure.

From 2002–2006, Mr Fennelly was Director-General of the then Department of State Development; concurrently he served as Queensland's Coordinator-General. Prior to joining the Queensland Government he was Victorian Director of the Australian Industry Group, which is the nation's largest industry association. Mr Fennelly chaired the QIMR Finance and Audit Committee.



Professor Lyn Griffiths

BSc (Hons) PhD (to 08/09/11)

Professor Griffiths is Director of the Griffith Health Institute and the Genomics Research Centre at Griffith University. She has expertise in human molecular genetics, undertaking research to map and identify genes involved in common complex human disorders, including

studies on migraine, cardiovascular disease risk, multiple sclerosis and certain types of cancer.

Her research has been well funded by national competitive grants and industry and she has authored more than 200 peer-reviewed publications to date in molecular genetics international journals as well as supervising 28 PhD students to completion.

She is a current Queensland President Human Genetics Society Australasia, past ASMR Director, current Member and past Chair of the Scientific Program Committee for the International Congress of Human Genetics and has been awarded the Centenary Medal for Distinguished Service to Education and Medical Research. Professor Griffiths was a member of the QIMR Appointments and Promotions Committee.

Committees to Council

Finance and Audit Committee

The role of the Finance and Audit Committee is to provide independent assurance and assistance to the QIMR Council on:

- risk, control and compliance frameworks;
- QIMR's external accountability responsibilities as prescribed in the relevant legislation; and
- the appointment of the internal audit function and communications with internal and external auditors.

The committee is directly responsible and accountable to the QIMR Council for the exercise of its duties and responsibilities.

The Committee meets quarterly to review business and financial risk, financial operating performance and audit performance. The Committee reviews all issues and recommendations arising from internal audit and the Queensland Audit Office, along with agreed management actions implemented to address any issues found.

The Finance and Audit Committee has observed its terms of reference and has due regard to Queensland Treasury's *Audit Committee Guidelines.* The Finance and Audit Committee comprises:

- Professor Bryan Campbell (Chair)
- Mr Christopher Coyne
- Mr Ian Fraser (from 7 December 2011)
- Professor John Hay (to 18 May 2012)
- Mr Rodney Wylie

Investment Committee

The Investment Committee meets quarterly and is responsible for overseeing the investment of QIMR Council funds.

- Mr Rodney Wylie (Chair)
- Mr Bruce Phillips
- Mr Michael Sargent
- Mr John Allpass (from 9 February 2012)
- Mr Ian Fraser (from 7 December 2011)
- Mr Gregory Baynton (from 9 September 2011)

Appointments and Promotions Committee

The Appointments and Promotions Committee assists Council with the maintenance of academic standards at QIMR by reviewing proposals for the appointment and promotion of Faculty staff. The committee comprises:

- Professor Judith Clements (Chair) (Council Member)
- Professor Nicholas Fisk (Council Member) (from 17 April 2012)
- Associate Professor Paula Marlton (Council Member) (from 17 April 2012)
- Professor Alan Pettigrew (Council Member) (from 17 April 2012)
- Dr Joanne Aitken (Director, Viertel Cancer Epidemiology Unit, Cancer Queensland) (from 17 April 2012)
- Professor Julie Campbell (Director, Wesley Research Institute)
- Professor Alan Cowman (Walter and Eliza Hall Institute of Medical Research) (from 17 April 2012)
- Professor Tony Evans (Director, Cancer Therapeutics CRC Pty Ltd) (from 17 April 2012)
- Professor Bob Graham (Executive Director, Victor Chang Cardiac Research Institute)
- Professor Andrew Grulich (The Kirby Institute, UNSW) (from 17 April 2012)
- Professor Graham Brown (to 17 April 2012)
- Professor Lyn Griffiths (to 17 April 2012)
- Professor James McCluskey (to 17 April 2012)
- Dr Jurgen Michaelis (Chair, Bio Innovation SA)
- Professor Joe Trapani (Peter MacCallum Cancer Centre)
- Professor Frank Gannon (ex officio)

Executive Employment and Remuneration Committee

(From 18 October 2011)

The Executive Employment and Remuneration Committee is responsible for reviewing the terms and conditions relating to the appointment and remuneration of senior management.

- Professor John Hay (Chair) (to 18 May 2012)
- Professor Bryan Campbell
- Mr Chris Coyne (Acting Chair) (from 28 May 2012)

Human Research Ethics Committee

The Human Research Ethics Committee (HREC) on behalf of Council ensures the maintenance of ethical standards in human research and compliance with regulatory guidelines.

- Dr Ian Wilkey (Chair)
- Dr Roger Allison
- Ms Madeline Brennan
- Mrs Gwen Eardley
- Mr Angus Edmonds
- Professor Barbara Leggett (from 18 October 2011)
- Mrs Mary Mackenzie
- Dr Peter Roeser (from 9 August 2011)
- Mr David Russell
- Mr John Stead
- Associate Professor Katharine Trenholme
- Dr Tom Sculley
- Ms Donna Hancock (ex officio)

Animal Ethics Committee

The QIMR Animal Ethics Committee (AEC) on behalf of Council ensures the maintenance of ethical standards in animal research and compliance with regulatory guidelines in the use of animals in medical research.

The Phase II and III Building Project Steering Commitee

- Professor Frank Gannon (Chair)
- Professor Adèle Green (Deputy Director) (to 31 January 2012)
- Professor Greg Anderson (Deputy Director) (from 1 February 2012)
- Mr Alan Stockman (Project Director)
- Mr John Parnell (Project Manager)
- Professor Grant Ramm (Staff Association Representative)
- Ms Donna Hancock (Chief Operating Officer)
- Dr Joseph Pereira (Senior Manager Scientific Services)

Risk Management

The review and management of risk at QIMR is undertaken by QIMR Council through the Finance and Audit Committee. QIMR management have developed a register of potential risks applicable to functions of the Institute. A schedule of quarterly reviews incorporates the actions required to improve any identified gaps in controls. The review process records all incidents reported to Committees, Management or Council and allocate those incidents to risk categories. If a risk has not previously been described in the register, it is added in the appropriate category and controls developed.

Internal Audit

Internal audit is a fundamental part of corporate governance that ensures that QIMR operates effectively, efficiently and economically. The Finance and Audit Committee acts as a forum to oversee the planning, performance and reporting of the internal auditor.

The role of internal audit is to provide independent, objective assurance and advice designed to assist QIMR in accomplishing its objectives by bringing a systematic, disciplined approach to evaluating and improving the appropriateness and effectiveness of risk management and internal control.

The internal audit contractor (KPMG) met with the Finance and Audit Committee on the following occasions during the period 1 July 2011 – 30 June 2012: 26 August 2011, 7 December 2011, 27 February 2012 and 15 June 2012.

The approach taken to identifying areas of significant risk combines a focus on both cyclical reviews of core business processes as well as reviews of key risk areas. KPMG's integrated governance, risk and controls framework builds on a traditional internal audit model to take a holistic view of QIMR's key objectives, risks, controls and supporting structure across the organisation.

In formulating an internal audit plan for presentation to the Finance and Audit Committee for approval, consideration was given to past internal audit findings, recent and forthcoming changes in systems and processes, key business risks and the period since the last internal audit of each core business process. An annual internal audit plan was prepared and presented to the Finance and Audit Committee prior to the commencement of the financial year.

The internal audit function has observed the terms of its charter and has due regard to Queensland Treasury's *Audit Committee Guidelines.*

External Scrutiny

QIMR was not subject to any reports of any parliamentary committees, the Crime and Misconduct Commission or the Queensland Ombudsman.

QIMR Annual Report 2011-2012

Page 22

OUR MANAGEMENT



Director and CEO, Professor Frank Gannon

Professor Frank Gannon is QIMR's seventh Director and CEO. In this role he is responsible for the research work undertaken by the Institute and management of employees, under the overall control of the Council.

Professor Frank Gannon joined QIMR as Director and CEO in January 2011. Previously, Professor Gannon was the Director General at the Science Foundation Ireland (SFI) from 2007.

From 1994 to 2007, Professor Gannon was the Executive Director of the European Molecular Biology Organisation (EMBO) and Senior Scientist at the European Molecular Biology Laboratory (EMBL), based in Germany; and Director of the National Diagnostic Centre and Associate Professor in the Department of Microbiology at University College Galway, Ireland (1981 to 1994).

He obtained a Bachelor of Science from the National University of Ireland, Galway in 1970; a PhD from the University of Leicester, England in 1973; was a post-doctoral fellow at the University of Madison Wisconsin, USA from 1973 to 1975; and Chargé de Recherche in INSERM at the University of Strasbourg, France from 1975 to 1981, after which he returned to Galway.

His major research interest is the expression and functional regulation of the oestrogen receptor, which plays a major role in breast cancer and osteoporosis. These studies have provided leads to novel treatments or therapeutic approaches to these and other cancers.

Professor Gannon has authored over 200 research articles published in international journals. In addition, from 2000 to 2008, he contributed to a monthly editorial to EMBO Reports of which he was founding Senior Editor. He also writes extensively on diverse topics related to science policy. Professor Gannon has seven patent applications, four of which are active at present and was the founder of both Bimini Ltd (1990) and Elara Pharmaceuticals (2006). He was a member of the interim Board of Science Foundation Ireland from 2002 to 2004 and was elected as a Member of the Royal Irish Academy in 2007 and the Mexican Academy of Medicine in 2008.

He has been awarded honorary Doctorates by the University of Jozsef Attila, Szeged (Hungary), The University of Queensland and Queens University Belfast (Northern Ireland).

He has served on a range of high-level scientific advisory boards at institutes throughout the world and was co-founder of the European Life Sciences Forum (ELSF) and the Initiative for Science Europe (ISE) that played significant roles in the establishment of the European Research Council (ERC).

He was Vice President of the European Heads of Research Council and an advisor to the European Union Commissioner for Research and Innovation prior to his move to Brisbane.

In 2012, Professor Gannon was appointed a Queensland Academy of Arts and Science Fellow.

Organisational Structure

Council

Director





Management Advisory Group (MAG)

The QIMR Management Advisory Group (MAG) are consulted on matters of relevance to the organisation's operation.

Members are selected to represent each of the programs and departments that operate within QIMR.

| | | Program/Department |
|-------------------------|--|------------------------------------|
| Director and CEO | Professor Frank Gannon | |
| Deputy Director | Professor Adèle Green (to 31 January 2012) | Cancer |
| | Professor Greg Anderson (from 1 February 2012) | Mental Health/Complex Disorders |
| Chief Operating Officer | Ms Donna Hancock | |
| Program Coordinators | Professor James McCarthy | Infectious Diseases |
| | Professor Michael Breakspear | Mental Health/Complex Disorders |
| | Professor Georgia Chenevix-Trench | Cancer |
| Department Coordinators | Professor Geoff Hill | Immunology |
| | Professor Emma Whitelaw | Cell and Molecular Biology |
| | Professor Grant Montgomery | Genetics and Computational Biology |
| | Professor David Whiteman | Population Health |
| | Professor Denise Doolan | Biology |
| Secretary | Ms Nerida Fox | |



Professor Frank Gannon



Professor Adèle Green



Professor Greg Anderson



Ms Donna Hancock



Professor James McCarthy



Professor Michael Breakspear



Professor Georgia Chenevix-Trench



Professor Geoff Hill



Professor Emma Whitelaw



Professor Denise Doolan



Professor Grant Montgomery



Professor David Whiteman



Our Performance

QIMR's mission is better health through medical research. This is achieved through outstanding fundamental and translational research with the ultimate goal being to make an impact on clinical practice in the form of improved diagnostics, prevention and treatment strategies. To measure how QIMR performs in researching with consequences, the following outputs are measured:

- Translation
- Scientific quality
- Commercial consequence
- Societal impacts
- International reputation

TRANSLATION



QIMR, one of Australia's largest and most successful medical research institutes, investigates the world's most debilitating diseases, from cancer to infectious diseases, to mental health and a range of complex disorders. In order to improve the health of all, scientific discoveries need to be translated into prevention strategies and treatments for disease. QIMR was the prototype of what is, today, referred to as a translational medical research institute.

Translational research highlights for 2011–12 include:

- Development of a brain stress test for dementia using brain imaging and showing that it could predict the functioning of patients for up to two years;
- Development of a new diagnostic and monitoring test for major depression based on a combination of video and imaging technology;
- A pilot study releasing *Wolbachia* infected mosquitoes in Cairns to test the bacteria's effectiveness against the spread of dengue fever; and
- Providing further evidence that human papillomavirus (HPV) contributes to skin cancer.

Translation facilities

QIMR is one of Australia's only fully integrated biomedical research and development centres. Within the Institute, there is the capability to translate fundamental basic research from the discovery phase through development, scale-up and manufacture, to Phase I and II clinical trials.

QIMR also has facilities for the good manufacture practice (GMP) manufacture of cell-based and molecular therapies. Co-located within the Institute is an associated commercial Phase I/II clinical trials facility, Q-Pharm Pty Ltd, allowing QIMR scientists and external clients the extended capability for taking research findings from bench to the bedside.

Q-Gen

Q-Gen is licensed by the Therapeutic Goods Administration (TGA) for the maintenance and storage of working cell banks, the on-site storage of cellular products and the management and release of cellular therapies for humans. The TGA license makes Q-Gen one of a very small number of organisations in Australia able to store human and non-human samples under GMP conditions.

Q-Gen is one of the largest GMP facilities in Australia, with 13 ISO Class 7 clean rooms. Each clean room is fully equipped for the manufacture of clinical therapies.

Q-Gen provides QIMR with a unique facility to conduct its translational research and processes for clinical therapies and is currently utilised in the manufacture of a number of QIMR sponsored developmental immunotherapies.

Q-Pharm

In order to facilitate the translation of QIMR's research into clinical practice, QIMR holds a 24.5% share of Q-Pharm.

Q-Pharm is a specialist contract research organisation that conducts early phase clinical trials of pharmaceutical and biotechnology products spanning the areas of therapeutic, diagnostic and disease prevention agents.

The company offers the best appointed early phase clinical trials facilities in Australasia, which include recruitment and outpatient clinics, a specialised 18-bed clinic for the conduct of the most medically demanding trials and an open plan 24 bed facility for larger healthy volunteer trials.

Clinical collaborations

Because of its close proximity to major teaching hospitals and The University of Queensland Medical School, QIMR is ideally placed for clinical research collaborations. It has a proud history of working closely with hospitals, in particular the RBWH. Clinicians have research groups within QIMR and medical researchers in QIMR have clinical sessions at the RBWH. QIMR's researchers also have significant relationships with clinicians nationally and internationally. In 2011–12, 64% of QIMR researchers collaborated with clinicians in over 100 projects, in hospitals worldwide.

Some of QIMR's current clinical collaborations include:

- Clinical trial of tocilizumab (a drug used to treat rheumatoid arthritis) for the treatment of asthma (Royal Children's Hospital, Princess Alexandra Hospital, Prince Charles Hospital);
- Epstein-Barr virus (EBV) -specific T cells as therapy for relapsed/refractory EBV-positive lymphomas (Princess Alexandra Hospital);
- Whole genome expression profiling of squamous cell carcinoma with perineural invasion (Princess Alexandra Hospital);
- A phase I / II study of pegylated-INF-2alpha for relapsed haematological malignancy after allogeneic haematopoietic progenitor cell transplantation (RBWH);
- A phase I / II study of humanised anti-IL-6 receptor antibody tocilizumab to prevent development of acute graft versus host disease post HLA-matched allogeneic haematopoietic progenitor cell transplantation (RBWH);
- Observation study of IL-17 generation in clinical bone marrow transplantation (RBWH);
- Adoptive immunotherapy for the treatment of cytomegalovirus (CMV) reactivation and disease after transplantation (RBWH);
- Phase I double blind randomised placebo controlled trial of oral iron supplementation in the treatment of iron deficiency in people with cystic fibrosis (CF) (Prince Charles Hospital);
- Adoptive immunotherapy for EBV associated with nasopharyngeal carcinoma (Princess Alexandra Hospital and University of Hong Kong);
- Phase I trial to assess safety of autologous HCMV-specific T cell therapy for glioblastoma multiforme (BrizBrain and Spine, Wesley Hospital);
- Evaluating thermostability of positive control wells containing malaria antigens used in rapid diagnostic tests (Hospital for Tropical Diseases, London);

- Revealing the genetics of oesophageal adenocarcinoma and identification of biomarkers for prognosis, treatment and progression (Princess Alexandra Hospital);
- Reporting the main treatment pathways for Australian patients with oesophageal cancer recruitment of patients and collection of biopsy specimens and blood through Cancer Council NSW;
- Proposed change in clinical management of children with cystic fibrosis and liver disease, using dual pass liver biopsy to detect liver fibrosis and predict future portal hypertension (Royal Children's Hospital);
- Genome-wide association study on response to treatment inflammatory bowel disease (RBWH);
- New clinical diagnostics for echinococcosis and development and testing of a canine vaccine to prevent transmission of the disease (Ningxia Medical College);
- Gene mapping in eye disease (Flinders Medical Centre);
- Diagnostic test for psychosis (RBWH); and
- Safety and tolerability of HCMV-specific T cell-based therapy for the treatment of recurrent glioblastoma patients (Wesley Hospital, BrizBrain and Spine).

Results

In 2011–12, QIMR's clinical collaborations have produced a range of significant outcomes:

- Showed that CD8 T cell deficiency impairs control of Epstein-Barr virus and worsens with age in multiple sclerosis (RBWH);
- Discovered new genes controlling naevus (mole) development (Princess Alexandra Hospital);
- Reviewed 6,000 bowel polyps to establish the frequency of different polyp types and identified a study population to examine the molecular features of polyps at different stages of progression (Envoi Specialist Pathologists);
- Found a low prevalence of antibodies to HPV in patients with oesophageal squamous cell cancer (Cancer Council NSW); and
- Provided further evidence that HPV contributes to skin cancer (Leiden University Medical Centre).

Vaccine Development

The QIMR Australian Centre for Vaccine Development (ACVD) at QIMR is one of the largest vaccine research centres in Australia. It provides opportunities for its members to develop collaborative links with national and international academic institutions and the biotechnology industry and provides a platform for young Australian and international scientists to develop new techniques in the field of vaccine research.

ACVD is collaborating with internationally renowned Emory Vaccine Centre (EVC) Atlanta, USA under the Queensland Government funded National and International Smart State Research Program (Queensland-US Vaccine Technology Alliance) to explore new technologies that can be used to develop and improve vaccines.

Both organisations have strong links with the biotechnology industry and health institutions that are being leveraged to translate the outcomes of research from bench to bedside, which will have significant implications for improving health outcomes for Australians. This collaborative program is also aiming to bring new technologies to Queensland and create training and employment opportunities for Queenslanders.

ACVD has unique expertise and resources in antigen discovery with a strong focus on immunomics, bioinformatics and high throughput re-sequencing. This approach allows rapid whole genome scanning of infectious pathogens and cancer antigens to map novel vaccine determinants.

Current clinical trials

Fundamental research at QIMR in 2011–12 underpinned a number of clinical trials that may ultimately lead to improved treatment options for patients. These included:

- Adoptive immunotherapy for EBV associated with nasopharyngeal carcinoma;
- Adoptive immunotherapy for HCMV infection in transplant patients;
- A new personalised asthma treatment;
- Vitamin D supplementation for reduction of mortality in older adults;
- Studies for malaria vaccines and treatments in human volunteers;
- Oral iron supplement in cystic fibrosis patients suffering iron deficiency;
- Phase I trials assessing HCMV specific T cell therapy for glioblastoma multiforme;
- T cell therapy for EBV-positive lymphomas;
- Phase I and II trials of a treatment for relapsed blood cancer patients following a bone marrow transplant; and
- Phase I and II trials of a treatment to prevent graft versus host disease following transplants.

Case Study

QIMR's System Neurosciences Group has developed a memory stress test that can be used to predict those at risk of developing dementia.

Led by Professor Michael Breakspear, Coordinator of QIMR's Mental Health/Complex Disorders Program, the researchers showed for the first time that the brain's response to increasing mental stress can predict a future decline in everyday functioning.

Australians aged between 70 and 85 with mild cognitive impairment, a known risk factor for dementia, were given a series of memory tasks of increasing difficulty and their brain activity was monitored.

By using a brain imaging scanner, Professor Breakspear and his team were able to detect subtle changes in brain activity. They studied the patients again after two years and found that their initial response to the stress test predicted whether their everyday functioning was stable or had declined.

Accurate detection of those at risk before they show clinical signs of dementia would allow for early, targeted preventive interventions. The ability to perform everyday functions is the

key skill that allows people to stay at home with their families, hence limiting the distress and financial burden of dementia. With an ageing population and nearly one million Australians expected to be living with dementia by 2050, this finding has enormous public health implications.

The researchers ultimately hope the research may lead to a clinical tool to identify those at risk. This would allow early intervention, better targeting of the available medications and hence improve the lives of those living with this terrible condition.

QIMR Annual Report 2011–2012

SCIENTIFIC QUALITY



QIMR prides itself on being one of the largest and most successful medical research facilities in Australia, attracting exceptional scientists and students to carry out high quality research aimed to prevent and cure disease throughout Australia and the world.

QIMR has demonstrated its commitment to scientific quality in a number of ways in 2011–12 including producing 549 peer reviewed publications, securing more than \$17 million of competitive NHMRC funding as well as producing a range of excellent world-class research outcomes across its laboratories.

QIMR will continue to strive for the highest standard of scientific quality by attracting outstanding researchers, producing and contributing to publications including high-impact journals; and gaining ongoing support from funding bodies to continue medical research.

Publications

Publications and citations are a key indicator of achievement and excellence in academic research and are a core output of QIMR. Confirming the ongoing pursuit of excellence in science, researchers at QIMR contributed to 549 scientific publications. At the same time the quality of the research has improved. Of these publications, 68 were published in high impact journals (those with an impact factor over 10); compared to 61 in 2010–11.

In a ranking of research institutes, prestigious publication, *Nature*, ranked QIMR seventh in Australia for research articles and reviews.

Scientific publications



This year, QIMR researchers been published in a range of high impact scientific journals such as *Journal of Clinical Oncology*, *The Lancet*, *Nature Genetics*, and *British Medical Journal*. These include:

- 14 articles in *Nature Genetics* on the genetics of bipolar, prostate cancer, melanoma, breast cancer, inflammatory bowel disease, menopause and brain size;
- Articles on the genetics of melanoma and platelet formation in *Nature;*
- An article on the genetics of the survival of women with ovarian cancer in the *Journal of the American Medical Association (JAMA)*;
- The Journal of Clinical Oncology published papers on the reduction of the incidence of melanoma from sunscreen use and the 20 year survival rates of people diagnosed with thin melanomas;
- *Hepatology* published an article on therapies for treating hepatic fibrosis; and
- *Gut* printed research on the link between alcohol intake and risk of oesophageal adenocarcinoma.

Funding

QIMR was recognised and gained support for its scientific innovation, with researchers securing more than \$17 million in funding from the NHMRC in the latest round of grants and fellowship announcements in early 2012.

Funds were provided from 1 January 2012 for a total of 21 new research projects ranging from those targeting specific viruses to treat brain cancer; to evaluating a vaccine to combat streptococcal disease; to identifying genes for a range of common diseases through QIMR's Brisbane twin study, QTwin.

NHMRC grants awarded (\$millions)



Staffing

Ensuring the ongoing quality of research, QIMR employed 27 NHMRC Fellows in 2011–12.

Invited lectures

QIMR researchers are recognised by their peers throughout Australia and the world and were invited to speak about their work at over 140 lectures in 2011–12, including:

- Professor David Whiteman presented at the National Cancer Institute in Washington USA in May 2012;
- Professor Grant Ramm presented at the Chinese Academy of Sciences Centre for Nanoscience and Technology in October 2011; and
- Dr Katja Fischer presented at The University of Queensland Gatton, School of Veterinary Science in May 2012.

Awards

QIMR scientists also received over 45 local and international awards in the last financial year, including:

- Professor Michael Breakspear (Mental Health and Complex Disorders Program Coordinator and Systems Neuroscience) won a 2011 ASMR Queensland Clinical Researcher Award;
- Professor Barbara Leggett (Conjoint Gastroenterology) received a Distinguished Research Award from the Gastroenterological Society of Australia. Only one of these is awarded each year; and
- Dr Manuel Ferreira (Asthma Genetics) received a Ruth Stephens Gani Medal in Human Genetics by the Australian Academy of Sciences for his work on the genetics of asthma.

Postgraduate Students

Today's students are the scientists of the future. Postgraduate students are an important part of the research effort at QIMR. The excellent research facilities, support services, extensive network of international and national research collaborations, and the internationally-recognised quality of QIMR scientists combine to provide an outstanding environment for advanced training in health and biomedical research. Mentoring of the students remains a high priority.

During 2011–12, the Institute welcomed 25 new PhD students, an increase of eight from the previous year, and nine new Honours students. It was also an excellent year for graduations with 15 PhD students and 18 Honours students graduating, including nine awarded First Class Honours. Very pleasingly, five of the graduating Honours students returned to QIMR to commence a PhD. During the year, the Institute also admitted two new MPhil students and two coursework Masters and welcomed more than 20 visiting students, many from overseas.

Recognising that inadequate funding is often a major barrier to students completing their degrees, QIMR's Higher Degrees Committee (HDC) was pleased to be able to award PhD top-up scholarships to 12 students. In addition, the HDC was able to offer scholarships to six new Honours students and 10 PhD students were awarded travel awards to help them attend and present their work at overseas conferences.

QIMR also hosted 59 visiting students during the year, including students from around the world.

QIMR's postgraduate students have continued to make an impressive impact on the wider scientific community this year with several receiving external awards during their candidature. Highlights include:

- Thomas Partridge was awarded a Nuffield Department of Medicine Prize Studentship by University of Oxford; and
- Jane Wilson was awarded for her presentation by the
 Australian Virology Society.

QIMR Annual Report 2011-201
COMMERCIAL CONSEQUENCE



While achieving its mission for better health, QIMR has achieved significant economic benefits and health outcomes through its connections with industry including the development of cancer therapeutics, diagnostic targets, cancer vaccines and infectious disease vaccines. QIMR's reputation for excellence is further enhanced through its collaborative projects with companies and its involvement in projects of commercial significance.

QIMR undertakes industry sponsored collaborative research with a large number of local, national and international

companies. Currently, QIMR has contracts with over 20 national and international biotechnology and pharmaceutical companies. In 2011–12, seven new projects were established with companies, attracting approximately \$2 million in external revenue. QIMR is a strong research partner of Queensland companies CBio Limited and Ecobiotics Limited.

Contract research carried out in QIMR has resulted in the discovery and development of cancer therapeutic agents and other commercial products.



Research agreements





Related commercial entities

QIMR has assisted in the economic development of the state through its involvement in the establishment of start up companies based in Queensland. QIMR has also been a key research provider to Queensland based company Ecobiotics Ltd since 2004.



VacTx Pty Ltd

QIMR is a shareholder in VacTx Pty Ltd, a Melbourne based company established to develop vaccine technology arising out of the Cooperative Research Centre (CRC) for Vaccine Technology.

Trust for Cooperative Research Centre (CRC) for Vaccine Technology (CRCVT Trust I)

QIMR is the Trustee of the CRC for Vaccine Technology Trust, a trust managing shares in VacTx Ltd on behalf of the participants of the CRC.

Trust for the Cooperative Research Centre (CRC) for Vaccine Technology (CRCVT Trust II)

QIMR is the Trustee of the CRC for Vaccine Technology (CRCVT) Trust (CRCT Trust II), a trust responsible for managing patent families and licensing agreements on behalf of those participating in the CRC for Vaccine Technology, which was abolished in June 2006.

Vaccine Solutions Pty Ltd

QIMR is a shareholder in Vaccines Solutions Pty Ltd, a company established to commercialise intellectual property resulting from the CRC for Vaccine Technology. The company has key licence agreements with Pfizer Inc.

Q-Pharm Pty Limited

Q-Pharm Pty Limited is a specialised contract research organisation that undertakes a broad range of early phase (Phase I and Phase II) clinical trials for clients in the global pharmaceutical and biotechnology industries. QIMR holds a 24.5% share and Q-Pharm pays a licence fee per annum to QIMR to lease office, laboratory and clinical trial ward facilities in the Clive Berghofer Cancer Research Centre, and for information technology services and stores services.



SOCIETAL IMPACTS



In order to achieve QIMR's mission of better health through medical research, its researchers target some of the world's most debilitating diseases, including cancer, malaria and mental health. Gaining support from funding bodies, the government and the community, QIMR has an obligation to demonstrate the value of medical research in improving health and the quality of life and addressing the major health needs of society.

Addressing society's health needs

Cancer

1 in 2 Australians will be affected by cancer before the age of 85. For that reason cancer research continues to be a major focus for QIMR.

Melanoma

Unfortunately, Queensland has the highest rate of skin cancer in the world, with melanoma the most deadly form of the disease. This is a statistic that needs to be addressed and many lives could be saved with better prevention and early diagnosis. Helping in the fight, are QIMR's Professor Nick Hayward and Associate Professor Stuart MacGregor who found a genetic variant which can significantly increase the risk of melanoma.

The MITF gene is responsible for regulating pigmentation and melanoma development, but this small mutation can increase the risk of developing melanoma by 150% – which is as significant to melanoma risk as traits such as having red hair.

The finding may help improve the ability to predict those individuals most likely to develop the potentially deadly disease.

While invasive melanoma is considered the most deadly form of skin cancer, QIMR's research found people suffering with thin melanomas, which are invasive melanomas that are less than 1mm in thickness, generally have a good chance of survival.

QIMR's Professor Adele Green's research has reassured melanoma patients with thin invasive tumours after finding that their survival rate is 96%, 20 years after diagnosis. By analysing the data of over 26,000 Queenslanders diagnosed with thin invasive melanoma between 1982 and 2006, Professor Green found their prognosis was mostly influenced by two factors: the measured thickness of their tumour and the site of their melanoma.

This research is the only published analysis of very long-term survival rates for these people and it gives a solid foundation to continue population-based research to better understand the course of this sometimes devastating disease.

Ovarian cancer

Ovarian cancer affects around 1,200 women in Australia each year. About two-thirds of women with ovarian cancer are diagnosed with advanced stage disease and overall survival is poor, with only about 40% of women surviving more than five years. Associate Professor Penny Webb, Group Leader of QIMR's Gynaecological Cancer Laboratory is carrying out the Ovarian Cancer Prognosis And Lifestyle (OPAL) study by interviewing up to 1200 women who have been diagnosed with ovarian cancer, with the aim of better understanding lifestyle influences on survival and quality of life.

The OPAL study is the first comprehensive study of lifestyle factors that might improve survival for women with ovarian cancer.

The ultimate hope is to be able to give women reliable advice, for the first time, regarding lifestyle changes that might improve their chances of beating this devastating disease.

Infectious diseases

Infectious disease is a cornerstone of QIMR, having been established in 1945 to combat tropical diseases affecting Queensland. The Institute is a world leader in a range of infectious disease including malaria, HIV, schistosomiasis and scabies. Many of the diseases under study are simultaneously the cause of very significant morbidity and mortality, but are also often understudied by other research groups elsewhere in the world.

Malaria

Professor James McCarthy, Coordinator of QIMR's Infectious Diseases Program, has secured international funding to carry out testing of new anti-malarial drugs and vaccines in human volunteers, at Q-Pharm.

Malaria kills up to one million people world-wide each year and is a significant cause of morbidity in some of Australia's neighbouring countries.

Dengue Fever

Dr Jonathan Darbro from QIMR's Mosquito Control Laboratory has been investigating whether a common fungus has a role to play in stopping the spread of dengue fever.

His initial testing has shown the *Beauveria bassiana* fungus kills *Aedes aegypti*, the mosquito which carries the viral disease.

The results offer a potential alternative to pesticides to control the mosquito-borne borne virus, which is a significant health concern in north Queensland.

HIV

In early 2012, Dr David Harrich, Group Leader of QIMR's HIV Molecular Virology Laboratory, made a breakthrough discovery which may lead to new treatment options for those suffering with HIV.

His finding has shown how the virus successfully inhabits the human body.

The finding is a milestone in better understanding this devastating disease and could have great implications in how HIV is treated.

HIV is at pandemic proportions, with African and Asian nations suffering greatly. HIV strains are becoming increasingly resistant to treatments that are currently available.

While new treatments based on this finding are some years away, these results give researchers a new target to focus on for treatments.

Mental health/complex disorders

Mental Health

One in two Australians will suffer from mental ill health sometime during their life. 75% of these disorders emerge before the age of 25 years.

In response to this growing health crisis, QIMR's Mental Health and Complex Disorders Program Coordinator, Professor Michael Breakspear, is working to develop a diagnostic test for depression.

By analysing people's facial expressions and eye movements during emotive film clips, and comparing depressed patients' reactions to those of healthy members of the community, Professor Breakspear and his team hope diagnosing depression will become easier and more efficient.

Asthma

For 1 in 10 Australians, asthma is part of their everyday life. Every year asthma attacks are responsible for one million work days lost, 36,000 hospital admissions and about 400 deaths.

Dr Manuel Ferreira, Head of QIMR's Asthma Genetics team, has launched a trial to investigate if a rheumatoid arthritis medication could have applications for asthma sufferers.

Asthma is complex, but trialling this potential treatment is helping researchers put together a clearer picture of asthma and hopefully offer more treatment options for sufferers.

Education Program

To address the decline in the number of students completing science based degrees and to ensure a supply of quality researchers into the future, QIMR's Education Program aims to inspire the scientists of tomorrow. Over 1,000 senior school students and their teachers from all around Australia have toured QIMR this year and heard first hand from researchers about science and potential career options. This included 700 students attending the annual High School Lecture Series and more than 40 students placed in QIMR laboratories as part of the school work experience program.

Other outreach educational activities included QIMR staff participating as judges in Kelvin Grove State College's Science Fair and visiting James Nash and Gympie State High Schools to carry out experiments and discuss careers in science.

Community engagement

QIMR strongly values the support of the community and is committed to keeping the public informed about its research outcomes.

The External Relations Department's Community Engagement Program aims to increase community awareness, support and involvement in QIMR's research. During the past year over 3,400 people from 77 different community groups toured QIMR or heard from a QIMR guest speaker. QIMR also kept the community informed through a series of research roadshows hosted at Mt Gravatt, Indooroopilly, Caloundra and Redcliffe.

QIMR's public seminar program continues to provide opportunities for members of the public, community groups, and health specialists to hear from the Institute's researchers. This year, a Cancer Forum was held on 10 August 2011 and a Malaria and Mosquitoes Forum on 23 April 2012.



A community group enjoying a tour of QIMR

Case Study

QIMR has teamed up with state and local government to monitor outbreaks of the main mosquito-borne diseases affecting Queenslanders; Ross River virus, Barmah Forest virus and now dengue fever.

The VEDS (Vector-borne Disease Early Detection and Surveillance) system allows public health officials to monitor the number of confirmed cases of the mosquito-borne diseases within local government areas in Queensland.

Headed up by QIMR's Malaria Drug Resistance and Chemotherapy Laboratory; the online system identifies increased disease occurrence, which allows public health officials to issue area-specific warnings to local residents to take extra precautions against mosquito bites and reduce water-filled containers which provide breeding sites for mosquitoes.

INTERNATIONAL REPUTATION



QIMR is an internationally recognised centre for medical research, attracting researchers, funding and collaborators from around the world. QIMR's research community consists of researchers and students from all continents, reflecting its position on the world stage.



Case Study

QIMR is leading the way in finding new drugs to treat malaria, securing international support to expand clinical trials in Brisbane.

The world renowned Swiss-based Medicines for Malaria Venture (MMV) is supporting the expansion of QIMR's clinical trials of anti-malarial drugs and vaccines.

MMV's support is allowing QIMR to carry out further testing of new malaria drugs on humans with increased accuracy

A team led by physician and QIMR researcher, Professor James McCarthy will continue to test emerging drugs and vaccines to treat and prevent malaria and help protect our neighbours in developing nations.

Malaria is responsible for up to one million deaths in Asian and African nations every year, but Australia is not immune – there are up to 600 cases here each year.

QIMR is carrying out ongoing trials of malaria treatments on human volunteers who are infected with low doses of malaria parasites and are then treated with anti-malarial drugs and vaccines. By analysing the immune response of the volunteers, the team can measure the efficacy of these treatments.

The volunteers are closely followed using a very sensitive test that measures the DNA of malaria parasites in the blood. This allows QIMR to treat the volunteers with antimalarial drugs before they become sick.

While many new drugs and vaccines are being developed, it is very difficult to determine which are the best to take to areas impacted by malaria and QIMR requires volunteers' help in better focussing potential malaria treatment regimes.

This vital funding from MMV highlights the work QIMR is carrying out to better treat and manage this devastating disease.

Page 4

International lectures

QIMR Researchers attended and presented at over 140 lectures throughout the world, reflecting its strong international reputation. Specific examples for 2011–12 include:

- Professor Kum Kum Khanna presented on defective genome maintenance and breast cancer targets at Queen University Belfast, Centre for Cancer Research and Cell Biology, Ireland.
- Professor Nick Martin lectured on the progress in understanding the genetics of moliness and melanoma at the 14th International Congress on Twin Studies in Florence, Italy.
- Dr Ting Wei presented on host cell factors regulating HIV-1 replication at the Society of Cell Biology in Bejing, China.

For a full list of international lectures please see our Invited Lectures table on page 118.

Major international collaborations

Collaborations are important for sharing resources and expertise, facilitating joint research and publications and building networks and relationships, all of which are essential for scientific excellence. QIMR has a diverse research program as demonstrated by the extensive range of international collaborations including the following:

| Project | Research | Collaborating countries | |
|---|--|---|--|
| CANCER PROGRAM | | | |
| Ovarian Cancer Association Consortium | Studying genetic and environmental risk factors to inform preventive efforts, screening, future drug development and treatment. | Belgium, Canada, Denmark, Finland, Germany, Japan, The Netherlands, Poland, UK, US | |
| Breast Cancer Association Consortium | Analysing genetic and epidemiological data from breast cancer studies from around the world. | Belgium, Canada, Cyprus, Denmark, France, Finland, Germany, Ireland, Italy, Japan, Korea, Malaysia, Mexico, The Netherlands, Nigeria, Norway, Poland, Russia, Singapore, Spain, Sweden, Taiwan, Thailand, UK, US | |
| International Melanoma Genetics Consortium | Identifying new melanoma risk genes and assessing genetic and environmental interactions | Argentina, Brazil, Chile, Colombia, France, Germany, Israel, Italy, Latvia, Mexico, The Netherlands, Poland, Scotland, Slovenia, Spain, Sweden, UK, US, Uruguay | |
| Consortium for Investigators of Modifiers of BRCA1/2 (CIMBA) | Working on genetic modifiers of cancer risk in BRCA1 and BRCA2 mutation carriers. The aim of CIMBA is to provide sufficient sample sizes to allow large scale studies in order to evaluate reliably the effects of genetic modifiers | Austria, Belgium, Canada, Colombia, Czech Republic, Denmark, Iceland, Italy, Latvia, Lithuania, Germany, The Netherlands, France, Hungary, Pakistan, Poland, Portugal, Korea, Russia, Italy, Malaysia, Singapore, Israel, Spain, South Africa, Sweden, UK, USA | |
| Collaborative Group on Hormonal Cancers | | Canada, Denmark, Germany, Israel, Italy, The Netherlands, Poland, Sweden, UK, US | |
| kConfab (Kathleen Cunningham Foundation Consortium for Research into Familial Breast cancer) | Understanding the genetics of familial breast cancer | Australia, New Zealand | |
| Colon Cancer Family Registry | Increasing the understanding of multiple factors affect familial colorectal cancer | Canada, New Zealand, Spain, US | |
| PRACTICAL | Searching for genetic markers and prostate cancer risk | Sweden, Denmark, Japan, USA, Norway, Bulgaria, Ireland, Spain, Romania, Sweden, Finland, Thailand, India, UK, Germany, USA, Switzerland, China | |
| INFECTIOUS DISEASES PROGRAM | | | |
| Eliminate Dengue Project | Developing a biological control to eliminate dengue fever funded by the Bill and Melinda Gates Foundation and Foundation for the National Institutes of Health | Vietnam and UK, US, | |
| International Research Alliance for Schistosomiasis Elimination | Developing strategies for eliminating schistosomiasis from developing countries worldwide | US, Switzerland, Mexico, UK and China | |
| MENTAL HEALTH/COMPLEX DISORDERS PROGRAM | | | |
| International Schizophrenia Consortium | Identifying the genetic causes of schizophrenia | Ireland, Sweden, UK, US | |
| Psychiatric Genome Wide Association Studies Consortium | Analysing the genetic causes of Attention Deficit and Hyperactivity Disorder, autism, bipolar disorder, major depressive disorder, and schizophrenia | US and Sweden | |
| Evidence-based Network for the Interpretation of Germline Mutant Alleles (ENIGMA) consortium | | France, USA, The Netherlands, Germany, Italy, UK, | |

QIMR researchers have collaborated with:

| Program | Project |
|----------------|---|
| North America | AMGEN, Albert Einstein College of Medicine, Broad Institute, Dana-Farber Cancer Institute, Fogarty Institute, Fred Hutchinson Cancer Research Center, Harvard Medical School, Johns Hopkins University, New York University, National Cancer Institute, MD Anderson Cancer Center, MIT, McGill University, Sanford-Burnham Medical Research Institute, Scripps Research Institute, Stanford University, TGen Institute, University of Colorado, University of Michigan, University of Missouri , University of Minnesota, US National Institutes of Health, University of North Carolina, University of California (Berkeley, Irvine and Los Angeles), University of Florida, University of Texas, University of Toronto, University of North Carolina, Washington University School of Medicine |
| UK | Cardiff University, Durham University, Hospital for Tropical Diseases in London, King's College London, Oxford University, The Roslin Institute, Sanger Institute, University of Bristol, University of Cambridge, University College London, University of Edinburgh |
| Asia | Banaras Hindu University, Chinese Academy of Sciences in Shanghai and Beijing, Chinese Center for Disease Control and Prevention in Shanghai, Chinese National Human Genome Center in Shanghai, Hunan Institute of Parasitic Diseases, Jiangxi Institute of Parasitic Diseases, The Kala-Azar Medical Research Centre, Khon Kaen University, Nanyang Technological University in Singapore, National Institute of Parasitic Diseases, Ningxia Medical College, Okayama University, Research Institute for Tropical Medicine in Manila, University of Hong Kong, Xinjiang Veterinary Research Institute |
| Africa | Ifakara Health Institute |
| Europe | Centre National de la Recherche Scientifique, Charité - Universitätsmedizin Berlin, Foundation for New Innovative Diagnostics, Vrije Universiteit Amsterdam, University of Helsinki, Johannes Gutenberg University Mainz, Karolinska Institutet, Leiden University Medical Center, Ludwig Institute for Cancer Research in Brussels, Lund University, Nestlé Research Center, University of Barcelona, University of Bonn, University of Heidelberg, University of Oviedo, Rotterdam University, Vrije Universiteit Amsterdam |
| Pacific region | University of Otago |
| Global | World Health Organization, Epidemiology of Endometrial Cancer Consortium, Collaborative Group on Hormonal Cancers |

QIMR is leading the way in finding new drugs to treat malaria, securing international support to expand clinical trials in Brisbane.





Our Research Achievements

Our research makes a real difference to the health of people throughout the world

CANCER PROGRAM



Coordinator: Professor Georgia Chenevix-Trench

The Cancer Program covers a variety of topics, including:

- Identification of the genetic, epigenetic and environmental risk factors that underlie an individual's risk of cancer;
- Studying the molecular changes that occur in precursor lesions that can give rise to cancer and those that occur during the formation of a tumour and its subsequent metastasis; and
- Development and testing of novel therapies for cancer in the laboratory and in clinical trials.

The Program has a strong focus on skin cancers, including melanoma; hormone-related cancers, such as those of the breast, prostate, ovary and endometrium; leukaemia and lymphoma, including exploring the complications that can arise after stem cell transplantation, which is used for the treatment of leukaemia; brain tumours; and tumours of the gastrointestinal tract.

Members of the Cancer Program have productive local and national collaborations with clinical oncologists, pathologists and biobanks, and many are also leading, or are involved in, large international consortia that have made great advances into the understanding of the genes that predispose individuals to many types of cancer.

Antigen Presentation and Immunoregulation

Group Leader: Dr Kelli MacDonald

The Antigen Presentation and Immunoregulation Laboratory aims to investigate how donor and host antigen presenting cells (APCs) respond following bone marrow stem cell transplantation (SCT). Basic research in immunology using pre-clinical models follows three streams: APC development, antigen presentation, and APC induced T cell responses and their regulation. Importantly, these studies should lead to the development of new therapeutic protocols that can be translated to clinical practice to improve transplant outcome.

Highlights:

- Received NHMRC project grant funding to study the role of antigen presenting cells in chronic graft-versus-host disease (GVHD).
- Identified for the first time a CD8+FoxP3+ regulatory T cell (Treg) population that develops following stem cell transplantation and is highly effective in suppressing GVHD. Furthermore, the group has developed strategies to specifically expand this population in vivo, highlighting the capacity to manipulate this population to control GVHD.
- Demonstrated that the immune-suppression in patients with GVHD results from corrupted antigen presentation post-transplant.
- Identified non-haematopoietic APC responsible for the induction of GVHD.

Bone Marrow Transplantation

Senior Scientist: Professor Geoff Hill

The Bone Marrow Transplantation Laboratory uses pre-clinical transplant models to dissect the immunological mechanisms of transplant rejection and aims to improve patient outcome through new therapies to prevent and treat GVHD. Research focuses on pathways of alloreactivity leading to GVHD and graft-versus-leukaemia (GVL) effects. The ultimate aim is to generate testable therapeutic interventions that attenuate GVHD and improve GVL.

Highlights:

- Defined the type of cells involved in antigen presentation after bone marrow transplantation.
- Defined IL-6 as a major pathological cytokine during GVHD.
- Characterised a new regulatory T cell subset.
- Characterised type I interferon as the major cytokine controlling anti-leukaemia effects after BMT.
- Characterised defects in immune function induced by GVHD.

Cancer Aetiology and Prevention

Team Head: Dr Rachel Neale

The Cancer Aetiology and Prevention team covers three broad research areas: causes and management of pancreatic cancer; role of vitamin D in human health; and causes and management of non-melanoma skin cancer.

- Completed pancreatic cancer study recruitment and H. pylori serology analysis, ascertaining diagnoses for all cases and collated data in preparing for trends analysis.
- Secured funding from the National Institutes of Health for a genome-wide association study.

- Completed D-Health pilot study and submitted the results towards an NHMRC grant.
- Described the viral load of cutaneous human papillomavirus (HPV) in organ transplant recipients compared with immunocompetent people.
- Published a description of management of patients with pancreatic cancer in Queensland showing variability in survival according to treatment location.

Cancer and Population Studies

Senior Scientist: Professor Adèle Green

The Cancer and Population Studies Group aims to understand the causes of cancer and how to better prevent and manage cancer. The group investigates the roles of environmental and personal factors in the causation of cancer and its precursors, and in cancer prognosis. The group collaborates with clinicians, statisticians and behavioural scientists and also with laboratory scientists to better understand the underlying mechanisms of carcinogenesis. Particular focuses currently are cancers of the skin and of the colon.

Highlights:

• Published the first analysis of 20-year survival rates for people diagnosed with melanomas measuring less than 1mm in thickness.

Cancer Control

Group Leader: Professor David Whiteman

Research undertaken by the Cancer Control Group is conducted with a view to reducing the burden from cancer through identifying risk factors, then translating these research findings into policy and practice. This includes research to identify the environmental and genetic factors that cause cancer, as well as research into early diagnosis, treatment and survival.

- Published an analysis showing the lifetime cost-effectiveness of skin cancer prevention in Queensland through promotion of daily sunscreen use.
- Published a paper describing the diagnostic usefulness of testing adenomas for mismatch repair protein expression to detect gene mutation carriers with Lynch syndrome.
- Published the largest study of serrated polyposis patients and the types and frequency of polyps that are present in the colon of these patients.
- Awarded a poster prize at Australian Epigenetics meeting in Adelaide in May 2012 for the group's work describing the association between methylation levels of DNA repetitive elements and colorectal cancer.

- Hosted an international scientific meeting on skin cancer in Brisbane.
- Published more than 20 papers arising from studies on Barrett's oesophagus and oesophageal cancer.
- Completed recruitment of more than 43,000 Queenslanders for the QSkin Study.
- Expanding the QSkin study to collect DNA samples from study participants.
- Described the prevalence and predictors of *Helicobacter pylori* infection in the Australian community.
- Described the prevalence and predictors of gastro-oesophageal reflux in the Australian community.
- Quantified the role of non-steroidal anti-inflammatory drugs and *Helicobacter pylori* on the risk of Barrett's oesophagus.
- Described the influence of smoking and alcohol on survival from oesophageal squamous cell carcinoma.
- Developed clinic-based risk prediction tools for Barrett's oesophagus.

Cancer Genetics

Laboratory Head: Professor Georgia Chenevix-Trench

The Cancer Genetics Laboratory investigates why some people get cancer, and how these cancers, particularly those of the breast, ovary and stomach, develop from a normal cell. The laboratory also looks at why these cancers are often found together in the same families and share many similar characteristics.

Highlights:

- Discovered that genetic variants in TTC39B, a gene know to be associated with high density lipoprotein (cholesterol) levels, are associated with outcome after treatment for ovarian cancer. The group has started to study the functional effects of these variants.
- Identified strong and complex associations which indicate multiple TERT roles in controlling telomere length, and breast and ovarian cancer development.

- Discovered that having a germline mutation in BRCA1 or BRCA2 is associated with improved five-year overall survival.
- Identified the first modifiers of ovarian cancer risk for BRCA1 and BRCA2 mutation carriers.
- Showed that women carrying certain mutations in the ATM gene demonstrate a significantly increased risk of breast cancer, with a penetrance that appears similar to that conferred by germline mutations in BRCA2.
- Described a new autosomal dominant syndrome, called gastric adenocarcinoma and proximal polyposis of the stomach (GAPPS). The group have identified several families with this disease, which will help to find the underlying mutation.
- Evaluating the role of EGFR mutations in breast cancer by developing *in vitro* and *in vivo* models.

Cancer Immunotherapy

Laboratory Head: Dr Chris Schmidt

A principal aim of the Cancer Immunotherapy Laboratory is to develop, optimise, and apply immunologically based therapies for solid cancers. The focus of research in this laboratory is on understanding how the immune system succeeds in its fight against malignancies, which is central to the future development of cancer immunotherapies. In general, these therapies involve the manipulation of human cells (usually tumour cells and blood-derived cells from the patient) in the laboratory before re-injection. The product is designed to stimulate the patient's immune system to kill or suppress the tumour, similar in concept to familiar vaccines.

The laboratory has developed a platform technology for manufacturing dendritic cell-based vaccines that can

be cryopreserved, allowing timely, uniform and relatively economical delivery.

Highlights:

- Utilised bioinformatic tools for generating mutation data from exome sequencing.
- Developed and refined lentiviral constructs for monitoring anti-cancer immune responses cancer immunity and successfully tested in both cancer and infectious disease models.
- Generating and banking melanoma cell lines. This is an ongoing, NHMRC grant-funded biobank project that has attracted high levels of research interest.

Cancer Council Queensland Transgenics

Laboratory Head: Associate Professor Graham Kay

The CCQ Transgenics Laboratory studies the epigenetic mechanisms that act during embryonic development to modulate gene expression and the role of tumour suppressor genes in preventing cancer. The laboratory is focusing on Smchd1, an epigenetic modifier that was previously demonstrated to be involved in X inactivation. The function of Smchd1 may impact diverse diseases ranging from X-linked and genomic imprinting disorders, to psychiatric disorders.

- Used microarray gene expression analysis to show that several classes of autosomal genes that are normally subject to monoallelic expression are deregulated by loss of Smchd1.
- Demonstrated loss of monoallelic expression in the absence of Smchd1 using methods based on next generation sequencing.
- Showed that compound deletion of all of the pocket proteins (Rb1, Rbl1 and Rbl2) is required for the development of melanoma in mice, and tumour growth is accelerated by co-deletion of p53.

Clinical Immunohaemotology

Group Leader: Associate Professor Maher Gandhi

The major research interests in the Clinical Immunohaemotology Group involve viral and immune biomarkers, immuno-evasion, viral micro-RNA expression and optimisation of cellular immunotherapies for virus associated lymphomas.

The research aims to understand the basis of lymphoma to devise new treatments that are less toxic and more effective; to establish new biomarkers which will help determine the most effective treatment strategies and to monitor response and relapse and understand the development of lymphomas.

Highlights:

- Completed a Phase I trial of adoptive immunotherapy.
- Contributed to an international study of a novel humanised mouse lymphoma, published in *The Journal of Clinical Investigation*.
- Performed an in depth profile of viral microRNAs in a range of primary samples from histologically diverse EBV-positive lymphomas.
- Completed the third year of a multi-centre Phase II lymphoma trial, in which the group's role is to perform a correlative laboratory study.
- Established the genetic susceptibility to immune thrombocytopenic purpura.
- Established the role of cell-free specific/non-specific DNA as a biomarker in lymphoma.
- Characterised the genetic basis for late onset neutropenia in aggressive lymphoma.
- Developed novel tissue based biomarkers for lymphoma.

Conjoint Gastroenterology

Laboratory Head: Professor Barbara Leggett

The main focus of the Conjoint Gastroenterology Laboratory is in understanding the molecular, histological, clinical and epidemiological features of a particular class of polyps called serrated polyps, as well as the cancers they may develop into. The group is studying a large series of colorectal polyps and cancers using technologies to examine genome-wide changes in DNA methylation, gene expression and copy number variation. The laboratory aims to identify molecular changes associated with high risk of polyp progression, and to identify key pathways altered in colorectal cancer subgroups.

Highlights:

- Completed a proof of principle pilot DNA methylation microarray project that identified cancer subgroups based on BRAF and KRAS mutation status, as well as identifying genes hypermethylated in these cancer subgroups.
- Described a new type of chromosomal instability associated with BRAF mutation that is defined by regional copy number variation.
- Developed a mouse model that has inducible, colon specific, BRAF V600E mutant over-expression and this is being assessed for its contribution to the initiation or progression of bowel cancer.

Drug Discovery

Group Leader: Professor Peter Parsons

The Drug Discovery Group combines expertise in cancer biology with genomics and drug discovery. Cell communication networks in serious cancers reveal responses that provide opportunities for prevention and treatment.

- Developed an analytical method for the novel anti-cancer drug EBC-46, pending Phase I clinical trial in humans.
- Optimised a formulation for EBC-46, suitable for injection into humans.

- Identified a range of cytokines induced by EBC-46 in cultured cells and *in vivo*.
- Expressed all PKC isoforms in tagged (GFP) form, and defined their translocation in tumour cells treated with PKC activating drugs, including EBC-46.
- Utilised whole genome expression profiling for squamous cell carcinoma with perineural invasion.
- Validated growth promoting activity of a specific melanoma transcription factor.

Epigenetics

Senior Scientist: Professor Emma Whitelaw

Epigenetics is the study of mechanisms which modify DNA structure in subtle ways, and thus change gene expression, without influencing the DNA base sequence.

Characteristics like physical appearance and personality traits are commonly considered to be the result of interactions between genetic and environmental factors alone, however genetically identical individuals, raised in similar environments, for example identical twins, show variation in some phenotypes. These variations may be the result of epigenetic differences between these individuals.

Gynaecological Cancers

Group Leader: Associate Professor Penny Webb

The Gynaecological Cancers Group investigates all aspects of cancer, particularly gynaecological cancer, from aetiology to diagnosis, patterns of care, quality of life and survival. A particular focus is on the role of environmental (non-genetic) factors and the interaction between genetic and environmental factors in the causation of gynaecological cancer. More recently, this has extended to assessing how gynaecological cancers are managed in Australia and investigating the role of lifestyle in determining quality of life and survival after a diagnosis of cancer. Much of this work is conducted within three national population-based studies: the Australian Ovarian Cancer Study (AOCS), the Ovarian Cancer Patterns of Care Study (POCS) and the Australian National Endometrial Cancer Study (ANECS).

Highlights:

- Awarded a \$1.75 million NHMRC grant for the Ovarian Cancer Prognosis and Lifestyle (OPAL) Study looking at how potentially modifiable aspects of lifestyle might influence patient outcomes.
- Showed that physical activity is associated with improved quality of life among women with ovarian cancer and that an individualised walking program for women undergoing chemotherapy would be feasible.
- Completed an international pooled analysis that confirmed that women with a history of endometriosis are at increased risk of certain subtypes of ovarian cancer.
- Published an analysis showing that among women with ovarian cancer, obesity is associated with a poorer outcome.
- Used an international pooled analysis to find that overweight and obese women are at increased risk of some subtypes of ovarian cancer.

Human Immunity

Team Head: Dr John Miles

The Human Immunity Laboratory studies the immune processes which determine the host's response to infectious disease, cancer and innocuous agents. The team's research focuses on T cells and their ligands, exploring receptor genetics, biology, engagement and molecular structure across a number of human disease systems. The team used information from these basic studies to modify T cell interactions and T cell repertoires for use in rational vaccine design and therapeutic interventions.

- Led the first comprehensive transmission control protocol repertoire analysis in human Hepatitis C virus infection.
- Involved in a landmark study revealing that a single T cell can recognise more than one million different antigens.
- Authored three reviews in immune receptor genetics, immune receptor structure and biophysics and T cell alloreactivity.
- Involved in uncovering a role of immune receptor sequence variation on immune function.
- Participated in identifying the structural basis of beta-cell killing in diabetes.
- Involved in identifying the functional and structural basis of drug hypersensitivity.

Leukaemia Foundation of Queensland Laboratory

Group Leader: Professor Andrew Boyd

The Leukaemia Foundation of Queensland Laboratory is exploring the biology of leukaemia and other cancers through studies of leukaemia-associated proteins. A major project is to understand the function of Eph and ephrin membrane proteins in cancer. Members of these protein families are highly expressed in many human cancers where, by actively promoting de-adhesion of cells, they contribute to tumour spread and invasion. The laboratory explores how these

Membrane Transport

Group Leader: Associate Professor Nathan Subramaniam

The major focus of the Membrane Transport Group is aimed at understanding how iron levels in the body are regulated, the genes involved, their mechanism of action, and the role iron plays in various disorders including liver disease and cancer. proteins function in a number of cancers through work in animal models and through *in vitro* studies.

Pre-clinical models have shown that both antibodies which target Eph proteins and soluble forms of their ephrin ligands can be used to target tumours and inhibit tumour growth.

Highlights:

- Discovered the role of EphA3 in glioma.
- Defined the role of Fat1 in leukaemia.

Highlights:

- Showed that a high fat, high carbohydrate diet in the presence of excess iron leads to steatohepatitis and fibrosis. Current studies are aimed at finding possible therapeutics.
- Demonstrated that iron accumulation in the liver does not reflect iron loading or other organs in mouse models of haemochromatosis.
- Identifying mutations in patients with non-HFE haemochromatosis.
- Developed novel diagnostic tools for the rapid screening of genes involved in iron metabolism.

Molecular Cancer Epidemiology

Group Leader: Associate Professor Amanda Spurdle

The Molecular Cancer Epidemiology Laboratory studies breast, ovarian, endometrial, colon and prostate cancer, with a focus on identifying molecular signatures of normal and tumour tissue that can point to the genetic and environmental causes of these cancers. The laboratory covers a range of projects with the themes of cancer epidemiology and molecular pathology.

- Initiated a quality control study of splicing studies used clinically, across over 20 sites internationally.
- Publicised the ENIGMA international consortium for classification of variants in BRCA1 and BRCA2.
- Identified a common variant near the CAPN9 gene that is associated with risk of endometrial cancer in Asians and Caucasians.
- Demonstrated that colorectal tumour features have value in multifactorial models to assess clinical significance for MMR gene variants.

Oncogenomics

Laboratory Head: Professor Nick Hayward

The Oncogenomics Laboratory identifies novel cancer genes and studies the way in which defects in these genes are associated with cancer predisposition or development. In particular, the group focuses on melanoma, oesophageal cancer, and endocrine tumours.

The laboratory is interested in investigating the process of cancer development at the level of individual cancer predisposition genes, and by looking at the whole genome scale. Better understanding the genetic events that cause cancer is hoped to lead to better ways of diagnosing or treating cancers in the future.

Highlights:

- Used whole genome expression array profiling to highlight differences in mucosal defense genes in Barrett's oesophagus.
- Conducted a meta-analysis of the effects of the melanocortin-1-receptor on risk of cutaneous melanoma.
- Assessed contribution of polymorphisms in nevus-associated genes MTAP, PLA2G6, and IRF4 to risk of cutaneous melanoma.
- Identified COL1A2, THBS1, TNFRSF10D and UCHL1 as genes frequently silenced by methylation in melanoma.
- Contributed to two genome-wide association studies of melanoma which identified five new susceptibility loci.
- Identified a novel recurrent mutation in MITF, which predisposes to familial and sporadic melanoma.
- Found frequent somatic mutations in MAP3K5 and MAP3K9 in metastatic melanoma.
- Conducted a meta-analysis of the effects of the TERT-CLPTM1L locus on melanoma risk.
- Developed a high-throughput panel for identifying clinically relevant mutation profiles in melanoma.
- Identified TFG as a putative metastatic melanoma tumour suppressor gene.
- Showed that menin and p53 have non-synergistic effects on endocrine tumorigenesis in mice.

Radiation Biology and Oncology

Group Leader: Professor Martin Lavin

The Radiation Biology and Oncology Group is focused on three areas of research:

- Investigating the molecular basis of autosomal recessive ataxias including ataxia-telangiectasia (A-T) and ataxia oculomotor apraxia type 2 (AOA2);
- 2. Early detection of prostate cancer; and
- 3. Venomics-developing a serum tube for analyte determination.

- Generated the first stem cells from patients with ataxia-telangiectasia.
- Produced two rat models for ataxia-telangiectasia.
- Generated first mouse model for ataxia oculomotor apraxia type 2.
- Identified new autophosphorylation sites during ATM activation.
- Demonstrated that ATM-dependent Rad50 phosphorylation is important in DNA repair and cell cycle control.
- Demonstrated a novel role for SMG-1 protein in stress granule formation.
- Cloned and characterised genes from a snake venom gland.
- Screened over 100 prostate cancer patients for gene expression and metabolic markers. The aim is to discover biomarkers to diagnose and determine prognosis of the cancer.

Signal Transduction

Group Leader: Professor Kum Kum Khanna

The Signal Transduction Group's major focus of research is on signalling pathways that maintain genome stability during normal cell division cycle and in the face of DNA damage. The group seek to exploit dysregulation of these pathways in breast cancer to develop new targeted therapeutic approaches.

Highlights:

• Demonstrated that Exo1 plays a predominant role in DNA end resection for DNA damage repair and signalling decisions in human cells.

- Identified Skp2-mediatetd NBS1 ubiquitination as a vital event for ATM activation in response to DNA damage.
- Characterised a novel role for FBX031 as the potential mechanism of resistance of breast cancer cells to standard anti-mitotic drugs (paclitaxel).
- Provided mechanistic explanation as to how altered expression of INT6 might relate to breast cancer development.
- Analysed mutant p53 gain of function to provide a molecular explanation of multinucleation phenotype.
- Tested EGFR-directed radio-immunotherapy in combination with other systemic therapies for treatment of triple negative breast cancer.

Skin Carcinogenesis

Laboratory Head: Dr Graeme Walker

The Skin Carcinogenesis Laboratory focuses on the use of mouse models to investigate the interaction of genetic and environmental factors in melanoma development and in particular how ultraviolet radiation (UVR) initiates melanoma.

Highlights:

- Used a novel method of gene identification using recombinant inbred mouse strains to discover new genes for naevus and melanoma susceptibility. Some of these genes not only confirm human melanoma genome wide association hits, but mice carrying these genes provide models to determine how these genes control melanoma development.
- Developed the first system for staging musing melanomas, greatly improving the utility of mice for genetic and pre-clinical drug studies in melanoma.

Statistical Genetics

Team Head: Associate Professor Stuart MacGregor

The Statistical Genetics Team studies the role that genetic variation plays in determining risk of disease and its risk factors. The laboratory develops and applies statistical genetic methods to gene mapping studies across a wide range of traits and diseases.

One major focus is understanding genetic and epigenetic variation in various cancers. Cancers studied include melanoma, ovarian cancer, breast cancer and oesophageal cancer. Ultimately this work will lead to better understanding of why particular individuals are affected by cancer or why they respond poorly to cancer treatment.

Another major interest is ophthalmological genetics, with work ongoing to identify the specific genes involved in both eye disease and in underlying quantitative risk factors.

- Identified new genes underlying melanoma susceptibility implicating new biological pathways in melanoma risk. These new findings are remarkable as they are among the first to find genetic variation underlying new biological mechanisms (DNA repair, tumour formation).
- Identified a novel recurrent mutation in the gene MITF (using whole genome sequencing) that predisposes to familial and sporadic melanoma.
- Identified a gene underlying the eye condition keratoconus.
- Showed that variants in the gene TERT are important in determining risk of various cancers including melanoma and ovarian cancer.
- Investigated why some women with ovarian cancer respond well to chemotherapy while others do not.

Tumour Immunology

Group Leader: Professor Rajiv Khanna

The major goal of the Tumour Immunology Laboratory is to obtain a deeper understanding of the mechanisms by which an immune response to tumours may be generated, augmented and exploited for the treatment of these cancers.

Highlights:

- Completed Phase I clinical trial on adoptive immunotherapy for stage IV nasopharyngeal carcinoma (in collaboration with University of Hong Kong).
- Developed novel T cell based therapy for the treatment of brain cancer, glioblastoma.
- Completed pre-clinical studies on the prophylactic vaccine for human cytomegalovirus to prevent birth defects.
- Completed clinical testing of a new diagnostic test to predict cytomegalovirus-associated complications in transplant patients.

Translational Leukaemia Research

Team Head: Dr Steven Lane

The Translational Leukaemia Research Team is researching myeloid blood cancers such as acute myeloid leukaemia (AML), myelodysplastic syndrome (MDS) and the myeloproliferative neoplasms (MPN). These are very aggressive and rapidly fatal blood cancers that are among the most common types of cancer affecting Australians. The laboratory's efforts are concentrated on understanding how leukaemia stem cells in AML and MPN are able to regenerate leukaemia (or cause relapse in patients), even after cytotoxic chemotherapy. To achieve this, research has focused on generating robust models of leukaemia and dissecting the pathways of self-renewal in leukaemia stem cells and normal blood stem cells.

- Identified novel pathways of stem cell mobilisation.
- Identified genetic susceptibilities of leukaemia stem cells.

INFECTIOUS DISEASES PROGRAM



Coordinator: Professor James McCarthy

The laboratories that contribute to QIMR's Infectious Diseases Program study how a range of important pathogenic organisms cause illness, search for better ways to diagnose and treat them, and develop vaccines to prevent infections. A major emphasis of work is on infections that disproportionately affect people living in the developing world and tropical regions.

Pathogens studied include viruses such as HIV, CMV, EBV and mosquito-borne viruses; bacteria such as streptococci; and parasites such as malaria, intestinal protozoa, worms and scabies. One laboratory in the program focuses on the application of proteomic technology to biomedical science.

The Program continues to focus on strong collaborations with clinicians and researchers from within QIMR and other

institutes, as well as working with pharmaceutical companies to develop patented therapeutic technologies that improve the health of many.

QIMR is a founding member of the Queensland Tropical Health Alliance (QTHA), which is designed to enhance collaborations and networking in tropical health issues, and the Australian Infectious Diseases Research Centre (AID), which supports research into diseases such as malaria, dengue fever and schistosomiasis. QIMR's collaboration with James Cook University, Griffith University and QUT, and UQ through the QTHA and with UQ through AID brings strength and focus for plans to address serious tropical and infectious disease issues through Queensland and across Australia, and in the Asia-Pacific region.

Bacterial Pathogenesis

Laboratory Head: Professor Sri Sriprakash

The Bacterial Pathogenesis Laboratory undertakes research into the two human pathogens *Streptococcus pyogenes* and *Streptococcus dysgalactiae* subsp *equisimilis*. *S. pyogenes* is a leading cause of bacterial related death in humans. *Streptococcus dysgalactiae* subsp *equisimilis* is a related species whose contribution to disease is only now being understood. These two bacterial species cause a number of diseases that target different organs in the body. The laboratory's research is aimed at understanding the pathogenic processes associated with infection by these organisms, and developing novel strategies to prevent streptococcal disease.

The group also has a research interest in bacterial colonisation of medical devices. The insertion of a catheter into a vein provides a portal by which bacteria can cross the skin and enter normally sterile body sites, thereby causing disease.

Bioinformatics

Team Head: Dr Lutz Krause

The Bioinformatics Team develops and applies bioinformatics methods in the context of biomedical research. It specialises in biomarker discovery, infectious diseases and genetics and epigenetics of complex disorders. The group is interested in characterising the pathogenic and non-pathogenic species that colonise these devices, identifying the sources of bacterial contamination, and ultimately developing novel technologies or practices that reduce device colonisation.

Highlights:

- Discovered that populations with widespread Streptococcus pyogenes and S. dysgalactiae subsp equisimilis colonisation exhibit increased recovery of novel recombinants with possible increased pathogenic potential.
- Designed and demonstrated the efficacy of recombinant vaccine candidate against *S. pyogenes* infection, which utilises variants from the conserved regions of the M protein. In this design, extraneous sequences for maintaining the conformation of the vaccine candidate have been eliminated.

Highlights:

- Published a scientific paper investigating if germline copy number variants (CNVs) are hotspots for tumour CNVs in breast cancer.
- Investigated if epigenetic genome state is a potential biomarker for long-term depression.
- Identified potential biomarkers for personalised treatment in oesophageal adenocarcinoma.
- Released Calypso software for mining, visualising and comparing multiple 16S rDNA samples.

Cellular Immunology

Group Leader: Associate Professor Scott Burrows

The Cellular Immunology Group focuses on the T cell immune response to viral infection, particularly Epstein-Barr virus which causes glandular fever and is associated with various malignancies and autoimmunity. The molecular interactions that control the specificity of T cells recognition of virus-infected cells are complex and could hold the key to preventing Epstein-Barr virus associated diseases. This major interest of the group has been examined this year from a number of perspectives.

- Showed that deletion of T cell receptor genes can influence antiviral immune responses in humans.
- Showed that drug hypersensitivity reactions can occur via drug-induced changes to the human leukocyte antigen-self peptide repertoire.
- Showed that T cell deficiency impairs control of Epstein-Barr virus and worsens with age in multiple sclerosis.
- Used x-ray crystallography to examine how several different T cell receptors recognise the same viral antigen, providing high resolution information that could be exploited in the future to improve the immune response to viral infection and to design new drugs to target virus-infected tumour cells.

Clinical Tropical Medicine

Senior Scientist: Professor James McCarthy

The Clinical Tropical Medicine Laboratory investigates how parasites such as the malaria parasite, hookworm, threadworm and scabies cause disease and how they become resistant to drugs used to treat them. The group also identifies new drugs and drug targets, and develops novel diagnostic techniques.

The focus of this laboratory is to apply modern techniques in microbiology, molecular biology and immunology to study clinical problems associated with infectious diseases in tropical environments. A particular interest in this laboratory is the study of drug resistance in a range of parasites, and the development of novel diagnostic techniques.

Highlights:

- Demonstrated the ability of the experimental human blood stage malaria challenge system to distinguish the relative activity of licensed antimalarial drugs.
- Demonstrated that a hallmark of early malaria infection is apoptosis of circulating dendritic cells, thereby resulting in impaired development of the immune response to malaria.
- Completed a clinical trial in pigs of an experimental drug for treatment of scabies.

Epstein-Barr Virus Biology

Laboratory Head: Professor Denis Moss

The Epstein-Barr Virus Biology Laboratory is focusing on screening the Ecobiotics plant library for two things: new adjuvants, which are needed for new generation vaccines, and immunologically active molecules that might be associated with immunosuppression.

Highlights:

- Isolated 15 extracts from the Ecobiotics plant library with a cytokine profile compatible with adjuvant activity.
- Purified and identified at the molecular level an extract with a distinct effect on human red blood cells (in collaboration with the Drug Discovery Group).
- Identified 25 extracts from the Ecobiotics plant library with apparent immunosuppressive activity.

HIV Molecular Virology

Group Leader: Dr David Harrich

The HIV Molecular Virology Laboratory analyses human immunodeficiency virus (HIV) replication. This includes the process by which HIV is able to convert its genetic material composed of RNA into a form compatible with human DNA. The laboratory's focus is the discovery of key viral or cellular molecules required for HIV to grow, and then to target their action to effectively block HIV growth.

- Discovered that a novel protein inhibitor of HIV called Nullbasic provided excellent protection from infection in human cells *in vitro*.
- Identified two cellular proteins that enable early steps of HIV-1 infection.
- Investigated unidentified host proteins that control the function of an important HIV-1 regulatory protein called Rev.
- Challenged the role of a host protein called PRMT6 as an HIV-1 restriction factor. The role of PRTM6 in regulating a critical HIV-1 protein called Tat, other than on increased protein stability, remains unclear.

Immunity and Vaccinology

Laboratory Head: Associate Professor Colleen Olive

The Immunity and Vaccinology Laboratory studies mechanisms linking innate and adaptive immunity, and has a strong focus on vaccine development for the prevention of rheumatic heart disease caused by group A streptococcus.

Highlights:

- Synthesised new group A streptococcal vaccine candidates based on two different virulence antigens for pre-clinical studies.
- Established how key immune cells called dendritic cells respond to group A streptococcal infection.

Immunology and Infection

Group Leader: Dr Christian Engwerda

The Immunology and Infection Laboratory continues to try and understand why some immune responses safely control parasite growth and protect against re-infection, whereas others cause disease during malaria and leishmaniasis. The research has moved from a primary focus on studying immune regulation during parasite infections in pre-clinical models of disease to validating our findings from these models using samples from patients and volunteers deliberately infected with the parasites that the laboratory works on.

Highlights:

- Conducted and participated in several human malaria challenge studies at Q-Pharm in collaboration with the Clinical Tropical Medicine Laboratory.
- Awarded an Australia-India Strategic Research Funding grant from the Australian Government to study immune modulation in samples from patients with visceral leishmaniasis in collaboration with colleagues in India.

Immunovirology

Group Leader: Professor Andreas Suhrbier

The Immunovirology Laboratory is developing and exploiting knowledge about interactions between viruses and the immune system to develop new anti-cancer, antiviral and anti-inflammation strategies.

Highlights:

- Illustrated the utility of ingenol mebutate for field-directed therapy of actinic keratoses to prevent future development of skin cancers
- Uncovered the similarity in the inflammatory disease seen in chikungunya virus and rheumatoid arthritis, which suggests drugs being developed for rheumatoid arthritis may find utility in the treatment of alphaviral diseases such as Ross River virus and chikungunya disease.
- Showed that deficiency in interferon responses in alphaviral infections is sufficient for haemorrhagic fever and shock.

Malaria Biology

Laboratory Head: Associate Professor Don Gardiner

The Malaria Biology Laboratory researches the molecular and cellular processes involved in critical phases of the malaria parasite life cycle in order to identify novel drug targets and to translate fundamental biological research into new interventions for the control of malaria. The laboratory has a fully integrated research program that uses established research methods in conjunction with recent advances in malaria transgenics, molecular modelling and *in vivo* and *in vitro* testing.

- Completed the first ever screen for anti-transmission blocking agents for malaria.
- Identified a novel orally bioavailable anti-malaria compound.
- Solved the crystal structure of the *P. falciparum* M18 aspartyl aminopeptidase.

Malaria Drug Resistance and Chemotherapy

Laboratory Head: Dr Michelle Gatton

The Malaria Drug Resistance and Chemotherapy Laboratory conducts research focused on malaria and locally relevant mosquito-borne diseases including Ross River virus and dengue. *Plasmodium falciparum* and *P. vivax* are responsible for millions of deaths annually in tropical regions of the world. Although understanding of the biology of the parasite has increased in recent years, the number of malaria-associated deaths remains high.

Highlights:

- Identified changes in the dormancy profile in parasites as artemisinin resistance develops.
- Developed a new statistical methodology to estimate the drug sensitivity of *ex vivo P. vivax* parasites, which can be used to detect stage-specific drug activity for new antimalarial treatments.

Malaria Immunology

Team Head: Dr Ashraful Haque

The Malaria Immunology Team use state of the art *in vivo* techniques to assess the immune response to *Plasmodium* infection. Our aim is to modulate the immune system to improve control of parasites.

- Developed a model for the dynamics of *P. falciparum* histidine-rich protein 2 in human malaria. The laboratory used it to show that good quality malaria rapid diagnostic tests should be able to detect parasites on the first day of symptoms.
- Expanded the Vector-borne Disease Early Detection and Surveillance (VEDS) System to include reporting of dengue cases in Queensland.
- As part of a global effort to reduce malaria morbidity, the laboratory is developing a mathematical model of *Plasmodium vivax* malaria transmission to predict the impact of control activities targeting this parasite. This work is particularly relevant for the Asia-Pacific region where *P. vivax* malaria dominates.
- Commenced a new project investigating the mechanisms of artemisinin resistance in *P. falciparum* parasites.

Highlights:

- Demonstrated that type I interferons suppress CD4+ T cell responses to *Plasmodium* infection.
- Uncovered an intimate relationship between parasite burden and CD8+ T cell immunopathology during murine severe malaria.

Molecular Parasitology

Group Leader: Professor Don McManus

The Molecular Parasitology Laboratory researches the biology, pathogenesis and epidemiology of parasitic worms that cause major clinical disease (schistosomiasis, echinococcosis (hydatid disease), soil transmitted helminthiases), with the aim of developing new public health interventions, including vaccines, and diagnostic procedures that will lead to their elimination through integrated control.

- Determined the diagnostic value of non-invasive biomarkers for stage-specific diagnosis of hepatic fibrosis in patients with advanced *Schistosoma japonica* schistosomiasis.
- Completed a five-year longitudinal study of schistosomiasis transmission in an endemic area in Sichuan Province, China.
- Undertook an extensive proteomic characterisation of *Echinococcus granulosus* hydatid cyst fluid from sheep, cattle and humans.

- Defined a role for peroxisome proliferator-activated receptors in the immunopathology of schistosomiasis.
- Determined that differential expression of chemokine and matrix re-modelling genes is associated with contrasting schistosome-induced hepatopathology in murine models.
- Demonstrated that migrating *S. japonicum* schistosomula induce an innate immune response and wound healing in the murine lung.
- Defined the risk factors for helminth infections in a rural and a peri-urban setting of the Dongting Lake area, China.
- Completed a five-year longitudinal assessment of the downstream impact on schistosomiasis transmission in China following closure of the Three Gorges Dam.
- Demonstrated that the insulin receptor is an effective transmission blocking veterinary vaccine target for zoonotic *S. japonicum*.

Molecular Vaccinology

Group Leader: Professor Denise Doolan

The Molecular Vaccinology Laboratory's research is focused on rational vaccine design, primarily for malaria, and encompasses core themes of:

- Basic research on immune mechanisms and adjuvant activity;
- Antigen and epitope discovery from genomic sequence data using protein microarrays and epitope prediction algorithms with biologically relevant laboratory and field specimens; and
- Pre-clinical research and development of antigen and epitope based molecular vaccine technologies.

Highlights:

- Identified four new malaria antigens as targets of infection-blocking protective immunity against malaria, and showed that antigen combinations are more effective than individual antigens.
- Established that antigens that are highly reactive for T cells are not dominant for antibodies and are highly

Mosquito Control

Laboratory Head: Professor Brian Kay

Research in the Mosquito Control Laboratory focuses on the biology and control of mosquito-borne viruses such as dengue, Ross River virus and Barmah Forest virus. This laboratory is designated by the World Health Organization (WHO) as an official global Collaborating Centre for Environmental Management for Vector Control.

It specialises in designing new mosquito surveillance and control strategies and has strong collaborative linkages with dengue prevention research groups in Vietnam and Australia. Mosquito Control researchers also work directly with State and local government in Queensland on mosquito control and all mosquito-transmitted arboviruses.

conserved; these data overturn conventional dogma and suggest that new strategies are required for T cell based vaccine development.

- Produced protein microarrays for *Plasmodium vivax* to identify excellent candidates for a malaria vaccine or diagnostic test.
- Identified an adjuvant that activates dermal dendritic cells, a specialised cell type shown to be important for cross-presenting antigens and activating CD8+ T cells.
- Developed a high throughput adjuvant screening assay to identify novel adjuvants to enhance cell mediated immunity.
- Showed that a natural product derived from rainforests can protect against malaria, in a mouse model.
- Evaluated a novel platform technology capable of presenting multiple epitopes from a complex pathogen in an authentic manner that maintains the native antigenic structure
- Evaluated the vaccine potential of a novel bacterial platform shown to be effective for drug delivery.

Highlights:

- Collaborated with successful north Queensland release of *Wolbachia* to reduce dengue transmission.
- Progressed in developing a number of age related proteins to measure the age of dengue and malaria vectors. Testing mosquito age can indicate the success of a mosquito control program.
- Continued to survey Brisbane households to document changes in household water storage practices since the drought, and to monitor the possible arrival of dengue vectors.
- Evaluated fungal pathogen *Beauveria* for mosquito control.

Parasite Cell Biology

Group Leader: Associate Professor Malcolm Jones

The Parasite Cell Biology Laboratory investigates schistosomiasis, a disease caused by infection with pathogenic blood flukes. This disease is responsible for substantial human misery in tropical developing nations, where it is a companion of poverty. The group's research involves the characterisation of molecules critical for survival of the parasites in the host, and searching for ways to disrupt these molecules in innovative control strategies.

- Conducted vaccine trials against a schistosome LAMP protein, showing moderate protection.
- Developed a method of cryo-preservation for consistent and reliable immuno-electron microscopy of schistosome surface proteins.
- Identified a family of 15 saposin-like molecules in schistosomes and demonstrated functional knockdown of the proteins in RNA interference studies.

Protein Discovery Centre

Laboratory Head: Professor Jeff Gorman

The QIMR Protein Discovery Centre is a state-of-the-art facility recognised as a world leader in the mass spectrometry and proteomics field and is one of the most advanced and best equipped of its kind in Australia. The centre collaborates broadly on both national and international projects.

The centre aims to discover the identities of proteins involved in and/or affected by physiological and disease processes and the ways in which these proteins function and interact and to develop techniques to observe stimulated cells and the reaction within cell proteins.

Highlights:

- Identified more than 5,500 protein groups at high stringency in lung epithelial A549 cells using advanced proteomic techniques developed in-house. This represents identification of approximately 20% of the theoretical proteome of any cell.
- Identified and quantified over 100 protein groups that are differentially expressed in respiratory syncytial (RSV) infected A549cells using a false discovery cut-off of 1%.

- Identified and quantified over 50 protein groups that are specifically regulated by the RSV non-structural protein 1 (NS1) using a false discovery rate to quantify protein expression in wild-type RSV compared to NS1-deficient infected A549 cells.
- Identified for the first time that RSV NS1 regulates interferon gamma dependent antiviral responses.
- Identified an epitope in RSV NS1 that potentially regulates the antiviral responses in RSV infected A549 cells.
- Determined that Newcastle disease virus is extensively adorned with post-translational modifications to the viral haemagglutinin-neuraminidase, fusion, nucleocapsid, phospho and matrix proteins, including greater than 40 unique phosphorylation events as well as at least 17 acetylations and several methylations.
- Advanced knowledge of protein expression in the matrix of developing cartilage chondrocytes.

Scabies

Laboratory Head: Dr Katja Fischer

Work in the Scabies Laboratory concentrates on the control of diseases caused by the scabies mites, *Sarcoptes scabiei*, which burrow under the skin to cause the condition commonly known as scabies.

Scabies mite infections and associated bacterial disease are a significant health problem, with limited available therapies. To protect itself from the host immune system the scabies mite produces proteins which, once released into the

Tropical Parasitology

Laboratory Head: Dr Kathy Andrews

Tropical Parasitology Laboratory focuses on the discovery and development of new antimalarial drugs and drug targets. A main focus is investigating histone deacetylase (HDAC) inhibitor action, both in terms of discovery of new small molecule inhibitors and applying chemical genetics to understand HDAC function in malaria parasites. Other key drug targets are the *P. falciparum* carbonic anhydrase and the non-digestive vacuole aspartic proteases. The group is also developing new tools for anti-malarial target identification, including application of a medium throughput biomolecular interaction platform. epidermis, also protect pathogenic bacteria that enter the infested area through the damaged skin surface. These mite molecules were determined to be inhibitors of the human complement system.

Highlights:

- Provided data to support a causal link between scabies and infections with group A streptococcus and *Staphylococcus aureus*.
- Initiated a comparative mite genome project.

- Discovered the antimalarial activity of anticancer HDAC inhibitor SB939.
- Used transcriptional profiling to investigate three structurally related HDAC inhibitors revealing alpha II tubulin is commonly upregulated.
- Established a new collaboration with CSIRO to screen the CSIRO compound library (>20,000 compounds) for antimalarial activity.

MENTAL HEALTH/COMPLEX DISORDERS PROGRAM

Coordinator: Professor Michael Breakspear

QIMR has brought teams from a variety of disciplines together into the Mental Health and Complex Disorders Program. While the disease focus is broad and multi-system, the program is united by a number of common conceptual and methodological themes. The diseases studied within the Program, ranging from schizophrenia and depression to haemochromatosis and migraine, all arise from an interaction of genetic and multi-factorial environmental influences. As highlighted in a number of key strategic reviews, they also represent an enormous burden of illness and unmet research need.

QIMR scientists continue to make important breakthroughs in mental health research from genetics and epidemiology to brain imaging and computational modelling. Research capabilities, technology opportunities and public awareness of mental health continue to grow, creating a unique opportunity for research at QIMR to improve recovery and outcome for those in the community with mental health disorders.

Technology plays a crucial role in the study of these disorders. QIMR is home to a growing number of imaging technologies that enable unprecedented insight into the biology of cells, animals and humans. Cutting edge animal imaging facilities were recently installed and plans for a major new human imaging facility on the Herston campus are well advanced. The growth of sequencing technologies that underpin genetic research also continues.

Asthma Genetics

Team Head: Dr Manuel Ferreira

The Asthma Genetics Team uses genetics to uncover the biological mechanisms of asthma, with the aim of developing more effective therapeutics targeting the genes and pathways.

Highlights:

- Identified two new risk loci for asthma: IL6R and 11q13.
- Developed a new gene-based test of association.
- Developed a new method to detect enrichment of genetic associations near genes.
- Established a clinical trial to test tocilizumab as a new treatment for asthma.

Genetic Epidemiology

Senior Scientist: Professor Nick Martin

The Genetic Epidemiology Laboratory investigates the pattern of disease in families to assess the relative importance of genes and environment in a variety of important health problems and to locate the genes responsible using genome-wide association analysis.

Highlights:

- Played a leading role in the Enhancing Neuroimaging Genetics through Meta-Analysis (ENIGMA) consortium and identified the first confirmed locus for a brain imaging phenotype, for hippocampal volume on chromosome 12.
- Conducted the first full genome sequencing project for a complex trait, which resulted in finding a causal variant for melanoma in MITF.
- Discovered a new locus for melanoma on chromosome one.

- Discovered IL6R as a new potential drug target for asthma.
- Contributed to genome-wide association scan (GWAS) meta-analysis, which found 65 new loci for platelets with strong therapeutic potential.
- Contributed to GWAS meta-analysis, which discovered six new loci for male pattern baldness with overlap with prostate cancer and other diseases.
- Contributed data that uncovering three new loci for eczema.
- Contributed to discovery of a new susceptibility locus near ODZ4 for bipolar disorder.
- Contributed to GWAS showing a tentative association with depression on chromosome three.
- Contributed to study finding new variants for menopause and triple-negative breast cancer.

Hepatic Fibrosis

Group Leader: Professor Grant Ramm

The Hepatic Fibrosis Laboratory investigates the cellular and molecular mechanisms of scar tissue formation in the liver. This leads to fibrosis and cirrhosis in adult liver diseases, such as haemochromatosis and in children, in diseases such as cystic fibrosis and biliary atresia.

- Identified hepatic matrix remodelling genes differentially regulated in liver disease that are associated with cystic fibrosis.
- Demonstrated that WT1 signalling pathway is implicated in a substantial proportion of human fetuses with bilateral renal agenesis and cardiac defects. The group hypothesises this is due to defective WT1 expression in mesenchymal cells including hepatic stellate cells in the liver derived from mesothelium.

Inflammatory Bowel Diseases Research Group

Group Head: Dr Graham Radford-Smith

Inflammatory bowel diseases (IBD) are a group of diseases that affect the colon and small intestine, including Crohn's disease and ulcerative colitis. They affect up to one in every 200 Australians.

IBD is a medical condition that affects the gastrointestinal system, or gut. People with this illness often have ongoing symptoms of tummy pain, diarrhoea, the passing of blood, and weight loss. They can also suffer from other conditions that affect the skin, eyes and joints. Patients need medication for long periods of time and many have bowel surgery. IBD affects both males and females, including children.

The group focuses on:

 Identification of genes associated with Crohn's disease and ulcerative colitis

Iron Metabolism

Group Leader: Professor Greg Anderson

The Iron Metabolism Laboratory focuses on understanding the homeostasis of the essential trace element iron in the body and the natural history of disorders of iron metabolism such as the iron loading disease haemochromatosis. The laboratory's work takes a broad approach from basic molecular mechanisms to clinical applications.

- The role of paneth cells in ileal Crohn's disease
- Determination of disease-specific gene
 expression signatures
- Incidence and prevalence of inflammatory bowel disease
 in South-East Queensland
- The causes of inflammatory bowel disease

Highlights:

- Immunochip study in collaboration with the International IBD Genetics Consortium, leading to a *Nature* publication
- Consolidation of major collaboration with Amgen–translational IBD research program
- Completion of the first phase of the Crohn's disease PBS study.

Highlights:

- Showed a critical role for hephaestin and related oxidases in iron absorption.
- Assessed the combined effects of multiple hepatic toxins (iron, alcohol, fat) on liver disease progression.
- Identified factors responsible for regulating iron homeostasis in thalassaemia and other haemolytic anaemias.
- Defined the role of the iron transporter ferroportin in iron recycling by macrophages.
- Worked towards understanding mechanisms of intestinal iron absorption during suckling.

Lung Inflammation and Infection

Team Head: Dr David Reid

The Lung Inflammation and Infection Team have focused on the role of iron in promoting bacterial infection in the cystic fibrosis (CF) lung and whether this in turn is related to dysregulation of cell iron homeostasis in CF. The team have spent the year breeding the necessary mouse models and conducting preliminary analyses of iron phenotype, while collecting samples from human subjects to conduct an epidemiological study of gene mutations related to iron homeosatsis in CF patients. The team now has the required flow cell bacterial biofilm models to allow testing of new therapeutic compounds.

- Development of a Cystic Fibrosis mouse model on a new genetic background. This will allow novel approaches to elucidation of the underlying mechanisms of disease pathogenesis in this lethal genetic disease.
- Development of therapeutic approaches targeting bacterial iron homeostasis, which appear very active against bacterial biofilms.
- Development of the methods to examine neutrophil function in the lung and demonstration that the oxidative burst potential of airway neutrophils from CF patients is affected by airway environmental conditions.

Molecular Epidemiology

Group Leader: Professor Grant Montgomery

The Molecular Epidemiology Laboratory seeks to identify genes and gene pathways contributing to risk for common human diseases. The laboratory is a world leader in the genetics of endometriosis and works on melanoma, inflammatory bowel disease and a range of other diseases including asthma, migraine, depression, and alcohol, nicotine and drug dependence. The group maintain a large biobank supporting projects in the laboratory and major collaborations with QIMR's Statistical Genetics, Genetic Epidemiology, Oncogenomics, Asthma Genetics and Neurogenetics Laboratories.

Highlights:

- Led significant advances in understanding genes and pathways contributing to risk for endometriosis by finding additional genomic regions associated with risk, demonstrating that the genetic factors underlying disease are similar in European and Japanese populations, and obtaining new funding to identify the specific genes and pathways underlying increased disease risk.
- Discovered new genomic regions associated with increased risk of ulcerative colitis and obtained funding to study causes of variation in response to treatment for acute inflammatory bowel disease.
- Discovered new genomic regions associated with increased melanoma risk, including a novel rare variant that predisposes to familial and sporadic melanoma.
- Discovered novel variants for a range of common complex diseases and conditions including atopic dermatitis, glaucoma, breast cancer and age at menopause.

Neurogenetics

Group Leader: Dr Dale Nyholt

The Neurogenetics Group's focus is on the genetic analysis of migraine, endometriosis and traits comorbid with migraine including depression and epilepsy. The primary goal of this research is to identify genetic risk factors which lead to new knowledge of the underlying biological pathways contributing to disease pathophysiology.

Quantitative Genetics

Team Head: Dr Sarah Medland

The newly formed Quantitative Genetics Team has focused on elucidating the biological pathways influencing common psychiatric conditions including attention deficit hyperactivity disorder and substance use disorders.

Highlights:

- Reported four novel risk genes for migraine without aura in *Nature Genetics*.
- Discovered six novel risk loci for androgenetic alopecia and their association with Parkinson's disease and decreased fertility in *PLoS Genetics*.

Highlights:

 Identified genetic variants influencing hippocampal volume.

System Neuroscience

Group Leader: Professor Michael Breakspear

Systems Neuroscience is an approach to brain sciences that seeks the fundamental principles of brain organisation, dynamics and function across a hierarchy of spatial and temporal scales. It is a rapidly growing field that differs considerably from the traditional reductionist paradigm in neuroscience that seeks purely sufficient causes for local phenomena. In contrast, systems neuroscience seeks unifying explanations for emergent phenomena.

- Developed diagnostic tests for dementia and depression.
- Developed a mathematical model to describe brain activity and gene expression.
- Created a novel model of human eye movement. The group is currently translating this as a tool for the diagnosis of psychotic disorders.
- Discovered a brain imaging marker of genetic risk for bipolar disorder.
- Constructed a comprehensive "affective sensing" database for large scale psychiatric research.
- Secured a Program Grant from the NHMRC to identify the aetiological processes during the transition from ultra high risk to clinical disorder.





Supporting Our Research

Your support is critical to our research. For every dollar in funding, we need another 65 cents to make the research happen

SUPPORTING OUR RESEARCH

Corporate

Dedicated corporate staff are committed to providing the high level of support required to keep QIMR researchers at the forefront of medical research and helping make successful research happen. During 2011–12, QIMR underwent a corporate restructure to provide a more streamlined system of support for the Institute. Now consisting of Scientific Services, Finance and Administration, Human Resources, External Relations and Research Support and Governance, the Corporate Division ensures researchers have the services and equipment required to undertake world-class research.

The new building's construction and fit-out has been coordinated by the Corporate Division, and 2011–12 saw a busy time as the facility neared completion. To ensure QIMR's researchers had a smooth transition to the new building corporate staff were involved with:

- the planning and commissioning of new laboratory areas;
- the planning and purchase of equipment for the specialist PC3 facilities;
- obtaining certification for PC2 laboratories, the scientific services and animal facilities;
- procurement and tenders in relation to fitting out the new building; and
- implementing new information services for the new facilities and retrofitting the Bancroft Centre and Clive Berghofer Centre for Cancer Research.

Another focus for the Corporate Division this year has been negotiating the QIMR Enterprise Agreement, which was agreed upon in early 2012 and ensured suitable conditions for the Institute's staff. A QIMR Code of Conduct was also reviewed and finalised.

The Corporate Division also oversaw the Director's recruitment campaign for new research positions at QIMR. The Institute has received hundreds of expressions of interest from international candidates and will continue this recruitment drive into the coming years.

Community Support

Much of QIMR's research would not be possible without the support of community groups, individuals and corporate sponsors.

2011 marked the inaugural Rio Tinto Ride to Conquer Cancer, which was held on 20-21 August and raised \$4.7 million for QIMR's cancer research. Over 2,000 registered riders took part in the two day, 200km Ride, from Brisbane to Somerset Dam and back. Money raised from this signature event has funded 27 cancer research projects and a flagship project. The Institute would like to thank the event's naming right sponsor Rio Tinto; "powered by" sponsor, Sunsuper; the Ausenco Foundation and those that participated in the event as a rider or volunteer.

In 2011, the Rhys Pengelly Leukaemia Research Fellowship, funded by InVitro Technologies and JJ Richards Pty Ltd, was awarded to Dr Steven Lane (Translational Leukaemia Research) to establish a new research team at QIMR dedicated to acute leukaemia. The fellowship provides significant and crucial funding for three years. The fellowship is named in honour of Rhys Pengelly who passed away at 20 years of age from leukaemia.

2011 also saw a decade of support from Clive Berghofer. Mr Berghofer's ongoing dedication and commitment to cancer research has allowed QIMR's cancer program to continue its work into improving the prevention, detection and treatment of many different types of cancer.

The William and Hilde Chenhall Research Trust continued to support QIMR in 2011–12. The Trust funds the bioinformatics unit at QIMR, which is helping to bring the Institute's researchers a step closer to understanding the underlying genetic causes of cancer. William and Hilde Chenhall were a Sunshine Coast couple who left the bulk of their estate to fund QIMR's cancer research.

QIMR also recognises contributions made by monthly donors; planned givers who kindly made provision for the Institute in their Wills; and long-term supporters such as Mrs Marno Parsons AM and Mr Royce Blackburn.

Each year QIMR also acknowledges community members for their outstanding support of medical research. In 2011, recipients of the QIMR Ambassador Awards included: Mr Brian Henson and Mr Ian Reid from Hornibrook Bus Lines, Mr Michael and Mrs Beryl Ward and Mr Albert and Mrs Dianne Budworth.
A special thank you to the following major donors:

- Anastazia Bociek
- Colin Albert Pill
- Evelyn Monica Dutton
- Joyce Bowler
- Melvin James Anderson
- Mona Lavery
- Norma Mary Alice Curran
- Patricia Joan Benson
- Ralph Brian Stubbs
- Rita McMillan
- Rosalie Edith Hunt
- ALS Limited (formerly Campbell Brothers Limited)
- Ausenco Pty Ltd
- Benjamin Charles Watkins and Evelyn Maud Watkins
- BT Investment Management
 Pty Ltd
- E M Squires Charitable Trust
- Elizabeth (Betty) Patterson (In memory)

- Fitton Insurance Charity Race Day
- In Vitro Technologies Life Science
- Ira Josey, Peace Mary Keidge and Ashley Josey Keidge Perpetual Charitable Trust
- J J Richards & Sons Pty Ltd
- Luke's Swim (organised by the Ogden Family)
- Mervyn Peatey (In memory)
- Mr Barry and Mrs Maureen
 Stevenson
- Mr Bren Curnow (In memory)
- Mr Joseph and Mrs Veronika Butta
- Mr Robert Clive Hawkins (In memory)
- Mr Royce Blackburne
- Mr Tim and Mrs Kim Reid
- Mrs Helen Gow
- Mrs Joan Daniel and the late
 Mr Henry Daniel
- Mrs L B Burgess

- Mrs Marno Parsons AM
- Ms Vera Thiess
- Port of Brisbane Proprietary
 Limited
- Queensland Community
 Foundation
- Rio Tinto Pty Ltd
- Ryan Saunders Foundation
 Limited
- Suncorp Pty Ltd
- Sunsuper Pty Ltd
- The Henry Cyril Robjohns and Stella May Robjohns Memorial Trust
- VMO Committee
- Walking on Sunshine (organised by Anne Stanton)
- William and Hilde Chenhall Research Trust



Mr Clive Berghofer



Financials

Established in 1945 by the Queensland Government, QIMR is one of the largest and most successful medical research institutes in Australia, and is recognised worldwide for the quality of its research.

FINANCIAL STATEMENTS 2011–12

Operating result

The operating result for the 2011–2012 financial year was a surplus of \$14.7 million after providing for depreciation of \$6.2 million. This surplus includes recognition of capital grants from Commonwealth Government, Queensland State Government, and The Atlantic Philanthropies towards the construction of the Medical Research Centre (\$11.4 million).

QIMR's financial structure is based on the management of operating and grant funds. Competitive research grant funding spent in the 2011–12 financial year was \$38.2 million (2010–11: \$39.2 million), representing 48% of total comprehensive income, excluding capital grants. A majority of the Institute's core funding is provided as a grant from Queensland Health \$14.0 million (2010–11 \$14.0 million).

QIMR's total funding resources, including amounts under management at 30 June 2012 totalled \$145.4 million (2010–11: \$172.3 million), of which \$41.2 million was represented by capital grants (2010–11: \$66.6 million). The decrease in funds held during the year is mainly due to payment for progress of the construction works undertaken in relation to the Medical Research Centre.

Construction of the Medical Research Centre is fully funded with total contributions from Commonwealth Government (\$110.0 million), Queensland State Government (\$35.0 million), and The Atlantic Philanthropies (\$27.5 million). Occupation of the new building commenced in May 2012.

Contents

- Statement of Comprehensive Income
- Statement of Financial Position
- Statement of Changes in Equity
- Statement of Cash Flows
- Notes to and forming part of the Financial Statements
- Management certificate

General information

These financial statements cover the Queensland Institute of Medical Research and its jointly controlled entities.

The Queensland Institute of Medical Research is a Queensland statutory body established under the Queensland Institute of Medical Research Act 1945.

The statutory body is controlled by the State of Queensland which is the ultimate parent.

The head office and principal place of business of the statutory body is:

300 Herston Road, Herston QLD 4006

A description of the nature of the Institute's operations and its principal activities is included in the notes to the financial statements.

For information in relation to the Institute's financial statements please call +61 7 3362 0222, email enquiries@qimr.edu.au or visit the statutory body's website www.qimr.edu.au

Amounts shown in these financial statements are rounded to thousands and therefore may not add to the exact sub-totals or totals.

Statement of Comprehensive Income for the year ended 30 June 2012

| | Notes | 2012 | 2011 |
|--|-------|---------|---------|
| | | \$'000 | \$'000 |
| Income from continuing operations | | | |
| Grants and other contributions | 2a | 65,403 | 65,023 |
| Commercial revenue | 3 | 3,103 | 4,386 |
| Other revenue | 4 | 11,842 | 10,340 |
| Total revenue | | 80,348 | 79,749 |
| Capital grants - Medical Research Centre | 2b | 11,400 | 80,500 |
| Gains/(losses) | 5 | (3,034) | 53,932 |
| Total income from continuing operations | | 88,714 | 214,181 |
| Expenses from continuing operations | | | |
| Employee expenses | 6 | 40,874 | 39,892 |
| Supplies and services | 7 | 21,711 | 18,106 |
| Depreciation and amortisation | 8 | 6,205 | 5,412 |
| Other expenses | 9 | 4,999 | 4,496 |
| Finance costs | | 268 | 141 |
| Share of (gain)/loss of equity accounted investees | 24 | (19) | 189 |
| Total expenses from continuing operations | _ | 74,038 | 68,236 |
| Operating result from continuing operations | _ | 14,676 | 145,945 |
| Other comprehensive income | | | |
| Decrease in asset revaluation surplus | 19 | (179) | (1,480) |
| Total other comprehensive income | _ | (179) | (1,480) |
| Total comprehensive income | | 14,497 | 144,465 |

Statement of Financial Position as at 30 June 2012

| | Notes | 2012 | 2011 |
|---|-------|---------|---------|
| | | \$'000 | \$'000 |
| Current assets | | | |
| Cash and cash equivalents | 10 | 82,234 | 112,453 |
| Receivables | 11 | 8,822 | 10,488 |
| Inventories | 12 | 256 | 277 |
| Prepayments | | 269 | 398 |
| Total current assets | _ | 91,581 | 123,616 |
| Non-current assets | | | |
| Other financial assets | 13 | 63,202 | 59,863 |
| Intangible assets | 14 | 636 | 722 |
| Property, plant and equipment | 15 | 241,173 | 206,287 |
| Investments accounted for using the equity method | 24 | 321 | 301 |
| Total non-current assets | _ | 305,332 | 267,173 |
| Total assets | - | 396,913 | 390,789 |
| Current liabilities | | | |
| Payables | 16 | 3,682 | 10,804 |
| Accrued employee benefits | 17 | 4,067 | 3,104 |
| Unearned revenue | 18 | 19,408 | 21,665 |
| Total current liabilities | _ | 27,157 | 35,573 |
| Non-current liabilities | | | |
| Accrued employee benefits | 17 | 913 | 870 |
| Total non-current liabilities | _ | 913 | 870 |
| Total liabilities | _ | 28,070 | 36,443 |
| Not assots | _ | 368 843 | 354 346 |
| 1101 455015 | = | | |
| Equity | | | _ |
| Accumulated surplus | | 329,895 | 315,219 |
| Asset revaluation surplus | 19 | 38,948 | 39,127 |
| Total equity | | 368,843 | 354,346 |

Statement of Changes in Equity for the year ended 30 June 2012

| | Accumulated surplus | Asset revaluation surplus (note 19) | Total |
|---|------------------------|-------------------------------------|---------|
| | \$'000 | \$'000 | \$'000 |
| Balance as at 1 July 2011 | 315,219 | 39,127 | 354,346 |
| Operating result from continuing operations | 14,676 | - | 14,676 |
| Decrease in asset revaluation surplus | - | (179) | (179) |
| Balance as at 30 June 2012 | 329,895 | 38,948 | 368,843 |
| Balance as at 1 July 2010 | 169,274 | 40,607 | 209,881 |
| Operating result from continuing operations | 145,945 | - | 145,945 |
| Decrease in asset revaluation surplus | - | (1,480) | (1,480) |
| Balance as at 30 June 2011 | 315,219 | 39,127 | 354,346 |

Statement of Cash Flows for the year ended 30 June 2012

| | Notes | 2012 \$'000 | 2011 \$'000 |
|--|-------|----------------|----------------|
| Cash flows from operating activities | | | |
| Inflows: | | | |
| Grants and other contributions | | 63,146 | 70,389 |
| Capital grants - Medical Research Centre | | 11,400 | 80,500 |
| Commercial revenue | | 3,181 | 4,152 |
| Other income | | 10,536 | 6,328 |
| GST collected | | 618 | (640) |
| Outflows: | | | |
| Employee expenses | | (40,162) | (39,644) |
| Supplies and services | | (21,226) | (18,489) |
| Finance costs | | (268) | (141) |
| GST paid | | (84) | (71) |
| Other | | (4,241) | (4,438) |
| Net cash provided by operating activities | 20 | 22,900 | 97,946 |
| Cash flows from investing activities | | | |
| Inflows: | | | |
| Sales of property, plant and equipment | | - | 1,049 |
| (Investments in)/redemptions of other financial assets | | (3,843) | 9,671 |
| Outflows: | | | |
| Acquisitions of property, plant and equipment | | (49,276) | (77,512) |
| Net cash used in investing activities | _ | (53,119) | (66,792) |
| Net increase/(decrease) in cash and cash equivalents | | (30,219) | 31,154 |
| Cash and cash equivalents at beginning of financial year | | 112,453 | 80,648 |
| Cash and cash equivalent transferred from QIMR Trust | _ | | 651 |
| Cash and cash equivalents at end of financial year | 10 | 82,234 | 112,453 |

Notes to and forming part of the financial statements 2011–12

| | Objectives and principal activities of the Council |
|----------|---|
| Note 1: | Summary of significant accounting policies |
| Note 2: | Grants and other contributions |
| Note 3: | Commercial revenue |
| Note 4: | Other revenue |
| Note 5: | Gains/(losses) |
| Note 6: | Employee expenses |
| Note 7: | Supplies and services |
| Note 8: | Depreciation and amortisation |
| Note 9: | Other expenses |
| Note 10: | Cash and cash equivalents |
| Note 11: | Receivables |
| Note 12: | Inventories |
| Note 13: | Other financial assets |
| Note 14: | Intangible assets |
| Note 15 | Property, plant and equipment |
| Note 16: | Payables |
| Note 17: | Accrued employee benefits |
| Note 18: | Unearned revenue |
| Note 19: | Asset revaluation surplus by class |
| Note 20: | Reconciliation of operating surplus to net cash from operating activities |
| Note 21: | Non-cash financing and investing activities |
| Note 22: | Commitments for expenditure |
| Note 23: | Contingencies |
| Note 24: | Jointly controlled entities |
| Note 25: | Trust transactions and balances |
| Note 26: | Key executive management personnel and remuneration |
| Note 27: | Transfer of the assets and liabilities of the abolished QIMR Trust to The Council of the Queensland Institute of Medical Research |
| Note 28: | Financial instruments |
| Note 29: | Events occurring after balance sheet date |
| Note 30: | Economic dependency |
| Note 31: | Changes in classification or presentation |

The Council of The Queensland Institute of Medical Research Notes to and forming part of the financial statements 2011–12

Objective and principal activities of the Council

The objective of the Council is to control and manage the Queensland Institute of Medical Research (the Institute). The Institute has been established to conduct research into all branches of medical science. It operates predominantly in one geographical area, being Queensland, Australia, although it has research collaborations across Australia and overseas.

The Institute recently built a new Medical Research Centre and has now entered into the third construction phase which is the refurbishment of the existing Bancroft Centre. The project has been funded by contributions from Federal Government of \$110m, the Queensland State Government of \$35m and The Atlantic Philanthropies of \$27.5m.

The Council receives an annual operational grant from Queensland Health. The majority of the Institute's funding is generated from competitive, peer reviewed research grants, commercial and other earned revenue. Funds are also received from donations, fundraising and investment activities performed by the Institute under the guidance of the Council.

1. Summary of significant accounting policies

(a) Statement of compliance

The Council has prepared this financial report in compliance with section 43 of the *Financial and Performance Management Standard* 2009.

These financial statements are general purpose financial statements, and have been prepared on an accrual basis in accordance with Australian Accounting Standards and Interpretations. In addition, the financial statements have regard to Treasury's Minimum Reporting Requirements for the year ended 30 June 2012, and other authoritative pronouncements.

With respect to compliance with Australian Accounting Standards and Interpretations, the Council has applied those requirements applicable to not-for-profit entities, as the Council is a not-for-profit statutory body. Except where stated, the historical cost convention is used.

(b) The reporting entity

The financial statements include the value of all revenues, expenses, assets, liabilities and equity of the Council. The Council has no material controlled entities as at 30 June 2012.

(c) Jointly controlled entities

Jointly controlled entities are those where the Council has joint control, established by contractual agreement. As at 30 June 2012, the Council has entered into two material joint ventures - Vaccine Solutions Pty Ltd and Q-Pharm Pty Ltd.

Where the Council has a claim over the equity of the joint venture, the interest is brought to account by using the equity method of accounting. The investment is initially recognised at cost and adjusted thereafter for the post-acquisition change in the Council's share of net assets of the joint venture. In addition, the Council's share of the profit or loss of the joint venture is included in the Council's operating result. This is the case for Q-Parm Pty Ltd.

Vaccine Solutions Pty Ltd is not equity accounted as QIMR has no claim over equity of joint venture. Further details of the Council's interest in jointly controlled operations including audit arrangements are contained in note 24.

(d) Trust transactions and balances

The Council undertakes certain trustee transactions on behalf of CRC Vaccine Technology and QIMR employee research activities.

As the Council acts only in a custodial role in respect of these transactions and balances, they are not recognised in the financial statements, but are disclosed in note 25.

(e) Grants and other contributions

Grants, contributions, donations, bequests, gifts and fundraising that are non-reciprocal in nature are recognised as revenue in the year in which the Council obtains control over them. Where grants are received that are reciprocal in nature, revenue is recognised over the term of the funding arrangements.

Notes to and forming part of the financial statements 2011–12

Contributed assets are recognised at their fair value. Contributions of services are recognised only when a fair value can be determined reliably and the services would be purchased if they had not been donated.

(f) Commercial revenue

User charges and fees from commercial services and recoveries of expenditure incurred by associated bodies which use QIMR laboratory consumables and services, controlled by the Council, are recognised as revenues when the revenue has been earned and can be measured reliably with a sufficient degree of certainty. This involves either invoicing for related goods/services and/or the recognition of accrued revenue. User charges and fees are controlled by the Council where they can be deployed for the achievement of council objectives.

(g) Interest, dividends and distributions

Revenue for interest on cash and cash equivalents is recognised on an accrual basis. Revenue for dividends and distributions from managed funds classified as financial instruments held at fair value through profit or loss are recognised when the Council's right to receive payment is established.

(h) Imputation credits

As an endorsed income tax exempt charity, imputation credits attached to franked dividends received by the Council are refundable and may be claimed retrospectively after the end of the financial year. Imputation credits are brought to account when the right to receive the credits is established,

(i) Cash and cash equivalents

For the purposes of the Statement of Financial Position and the Statement of Cash Flows, cash assets include all cash and cheques receipted but not banked at 30 June as well as deposits at call with financial institutions.

(j) Receivables

Trade debtors are recognised at the amounts due at the time of sale or service delivery i.e. the agreed purchase/contract price. Settlement of these amounts is required within 30 days from invoice date.

The collectability of receivables is assessed periodically with provision being made for impairment. All known bad debts are written-off at financial year end.

Other debtors generally arise from transactions outside the usual operating activities of the Council and are recognised at their assessed values. Terms are a maximum of one month, no interest is charged and no security is obtained.

(k) Inventories

Inventories are represented by consumable laboratory supplies valued at the lower of cost and net realisable value.

Cost is assigned on a weighted average basis and includes expenditure incurred in acquiring the inventories and bringing them to their existing condition, except for training costs which are expensed as incurred.

Net realisable value is determined by estimating the selling price in the ordinary course of business, less the estimated costs of completion and selling expenses.

No inventory assets have been classified as inventories held for distribution.

(I) Acquisitions of assets

Actual cost is used for the initial recording of all non-current physical and intangible asset acquisitions. Cost is determined as the value given as consideration plus costs incidental to the acquisition, including all other costs incurred in getting the assets ready for use, including architects' fees and engineering design fees. However, any training costs are expensed as incurred.

Where assets are received free of charge from another Queensland Government entity, the acquisition cost is recognised as the gross carrying amount in the books of the transferor immediately prior to the transfer together with any accumulated depreciation.

Assets acquired at no cost or for nominal consideration, other than from an involuntary transfer from another Queensland Government entity, are recognised at their fair value at date of acquisition in accordance with AASB 116 Property, Plant and Equipment.

Notes to and forming part of the financial statements 2011–12

(m) Property, plant and equipment

Items of property, plant and equipment with a cost or other value equal to or in excess of the following thresholds are recognised for financial reporting purposes in the year of acquisition:

| Buildings | \$10,000 |
|---------------------------------------|----------|
| Plant and equipment | \$5,000 |
| Other (including heritage & cultural) | \$5,000 |

Items with a lesser value are expensed in the year of acquisition.

(n) Revaluations of non-current physical and intangible assets

Buildings and heritage and cultural assets are measured at fair value in accordance with AASB 116 *Property, Plant and Equipment* and Queensland Treasury's *Non-Current Asset Policies for the Queensland Public Sector*. In respect of these asset classes, the cost of items acquired during the financial year has been judged by management of the Council to materially represent their fair value at the end of the reporting period.

Where intangible assets have an active market, they are measured at fair value, otherwise they are measured at cost.

Plant and equipment is measured at cost in accordance with Treasury's Non-Current Asset Policies .

Where indices are used in the revaluation process the Council ensures that the application of such indices would result in a valid estimation of the asset's fair value at reporting date.

Non-current physical assets measured at fair value are independently re-valued by an external registered valuer at least once every five years with interim valuations, using appropriate indices, being otherwise performed on an annual basis where there has been a material variation in the index. Refer to note 15 for details.

Any revaluation increment arising on the revaluation of an asset is credited to the asset revaluation surplus of the appropriate class, except to the extent it reverses a revaluation decrement for the class previously recognised as an expense. A decrease in the carrying amount on revaluation is charged as an expense, to the extent it exceeds the balance, if any, in the revaluation surplus relating to that asset class.

On revaluation, accumulated depreciation is restated proportionately with the change in the carrying amount of the asset and any change in the estimate of remaining useful life.

Materiality concepts under AASB 1031 *Materiality* are considered in determining whether the difference between the carrying amount and the fair value of an asset is material.

Separately identified components of assets are measured on the same basis as the assets to which they relate.

(o) Intangibles

Intangible assets with a cost or other value equal to or greater than \$100,000 are recognised in the Statement of Financial Position, items with a lesser value being expensed. Each intangible asset, less any anticipated residual value, is amortised over its estimated useful life to the Council. The residual value is zero for all the Council's intangible assets.

It has been determined that there is not an active market for any of the Council's intangible assets. As such, the assets are recognised and carried at cost less accumulated amortisation and accumulated impairment losses.

No intangible assets have been classified as held for sale or form part of a disposal group held for sale.

Purchased software

The purchase cost of this software has been capitalised and is being amortised on a straight-line basis over the period of the expected benefit to the Council, namely 10 years.

Internally generated software

Expenditure on research activities relating to internally-generated intangible assets is recognised as an expense in the period in which it is incurred.

Notes to and forming part of the financial statements 2011–12

Costs associated with the development of computer software have been capitalised and are amortised on a straight line basis over the period of expected benefit to the Council, namely 10 years.

(p) Amortisation and depreciation of intangibles and property, plant and equipment

All intangible assets of the Council have finite useful lives and are amortised on a straight line basis.

Property, plant and equipment is depreciated on a straight-line basis so as to allocate the net cost or re-valued amount of each asset, less its estimated residual value, progressively over its estimated useful life to the Council.

Assets under construction (work-in-progress) are not depreciated until they reach service delivery capacity. Service delivery capacity relates to when construction is complete and the asset is first put to use or is installed ready for use in accordance with its intended application. These assets are then reclassified to the relevant classes within property, plant and equipment.

Where assets have separately identifiable components that are subject to regular replacement, these components are assigned useful lives distinct from the asset to which they relate and are depreciated accordingly.

Any expenditure that increases the originally assessed capacity or service potential of an asset is capitalised and the new depreciable amount is depreciated over the remaining useful life of the asset to the Council.

The depreciable amount of improvements to or on leasehold land is allocated progressively over the estimated useful lives of the improvements or the unexpired period of the lease, whichever is the shorter. The unexpired period of a lease includes any option period where exercise of the option is probable.

Common use items of the Institute's research library are expensed on acquisition. Heritage and cultural assets include research library monographs, Australiana and scarce items. The service potential of these assets is not expected to diminish with time or use and therefore, they are not depreciated.

For each class of depreciable asset the following depreciation and amortisation rates are used:

| Class | Rate % |
|-------------------------------|----------|
| Buildings | 2 |
| Plant and Equipment: | |
| Motor vehicles | 20 |
| Scientific equipment | 5 - 33.3 |
| Leasehold improvements | 4 |
| Other equipment | 5 - 33.3 |
| Intangible Assets: | |
| Software purchased | 10 |
| Software internally generated | 10 |
| | |

(q) Impairment of non-current assets

All non-current physical and intangible assets are assessed for indicators of impairment on an annual basis. If an indicator of possible impairment exists, the Council determines the asset's recoverable amount. Any amount by which the asset's carrying amount exceeds the recoverable amount is recorded as an impairment loss.

The asset's recoverable amount is determined as the higher of the asset's fair value less costs to sell and depreciated replacement cost.

An impairment loss is recognised immediately in the Statement of Comprehensive Income, unless the asset is carried at a re-valued amount. When the asset is measured at a re-valued amount, the impairment loss is offset against the asset revaluation surplus of the relevant class to the extent available.

Notes to and forming part of the financial statements 2011–12

Where an impairment loss subsequently reverses, the carrying amount of the asset is increased to the revised estimate of its recoverable amount, but so that the increased carrying amount does not exceed the carrying amount that would have been determined had no impairment loss been recognised for the asset in prior years. A reversal of an impairment loss is recognised as income, unless the asset is carried at a re-valued amount, in which case the reversal of the impairment loss is treated as a revaluation increase. Refer also note 1(n).

(r) Leasehold improvements

The Queensland Institute of Medical Research occupies three buildings situated on Crown land reserved and set apart for hospital purposes and under the control of Queensland Health on behalf of the State of Queensland.

A lease for the land and building known as the Bancroft Centre exists between the Institute and The State of Queensland (represented by Queensland Health), at a nominal rental, terminating on 27 June 2066. The Bancroft Centre was constructed by the Council using grants from the Federal and Queensland State Government.

A lease for the land and building known as The Clive Berghofer Cancer Research Centre exists between the Institute and The State of Queensland (represented by the Department of Health), at a nominal rental, terminating on 27 June 2066. The building was constructed by the Council using grants from the Federal and Queensland State Governments, and private donors.

A lease for the land and building known as Medical Research Centre will be entered into between the Institute and The State of Queensland (represented by Queensland Health), at nominal rental, terminating on 27 June 2066. The building was constructed by the Council using grants from the Federal and Queensland State Governments, and private donors.

The costs of leasehold improvements relating to these properties are amortised over the remaining period of the lease, or the estimated useful life to the Institute, whichever is shorter.

(s) Leases

Operating lease payments are representative of the pattern of benefits derived from the leased assets and are expensed in the periods in which they are incurred.

(t) Other Financial Assets

Other financial assets held at fair value through profit or loss represent investments in managed funds and shares in listed companies. The investments are stated at current market value at the reporting date. Changes in the market value of these instruments, whether realised or unrealised, are recognised in the Statement of Comprehensive Income. These investments were originally classified as at fair value through profit or loss upon initial recognition and the Council manages these investments and makes purchases and sales decisions based on their fair value in accordance with the Council's documented investment strategy.

(u) Payables

Trade creditors are recognised upon receipt of the goods or services ordered and are measured at the nominal amount i.e. agreed purchase/contract price, gross of applicable trade and other discounts. Amounts owing are unsecured and are generally settled on 30 to 60 day terms.

(v) Financial instruments

Recognition

Financial assets and financial liabilities are recognised in the Statement of Financial Position when the Council becomes party to the contractual provisions of the financial instrument.

Classification

Financial instruments are classified and measured as follows:

- i. Cash and cash equivalents held at fair value through profit or loss
- ii. Receivables held at amortised cost
- iii. Other financial assets held at fair value through profit or loss
- iv. Payables held at amortised cost

The Council does not enter into transactions for hedging purposes.



Notes to and forming part of the financial statements 2011–12

All other disclosures relating to the measurement and financial risk management of financial instruments held by the Council are included in note 28.

(w) Employee benefits

Employer superannuation contributions, annual leave and long service leave levies are regarded as employee benefits.

Payroll tax and workers' compensation insurance are a consequence of employing employees, but are not counted in an employee's total remuneration package. They are not employee benefits and are recognised separately as employee related expenses.

Wages, salaries, annual leave and sick leave

Wages, salaries and annual leave due but unpaid at reporting date are recognised in the Statement of Financial Position at the current salary rates.

For unpaid entitlements expected to be paid within 12 months, the liabilities are recognised at their undiscounted values. Entitlements not expected to be paid within 12 months are classified as non-current liabilities and recognised at their present value, calculated using yields on Fixed Rate Commonwealth Government bonds of similar maturity, after projecting the remuneration rates expected to apply at the time of likely settlement.

Prior history indicates that on average, sick leave taken each reporting period is less than the entitlement accrued. This is expected to continue in future periods. Accordingly, it is unlikely that existing accumulated entitlements will be used by employees and no liability for unused sick leave entitlements is recognised.

As sick leave is non-vesting, an expense is recognised for this leave as it is taken.

Long service leave

Under the Queensland Government's long service leave scheme, a levy is made on the statutory body to cover the cost of employees' long service leave. The levies are expensed in the period in which they are payable. Amounts paid to employees for long service leave are claimed from the scheme quarterly in arrears.

No provision for long service leave is recognised in the Council's financial statements, the liability being held on a wholeof-government basis and reported in those financial statements pursuant to AASB 1049 *Whole of Government and General Government Sector Financial Reporting*.

Superannuation

Employer superannuation contributions are paid to QSuper, the superannuation scheme for Queensland Government employees, at rates determined by the Treasurer on the advice of the State Actuary. Contributions are expensed in the period in which they are paid or payable. The Council's obligation is limited to its contribution to QSuper.

The QSuper scheme has defined benefit and defined contribution categories. The liability for defined benefits is held on a whole-of-government basis and reported in those financial statements pursuant to AASB 1049 *Whole of Government and General Government Sector Financial Reporting*.

Key executive management personnel and remuneration

Key executive management personnel and remuneration disclosures are made in accordance with section 5 of the Financial Reporting Requirements for Queensland Government Agencies issued by Queensland Treasury. Refer to note 26 for the disclosures on key executive management personnel and remuneration.

(x) Insurance

The Council's non-current physical assets and other risks are insured through the Queensland Government Insurance Fund (QGIF), premiums being paid on a risk assessment basis. In addition, the Institute has policies with private insurance companies to cover risks not included by QGIF.

The Institute also pays premiums to WorkCover Queensland in respect of its obligations for employee compensation.

Notes to and forming part of the financial statements 2011–12

(y) Services received free of charge or for nominal value

Contributions of services are recognised only if the services would have been purchased if they had not been donated and their fair value can be measured reliably. Where this is the case, an equal amount is recognised as revenue and an expense.

(z) Taxation

The Council is a State body as defined under the Income Tax Assessment Act 1936 and is exempt from Commonwealth taxation with the exception of Fringe Benefits Tax (FBT) and Goods and Services Tax (GST). FBT and GST are the only taxes accounted for by the Council. GST credits receivable from, and GST payable to the ATO, are recognised (refer to note 11).

(aa) Issuance of financial statements

The financial statements are authorised for issue by the Chairman of Council, Director and Secretary at the date of signing the Management Certificate.

(ab) Judgements

The preparation of financial statements necessarily requires the determination and use of certain critical accounting estimates, assumptions, and management judgements that have the potential to cause a material adjustment to the carrying amounts of assets and liabilities within the next financial year. Such estimates, judgements and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognised in the period in which the estimate is revised and in future periods as relevant.

Estimates and assumptions that have a potential significant effect are outlined in the following financial statement notes:

- Valuation of Property, Plant and Equipment notes 1(n) and 15
- Contingencies note 23

The Australian government passed its Clean Energy Act in November 2011 with a start date of 1 July 2012. The legislation will result in the introduction of a price on carbon emissions made by Australian businesses from 1 July 2012.

The flexible market-based price phase of the carbon pricing mechanism will commence on 1 July 2015. It will be preceded by a three-year period during which the price of permits will be fixed at \$23 per tonne or carbon dioxide equivalent in year one, \$24.15 in year two and \$25.40 in year three.

Section 4.3.4 of Queensland Treasury's report on 'Carbon Price Impacts for Queensland' dated August 2011 indicates that, for non-residential construction activities, costs may increase by between 0.7 per cent and 0.8 per cent over the period 2012-13 to 2015-16.

On this basis and other information available, the introduction of the carbon pricing mechanism is not expected to have a significant impact on Council's critical accounting estimates, assumptions and management judgements.

(ac) Rounding and comparatives

Amounts included in the financial statements are in Australian dollars and have been rounded to the nearest \$1,000 or, where that amount is \$500 or less, to zero, unless disclosure of the full amount is specifically required.

Comparative information has been restated where necessary to be consistent with disclosures in the current reporting period.

(ad) New and revised accounting standards

The Council did not voluntarily change any of its accounting policies during 2011-12. No amendments to the Australian Accounting Standards applicable for the first time for 2011-12 were relevant to the Council's financial statements.

The Council is not permitted to early adopt a new or amended accounting standard ahead of the specified commencement date unless approval is obtained from the Treasury Department. Consequently, the Council has not applied any Australian accounting standards and interpretations that have been issued but are not yet effective. The Council applies standards and interpretations in accordance with their respective commencement dates.

At the date of authorisation of the financial report, significant impacts of new or amended Australian accounting standards with future commencement dates are as set out below.

Notes to and forming part of the financial statements 2011–12

AASB 2010-4 Further Amendments to Australian Accounting Standards arising from the Annual Improvements Project [AASB 1, AASB 7, AASB 101 & AASB 134 and Interpretation 13] became effective from reporting periods beginning on or after 1 January 2011. Given the Council's existing financial instruments, there was only a minor impact on the Council's financial instruments note (note 28(c)), in relation to disclosures about credit risk. That note no longer needs to disclose amounts that best represent the maximum exposure to credit risk where the carrying amount of the instruments already reflects this. As this was the case with all the Council's receivables as at 30 June 2012 (and as at 30 June 2011), receivables are not included in the credit risk disclosure in this year's financial statements.

As the Council held no collateral or other credit enhancements in respect of its financial instruments, and did not renegotiate the terms of any financial assets, during the reporting periods presented in these financial statements, there were no other changes required to the Council's financial instruments note arising from the amendments to AASB 7 *Financial Instruments: Disclosures.*

AASB 1054 Australian Additional Disclosures became effective from reporting periods beginning on or after 1 July 2011. Given the Council's previous disclosure practices, AASB 1054 had minimal impact on the Council. One of the footnotes to note 9 Other expenses, regarding audit fees, has been slightly amended to identify the Council's auditor and clarify the nature of the work performed by the auditor.

AASB 2011-1 Amendments to Australian Accounting Standards arising from the Trans-Tasman Convergence

Project [AASB 1, AASB 5, AASB 101, AASB 107, AASB 108, AASB 121, AASB 128, AASB 132 & AASB 134 and Interpretations 2, 112 & 113] also became effective from reporting periods beginning on or after 1 July 2011. The only potential implication for the Council from this amending standard was the deletion from AASB 101 Presentation of Financial Statements of the requirement for disclosure of commitments. However, Treasury Department's Financial Reporting Requirements require continuation of commitments disclosures, so this deletion from AASB 101 has no impact on the Council's commitments note (note 22).

At the date of authorisation of the financial report, the expected impacts of new or amended Australian accounting standards with future commencement dates are as set out below.

AASB 2011-9 Amendments to Australian Accounting Standards – Presentation of Items of Other Comprehensive Income [AASB 1, 5, 7, 101, 112, 120, 121, 132, 133, 134, 1039 & 1049] applies as from reporting periods beginning on or after 1 July 2012. The only impact for the Council will be that, in the Statement of Comprehensive Income, items within the "Other Comprehensive Income" section will need to be presented in different sub-sections, according to whether or not they are subsequently re-classifiable to the operating result. Whether subsequent re-classification is possible depends on the requirements or criteria in the accounting standard/interpretation that relates to the item concerned.

AASB 9 *Financial Instruments* (December 2010) and AASB 2010-7 *Amendments to Australian Accounting Standards arising from AASB 9 (December 2010) [AASB 1, 3, 4, 5, 7, 101, 102, 108, 112, 118, 120, 121, 127, 128, 131, 132, 136, 137, 139, 1023 & 1038 and Interpretations 2, 5, 10, 12, 19 & 127]* become effective from reporting periods beginning on or after 1 January 2013. The main impacts of these standards on the Council are that they will change the requirements for the classification, measurement and disclosures associated with financial assets. Under the new requirements, financial assets will be more simply classified according to whether they are measured at either amortised cost or fair value. Pursuant to AASB 9, financial assets can only be measured at amortised cost if two conditions are met. One of these conditions is that the asset must be held within a business model whose objective is to hold assets in order to collect contractual cash flows. The other condition is that the contractual terms of the asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

On initial application of AASB 9, the Council will need to re-assess the measurement of its financial assets against the new classification and measurement requirements, based on the facts and circumstances that exist at that date. Assuming no change in the types of transactions the Council enters into, it is not expected that any of the Council's financial assets will meet the criteria in AASB 9 to be measured at amortised cost. Therefore, as from the 2013-14 financial statements, all of the Council's financial assets will be required to be classified as financial assets measured at fair value through profit or loss (instead of the measurement classifications presently used in notes 1(v) and 28). The same classification will be used for net gains/losses recognised in the Statement of Comprehensive Income in respect of those financial assets. In the case of the Council's receivables, the carrying amount is considered to be a reasonable approximation of fair value.

The following new and revised standards apply as from reporting periods beginning on or after 1 January 2013

- AASB 10 Consolidated Financial Statements;
- AASB 11 Joint Arrangements;
- AASB 12 Disclosure of Interests in Other Entities;
- AASB 127 (revised) Separate Financial Statements;
- AASB 128 (revised) Investments in Associates and Joint Ventures; and

The Council of The Queensland Institute of Medical Research Notes to and forming part of the financial statements 2011–12

- AASB 2011-7 Amendments to Australian Accounting Standards arising from the Consolidation and Joint Arrangements Standards [AASB 1, 2, 3, 5, 7, 9, 2009-11, 101, 107, 112, 118, 121, 124, 132, 133, 136, 138, 139,

These standards cannot be applied by not-for-profit entities prior to their effective date, as the AASB is presently considering modifying them for application by not-for-profit entities in an Australian context. Any such modifications are likely to clarify how the IASB's principles should be applied by not-for-profit entities. Hence, the Council is not yet in a position to reliably determine the future implications of these new and revised standards for the Council's financial statements.

AASB 10 redefines and clarifies the concept of control of another entity, which is the basis for determining which entities should be consolidated into an entity's financial statements. Therefore, subject to any not-for-profit modifications yet to be made to AASB 10, the Council will need to re-assess the nature of its relationships with other entities, including entities that aren't currently consolidated.

AASB 11 deals with the concept of joint control, and sets out new principles for determining the type of joint arrangement that exists – which, in turn, dictates the accounting treatment. The new categories of joint arrangements under AASB 11 are more aligned to the actual rights and obligations of the parties to the arrangement. Subject to any not-for-profit modifications yet to be made to AASB 11, the Council will need to assess the nature of any arrangements with other entities to determine whether a joint arrangement exists in terms of AASB 11.

AASB 12 contains a wide range of new disclosure requirements in respect of interests in other entities, whether those entities are controlled entities, associates, joint arrangements, or structured entities that aren't consolidated. The volume and nature of disclosures that the Council will be required to make as from its 2013-14 financial statements will depend on the Council's eventual assessment of the implications of the new and revised standards listed above, particularly AASB 10, AASB 11 and AASB 128.

AASB 13 *Fair Value Measurement* applies from reporting periods beginning on or after 1 January 2013. AASB 13 sets out a new definition of 'fair value', as well as new principles to be applied when determining the fair value of assets and liabilities. The new requirements will apply to all of the Council's assets and liabilities (excluding leases) that are measured and/or disclosed at fair value or another measurement based on fair value. The potential impacts of AASB 13 relate to the fair value measurement methodologies used, and financial statement disclosures made in respect of, such assets and liabilities.

The Council has commenced reviewing its fair value methodologies (including instructions to valuers, data used and assumptions made) for all items of property, plant and equipment measured at fair value to determine whether those methodologies comply with AASB 13. To the extent that the methodologies don't comply, changes will be necessary. While the Council is yet to complete this review, no significant changes are anticipated, based on the fair value methodologies presently used. Therefore, at this stage, no consequential material impacts are expected for the Council's property, plant and equipment as from 2013-14.

AASB 13 will require an increased amount of information to be disclosed in relation to fair value measurements for both assets and liabilities. To the extent that any fair value measurement for an asset or liability uses data that is not 'observable' outside the Council, the amount of information to be disclosed will be relatively greater.

The revised AASB 119 includes changed criteria for accounting for employee benefits as 'short-term employee benefits'. However, as the Council is a member of the Queensland Government central schemes for annual leave and long service leave, this change in criterion has no impact on the Council's financial statements, as the employer liability is held by the central scheme. The revised AASB 119 also includes changed requirements for the measurement of employer liabilities/assets arising from defined benefit plans, and the measurement and presentation of changes in such liabilities/assets. The Council only contributes to the QSuper defined benefit plan, and the corresponding QSuper employer benefit obligation is held by the State. Therefore, those changes to AASB 119 will have no impact on the Council.

AASB 1053 Application of Tiers of Australian Accounting Standards applies as from reporting periods beginning on or after 1 July 2013. AASB 1053 establishes a differential reporting framework for those entities that prepare general purpose financial statements, consisting of two tiers of reporting requirements – Australian Accounting Standards (commonly referred to as 'tier 1'), and Australian Accounting Standards – Reduced Disclosure Requirements (commonly referred to as 'tier 2'). Tier 1 requirements comprise the full range of AASB recognition, measurement, presentation and disclosure requirements that are currently applicable to reporting entities in Australia. The only difference between the tier 1 and tier 2 requirements is that tier 2 requires fewer disclosures than tier 1.

Notes to and forming part of the financial statements 2011–12

Details of which disclosures in standards and interpretations are not required under tier 2 reporting are set out in amending standards AASB 2010-2, AASB 2011-2, AASB 2011-6 and AASB 2011-11 (which also apply from reporting periods beginning on or after 1 July 2013). However, Treasury Department's Financial Reporting Requirements effectively do not allow application of AASB 2011-6 in respect of controlled entities, associates or interests in jointly controlled entities.

Pursuant to AASB 1053, public sector entities like the Council may adopt tier 2 requirements for their general purpose financial statements. However, AASB 1053 acknowledges the power of a regulator to require application of the tier 1 requirements. In the case of the Council, Treasury Department is the regulator. Treasury Department has advised that its policy decision is to require adoption of tier 1 reporting by all statutory bodies that are consolidated into the whole-of-Government financial statements. Treasury's policy also prohibits the early adoption of the arrangements outlined in AASB 1053 and its accompanying amending standards. Therefore, the release of AASB 1053 and associated amending standards will have no impact on the Council.

All other Australian accounting standards and interpretations with future commencement dates are either not applicable to the Council's activities, or have no material impact on the Council.

Notes to and forming part of the financial statements 2011–12

| | 2012 | 2011 |
|---|--------|--------|
| | \$'000 | \$'000 |
| 2. Grants | | |
| (a) Grants and other contributions | | |
| Grants - Queensland Health * | 13,969 | 13,969 |
| Grants - QIMR Trust research support | - | 1,164 |
| Grants - Other | 10,691 | 12,993 |
| Grants - Cancer Council Qld | 1,273 | 247 |
| Grants - National Health & Medical Research Council | 24,018 | 23,128 |
| Grants - National Institutes of Health | 2,215 | 2,879 |
| Grants - NHMRC Infrastructure Funding ** | 4,473 | 4,765 |
| Donations and fundraising | 6,486 | 5,586 |
| Bequests | 2,278 | 292 |
| | 65,403 | 65,023 |

* The Queensland Health grant must be used to fund the administrative operations and maintenance of the Institute throughout the reporting period. The recognition of revenue has been deferred upon receipt with revenue recognised over the term of the funding arrangement. At 30 June 2012, all of the grant had been spent.

** The grant from the National Health and Medical Research Council must be used to fund capital scientific equipment acquisitions and maintenance of the Institute. The recognition of revenue has been deferred upon receipt with revenue recognised over the term of the funding arrangement. At 30 June 2012, all of the grant had been spent.

(b) Capital grants

| Grants - Medical Research Centre | 11,400 | 80,500 |
|----------------------------------|--------|--------|
|----------------------------------|--------|--------|

Capital grants received for the Medical Research Centre in 2011-12 include milestone payments of \$5.9 million from the Queensland Department of Employment, Economic Development and Innovation and \$5.5 million from The Atlantic Philanthropies. These grants must be used to fund the construction and fit out of the QIMR Medical Research Centre building on the Herston site. The milestone grant payments are recognised as revenue upon receipt.

3. Commercial revenue

| Commercial and contract research | 1,503 | 1,912 |
|----------------------------------|-------|-------|
| Sundry tenants recoveries | 1,052 | 1,869 |
| Other | 548 | 605 |
| Total | 3,103 | 4,386 |

4. Other revenue

| | <u> </u> | -, |
|------------------------------------|----------|--------|
| Total | 11,842 | 10,340 |
| Other | 41 | 149 |
| Reimbursements | 3,432 | 1,028 |
| Investment distributions | 2,531 | 3,806 |
| Interest - Medical Research Centre | 3,062 | 3,242 |
| Interest | 2,776 | 2,115 |
| | | |

Notes to and forming part of the financial statements 2011-12

| | 2012 \$'000 | 2011 \$'000 |
|--|----------------|----------------|
| 5. Gains/(losses) | \$ 000 | \$ 000 |
| Net loss on market value of other financial asset | (3,034) | (1,053) |
| Net gain on transfer of QIMR Trust net assets to Council (note 27) | - | 54,985 |
| Total | (3,034) | 53,932 |
| 6. Employee expenses | | |
| Employee benefits | | |
| Wages and salaries | 33,067 | 32,051 |
| Employer superannuation contributions * | 3,710 | 3,744 |
| Long service leave levy * | 617 | 632 |
| Annual leave expense * | 3,018 | 3,040 |
| Other employee benefits | 244 | 241 |
| Employee related expenses | | |
| Workers' compensation premium * | 73 | 73 |
| Fringe benefits tax expense | 61 | 36 |
| Other employee related expenses | 84 | 75 |
| Total | 40,874 | 39,892 |

* Refer to note 1(w)

The number of employees including both full-time employees and part-time employees measured on a full-time equivalent basis is:

| Number of employees: | 446 | 448 |
|--|--------|--------|
| 7. Supplies and services | | |
| Consultants and contractors | 3,328 | 3,221 |
| Supplies and consumables | 13,821 | 12,127 |
| Travel | 1,434 | 1,793 |
| Minor equipment and software purchases * | 2,987 | 782 |
| Rent | 141 | 183 |
| Total | 21,711 | 18,106 |

* The increase in expenditure for minor equipment and software purchases in 2012 relates to acquisitions undertaken in relation to the opening of the new building.

Notes to and forming part of the financial statements 2011-12

| | 2012 | 2011 |
|----------------------------------|--------|--------|
| | \$'000 | \$'000 |
| 8. Depreciation and amortisation | | |
| Buildings | 2,595 | 2,373 |
| Plant and equipment | 3,525 | 2,954 |
| Software purchased | 68 | 68 |
| Software internally generated | 17 | 17 |
| Total | 6,205 | 5,412 |

The Institute's property, plant and equipment includes heritage assets such as research library monographs, Australiana and scarce items. These were independently valued in 2012 at \$103,735. The service potential of the heritage assets is not expected to diminish with time or use and therefore, they are not depreciated. Further details are presented in notes 15 and 19.

9. Other expenses

| Scientific collaboration distributions | 3,551 | 3,714 |
|---|-------|-------|
| Audit fee * | 188 | 182 |
| Insurance | 404 | 380 |
| Legal expenses | 128 | 112 |
| Net loss on sale of property, plant and equipment | 757 | 59 |
| Net (gain)/loss on foreign exchange transactions | (32) | 33 |
| Impairment of bad debts | 3 | 16 |
| Total | 4,999 | 4,496 |

* Total external audit fees to be paid to the Queensland Audit Office relating to the 2011-12 financial year are estimated to be \$62,500 (2011: \$60,000). There are no non-audit services included in this amount.

10. Cash and cash equivalents

| Imprest accounts | 1 | 1 |
|-----------------------------------|--------|---------|
| Cash at bank | 6,415 | 7,140 |
| Term deposits | 75,818 | 105,312 |
| Total | 82,234 | 112,453 |
| 11. Receivables | | |
| Trade debtors | 4,142 | 4,220 |
| GST receivable | 608 | 1,226 |
| GST payable | (75) | (159) |
| | 533 | 1,067 |
| Long service leave reimbursements | 261 | 91 |
| NHMRC Infrastructure Funding | 2,274 | 2,274 |
| Other | 1,045 | 1,135 |
| Accrued interest | 567 | 1,701 |
| Total | 8,822 | 10,488 |

Notes to and forming part of the financial statements 2011–12

| | 2012 | 2011 |
|------------------------------------|--------|--------|
| | \$'000 | \$'000 |
| 12. Inventories | | |
| Supplies and consumables - at cost | 256 | 277 |
| Total | 256 | 277 |
| | | |

During the 2012 reporting period, \$1.1 million of inventories (2011: \$1.1 million) were expensed. All inventories on hand at 30 June are expected to be realised before 12 months.

13. Other financial assets

Other financial assets at fair value through profit or loss:

| Managed fund investments | 63,176 | 59,816 |
|-------------------------------|--------|--------|
| Shares - US listed entities * | 26 | 47 |
| Total | 63,202 | 59,863 |

* QIMR holds shares in Sequenom Inc. which were acquired as a result of the takeover of Gemini PLC, in which QIMR held shares originally. These shares are quoted on the NASDAQ exchange in the United States of America and are recorded at their market value at reporting date.

14. Intangible assets

| Software purchased: | | |
|--------------------------------|-------|-------|
| At cost | 679 | 679 |
| Less: Accumulated amortisation | (178) | (110) |
| | 501 | 569 |
| Software internally generated: | | |
| At cost | 172 | 172 |
| Less: Accumulated amortisation | (37) | (19) |
| | 135 | 153 |
| Total | 636 | 722 |
| | | |



| Intangibles reconciliation | Software internally generated | Software purchased | Software WIP | Total |
|---------------------------------|-------------------------------|--------------------|----------------|----------------|
| | 2012 | 2012 | 2012 | 2012 |
| | \$,000 | 000.\$ | 000.\$ | \$-000 |
| Carrying amount at 1 July 2011 | 153 | 569 | | 722 |
| Acquisitions | | | · | ı |
| Transfers between classes | | | · | ı |
| Amortisation | (18) | (68) | | (86) |
| Carrying amount at 30 June 2012 | 135 | 501 | | 636 |
| | Software internally generated | Software purchased | Software WIP | Total |
| | 2011 \$'000 | 2011 \$'000 | 2011 \$'000 | 2011 \$'000 |
| Carrying amount at 1 July 2010 | 131 | 548 | 107 | 786 |
| Acquisitions | | | 21 | 21 |
| Transfers between classes | 39 | 89 | (128) | |
| Amortisation | (12) | (68) | | (85) |
| Carrying amount at 30 June 2011 | 153 | 569 | • | 722 |

QIMR Annual Report 2011-2012

Page 94

Amortisation of intangibles is included in the line item depreciation and amortisation in the Statement of Comprehensive Income.

The Council of The Queensland Institute of Medical Research Notes to and forming part of the financial statements 2011–12

Notes to and forming part of the financial statements 2011–12

| | 2012 | 2011 |
|-----------------------------------|----------|----------|
| 15. Property, plant and equipment | \$'000 | \$'000 |
| Buildings: | | |
| At fair value | 251,510 | 118,641 |
| Less: Accumulated depreciation | (43,451) | (40,856) |
| | 208,059 | 77,785 |
| Heritage and cultural assets: | | |
| At fair value | 104 | 283 |
| | 104 | 283 |
| Plant and equipment: | | |
| At cost | 57,396 | 52,401 |
| Less: Accumulated depreciation | (30,907) | (28,441) |
| | 26,489 | 23,960 |
| Work in progress: | | |
| At cost | 6,521 | 104,259 |
| | 6,521 | 104,259 |
| Total | 241,173 | 206,287 |

The Institute's buildings known as the Bancroft Centre and the Clive Berghofer Cancer Research Centre (CBCRC) were last revalued at 30 June 2008 by the independent valuer Davis Langdon Australia Pty Ltd. The valuations at the time were based on the depreciable replacement cost. Since 2008 interim valuations for these buildings have been carried out annually to ensure that material changes in fair value are reflected at each reporting date. The implicit price deflator is used for such interim valuations which the independent valuer believed to be the most appropriate index given the number of laboratories contained within the Institute's buildings.

At 30 June 2012 the cumulative change in the index since the last independent valuation was not material (less than 5%) and the carrying value of the buildings was therefore left unchanged (2011: -1.9%).

The commissioning of the Institute's Medical Research Centre building on 1 June 2012 resulted in an increase in the value of buildings by \$132.9 million represented by the total capitalised costs to practical completion.

Heritage and cultural assets consisting of research library monographs, Australiana and scarce items have been included at current replacement cost as assessed by the Approved Commonwealth Valuer (Books) Jörn Harbeck as at 18 April 2012.

| Property, plant and equipment reconciliationBuildingsHeritage & culturaCarrying amount at 1 July 2011201220122013Carrying amount at 1 July 201177,78528Acquisitions77,78528Disposals132,869132,869Transfers between classes132,869(179Revaluation decrements(179Accumulated depreciation revaluation adjustment2,595)-(179Depreciation/amortisation203,059104 | Heritage & cultural 2012 \$'000 283 283 283 (179) (179) - | Plant & equipment 2012 \$*000 23,960 5,781 (757) 1,030 | Work in progress 2012 \$'000 104,259 36,161 - (133,899) | Total 2012 \$'000 206,287 41,942 |
|---|---|---|---|---|
| 2012 2012 2011 Carrying amount at 1 July 2011 77,785 28 Acquisitions 77,785 28 Acquisitions 17,785 28 Acquisitions - 28 Disposals - - 28 Transfers between classes 132,869 - (179 Revaluation decrements - - (179 Accumulated depreciation revaluation adjustment - - (179 Depreciation/amortisation (2,595) - 20 04 | 2012 \$*000 283 283 (179) (179) | 2012 \$'000 \$'000 23,960 5,781 (757) 1,030 1,030 | 2012 \$'000 104,259 36,161 - (133,899) | 2012 \$'000 206,287 41,942 |
| Since Since <th< th=""><th>\$'000 283 283 (179) </th><th>\$'000 23,960 5,781 (757) 1,030 </th><th>\$'000 104,259 36,161 - (133,899)</th><th>\$'000 206,287 41,942</th></th<> | \$'000 283 283 (179) | \$'000 23,960 5,781 (757) 1,030 | \$'000 104,259 36,161 - (133,899) | \$'000 206,287 41,942 |
| Carrying amount at 1 July 2011 77,785 28. Acquisitions - - Acquisitions - - Disposals - - Disposals 132,869 - Transfers between classes 132,869 - Revaluation decrements - - Accumulated depreciation revaluation adjustment - - Depreciation/amortisation (2,595) - Carrying amount at 30 June 2012 208,059 104 | 283 | 23,960 5,781 (757) 1,030 - - | 104,259 36,161 - (133,899) - | 206,287 41,942 |
| Acquisitions-Disposals-Disposals-Transfers between classes132,869Revaluation decrements-Accumulated depreciation revaluation adjustment-Depreciation/amortisation(179Depreciation/amortisation208,059Carrying amount at 30 June 2012208,059 | (179) | 5,781 (757) 1,030 - | 36,161 - (133,899) - | 41,942 |
| Disposals-Transfers between classes132,869Revaluation decrements-Revaluation decrements-Accumulated depreciation revaluation adjustment-Depreciation/amortisation(2,595)Carrying amount at 30 June 2012208,059104 | - - - - | (757) 1,030 - - | - (133,899) - | |
| Transfers between classes132,869Revaluation decrements-Accumulated depreciation revaluation adjustment-Depreciation/amortisation(2,595)Carrying amount at 30 June 2012208,059 | - (179) | 1,030 | (133,899) - - | (757) |
| Revaluation decrements - (179 Accumulated depreciation revaluation adjustment - - Depreciation/amortisation (2,595) 104 Carrying amount at 30 June 2012 208,059 104 | (179) - - | | | • |
| Accumulated depreciation revaluation adjustment - Depreciation/amortisation Carrying amount at 30 June 2012 104 | · · · | | ı | (179) |
| Depreciation/amortisation Carrying amount at 30 June 2012 208,059 104 | - - | | | • |
| Carrying amount at 30 June 2012 208,059 208,059 104 | 101 | (0,020) | | (6,120) |
| | 104 | 26,489 | 6,521 | 241,173 |
| Buildings Heritage & cultura | Heritage & cultural | Plant & equipment | Work in progress | Total |
| 2011 2011 \$ | 2011 \$'000 | 2011 \$'000 | 2011 \$'000 | 2011 \$'000 |
| Carrying amount at 1 July 2010 81,639 28: | 283 | 21,515 | 29,385 | 132,822 |
| Acquisitions - | | 4,954 | 76,096 | 81,049 |
| Disposals - | | (222) | | (777) |
| Transfers between classes | | 1,222 | (1,222) | • |
| Revaluation decrements (2,259) | ı | · | | (2,259) |
| Accumulated depreciation revaluation adjustment | · | | | 779 |
| Depreciation/amortisation (2,373) | | (2,954) | | (5,327) |
| Carrying amount at 30 June 2011 77,785 28: | 283 | 23,960 | 104,259 | 206,287 |

The Council has plant and equipment with an original cost of \$16.2 million (2011: \$15.9 million) and a written down value of zero still being used in the provision of services. The Council intends to retire these assets over the following five years.

The Council of The Queensland Institute of Medical Research Notes to and forming part of the financial statements 2011–12

Notes to and forming part of the financial statements 2011-12

| | 2012 | 2011 |
|-----------------------------------|--------|--------|
| | \$'000 | \$'000 |
| 16. Payables | | |
| Trade creditors | 1,491 | 10,792 |
| Others | 2,191 | 12 |
| Total | 3,682 | 10,804 |
| Current | | |
| Current | | |
| Wages outstanding * | 963 | - |
| Long service leave levy payable | 174 | 176 |
| Annual leave entitlements payable | 2,526 | 2,488 |
| Other | 404 | 440 |
| Total | 4,067 | 3,104 |

* Wages outstanding in 2011-12 financial year relate to accrued back pay under the Institute's enterprise agreement.

Non current

| Annual leave entitlements payable | 913 | 870 |
|-----------------------------------|-----|-----|
| Total | 913 | 870 |
| | | |

18. Unearned revenue

| Unearned revenue | | | 19,408 | 21,665 |
|--|---|--------------------|----------------------|--|
| | | = | 19,408 | 21,665 |
| As at 30 June 2012 (\$'000) | Grants brought forward 1 July 2011 | Grants received | Grant expenditure | Grants carried forward 30 June 2012 |
| National Health & Medical Research Council | 10,146 | 23,579 | (24,017) | 9,707 |
| Queensland Health | - | 13,969 | (13,969) | - |
| Cancer Australia | 1,292 | 22 | (744) | 569 |
| Cancer Council Qld | 246 | 1,191 | (1,273) | 164 |
| National Institutes of Health | 78 | 2,254 | (2,215) | 117 |
| Other granting bodies | 9,060 | 10,891 | (11,519) | 8,432 |
| Other commercial funding bodies | 843 | 44 | (468) | 419 |
| | 21.665 | 51.949 | (54.206) | 19.408 |

Notes to and forming part of the financial statements 2011-12

18. Unearned revenue (cont'd)

| As at 30 June 2011 (\$'000) | Grants brought forward 1 July 2010 | Grants received | Grant expenditure | Grants carried forward 30 June 2011 |
|--|---|--------------------|----------------------|--|
| National Health & Medical Research Council | 7,959 | 25,313 | (23,126) | 10,146 |
| Queensland Health | - | 13,969 | (13,969) | - |
| QIMR Trust | - | 1,160 | (1,160) | - |
| Cancer Australia | 1,222 | 819 | (749) | 1,292 |
| Cancer Council Qld | 415 | 1,447 | (1,616) | 246 |
| National Institutes of Health | 647 | 2,310 | (2,879) | 78 |
| Other granting bodies | 6,089 | 13,894 | (10,923) | 9,060 |
| Other commercial funding bodies | 563 | 830 | (550) | 843 |
| | 16,895 | 59,742 | (54,972) | 21,665 |

19. Asset revaluation surplus by class

| | Buildings | cultural assets | s Total |
|---------------------------------------|-----------|-----------------|---------|
| | \$'000 | \$'000 | \$'000 |
| Balance 1 July 2011 | 38,944 | 183 | 39,127 |
| Revaluation increments/(decrements) * | - | (179) | (179) |
| Balance 30 June 2012 | 38,944 | 4 | 38,948 |

| | | Heritage & | | |
|---------------------------------------|-----------|---------------------------|---------|--|
| | Buildings | Buildings cultural assets | | |
| | \$'000 | \$'000 | \$'000 | |
| Balance 1 July 2010 | 40,424 | 183 | 40,607 | |
| Revaluation increments/(decrements) * | (1,480) | - | (1,480) | |
| Balance 30 June 2011 | 38,944 | 183 | 39,127 | |

* Further details are presented in notes 8 and 15.

Notes to and forming part of the financial statements 2011–12

| | 2012 \$'000 | 2011 \$'000 |
|---|----------------|----------------|
| 20. Reconciliation of operating surplus to net cash from operating activities | | |
| Operating surplus/(deficit) | 14,676 | 145,945 |
| Depreciation and amortisation expense | 6,205 | 5,412 |
| Loss on sale of property, plant and equipment | 757 | 59 |
| Net increase in other financial asset | 503 | (2,363) |
| Transfer of gain and financial assets from QIMR Trust | - | (54,766) |
| Change in assets and liabilities: | | |
| (Increase)/decrease in trade receivables | 77 | (585) |
| (Increase)/decrease in GST input tax credits receivable | 618 | (640) |
| (Increase)/decrease in long service leave reimbursement receivables | (170) | 119 |
| (Increase)/decrease in NHMRC Infrastructure Funding | - | 217 |
| (Increase)/decrease in other receivables | 1,225 | (206) |
| (Increase)/decrease in inventories | 21 | (8) |
| (Increase)/decrease in prepayments | 132 | 353 |
| Increase/(decrease) in accounts payable | 211 | (465) |
| Increase/(decrease) in accrued employee benefits | 1,006 | (3) |
| Increase/(decrease) in unearned revenue | (2,257) | 4,759 |
| Increase/(decrease) in GST payable | (84) | (71) |
| (Increase)/decrease in investments accounted for using equity method | (20) | 189 |
| Net cash from operating activities | 22,900 | 97,946 |

21. Non-cash financing and investing activities

Assets and liabilities received or donated/transferred by the Council are recognised as revenue and expenses if material and included in balances contained in Notes 4 and 15, respectively.

22. Commitments for expenditure

(a) Non-cancellable operating leases

Commitments under operating leases at reporting date are inclusive of anticipated GST and are payable as follows: Payable:

| Total | 36 | 84 |
|---|----|----|
| Later than five years | | - |
| Later than one year and not later than five years | 6 | 36 |
| Not later than one year | 30 | 48 |
| | | |

Operating leases have renewal options, however, no leases have escalation clauses other than in the event of payment default.

No lease arrangements create restrictions on other financing transactions.

The Council of The Queensland Institute of Medical Research Notes to and forming part of the financial statements 2011–12

22. Commitments for expenditure (cont'd)

(b) Capital expenditure commitments

The Institute has identified the material classes of capital expenditure commitments which in majority relate to the third phase of the Medical Research Centre construction project. The values shown as at 30 June 2012 are based on contract value commitments inclusive of anticipated GST, contracted for at reporting date but not recognised in the accounts as payable. The 2011 comparatives were based on order value and excluded commitments for the Medical Research Centre construction project.

| 2012 | 2011 |
|--------|---|
| \$'000 | \$'000 |
| | |
| 21,213 | 1,255 |
| 11,511 | - |
| | - |
| 32,724 | 1,255 |
| | 2012 \$'000 21,213 11,511 - 32,724 |

Other expenditure committed at the end of the period but not recognised in the accounts are as follows:

| Later than five years | - | - 1 252 |
|---|-----|---------|
| Later than one year and not later than five years | - | - |
| Not later than one year | 863 | 1,253 |
| Payable: | | |

23. Contingencies

(a) Contingent assets

Contributions to Queensland Community Foundation

The abolished QIMR Trust established a fund with the Queensland Community Foundation (QCF) for the purpose of creating a specific fund to generate future income and donations. This fund was transferred to Council upon abolition of the Trust on 1 February 2011. All contributions made to this named fund within QCF are held in trust and invested in perpetuity with net income distributed to the Council at the discretion of the Trustee in accordance with the Queensland Community Fund Declaration of Trust. The available balance of this fund was \$823,000 at 30 June 2012 comprising total assets of \$840,000 and total liabilities of \$17,000 (net assets 2011: \$358,000) of which \$10,000 was contributed by the former QIMR Trust. The Council expects that earnings from the 2011-12 financial year will be brought to account during the financial year ending 30 June 2013.

(b) Contingent liabilities

There were no known contingent liabilities at 30 June 2012.

Notes to and forming part of the financial statements 2011–12

24. Jointly controlled entities

(a) Q-Pharm Pty Ltd

Q-Pharm Pty Limited is a phase 1 clinical trial company. The company is a joint venture between Professors Hooper and Dickinson, QIMR and The University of Queensland. QIMR holds 24.5% of the shares of Q-Pharm Pty Limited (2011: 24.5%).

QIMR accounts for its 24.5% interest in Q-Pharm Pty Limited on an equity accounted basis.

A summary of the financial transactions and balances for Q-Pharm Pty Limited is as follows:

| Q-Pharm Pty Ltd | 2012 | 2011 |
|-------------------------|---------|---------|
| | \$'000 | \$'000 |
| Income | 6,661 | 5,129 |
| Expenses | (6,582) | (5,900) |
| Net surplus/(deficit) | 79 | (771) |
| Current assets | 2,072 | 1,994 |
| Non-current assets | 281 | 369 |
| Current liabilities | (1,044) | (1,132) |
| Non-current liabilities | - | - |
| Net assets | 1,309 | 1,231 |

Q-Pharm did not have any material contingent liabilities or commitments as at 30 June 2012. Council has not individually or jointly incurred any contingent liabilities in Q-Pharm. Council is not contingently liable for the liabilities of the other ventures of Q-Pharm.

The Q-Pharm financial statements to 30 June 2012 were audited by Terry Murphy CA. Total external audit fees relating to the 2011-12 financial year are estimated to be \$13,000 (2011: \$15,500). There are no non-audit services included in this amount.

(b) Vaccine Solutions Pty Ltd

QIMR and CSL Limited are equal shareholders in Vaccine Solutions Pty Ltd, a company established in 1998 to provide clinical trial sponsorship, intellectual property management and commercialisation services to the CRC for Vaccine Technology (CRCVT). Upon the winding up of the CRCVT the company manages a number of licensing arrangements for the benefit of the members of CRCVT Trust II. Vaccine Solutions does not own any physical or intellectual property assets of its own and is required to return 97% of all commercial income received from licensing activities to the CRCVT Trust II for distribution to members of that trust.

25. Trust transactions and balances

(a) Trust I for the CRC for Vaccine Technology (CRCVT Trust I)

QIMR is the Trustee of the CRC for Vaccine Technology Trust I (CRCVT Trust I), a trust managing shares in VacTx Pty Ltd on behalf of the participants of the CRCVT. VacTx Pty Ltd is a company focused on the development of vaccines through intellectual property created by the CRCVT. The CRCVT wound up operations in June 2006. Income received from the sale of the shares is to be distributed to the members in the trust according to their participating share in the CRCVT as of June 2006. The members of this trust are: The Queensland Institute of Medical Research, CSIRO, The University of Melbourne, Walter and Eliza Hall Institute of Medical Research, Monash University, Australian Red Cross Blood Service and La Trobe University.

The Council of The Queensland Institute of Medical Research Notes to and forming part of the financial statements 2011–12

25. Trust transactions and balances (cont'd)

(b) Trust II for the CRC for Vaccine Technology (CRCVT Trust II)

QIMR is the Trustee of the CRC for Vaccine Technology Trust II (CRCVT Trust II), a trust responsible for managing patent families and licensing arrangements on behalf of the participants in the CRC for Vaccine Technology since winding up in June 2006. Income received from licensing arrangements is distributed to the members in the trust according to their participating share in the CRCVT as of June 2006. The members of the trust are: The Queensland Institute of Medical Research, CSIRO, CSL Limited, The University of Melbourne, Walter and Eliza Hall Institute of Medical Research, Monash University, Australian Red Cross Blood Service and La Trobe University.

As the Council performs only a custodial role in respect of these transactions and balances, they are not recognised in the financial statements but are disclosed in these notes for the information of users.

| Trust for the CRC for Vaccine Technology (CRCVT Trust II) | 2012 | 2011 |
|---|--------|--------|
| | \$'000 | \$'000 |
| Income | 468 | 272 |
| Expenses | (246) | (188) |
| Trust net surplus before distributions | 222 | 84 |
| Cash | 200 | 45 |
| Receivables | 435 | 358 |
| Total assets | 635 | 403 |
| Payables | 11 | 1 |
| Beneficiaries entitlements payable | 624 | 402 |
| Total liabilities | 635 | 403 |
| Trust net assets | | |
| | | |

The CRCVT Trust II financial statements were audited for the first time at 30 June 2012. Based on audit findings the 2011 comparatives were restated. KPMG is the auditor of CRCVT Trust II. Total external audit fees relating to the 2011-12 financial year are estimated to be \$8,000 (2011: nil). There are no non-audit services included in this amount.

(c) Employee Research Services

The Council undertakes a custodial role in respect of transactions and balances relating to Employee Research Services (ERS). They are not recognised in the financial statements but are disclosed in these notes for the information of users.

Employee Research Services

| | | 0.000 |
|----------------------------------|-------|-------|
| Cash held in short term deposits | 2,214 | 2,332 |
| | 2,214 | 2,332 |

Notes to and forming part of the financial statements 2011–12

26. Key executive management personnel and remuneration

(a) Key executive management personnel

The following details for key executive management personnel include those positions that had authority and responsibility for planning, directing and controlling the activities of the Institute during 2011-12. Further information on these positions can be found in the body of the annual report under the section relating to executive management.

| | | Contract classification and appointment authority | Date appointed to position |
|--------------|--|--|----------------------------|
| Director/CEO | The Director is responsible for work and efficient and effective administration of the Council | Appointed by Governor in Council, s10 QIMR Act 1945 | 4 January 2011 |

(b) Remuneration

Remuneration policy for the Institute's key executive management personnel is set by Council as provided for under the Queensland Institute of Medical Research Act 1945. The remuneration and other terms of employment for the key executive management personnel are specified in employment contracts. The contracts provide for the provision of other benefits including motor vehicles.

Remuneration packages for key executive management personnel comprise the following components:

- i. Short term employee benefits which include
 - Base consisting of base salary, allowances and leave entitlements paid and provided for the entire year or for that
 part of the year during which the employee occupied the specified position. Amounts disclosed equal the amount
 expensed in the Statement of Comprehensive Income.
 - Non-monetary benefits consisting of provision of vehicle together with fringe benefits tax applicable to the benefit.
- ii. Long term employee benefits include long service leave accrued.
- iii. Post employment benefits include superannuation contributions.
- iv. Redundancy payments are not provided for within individual contracts of employment. Contracts of employment provide only for notice periods or payment in lieu of notice on termination, regardless of the reason for termination.
- v. There are no performance bonuses paid or payable to key executive management.

Total fixed remuneration is calculated on a 'total cost' basis and includes the base and non-monetary benefits, long term employee benefits and post employment benefits:

| Position | Short term employee benefits | | Long term employee benefits | Post employment benefits | Termination benefits | Total remuneration |
|--------------|---------------------------------|--|-----------------------------------|--------------------------------|-------------------------|--------------------|
| | Base \$'000 | Non- monetary benefits \$'000 | \$'000 | \$'000 | \$'000 | \$'000 |
| Director/CEO | 514 | 30 | 16 | 16 | - | 576 |

1 July 2011 - 30 June 2012

The Council of The Queensland Institute of Medical Research Notes to and forming part of the financial statements 2011–12

26. Key executive management personnel and remuneration (cont'd)

1 July 2010 - 30 June 2011

| Position | Short term employee benefits | | Long term employee benefits | Post employment benefits | Termination benefits | Total remuneration |
|---------------------------|---------------------------------|--|-----------------------------------|--------------------------------|-------------------------|--------------------|
| | Base \$'000 | Non- monetary benefits \$'000 | \$'000 | \$'000 | \$'000 | \$'000 |
| Director/Acting Directors | 410 | 27 | 8 | 25 | - | 470 |

The key executive remuneration for the financial year 2010-11 only includes six months of the current Director/CEO's remuneration as he was appointed on 4 January 2011. The disclosure for 2011-12 includes full 12 months of remuneration.

27. Transfer of the assets and liabilities of the abolished QIMR Trust to The Council of the Queensland Institute of Medical Research

The Queensland Institute of Medical Research Trust was abolished with effect on 1 February 2011. On the Trust abolition day the net assets of the Trust immediately became the assets and liabilities of the Council, as prescribed by the Water and Other Legislation Amendment Act 2010. The book values of the assets and liabilities transferred to the Council, as at 31 January 2011, were recorded in the abolished Trust as follows:

| | 2012 | 2011 |
|-----------------------------|----------|--------|
| | \$'000 | \$'000 |
| Current assets | | |
| Cash and cash equivalents | - | 651 |
| Trade and other receivables | - | 314 |
| Other current assets | <u> </u> | 36 |
| Total current assets | <u> </u> | 1,001 |
| Non-current assets | | |
| Other financial assets | - | 54,115 |
| Total non-current assets | | 54,115 |
| Total assets | <u> </u> | 55,116 |
| Current liabilities | | |
| Payables | - | 131 |
| Total current liabilities | | 131 |
| Total liabilities | <u> </u> | 131 |
| Net assets | <u> </u> | 54,985 |

Notes to and forming part of the financial statements 2011–12

28. Financial instruments

(a) Categorisation of financial instruments

The Council has the following categories of financial assets and financial liabilities:

| Category | Notes | | |
|---|-------|---------|----------|
| Financial assets | | | |
| Cash and cash equivalents | 10 | 82,234 | 112,453 |
| Receivables | 11 | 8,822 | 10,488 |
| Managed fund investments and US listed shares | 13 | 63,202 | 59,863 |
| | | 154,258 | 182,804 |
| Financial liabilities | | | |
| Financial liabilities measured at amortised cost: | | | |
| Payables | 16 | (3,683) | (10,804) |
| | | (3,683) | (10,804) |

(b) Financial risk management

The Council's activities expose it to a variety of financial risks - interest rate risk, credit risk, liquidity risk and market risk.

Financial risk management is implemented pursuant to Government and Council policy. These policies focus on the unpredictability of financial markets and seek to minimise potential adverse effects on the financial performance of the Council.

All financial risk is managed by the Queensland Institute of Medical Research Corporate Division under policies approved by the Council. The Council provides written principles for overall risk management, as well as policies covering specific areas.

The Council measures risk exposure using a variety of methods as follows:

| Risk exposure | Measurement method | | |
|----------------|------------------------------------|--|--|
| Credit risk | Ageing analysis, earnings at risk | | |
| Liquidity risk | Sensitivity analysis | | |
| Market risk | Interest rate sensitivity analysis | | |

(c) Credit risk exposure

Credit risk exposure refers to the situation where the Council may incur financial loss as a result of another party to a financial instrument failing to discharge their obligation.

The maximum exposure to credit risk at balance date in relation to each class of recognised financial assets is the gross carrying amount of those assets inclusive of any provisions for impairment.

The following table represents the Council's maximum exposure to credit risk based on contractual amounts net of any allowances:

| | | 2012 | 2011 |
|---|------|--------|--------|
| | Note | \$'000 | \$'000 |
| Financial assets | | | |
| Managed fund investments and US listed shares | 13 | 63,202 | 59,863 |
| Total | | 63,202 | 59,863 |
| | | | |

The Council of The Queensland Institute of Medical Research Notes to and forming part of the financial statements 2011–12

28. Financial instruments (cont'd)

The carrying amount of receivables represents the maximum exposure to credit risk. As such, receivables are not included in the above disclosure.

No collateral is held as security and no credit enhancements relate to financial assets held by the Council.

The Council manages credit risk through the use of a credit management strategy. This strategy aims to reduce the exposure to credit default by ensuring that the Council invests in secure assets and monitors all funds owed on a timely basis. Exposure to credit risk is monitored on an ongoing basis.

No financial assets and financial liabilities have been offset and presented net in the Statement of Financial Position.

The method for calculating any provision for impairment is based on past experience, current and expected changes in economic conditions and changes in client credit ratings. These economic and geographic changes form part of the Council's documented risk analysis assessment in conjunction with historic experience and associated industry data. This analysis has identified that none of the Council's financial assets are impaired and subsequently provisions for impairment have not been raised.

No financial assets have had their terms renegotiated so as to prevent them from being past due or impaired, and are stated at the carrying amounts as indicated.

Ageing of past due but not impaired financial assets is disclosed in the following tables. No financial assets were assessed as being impaired as at 30 June 2012:

2012 Financial assets past due but not impaired

| | | Overdue | | | | | | |
|------------------|------|-----------|------------|--------------|-----------|--------|--|--|
| | Note | < 30 days | 30-60 days | 61-90 days * | > 90 days | Total | | |
| | | \$'000 | \$'000 | \$'000 | \$'000 | \$'000 | | |
| Financial assets | 5 | | | | | | | |
| Receivables | 11 | 5,303 | 824 | 1,975 | 699 | 8,822 | | |
| Total | _ | 5,303 | 824 | 1,975 | 699 | 8,822 | | |

* Of this amount \$1.5 million relate to the reimbursement of capital expenditure incurred for the Queensland Tropical Health Alliance (QTHA). The full amount has been received by QIMR shortly after financial year end.

2011 Financial assets past due but not impaired

| | | Overdue | | | | | | |
|------------------|------|-----------|------------|------------|-----------|--------|--|--|
| | Note | < 30 days | 30-60 days | 61-90 days | > 90 days | Total | | |
| | | \$'000 | \$'000 | \$'000 | \$'000 | \$'000 | | |
| Financial assets | 6 | | | | | | | |
| Receivables | 11 | 9,448 | 657 | 7 | 376 | 10,488 | | |
| Total | _ | 9,448 | 657 | 7 | 376 | 10,488 | | |

(d) Liquidity risk

Liquidity risk refers to the situation where the Council may encounter difficulty in meeting obligations associated with financial liabilities that are settled by delivering cash or another financial asset.

The Council is exposed to liquidity risk in respect of its payables.

The Council manages liquidity risk through the use of a liquidity management strategy. This strategy aims to reduce the exposure to liquidity risk by ensuring the Council has sufficient funds available to meet employee and supplier obligations as they fall due. This is achieved by ensuring that minimum levels of cash are held within the various bank accounts so as to match the expected duration of the various employee and supplier liabilities.
The Council of The Queensland Institute of Medical Research Notes to and forming part of the financial statements 2011–12

28. Financial instruments (cont'd)

The following table sets out the liquidity risk of financial liabilities held by the Council. It represents the contractual maturity of financial liabilities, calculated based on undiscounted cash flows relating to the liabilities at reporting date. The undiscounted cash flows in these tables may differ from the amounts included in the Statement of Financial Position that are based on discounted cash flows.

| | | 2012 | Payable in | | |
|-----------------|--------|----------|------------|-----------|----------|
| | | < 1 year | 1-5 years | > 5 years | Total |
| | Note | \$'000 | \$'000 | \$'000 | \$'000 |
| Financial liabi | lities | | | | |
| Payables | 16 | (3,682) | - | - | (3,682) |
| Total | | (3,682) | - | - | (3,682) |
| | | 2011 | Payable in | | |
| | | < 1 year | 1-5 years | > 5 years | Total |
| | Note | \$'000 | \$'000 | \$'000 | \$'000 |
| Financial liabi | lities | | | | |
| Payables | 16 | (10,804) | - | - | (10,804) |
| Total | | (10,804) | - | - | (10,804) |

(e) Market risk

Market risk refers to the risk of loss arising from movements in market parameters such as exchange rates, interest rates and equity prices.

The Council does not trade in foreign currency and is not materially exposed to movements in foreign currency exchange rates. It maintains a bank account in Hong Kong with an immaterial cash balance denominated in HK\$ used to fund the operations of a local study.

The Council does not undertake any hedging in relation to interest risk and manages its risk as per the Council's liquidity risk management strategy articulated in the Council's policies. The Council is exposed to movements in interest rate risk through its investment in externally managed funds and it's holdings in cash and cash equivalents. An interest rate sensitivity analysis has been carried out and is presented in item (i) below.

The Council is exposed to price risk arising from its managed fund investments. These investments are classified as financial assets at fair value through profit or loss in the Statement of Financial Position. While the price of the managed funds can vary in the short term the Council does not consider the fluctuations to be significant over the long term. A price risk sensitivity analysis has been carried out and is presented in item (ii) below.

i. Interest rate sensitivity analysis

The following interest rate sensitivity analysis is based on a report similar to that provided to management, depicting the outcome on net income if interest rates would change by +/- 1% from the year-end rates applicable to the Council's financial assets and liabilities. With all other variables held constant, the Council would experience a change in operating result and equity by \$0.8 million (2011: \$1.1 million). This is mainly attributable to the Council's exposure to interest rate movements in its holdings in cash and cash equivalents.

The Council of The Queensland Institute of Medical Research

Notes to and forming part of the financial statements 2011–12

28. Financial instruments (cont'd)

| | | 2012 Interest rate risk | | | |
|-------------------------|-----------------|-------------------------|---------------|---------------|---------------|
| - | Carrying amount | -1 | % | +19 | % |
| Financial instruments | \$'000 | Profit \$'000 | Equity \$'000 | Profit \$'000 | Equity \$'000 |
| Cash & cash equivalents | 82,234 | (822) | (822) | 822 | 822 |
| Potential impact | | (822) | (822) | 822 | 822 |
| _ | | | 2011 Intere | est rate risk | |
| - | Corruing amount | 1 | 2011 Intere | . 40 | <u></u> |
| - | Carrying amount | - | /0 | T 1, | /0 |
| Financial instruments | \$'000 | Profit \$'000 | Equity \$'000 | Profit \$'000 | Equity \$'000 |
| Cash & cash equivalents | 112,453 | (1,125) | (1,125) | 1,125 | 1,125 |
| Potential impact | | (1,125) | (1,125) | 1,125 | 1,125 |

ii. Price risk sensitivity analysis

The following other price risk sensitivity analysis is based on a report similar to that provided to management, depicting the outcome on profit or loss if unit/share price would change by +/-1% from the year-end price applicable to the Council's other financial asset investments. With all other variables held constant, the Council would experience a change in operating result and equity by \$0.6 million (2011: \$0.6 million). This is mainly attributable to exposure to unit price movements in its investments managed funds and movements in market value of US listed shares.

| | | 2012 Other price rate risk | | | |
|------------------------|-----------------|----------------------------|---------------|---------------|---------------|
| | Carrying amount | -1 | % | +19 | 6 |
| Financial instruments | \$'000 | Profit \$'000 | Equity \$'000 | Profit \$'000 | Equity \$'000 |
| Managed funds & shares | 63,202 | (632) | (632) | 632 | 632 |
| Potential impact | | (632) | (632) | 632 | 632 |

| | | 2011 Other price rate risk | | | |
|------------------------|-----------------|----------------------------|---------------|---------------|---------------|
| | Carrying amount | -1 | % | +19 | 6 |
| Financial instruments | \$'000 | Profit \$'000 | Equity \$'000 | Profit \$'000 | Equity \$'000 |
| Managed funds & shares | 59,863 | (599) | (599) | 599 | 599 |
| Potential impact | | (599) | (599) | 599 | 599 |

(g) Fair value

The recognised fair values of financial assets and liabilities are classified according to the following fair value hierarchy that reflects the significance of the inputs used in making these measurements:

Level 1 - fair values that reflect unadjusted quoted prices in active markets for identical assets/liabilities;

Level 2 - fair values that are based on inputs that are directly or indirectly observable for the asset/liability (other than unadjusted quoted prices); and

Level 3 - fair values that are derived from data not observable in a market.

According to the above hierarchy, the fair values of each class of asset/liabilities recognised at fair value are as follows:

The Council of The Queensland Institute of Medical Research Notes to and forming part of the financial statements 2011–12

28. Financial instruments (cont'd)

| | 2012 Classifi | cation according to fair value | e hierarchy | |
|---------------------------|---------------|--------------------------------|-------------|--------|
| _ | Level 1 | Level 2 | Level 3 | Total |
| Financial assets | \$'000 | \$'000 | \$'000 | \$'000 |
| Mangd. fund investments | 63,176 | - | - | 63,176 |
| Shares-US listed entities | 26 | - | - | 26 |
| Total | 63,202 | - | - | 63,202 |

| | 2011 Classification according to fair value hierarchy | | | |
|---------------------------|---|---------|---------|--------|
| | Level 1 | Level 2 | Level 3 | Total |
| Financial assets | \$'000 | \$'000 | \$'000 | \$'000 |
| Mangd. fund investments | 59,816 | - | - | 59,816 |
| Shares-US listed entities | 47 | - | - | 47 |
| Total | 59,863 | - | - | 59,863 |

The fair value of trade receivables and payables is assumed to approximate the value of the original transaction, less any provision for impairment.

29. Events occurring after balance sheet date

No events have occurred after the balance sheet date that would have a material impact on the figures reported in the above statements.

30. Economic dependency

The Institute's activities are predominantly funded by grants received from a range of funding agencies, the majority of which are Commonwealth and State Government bodies. The ability of the Institute to source sufficient grant funding is dependent upon those entities continuing to have the ability to fund research activities and for the Institute to be successful in its funding applications.

31. Changes in classification or presentation

During the year, the Council reviewed the accounting for the Medical Research Centre capital grants received following the recent release of the Queensland Government Accounting Policy Guideline (APG) 2 *Contributions Received by Not-For-Profit Agencies*. Previously, unexpended Medical Research Centre capital grant funds as at the end of the reporting period were accounted for as reciprocal transfers and recorded as Unearned revenue. APG 2 regards the Medical Research Centre capital grant funds to be recorded as revenue when control of the contribution is obtained, it is probable that future economic benefits will flow to the Institute and the contribution can be reliably measured.

As a result of this change, financial statement comparative figures have been restated. The effect on the Statement of Comprehensive Income in the financial year 2010-11 resulted in an increase in Grants and other contributions by \$8.7 million and Other revenue by \$0.4 million. The effect on the Statement of Financial Position in the financial year 2010-11 resulted in a decrease in Unearned revenue and a corresponding increase in the Accumulated surplus by \$66.6 million.

The financial statement comparative figures have also been restated to reflect the reclassification of a research grant from non-reciprocal to reciprocal transfers. This resulted in a decrease to the line item Grants and other contributions in the Statement of Comprehensive Income and an increase to Unearned revenue in the Statement of Financial Position by \$972,000 in 2010-11.

The Council of The Queensland Institute of Medical Research

Certificate of The Council of the Queensland Institute of Medical Research

These general purpose financial statements have been prepared pursuant to section 62(1) of the *Financial Accountability Act 2009* (the Act), relevant sections of the *Financial and Performance Management Standard 2009* and other prescribed requirements. In accordance with section 62(1)(b) of the Act we certify that in our opinion:

- a) the prescribed requirements for establishing and keeping the accounts have been complied with in all material respects; and
- b) the statements have been drawn up to present a true and fair view, in accordance with prescribed accounting standards, of the transactions of the Council of the Queensland Institute of Medical Research for the financial year ended 30 June 2012 and of the financial position of the Council at the end of that year.

Dated at Brisbane this 31st day of August 2012

Christopher Coyne Acting Chairman of Council

Professor Frank Gannon Director & Chief Executive Officer

Donna Hancock Secretary



INDEPENDENT AUDITOR'S REPORT

To the Council of the Queensland Institute of Medical Research

Report on the Financial Report

I have audited the accompanying financial report of the Council of the Queensland Institute of Medical Research, which comprises the statement of financial position as at 30 June 2012, the statement of comprehensive income, statement of changes in equity and statement of cash flows for the year then ended, notes comprising a summary of significant accounting policies and other explanatory information, and certificates given by the Acting Chairman, Director and Chief Executive Officer and Secretary.

The Council's Responsibility for the Financial Report

The Council is responsible for the preparation of the financial report that gives a true and fair view in accordance with prescribed accounting requirements identified in the *Financial Accountability Act 2009* and the *Financial and Performance Management Standard 2009*, including compliance with Australian Accounting Standards. The Council's responsibility also includes such internal control as the Council determines is necessary to enable the preparation of the financial report that gives a true and fair view and is free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

My responsibility is to express an opinion on the financial report based on the audit. The audit was conducted in accordance with the *Auditor-General of Queensland Auditing Standards*, which incorporate the Australian Auditing Standards. Those standards require compliance with relevant ethical requirements relating to audit engagements and that the audit is planned and performed to obtain reasonable assurance about whether the financial report is free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial report. The procedures selected depend on the auditor's judgement, including the assessment of the risks of material misstatement of the financial report, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation of the financial report that gives a true and fair view in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control, other than in expressing an opinion on compliance with prescribed requirements. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by the Council, as well as evaluating the overall presentation of the financial report including any mandatory financial reporting requirements approved by the Treasurer for application in Queensland.

I believe that the audit evidence obtained is sufficient and appropriate to provide a basis for my audit opinion.

Independence

The Auditor-General Act 2009 promotes the independence of the Auditor-General and all authorised auditors. The Auditor-General is the auditor of all Queensland public sector entities and can be removed only by Parliament.

The Auditor-General may conduct an audit in any way considered appropriate and is not subject to direction by any person about the way in which audit powers are to be exercised. The Auditor-General has for the purposes of conducting an audit, access to all documents and property and can report to Parliament matters which in the Auditor-General's opinion are significant.

Opinion

In accordance with s.40 of the Auditor-General Act 2009 -

- (a) I have received all the information and explanations which I have required; and
- (b) in my opinion
 - (i) the prescribed requirements in relation to the establishment and keeping of accounts have been complied with in all material respects; and
 - (ii) the financial report presents a true and fair view, in accordance with the prescribed accounting standards, of the transactions of the Council of the Queensland Institute of Medical Research for the financial year 1 July 2011 to 30 June 2012 and of the financial position as at the end of that year.

Other Matters - Electronic Presentation of the Audited Financial Report

This auditor's report relates to the financial report of the Council of the Queensland Institute of Medical Research for the year ended 30 June 2012. Where the financial report is included on the Council of the Queensland Institute of Medical Research's website the Council is responsible for the integrity of Council of the Queensland Institute of Medical Research's website and I have not been engaged to report on the integrity of the Council of the Queensland Institute of Medical Research's website. The auditor's report refers only to the subject matter described above. It does not provide an opinion on any other information which may have been hyperlinked to/from these statements or otherwise included with the financial report. If users of the financial report are concerned with the inherent risks arising from publication on a website, they are advised to refer to the hard copy of the audited financial report to confirm the information contained in this website version of the financial report.

These matters also relate to the presentation of the audited financial report in other electronic media including CD Rom.

P Brahman CPA (as Delegate of the Auditor-General of Queensland)

ANT AUDITOR-GA 1 AHG 201

Queensland Audit Office Brisbane



Supporting Information

QIMR is home to more than 700 scientists, students and support staff in six research departments in over 50 separate laboratories.

AWARDS

| Recipient | Bestower of award | Date | Award | Reason |
|-------------------|--|--------|---|--|
| Daniel Buchanan | Gastroenterological Society of Queensland | Jun-12 | Finalist | Young Investigator Award |
| Rhiannon Walters | Australian Epigenetics Alliance | May-12 | Winner | Meeting Poster Prize |
| Felicity Lose | The CASS Foundation | Oct-11 | Travel Grant \$4000 | Attend 12th ICHG Meeting, Montreal |
| Felicity Lose | Cancer Council Queensland | Jul-11 | Travel Grant \$1150 | Attendance COGS & PRACTICAL meetings, Stockholm |
| Tracy O'Mara | HGSA | Oct-11 | Travel Award \$3000 | Attendance at the 12th ICHG meeting. Montreal |
| Jane Wilson | Australian Virology Society | Dec-11 | Student Oral Presentation | Aust. Virology Soc. 6, Kingscliff, NSW |
| Thomas Partridge | University of Oxford | Feb-12 | Nuffield Department of Medicine Prize Studentship | PhD Stipend £18,000 per annum plus fees |
| Barbara Leggett | Gastroenterological Society of Australia | Sep-11 | Distinguished Research Award | Sustained and major contribution to gastroenterological research in Australia. One awarded annually. |
| Haran Sivakumaran | Australian Centre for HIV and Hepatitis Research | Jul-11 | Gold Medal Award | Best oral presentation by a post-doc |
| David Whiteman | QIMR | Dec-11 | Bancroft Medal | Services to QIMR |
| Aaron Thrift | University of Queensland | Mar-12 | Graduate School International Travel Award (GSITA) | To visit University of Bristol (UK) and learn statistical genetics techniques |
| Aaron Thrift | European Association for Cancer Research | Jan-12 | EACR Travel Fellowship Award | To visit University of Bristol (UK) and learn statistical genetics techniques |
| David Pattinson | Australian Society for Parasitology | May-12 | Travel Award | Recipient |
| Sophie Schussek | Australian Society for Parasitology | May-12 | Travel Award | Recipient |
| Sophie Schussek | QIMR | May-12 | HDC Travel award for 2nd International Conference on Vaccines and Vaccination | Recipient |
| Simon Apte | QIMR | Jun-12 | Post doc overseas conference support | Recipient |
| Julie Burel | Australian Society for Parasitology | May-12 | Travel award | Recipient |
| Sophie Schussek | ACVD | Jul-11 | ACVD PhD top up | Recipient |
| Sophie Schussek | Australian Society for Parasitology | Jul-11 | Travel Award | Recipient |
| Sophie Schussek | UQ | Jul-11 | Three Minute Thesis School of Medicine | Finalist |
| Julie Burel | ACVD | Jul-12 | ACVD PhD top up | Recipient |
| David Pattinson | UQ | Mar-12 | UQ Advantage Award | Recipient |
| Denise Doolan | Australian Society for Parasitology | Jul-12 | Society President | Society President |
| Geoffrey Gobert | Molecular and Biochemical Parasitology | Jul-11 | Top Reviewer Award | |
| Barrie Anthony | University of Salford | Jul-11 | Hugh Mulligan prize | For work of outstanding merit on a thesis for a PhD in the field of parasitology, bacteriology or tropical medicine |
| Don McManus | World Congress of Hydatidologists | Sep-11 | Elected Member Expert Scientific Committee of the 24th International Congress of Hydatidology, Urumqi, Xinjiang, China | Identification, selection and invitation of speakers for the 24th International Congress of Hydatidology |
| Don McManus | National Institute of Parasitic Diseases- China CDC, Shanghai, PR China | Jun-12 | Elected Member, Scientific Committee of The First Forum on Surveilance Response System Leading to Tropical Disease Elimination, Shanghai, China | Identification, selection and invitation of speakers for the The First Forum on Surveilance Response System Leading to Tropical Disease Elimination |
| Don McManus | Australian Centre for Vaccine Development | Jul-12 | ACVD | To provide scientific advice to the Director of the Australian Centre for Vaccine Development |

| Recipient | Bestower of award | Date | Award | Reason |
|--------------------|--|--------|--|--|
| Franziska Bieri | QIMR | Jul-12 | QIMR Travel Award | Travel funds awarded for an oral presentation at XVII International Congress for Tropical Medicine and Malaria in Rio deJaneiro, Brazil. September 2012 |
| Franziska Bieri | QIMR | Jul-11 | QIMR Student Conference, First Prize for Oral Presentation | First prize for oral presentation at the conference |
| Franziska Bieri | Australian Society for Medical Research | Jul-11 | People's Choice Poster Award, Post-graduate Conference, Brisbane | Winner of the People's Choice Poster Award |
| Franziska Bieri | Queensland Tropical Health Alliance | Jul-11 | Travel Award | Travel Award for Queensland Tropical Health Alliance Conference in Cairns, July 2011 |
| Emma Whitelaw | Human Genome Organisation | Jul-11 | Member of Council | |
| Kate Markey | TSANZ | Jun-12 | President's Prize | Best presentation in the basic science category |
| Hugh Murray | QIMR | Apr-12 | QIMR Student Symposium award | |
| John Miles | NHMRC | Jan-12 | Career Development Fellowship | |
| Kathy Andrews | Australian Association of Alexander von Humboldt Fellows | Oct-11 | AAvH Peter Schwerdtfeger Award | Outstanding research achievement |
| Kathy Andrews | Eskitis Institute for Cell and Molecular Therapies | Oct-11 | Eskitis Independent Senior Fellow Award | Research Excellence |
| Simone Reynolds | Marie Curie Action (funded by European Commission) | Aug-11 | TransVIR Grant | Travel award from the European Meeting on Complement in Human Disease |
| Simone Reynolds | ASP and ARC/NHMRC Network for Parasitology | Jul-11 | Student Travel Award 2011 | Student travel |
| Simone Reynolds | Lowitja Institute Professional Development Program for Aboriginal and Torres Strait Islander Researchers | May-12 | Travel award | Travel to American Society for Tropical Medicine and Hygiene conference 2012 |
| Kylie Alexander | TSANZ | Jun-12 | Young Investigators Award | Selected for Presidents Prize session |
| Manuel Ferreira | Australian Academy of Science | May-12 | Ruth Stephens Gani Medal in Human Genetics | Work that led to the identification of IL6R as a risk locus for asthma |
| Michael Breakspear | Australian Society for Medical Research (Queensland) | Oct-11 | Clinical Researcher Award | Research contributions |
| Nick Hayward | Cancer Council Queensland | Jul-11 | Willian Rudder Travelling Fellowship | to promote cancer research in Queensland |
| Susan Jordan | Clinical Oncology Society of Australia | Nov-11 | Best of the Best oral presentation in Epidemiology | best oral presentation in the cancer epidemiology section |
| Sarah Medland | QIMR | Dec-11 | QIMR Postdoctoral Prize | Excelence in postdoctoral research |
| Yi Lu | Australian Twin Registry | Jun-12 | Travel Award | Competitively awarded travel |

INVITED LECTURES

| Speaker | Title of lecture | Date | City. Country |
|---------------------|--|--------|-----------------------------------|
| Adele Green | SCC pathways, pathogenesis and prevention | Aug-11 | Hamilton Island, Australia |
| Adele Green | Cancers of the Skin and their prevention | Jul-11 | Brisbane, Australia |
| Adele Green | Cultivating a Sound Research Ethos | Jul-11 | Brisbane, Australia |
| Adele Green | UV carcinogenesis, an epidemiological view | Dec-11 | Brisbane, Australia |
| Adele Green | Skin cancer prevention Research : Goals. Challenges. Opportunities | Nov-11 | Canberra, Australia |
| Adele Green | Solar UV radiation & epidemiology of Cancers of the Skin | Dec-11 | Manila, Philippines |
| Adele Green | A career in medical research | Feb-12 | Brisbane, Australia |
| Adele Green | How to design a good study: secrets of epidemiology | May-12 | Istanbul, Turkey |
| Adele Green | UV and skin cancer causation, and some unanswered questions | May-12 | Edinburgh, United Kingdom |
| Louise Marquart | A birth and death process to model the dynamics of an antigen in human malaria | Jul-12 | Adelaide, Australia |
| Leesa Wockner | Detection of differentially expressed genes via clustering of gene profiles | Jul-12 | Adelaide, Australia |
| Amanda Spurdle | Current Results from the ENIGMA Splicing Working Group. | Jan-12 | Paris, France |
| Amanda Spurdle | Results to date for the ENIGMA rare variants in BCAC and CIMBA | Jan-12 | Paris, France |
| Amanda Spurdle | The lows and highs of endometrial cancer genetics | May-12 | Melbourne, Australia |
| Bryony Thompson | Classification Criteria for evaluation of mismatch repair gene variants by the InSiGHT Mutation Interpretation Committee | Jun-12 | Paris, France |
| Andreas Suhrbier | Chikungunya virus disease: Pathogenesis, Animal Models and Interventions | Jul-11 | Hobart, Australia |
| Andreas Suhrbier | To vax or not to vax. | Jun-12 | Brisbane, Australia |
| Wayne Schroder | SerpinB2: Paris Hilton of the Inflammation Party | Aug-11 | Gold Coast, Australia |
| Andreas Suhrbier | Chikungunya virus Epidemics, Arthritic disease and Treaments | Jul-11 | Cairns, Australia |
| Andreas Suhrbier | Sculpting of adaptive immunity by SerpinB2 | Oct-11 | Chapel Hill, United States |
| Andreas Suhrbier | Chikungunya virus, hemorrhagic shock and rheumatoid arthritis. | Jun-12 | Adelaide, Australia |
| Barbara Leggett | Recent Advances in Understanding of Molecular Genetics | May-12 | Brisbane, Australia |
| Barbara Leggett | Colorectal Cancer Genetics for the practising gastroenterologist | Mar-12 | Sydney , Australia |
| Barbara Leggett | Genetic profiling of bowel cancer | Oct-11 | Brisbane, Australia |
| Barbara Leggett | The serrated neoplastic pathway of colorectal cancer development | Sep-11 | Brisbane, Australia |
| Barbara Leggett | Love Your Liver | Jul-11 | Brisbane, Australia |
| Vicki Whitehall | Pathways of colorectal tumorigenesis. | May-12 | Brisbane, Australia |
| Maggy Sikulu | Novel age biomarkers for African and Asian malaria vectors: Changes in protein expression in heads and thoraces | Dec-11 | Philadelphia, United States |
| Brian Kay | Update on Wolbachia project and other relevante projects at QIMR | Apr-12 | Brisbane, Australia |
| Tim Hurst | Report on the "10,000 house" mosquito breeding survey in Brisbane | Apr-12 | Brisbane, Australia |
| Tim Hurst | What's happening up north - dengue, malria, Aedes albopictus. | Jul-11 | Brisbane, Australia |
| Tim Hurst | Water sensitive urban design project | Nov-11 | Brisbane, Australia |
| Brian Kay | Report from the European Mosquito Control Conference, Budapest | Nov-11 | Brisbane, Australia |
| Jonathan Darbro | Studies of fungal pathogens of mosquito | Nov-11 | Brisbane, Australia |
| Chris Schmidt | Immune Therapies for Cancer | Aug-11 | Sydney, Australia |
| Chris Schmidt | Melanoma Vaccines: can they work? | May-12 | Gold Coast, Australia |
| Colleen Olive | Understanding the innate immune response to group A streptococcus | May-12 | Lima, Peru |
| Colleen Olive | Understanding the innate immune response to group A streptococcus | Jun-12 | Rhodes, Greece |
| Ting Wei | Host cell factors regulating HIV-1 replication | Oct-11 | Bejing, China |
| Ting Wei | Role of Translation elongation factors in HIV-1 reverse transcripiton | May-12 | Cold Spring Harbor, United States |
| David Harrich | Identification and Characterisation of Host cell proteins regulating HIV-1 | Sep-11 | Hobart, Australia |
| David Harrich | Westaway Session | Sep-11 | Hobart, Australia |
| David Reid | Telehealth in Australia | Jun-12 | Dublin, Ireland |
| David Reid | Adult Cystic Fibrosis | Mar-12 | Canberra, Australia |
| David Whiteman | Risk factors for melanoma and Screening for melanoma" | Aug-11 | Hamilton Island, Australia |
| David Whiteman | Tiny steps towards the control of oesophageal cancer | Mar-12 | Lyon, France |
| David Whiteman | Melanoma and other skin cancers: the Australian experience | May-12 | Washington, DC, United States |
| Andrew Redmond | HIV Prescribers' Update | Jun-12 | Brisbane, Australia |
| Katharine Trenholme | Public Malaria Forum | Apr-12 | Brisbane, Australia |
| Franziska Bieri | Linxiang Centre for Disease Control | Apr-12 | Hunan Province, China |
| Franziska Bieri | Queensland Institute of Medical Research High School Lectures | May-11 | Brisbane, Australia |
| Franziska Bieri | Queensland Institute of Medical Research Student Seminar | Nov-10 | Brisbane, Australia |

| Franziska BieriFranziska BieriSiok TeyGraeme WalkerGraham KayGrant MontgomeryGrant RammGrant RammGrant RammGrant RammGreg AndersonGreg AndersonGreg Anderson | Hunan Institute of Parasitic Diseases Linxiang Centre for Disease Control Safety switch for adoptive immunotherapy Sun exposue and melanoma Smchd1 is essential for X inactivation, but also much more. Novel gene regions associated with endometriosis risk Research Directions: Genetics and Epidemiology Genome-Wide Association Studies and Beyond - Genetic Architecture of Common Human Diseases Applying for NIH Funding Common complex diseases - can we blame our genes? Genes in inflammatory bowel disease Genome regions associated with endometriosis risk Genetics of dizygotic twinning Role of the iron-binding protein ferritin in inflammation associated with hepatic fibrogenesis Mechanistic Advances in Understanding Fibrogenesis, Wound Healing and Regeneration in the Liver Role of the Iron-Binding Protein Ferritin in Inflammation Associated with Hepatic Fibrogenesis The Role of Ferritin as a Proinflammatory Mediator of Hepatic Fibrogenesis Systemic control of body iron intake Iron absorption Regulating iron homeostasis: links to primary and secondary iron loading Iron metabolism | Sep-10 Sep-10 Jun-12 Oct-11 Jul-11 Aug-11 Sep-10 Jun-12 Oct-11 Jul-11 Aug-11 Sep-11 Nov-11 Nov-11 Nov-11 Mar-12 Apr-12 Sep-11 Oct-11 Oct-11 Dec-11 Sep-11 | Hunan Province, China Hunan Province, China Canberra, Australia Brisbane, Australia Dxford, UK, Australia Perth, Australia Montpellier, France Cairns, Australia Dunedin, New Zealand Dunedin, New Zealand Dunedin, New Zealand Washington, United States Florence, Italy Cairns, Australia Beijing, China Beijing, China Perth, Australia |
|--|--|---|--|
| Franziska Bieri Siok Tey Graeme Walker Graham Kay Grant Montgomery Grant Montgomery Grant Montgomery Grant Montgomery Grant Montgomery Grant Montgomery Grant Montgomery Grant Montgomery Grant Ramm Grant Ramm Grant Ramm Grant Ramm Grant Ramm Grant Ramm | Linxiang Centre for Disease Control Safety switch for adoptive immunotherapy Sun exposue and melanoma Smchd1 is essential for X inactivation, but also much more. Novel gene regions associated with endometriosis risk Research Directions: Genetics and Epidemiology Genome-Wide Association Studies and Beyond - Genetic Architecture of Common Human Diseases Applying for NIH Funding Common complex diseases - can we blame our genes? Genes in inflammatory bowel disease Genome regions associated with endometriosis risk Genetics of dizygotic twinning Role of the iron-binding protein ferritin in inflammation associated with hepatic fibrogenesis Mechanistic Advances in Understanding Fibrogenesis, Wound Healing and Regeneration in the Liver Role of the Iron-Binding Protein Ferritin in Inflammation Associated with Hepatic Fibrogenesis The Role of Ferritin as a Proinflammatory Mediator of Hepatic Fibrogenesis Systemic control of body iron intake Iron absorption Regulating iron homeostasis: links to primary and secondary iron loading Iron metabolism | Sep-10 Jun-12 Oct-11 Jul-11 Aug-11 Sep-11 Sep-11 Nov-11 Nov-11 Mar-12 Apr-12 Sep-11 Oct-11 Oct-11 Sep-11 | Hunan Province, China Canberra, Australia Brisbane, Australia Oxford, UK, Australia Perth, Australia Montpellier, France Cairns, Australia Dunedin, New Zealand Dunedin, New Zealand Dunedin, New Zealand Washington, United States Florence, Italy Cairns, Australia Beijing, China Beijing, China Perth, Australia |
| Siok Tey Graeme Walker Graham Kay Grant Montgomery Grant Montgomery Grant Montgomery Grant Montgomery Grant Montgomery Grant Montgomery Grant Montgomery Grant Montgomery Grant Ramm Grant Ramm Grant Ramm Grant Ramm Grant Ramm Grant Ramm Grant Ramm | Safety switch for adoptive immunotherapy Sun exposue and melanoma Smchd1 is essential for X inactivation, but also much more. Novel gene regions associated with endometriosis risk Research Directions: Genetics and Epidemiology Genome-Wide Association Studies and Beyond - Genetic Architecture of Common Human Diseases Applying for NIH Funding Common complex diseases - can we blame our genes? Genes in inflammatory bowel disease Genome regions associated with endometriosis risk Genetics of dizygotic twinning Role of the iron-binding protein ferritin in inflammation associated with hepatic fibrogenesis Mechanistic Advances in Understanding Fibrogenesis, Wound Healing and Regeneration in the Liver Role of the Iron-Binding Protein Ferritin in Inflammation Associated with Hepatic Fibrogenesis The Role of Ferritin as a Proinflammatory Mediator of Hepatic Fibrogenesis Systemic control of body iron intake Iron absorption Regulating iron homeostasis: links to primary and secondary iron loading Iron metabolism | Jun-12 Oct-11 Jul-11 Aug-11 Sep-11 Sep-11 Nov-11 Nov-11 Nov-11 Mar-12 Apr-12 Sep-11 Oct-11 Dec-11 Sep-11 Oct-11 | Canberra, Australia Brisbane, Australia Oxford, UK, Australia Perth, Australia Montpellier, France Cairns, Australia Dunedin, New Zealand Dunedin, New Zealand Dunedin, New Zealand Washington, United States Florence, Italy Cairns, Australia Beijing, China Beijing, China Perth, Australia |
| Graeme Walker Graham Kay Grant Montgomery Grant Montgomery Grant Montgomery Grant Montgomery Grant Montgomery Grant Montgomery Grant Montgomery Grant Montgomery Grant Ramm Grant Ramm Grant Ramm Grant Ramm Grant Ramm Grant Ramm Grant Ramm Grant Ramm | Sun exposue and melanoma Smchd1 is essential for X inactivation, but also much more. Novel gene regions associated with endometriosis risk Research Directions: Genetics and Epidemiology Genome-Wide Association Studies and Beyond - Genetic Architecture of Common Human Diseases Applying for NIH Funding Common complex diseases - can we blame our genes? Genes in inflammatory bowel disease Genome regions associated with endometriosis risk Genetics of dizygotic twinning Role of the iron-binding protein ferritin in inflammation associated with hepatic fibrogenesis Mechanistic Advances in Understanding Fibrogenesis, Wound Healing and Regeneration in the Liver Role of the Iron-Binding Protein Ferritin in Inflammation Associated with Hepatic Fibrogenesis The Role of Ferritin as a Proinflammatory Mediator of Hepatic Fibrogenesis Systemic control of body iron intake Iron absorption Regulating iron homeostasis: links to primary and secondary iron loading Iron metabolism | Oct-11 Jul-11 Aug-11 Sep-11 Sep-11 Nov-11 Nov-11 Nov-11 Mar-12 Apr-12 Sep-11 Oct-11 Dec-11 Sep-11 Oct-11 | Brisbane, AustraliaOxford, UK, AustraliaPerth, AustraliaMontpellier, FranceCairns, AustraliaDunedin, New ZealandDunedin, New ZealandDunedin, New ZealandWashington, United StatesFlorence, ItalyCairns, AustraliaBeijing, ChinaPerth, AustraliaPerth, Australia |
| Graham Kay Grant Montgomery Grant Montgomery Grant Montgomery Grant Montgomery Grant Montgomery Grant Montgomery Grant Montgomery Grant Montgomery Grant Ramm Grant Ramm Grant Ramm Grant Ramm Grant Ramm Grant Ramm Grant Ramm Grant Ramm | Smchd1 is essential for X inactivation, but also much more. Novel gene regions associated with endometriosis risk Research Directions: Genetics and Epidemiology Genome-Wide Association Studies and Beyond - Genetic Architecture of Common Human Diseases Applying for NIH Funding Common complex diseases - can we blame our genes? Genes in inflammatory bowel disease Genome regions associated with endometriosis risk Genetics of dizygotic twinning Role of the iron-binding protein ferritin in inflammation associated with hepatic fibrogenesis Mechanistic Advances in Understanding Fibrogenesis, Wound Healing and Regeneration in the Liver Role of the Iron-Binding Protein Ferritin in Inflammation Associated with Hepatic Fibrogenesis The Role of Ferritin as a Proinflammatory Mediator of Hepatic Fibrogenesis Systemic control of body iron intake Iron absorption Regulating iron homeostasis: links to primary and secondary iron loading Iron metabolism | Jul-11 Aug-11 Sep-11 Sep-11 Nov-11 Nov-11 Nov-11 Mar-12 Apr-12 Sep-11 Oct-11 Dec-11 Sep-11 Oct-11 | Oxford, UK, Australia Perth, Australia Montpellier, France Cairns, Australia Dunedin, New Zealand Dunedin, New Zealand Dunedin, New Zealand Washington, United States Florence, Italy Cairns, Australia Beijing, China Beijing, China Perth, Australia |
| Grant Montgomery Grant Montgomery Grant Montgomery Grant Montgomery Grant Montgomery Grant Montgomery Grant Montgomery Grant Montgomery Grant Ramm Grant Ramm Grant Ramm Grant Ramm Grant Ramm Grant Ramm Grant Ramm Grant Ramm Grant Ramm | Novel gene regions associated with endometriosis risk Research Directions: Genetics and Epidemiology Genome-Wide Association Studies and Beyond - Genetic Architecture of Common Human Diseases Applying for NIH Funding Common complex diseases - can we blame our genes? Genes in inflammatory bowel disease Genetics of dizygotic twinning Role of the iron-binding protein ferritin in inflammation associated with hepatic fibrogenesis Mechanistic Advances in Understanding Fibrogenesis, Wound Healing and Regeneration in the Liver Role of the Iron-Binding Protein Ferritin in Inflammation Associated with Hepatic Fibrogenesis The Role of Ferritin as a Proinflammatory Mediator of Hepatic Fibrogenesis Systemic control of body iron intake Iron absorption Regulating iron homeostasis: links to primary and secondary iron loading Iron metabolism | Aug-11 Sep-11 Sep-11 Nov-11 Nov-11 Nov-11 Mar-12 Apr-12 Sep-11 Oct-11 Dec-11 Sep-11 Oct-11 | Perth, Australia Montpellier, France Cairns, Australia Dunedin, New Zealand Dunedin, New Zealand Dunedin, New Zealand Washington, United States Florence, Italy Cairns, Australia Beijing, China Beijing, China Perth, Australia |
| Grant Montgomery Grant Montgomery Grant Montgomery Grant Montgomery Grant Montgomery Grant Montgomery Grant Montgomery Grant Ramm Grant Ramm Grant Ramm Grant Ramm Grant Ramm Grant Ramm Grant Ramm Grant Ramm Grant Ramm Grant Ramm | Research Directions: Genetics and Epidemiology Genome-Wide Association Studies and Beyond - Genetic Architecture of Common Human Diseases Applying for NIH Funding Common complex diseases - can we blame our genes? Genes in inflammatory bowel disease Genome regions associated with endometriosis risk Genetics of dizygotic twinning Role of the iron-binding protein ferritin in inflammation associated with hepatic fibrogenesis Mechanistic Advances in Understanding Fibrogenesis, Wound Healing and Regeneration in the Liver Role of the Iron-Binding Protein Ferritin in Inflammation Associated with Hepatic Fibrogenesis The Role of Ferritin as a Proinflammatory Mediator of Hepatic Fibrogenesis Systemic control of body iron intake Iron absorption Regulating iron homeostasis: links to primary and secondary iron loading Iron metabolism | Sep-11 Sep-11 Sep-11 Nov-11 Nov-11 Nov-11 Mar-12 Apr-12 Sep-11 Oct-11 Oct-11 Dec-11 Sep-11 | Montpellier, France Cairns, Australia Dunedin, New Zealand Dunedin, New Zealand Dunedin, New Zealand Washington, United States Florence, Italy Cairns, Australia Beijing, China Beijing, China Perth, Australia |
| Grant Montgomery Grant Montgomery Grant Montgomery Grant Montgomery Grant Montgomery Grant Montgomery Grant Ramm | Genome-Wide Association Studies and Beyond - Genetic Architecture of Common Human Diseases Applying for NIH Funding Common complex diseases - can we blame our genes? Genes in inflammatory bowel disease Genome regions associated with endometriosis risk Genetics of dizygotic twinning Role of the iron-binding protein ferritin in inflammation associated with hepatic fibrogenesis Mechanistic Advances in Understanding Fibrogenesis, Wound Healing and Regeneration in the Liver Role of the Iron-Binding Protein Ferritin in Inflammation Associated with Hepatic Fibrogenesis The Role of Ferritin as a Proinflammatory Mediator of Hepatic Fibrogenesis Systemic control of body iron intake Iron absorption Regulating iron homeostasis: links to primary and secondary iron loading Iron metabolism | Sep-11 Nov-11 Nov-11 Nov-11 Mar-12 Apr-12 Sep-11 Oct-11 Dec-11 Sep-11 Oct-11 | Cairns, Australia Dunedin, New Zealand Dunedin, New Zealand Dunedin, New Zealand Washington, United States Florence, Italy Cairns, Australia Beijing, China Beijing, China Perth, Australia Enshi, China |
| Grant Montgomery Grant Montgomery Grant Montgomery Grant Montgomery Grant Montgomery Grant Ramm Grant Ramm Grant Ramm Grant Ramm Grant Ramm Grant Ramm Greg Anderson Greg Anderson Greg Anderson | of Common Human Diseases Applying for NIH Funding Common complex diseases - can we blame our genes? Genes in inflammatory bowel disease Genome regions associated with endometriosis risk Genetics of dizygotic twinning Role of the iron-binding protein ferritin in inflammation associated with hepatic fibrogenesis Mechanistic Advances in Understanding Fibrogenesis, Wound Healing and Regeneration in the Liver Role of the Iron-Binding Protein Ferritin in Inflammation Associated with Hepatic Fibrogenesis The Role of Ferritin as a Proinflammatory Mediator of Hepatic Fibrogenesis Systemic control of body iron intake Iron absorption Regulating iron homeostasis: links to primary and secondary iron loading Iron metabolism | Nov-11 Nov-11 Nov-11 Mar-12 Apr-12 Sep-11 Oct-11 Dec-11 Sep-11 | Dunedin, New Zealand Dunedin, New Zealand Dunedin, New Zealand Washington, United States Florence, Italy Cairns, Australia Beijing, China Beijing, China Perth, Australia Enshi, China |
| Grant Montgomery Grant Montgomery Grant Montgomery Grant Montgomery Grant Montgomery Grant Ramm | Applying for NiH Funding Common complex diseases - can we blame our genes? Genes in inflammatory bowel disease Genome regions associated with endometriosis risk Genetics of dizygotic twinning Role of the iron-binding protein ferritin in inflammation associated with hepatic fibrogenesis Mechanistic Advances in Understanding Fibrogenesis, Wound Healing and Regeneration in the Liver Role of the Iron-Binding Protein Ferritin in Inflammation Associated with Hepatic Fibrogenesis The Role of Ferritin as a Proinflammatory Mediator of Hepatic Fibrogenesis Systemic control of body iron intake Iron absorption Regulating iron homeostasis: links to primary and secondary iron loading Iron metabolism | Nov-11 Nov-11 Nov-11 Mar-12 Apr-12 Sep-11 Oct-11 Dec-11 Sep-11 Oct-11 | Dunedin, New Zealand Dunedin, New Zealand Dunedin, New Zealand Washington, United States Florence, Italy Cairns, Australia Beijing, China Beijing, China Perth, Australia Enshi, China |
| Grant Montgomery Grant Montgomery Grant Montgomery Grant Montgomery Grant Ramm Grant Ramm Grant Ramm Grant Ramm Grant Ramm Grant Ramm Greg Anderson Greg Anderson Greg Anderson | Common complex diseases - can we blame our genes? Genes in inflammatory bowel disease Genome regions associated with endometriosis risk Genetics of dizygotic twinning Role of the iron-binding protein ferritin in inflammation associated with hepatic fibrogenesis Mechanistic Advances in Understanding Fibrogenesis, Wound Healing and Regeneration in the Liver Role of the Iron-Binding Protein Ferritin in Inflammation Associated with Hepatic Fibrogenesis The Role of Ferritin as a Proinflammatory Mediator of Hepatic Fibrogenesis Systemic control of body iron intake Iron absorption Regulating iron homeostasis: links to primary and secondary iron loading Iron metabolism | Nov-11 Nov-11 Mar-12 Apr-12 Sep-11 Oct-11 Dec-11 Sep-11 | Dunedin, New Zealand Dunedin, New Zealand Washington, United States Florence, Italy Cairns, Australia Beijing, China Beijing, China Perth, Australia Enshi, China |
| Grant Montgomery Grant Montgomery Grant Montgomery Grant Ramm Grant Ramm Grant Ramm Grant Ramm Grant Ramm Greg Anderson Greg Anderson Greg Anderson Greg Anderson | Genes in inflammatory bowel disease Genome regions associated with endometriosis risk Genetics of dizygotic twinning Role of the iron-binding protein ferritin in inflammation associated with hepatic fibrogenesis Mechanistic Advances in Understanding Fibrogenesis, Wound Healing and Regeneration in the Liver Role of the Iron-Binding Protein Ferritin in Inflammation Associated with Hepatic Fibrogenesis The Role of Ferritin as a Proinflammatory Mediator of Hepatic Fibrogenesis Systemic control of body iron intake Iron absorption Regulating iron homeostasis: links to primary and secondary iron loading Iron metabolism | Nov-11 Mar-12 Apr-12 Sep-11 Oct-11 Oct-11 Dec-11 Sep-11 | Dunedin, New Zealand Washington, United States Florence, Italy Cairns, Australia Beijing, China Beijing, China Perth, Australia Enshi, China |
| Grant Montgomery Grant Montgomery Grant Ramm Grant Ramm Grant Ramm Grant Ramm Grant Ramm Greg Anderson Greg Anderson Greg Anderson Greg Anderson | Genome regions associated with endometriosis risk Genetics of dizygotic twinning Role of the iron-binding protein ferritin in inflammation associated with hepatic fibrogenesis Mechanistic Advances in Understanding Fibrogenesis, Wound Healing and Regeneration in the Liver Role of the Iron-Binding Protein Ferritin in Inflammation Associated with Hepatic Fibrogenesis The Role of Ferritin as a Proinflammatory Mediator of Hepatic Fibrogenesis Systemic control of body iron intake Iron absorption Regulating iron homeostasis: links to primary and secondary iron loading Iron metabolism | Mar-12 Apr-12 Sep-11 Oct-11 Oct-11 Dec-11 Sep-11 Oct-11 | Washington, United States Florence, Italy Cairns, Australia Beijing, China Beijing, China Perth, Australia Enshi, China |
| Grant Montgomery Grant Ramm Grant Ramm Grant Ramm Grant Ramm Grant Ramm Greg Anderson Greg Anderson Greg Anderson Greg Anderson | Genetics of dizygotic twinning Role of the iron-binding protein ferritin in inflammation associated with hepatic fibrogenesis Mechanistic Advances in Understanding Fibrogenesis, Wound Healing and Regeneration in the Liver Role of the Iron-Binding Protein Ferritin in Inflammation Associated with Hepatic Fibrogenesis The Role of Ferritin as a Proinflammatory Mediator of Hepatic Fibrogenesis Systemic control of body iron intake Iron absorption Regulating iron homeostasis: links to primary and secondary iron loading Iron metabolism | Apr-12 Sep-11 Oct-11 Oct-11 Dec-11 Sep-11 Oct-11 | Florence, Italy Cairns, Australia Beijing, China Beijing, China Perth, Australia Enshi, China |
| Grant Ramm Grant Ramm Grant Ramm Grant Ramm Greg Anderson Greg Anderson Greg Anderson | Role of the iron-binding protein ferritin in inflammation associated with hepatic fibrogenesis Mechanistic Advances in Understanding Fibrogenesis, Wound Healing and Regeneration in the Liver Role of the Iron-Binding Protein Ferritin in Inflammation Associated with Hepatic Fibrogenesis The Role of Ferritin as a Proinflammatory Mediator of Hepatic Fibrogenesis Systemic control of body iron intake Iron absorption Regulating iron homeostasis: links to primary and secondary iron loading Iron metabolism | Sep-11 Oct-11 Oct-11 Dec-11 Sep-11 Oct-11 | Cairns, Australia Beijing, China Beijing, China Perth, Australia Enshi. China |
| Grant Ramm Grant Ramm Grant Ramm Greg Anderson Greg Anderson Greg Anderson | Mechanistic Advances in Understanding Fibrogenesis, Wound Healing and Regeneration in the Liver Role of the Iron-Binding Protein Ferritin in Inflammation Associated with Hepatic Fibrogenesis The Role of Ferritin as a Proinflammatory Mediator of Hepatic Fibrogenesis Systemic control of body iron intake Iron absorption Regulating iron homeostasis: links to primary and secondary iron loading Iron metabolism | Oct-11 Oct-11 Dec-11 Sep-11 Oct-11 | Beijing, China Beijing, China Perth, Australia Enshi, China |
| Grant Ramm Grant Ramm Greg Anderson Greg Anderson Greg Anderson | Role of the Iron-Binding Protein Ferritin in Inflammation Associated with Hepatic Fibrogenesis The Role of Ferritin as a Proinflammatory Mediator of Hepatic Fibrogenesis Systemic control of body iron intake Iron absorption Regulating iron homeostasis: links to primary and secondary iron loading Iron metabolism | Oct-11 Dec-11 Sep-11 Oct-11 | Beijing, China Perth, Australia Enshi, China |
| Grant Ramm Greg Anderson Greg Anderson Greg Anderson | The Role of Ferritin as a Proinflammatory Mediator of Hepatic Fibrogenesis Systemic control of body iron intake Iron absorption Regulating iron homeostasis: links to primary and secondary iron loading Iron metabolism | Dec-11 Sep-11 Oct-11 | Perth, Australia Enshi, China |
| Greg Anderson Greg Anderson Greg Anderson | Systemic control of body iron intake Iron absorption Regulating iron homeostasis: links to primary and secondary iron loading Iron metabolism | Sep-11 Oct-11 | Enshi, China |
| Greg Anderson Greg Anderson | Iron absorption Regulating iron homeostasis: links to primary and secondary iron loading Iron metabolism | Oct-11 | , |
| Greg Anderson | Regulating iron homeostasis: links to primary and secondary iron loading Iron metabolism | | Antalya, Turkey |
| | Iron metabolism | Oct-11 | Paphos, Cyprus |
| Grea Anderson | | Nov-11 | Adelaide. Australia |
| Grea Anderson | Mammalian iron trafficking and its regulation | Mar-12 | Svdnev. Australia |
| Grea Anderson | Systemic control of body iron metabolism: lessons from mice and men | May-12 | Brisbane, Australia |
| leffrev Gorman | Interactions of paramyxoviruses with host cell proteins | Aug-11 | San Francisco, United States |
| leffrey Gorman | Interactions of paramyxoviruses with host cell proteins | Sep-11 | |
| John Miles | Immunodomiance hierarchy of CD8+T cell epitopes encoded by | Jul-11 | Split, Australia |
| John Miles | Using mixture chemistry to investigate T cell epitope cross-reactivity and super agonists design | Jul-11 | Split, Australia |
| Kathy Andrews | A piggyback approach to antimalarial drug discovery | Apr-12 | Gold Coast, Australia |
| Fina Skinner-Adams | Saguinavir inhibits PfCRT-mediated chloroquine transport | Apr-12 | Brisbane, Australia |
| Katja Fischer | Scables Mite Complement Inhibitors promote Group A streptococcal Skin Infections | Jul-12 | Cairns, Australia |
| Katia Fischer | Scables and associated skin infections | May-12 | Gatton, Australia |
| Katja Fischer | Scables Mite Complement Inhibitors promote Group A streptococcal | Jul-11 | Cairns, Australia |
| Simone Reynolds | Determining the immune evasion mechanism of scables mite serine | Jul-11 | Cairns, Australia |
| Kylie Alexander | proteases. IL-17 dependant alternatively activated macrophages mediate chronic | Jun-12 | Canberra, Australia |
| Kalli MacDonald | graft versus host disease | lup 12 | Canhorra Australia |
| Nelli MacDonalu | responses | Jun-12 | Caliberta, Australia |
| Kum Kum Khanna | Defective DNA damage repair as a cause and cure for cancer | Jul-12 | Melbourne, Australia |
| Kum Kum Khanna | Defective DNA damage repair as a cause and cure for cancer | Jul-11 | Garvan Institute, Australia |
| Kum Kum Khanna | DNA repair pathways and link with cancer susceptibility | Aug-11 | Melbourne, Australia |
| Kum Kum Khanna | Genome maintenance and SSB1: a novel player in DNA repair pathway | Sep-11 | Cairns, Australia |
| Kum Kum Khanna | Defective genome maintenance and breast cancer targets | Jan-12 | Belfast, Ireland |
| Kum Kum Khanna | Functional characterization of single-stranded DNA binding proteins using mouse genetics | Jan-12 | Paris, France |
| Kum Kum Khanna | DNA damage repair from genome maintenance to therapeutic targets | Mar-12 | Texas Houston, United States |
| Kum Kum Khanna | DNA recombinase Rad51 as a therapeutic target in breast cancer | Mar-12 | Delhi, India |
| Lutz Krause | Mining and Comparing Multiple 16S rDNA Samples | May-12 | Brisbane, Australia |
| Lutz Krause | Exploring the Role of the Human Microbiota in Health and Disease by High-Throughput Sequencing of the 16S rDNA Gene | Sep-11 | Brisbane, Australia |
| Lutz Krause | From Metagenomics to Epigenetics and Riomarker Discovery | Aug-11 | Lausanne Switzerland |
| | Metagenomice - Characterizing the Composition and Eurotion of | Jul 10 | Briebane Australia |
| LUIZ NIQUSE | Natural Microbial Communities | JUI-12 | |
| | | | × Polo of |

Invited Lectures | continued

| Speaker | Title of lecture | Date | City, Country |
|--------------------|---|--------|---------------------------|
| Manuel Ferreira | Back to humans: how genetic research can help identify new treatments for asthma | May-12 | Canberra, Australia |
| Michael Breakspear | A phase transition in neonatal cortex | May-12 | Bethesda, United States |
| Michael Breakspear | A diagnostic test for depression | May-12 | Brisbane, Australia |
| Michael Breakspear | Computational models of the Brain | Jun-12 | Chengdu, China |
| Michelle Gatton | Quality assurance of malaria rapid diagnostic tests (RDTs) and field G-6-PD tests | Jul-11 | Brisbane, Australia |
| Nathan Subramaniam | Regulation of Iron Homeostasis: Insights from Genetic, Cellular and Animal Studies | Oct-11 | Brisbane, Australia |
| Nathan Subramaniam | The role of hepcidin in regulation of iron homeostasis | Sep-11 | Cairns, Australia |
| Nathan Subramaniam | Signalling pathways in iron-induced liver damage | Nov-11 | Perth, Australia |
| Nathan Subramaniam | Non-HFE Haemochromatosis | Aug-11 | Brisbane, Australia |
| Nick Hayward | Somatic genetics of melanoma | Jun-12 | Leiden, Netherlands |
| Nick Hayward | The Genetics Of Naevus Count: An Endophenotype Strongly Associated with Melanoma Susceptibility | Jan-12 | Miami, United States |
| Nick Hayward | From GWAS to genome sequencing: Complementary Approaches to Identify Melanoma Predisposition Genes | Aug-11 | Kingscliff, Australia |
| Nick Hayward | From GWAS to genome sequencing: Complementary Approaches to Identify Melanoma Predisposition Genes | Dec-11 | Brisbane, Australia |
| Nick Hayward | From GWAS to genome sequencing: Complementary Approaches to Identify Melanoma Predisposition Genes | Apr-12 | Gold Coast, Australia |
| Nick Hayward | 8th International Melanoma Research Congress | Nov-11 | Tampa, United States |
| Nick Martin | How much variance have GWAS studies explained? | Jun-12 | Edinburgh, United Kingdom |
| Nick Martin | Lindon Eaves, paradigm shifter | Jun-12 | Edinburgh, United Kingdom |
| Nick Martin | Science triumphant! the GWAS revolution in complex trait genetics | Mar-12 | Boulder, United States |
| Nick Martin | Progress in the genetics of complex traits | Mar-12 | Amsterdam, Netherlands |
| Nick Martin | Progress in understanding the genetics of moliness and melanoma | Apr-12 | Florence, Italy |
| Nick Martin | Contributions of twin studies towards elucidating disease etiology | Oct-11 | Montreal, Canada |
| Nick Martin | The genetics of complex traits: the GWAS revolution and beyond (Sutherland Lecture) | Jul-11 | Gold Coast, Australia |
| Nick Martin | Common variants of large effect: do they exist, do they matter? | Dec-11 | Munich, Germany |
| Nick Martin | Studies of brain structure and function of twins: getting closer to the genetics of behavior? | Apr-12 | Florence, Italy |
| Margie Wright | Queensland Twin Imaging (QTIM) Project. | Nov-11 | Melbourne, Australia |
| Margie Wright | Gene expression, gene mapping, cognition (integrating different approaches) | Sep-11 | Melbourne, Australia |
| Susan Jordan | Patterns of Care for Women Diagnosed with Epithelial Ovarian Cancer in Australia Study summary: evidence-practice gaps | Jun-12 | Sydney, Australia |
| Penny Webb | Diagnosis and management of ovarian cancer in Australia | Aug-11 | Melbourne, Australia |
| Penny Webb | Improving outcomes for women with ovarian cancer | Apr-12 | Brisbane, Australia |
| Penny Webb | Improving outcomes for women with ovarian cancer | Aug-11 | Brisbane, Australia |
| Rachel Neale | Vitamin D and Cancer | Oct-11 | Brisbane, Australia |
| Rachel Neale | The Queensland Pancreatic Cancer Study | Mar-12 | Sydney, Australia |
| Sarah Medland | Introduction to Unix | Mar-12 | Colorado, United States |
| Sarah Medland | Univariate redux | Mar-12 | Colorado, United States |
| Sarah Medland | Heterogeniety | Mar-12 | Colorado, United States |
| Sarah Medland | Categorical data | Mar-12 | Colorado, United States |
| Sarah Medland | Sex limitation | Mar-12 | Colorado, United States |
| Sarah Medland | Incorporating siblings | Mar-12 | Colorado, United States |
| Sarah Medland | Meta vs Mega analysis in imaging genetics: lessons from ENIGMA | Mar-12 | Boston, United States |
| Sarah Medland | Imaging genetics: lessons from ENIGMA-I | Mar-12 | Boulder, United States |
| Sarah Medland | Emerging approaches in gene mapping | May-12 | Rekyavik, Icel And |
| Steven Lane | IMVS series | Sep-11 | adelaide, Australia |
| Steven Lane | Mater Medical Stem Cell Series | May-12 | Brisbane, Australia |
| Stuart MacGregor | GWAS for risk and for outcome in Ovarian Cancer. | Aug-11 | Melbourne, Australia |

PATENTS

Patent Families Managed by QIMR

| Title | Inventor(s) | Application Number |
|--|--|--------------------|
| Novel molecules | Toni Antalis; John Hooper | PCT/AU1998/000085 |
| Immunogenic agent and pharmaceutical composition for use against homologous and heterologous pathogens | Michael Good; Mary Stevenson | PCT/AU2004/000870 |
| Polytope vaccines | Andreas Suhrbier; Scott Thomson; Rajiv Khanna; Scott Burrows; Barbara Coupar; Denis Moss | PCT/AU1995/000461 |
| Synthetic peptides and vaccines comprising the same | Juan Cooper; Wendy Relf; Michael Good; Allan Saul | PCT/AU1995/000681 |
| Cytotoxic T-cell epitopes | Denis Moss; Scott Burrows; Rajiv Khanna; Beverley Kerr; Jacqueline Burrows; Andreas Suhrbier | PCT/AU1995/000140 |
| EBV CTL epitopes | Rajiv Khanna; Beverley Kerr; Ihor Misko; Denis Moss; Scott Burrows | PCT/AU1997/000328 |
| CTL epitopes from EBV | Martina Sherritt; Scott Burrows; Rajiv Khanna | PCT/AU1998/000531 |
| EBV peptide epitopes, polyepitopes and delivery system therefor | Rajiv Khanna; Jaikumar Duraiswamy | PCT/AU2003/001451 |
| Novel hCMV cytotoxic T cell epitopes, polyepitopes, composition comprising same and diagnostic and prophylactic and therapeutics uses therefor | Rajiv Khanna; Rebecca Elkington; Susan Walker | PCT/AU2002/000829 |
| Human cytomegalovirus immunotherapy | Rajiv Khanna | PCT/AU2005/001798 |
| Peptide compounds | Istvan Toth; William Gibbons | PCT/GB1993/001558 |
| Novel human ssDNA binding proteins and methods of cancer diagnosis | Kum Kum Khanna; Derek Richard; Malcolm White | PCT/AU2008/000181 |
| Cancer drug targets and methods of diagnosis | Andrew Boyd; Bryan Day; Brett Stringer | PCT/AU2009/000672 |
| Human cytomegalovirus immunotherapy | Rajiv Khanna | 61/347,352 |

QIMR Patent Families Managed Outside QIMR

| Title | Inventor(s) | Application Number |
|--|--|--------------------|
| Receptor ligand system and assay | Andrew Boyd | US 1998/104340 |
| Eph/ephrin mediated modulation of cell adhesion and tumour cell metastasis | Andrew Boyd | PCT/AU2004/000142 |
| A method of treatment | Andrew Boyd | PCT/AU1999/000931 |
| Differentiation modulating agents and uses therefor | Johannes Prins | PCT/AU2005/000008 |
| Melanoma-associated MHC Class 1 Associated oligopeptide and its use | Chris Schmidt | PCT/EP2006/008533 |
| Method for screening for anticancer agents | Kum Kum Khanna | PCT/GB2008/003390 |
| A novel growth factor and a genetic sequence encoding same | Nicholas Hayward | PCT/AU1996/000094 |
| Flavivirus replicon constructs for tumour therapy | Andreas Suhrbier; Alexander Khromykh | PCT/AU2006/000198 |
| Immunogenic complexes and methods relating thereto | Andreas Suhrbier, John Cooper Cox, Debbie Pauline Drane | PCT/AU0000110 |

Patent families relating to QIMR visiting scientists and administered by other institutions

| Title | Inventor(s) | Application Number |
|---|--------------|--------------------|
| Prothrombin activating protein | Martin Lavin | PCT/AU0300406 |
| Plasmin inhibitors from the australian brown snake (pseudonaja textilis textilis) | Martin Lavin | PCT/AU9936922 |
| Agents and methods for diagnosing the presence or risk of prostate cancer | Martin Lavin | PCT/AU09/000651 |
| Serum preparation | Martin Lavin | PCT/AU11/001221 |
| A method of treatment | Andrew Boyd | PCT/AU99/000931 |

Patent Families Resulting from Industry Sponsored Contract Research Performed at QIMR

| Title | Inventor(s) | Application Number |
|---|------------------------------------|--------------------|
| Treatment of virally induced lesions | Andreas Suhrbier | PCT/AU2008/000596 |
| Use of angeloyl-substituted ingenones in combination with other agents to treat cancer | Andreas Suhrbier; Peter Parsons | PCT/AU2006/001700 |
| Treatment of solid tumours | Andreas Suhrbier | PCT/AU2005/001827 |
| Chaperonin 10 modulators of toll-like receptors inducible cytokine and cytokine secretion | Andreas Suhrbier | PCT/AU2005/000041 |
| Treatment of prostate cancer | Peter Parsons | PCT/AU2001/000966 |
| Therapeutic agents I | Andreas Suhrbier; Peter Parsons | PCT/AU2001/000679 |
| Therapeutic agents II | Andreas Suhrbier; Peter Parsons | PCT/AU2001/000680 |
| Therapeutic agents III | Andreas Suhrbier; Peter Parsons | PCT/AU2001/000678 |

Patent Families Managed by QIMR as Trustee for the CRC-Vaccine Technology

| Title | Inventor(s) | Application Number |
|---|---------------|--------------------|
| T helper epitopes | David Jackson | PCT/AU2000/000070 |
| Novel immunogenic lipopeptides comprising T-helper and cytotoxic T lymphocyte (CTL) epitope | David Jackson | PCT/AU2003/001019 |
| Novel immunogenic lipopeptides comprising T-helper and B-cell epitopes | David Jackson | PCT/AU2003/001018 |
| Truncated LHRH formulations | David Jackson | PCT/AU2005/001383 |
| Immunogenic molecules | David Jackson | PCT/AU2006/000162 |

Trade Marks Managed by QIMR

| Mark | Status | Australian Trade Mark Number |
|--|------------------------|------------------------------|
| Queensland Institute of Medical Research | Registered / Protected | 1233303 |
| QIMR | Registered / Protected | 1233307 |
| Hexagons device | Registered / Protected | 1233317 |

GRANTS AND FUNDING

(over \$100,000)

| Source | Chief Investigators and Project Title | Term | Period | Total Funding |
|----------|---|------|-------------|------------------|
| AISRF | Engwerda, Christian et al - Designing combination immunotherapy and drug treatment to control chronic infectious disease | 4yrs | 2012 - 2015 | 300,000.00 |
| ALF | Frazer, David - ALF-Hospitality Industry Career Research Fellowship | 3yrs | 2012 - 2014 | 270,000.00 |
| ARC | Harrich, David - Regulation of human immunodeficiency virus type 1 replication by viral & cellular proteins | 4yrs | 2012 - 2015 | 822,556.00 |
| ARC | Medland, Sarah - Elucidating the genetics of attention deficit hyperactivity disorder | 4yrs | 2012 - 2015 | 603,528.00 |
| BPA | Gorman, Jeffrey - Protein Discovery Centre NCRIS Program C'wealth Funding | 3yrs | 2011 - 2013 | 2,500,000.00 |
| CCQ | Walker, Graeme <i>et al</i> - An ultraviolet radiation induced inflammatory response involving infiltrating macrophages drives melanocyte proliferation and triggers melanoma development | 2yrs | 2012 - 2013 | 200,000.00 |
| CCQ | Hayward, Nicholas - Characterisation of novel melanoma susceptibility genes through whole-genome sequencing | 2yrs | 2012 - 2013 | 198,724.00 |
| CCQ | Boyle, Glen <i>et al</i> - Does "phenotype-switching" control melanoma proliferation, invasion and metastasis | 2yrs | 2012 - 2013 | 198,856.00 |
| CCQ | Suhrbier, Andreas et al - The function of Sin1 isoforms in mTORC2 and Ras signalling | 2yrs | 2012 - 2013 | 200,000.00 |
| GESA | Wallace, Daniel - Postdoc Senior Research Fellowship | 3yrs | 2012 - 2014 | 300,000.00 |
| KOMEN | Trench, Georgia <i>et al</i> - Germline Mutations in Genes that Modify Epigentic Silencing in familial breast cancer | 4yrs | 2012 - 2015 | USD 585,265.00 |
| LFA | Lane, Steven et al - Targeting disease -initiating cells in Jak2V617F myeloproliferative neoplasms | 2yrs | 2012 - 2013 | 210,000.00 |
| LFQ | Gandhi, Maher <i>et al</i> - The immunopathogenesis of EBV-positive diffuse large B-cell Lymphoma of the elderly | 1yrs | 2012 | 100,000.00 |
| LFQ | Lane, Steven et al - Targeting disease -initiating stem cells in myeloproliferative neplasms | 1yrs | 2012 | 100,000.00 |
| LFQ | Cheong, Melody - Optimization of CD8+ dendritic cell cross presentation for enhanced graft versus leukaemia effects following haematopoeitic stem cell transplantation | 3yrs | 2012 - 2014 | 120,000.00 |
| NBCF | Khanna, Kum Kum <i>et al</i> - Identification of Regulators of Dormancy In Breast Cancer | 2yrs | 2012 - 2013 | 199,639.00 |
| NHMRC-PJ | MacDonald, Kelli - Defective donor DC function promotes chronic GVHD | 3yrs | 2012 - 2014 | 566,010.00 |
| NHMRCCCV | Jordan, Susan - Collaborative Australian Renal Cell Carcinoma Epi Study (Administered by Cancer Council Victoria) | 3yrs | 2012 - 2014 | 130,460.00 |
| NHMRCCDF | Mulvenna, Jason - Proteomic approaches to explore the pathogenesis and secretomes of parasitic flukes of humans (Transferred from James Cook University) | 3yrs | 2012 - 2014 | 248,575.00 |
| NHMRC-PJ | Haque, Ashraful <i>et al</i> - Investigating Type I Interferon-mediated immune- suppression during Plasmodium infection | 4yrs | 2012 - 2015 | 540,975.00 |
| NHMRCCDF | Haque, Ashraful - Understanding the host immune response to blood-stage malaria | 4yrs | 2012 - 2015 | 391,076.00 |
| NHMRCCDF | Miles, John - Modifying immune receptors for therapeutics and | 4yrs | 2012 - 2015 | 391,076.00 |
| NHMRCCDF | Ferriera, Manuel - Asthma genetics: dissecting the missing | 4yrs | 2012 - 2015 | 432,568.00 |
| NHMRC-MO | Boyd, Andrew <i>et al</i> - New therapies for the treatment of brain cancer (Administered by Monash University) | 3yrs | 2012 - 2014 | 285,000.00 |
| NHMRC-PJ | Ramm, Grant <i>et al</i> - Role of hepatic stellate cell and liver progenitor cell interactions in the regulation of wound healing and liver regeneration | 3yrs | 2012 - 2014 | 599,685.00 |
| NHMRC-PJ | Young, Joanne <i>et al</i> - Young Onset Colorectal Cancer: Genetics Pathology and Environment | 2yrs | 2012 - 2013 | 303,750.00 |
| NHMRC-PJ | Khanna, Rajiv et al - Exploiting viral infection in brain cancer as therapeutic target | 3yrs | 2012 - 2014 | 378,510.00 |
| NHMRC-PJ | Subramaniam, Nathan <i>et al</i> - Understanding how the Liver Regulates Body Iron Levels | 3yrs | 2012 - 2014 | 393,510.00 |
| NHMRC-PJ | Harten, Sarah et al - Are mice with defects in epigenetic state susceptible to cancer? | 3yrs | 2012 - 2014 | 407,575.00 |
| NHMRC-PJ | Burrow, Scott <i>et al</i> - A reassessment of the viral determinants presented for immune recognition by T cells. | 3yrs | 2012 - 2014 | 419,925.00 |
| NHMRC-PJ | Lane, Steven - Treatment of blood diseases by targeting the disease-causing stem cells | 3yrs | 2012 - 2014 | 461,265.00 |
| NHMRC-PJ | Cheng, Qin <i>et al</i> - The control and regulatory mechanisms of artemisinin induced dormancy in P. falciparum | 3yrs | 2012 - 2014 | 478,675.00 |
| NHMRC-PJ | Mounsey, Kate et al - Inside the skin: Understanding the different host responses | 3yrs | 2012 - 2014 | 483,510.00 |

| Source | Chief Investigators and Project Title | Term | Period | Total Funding |
|-------------|---|------|-------------|------------------|
| NHMRC-PJ | Khanna, Rajiv <i>et al</i> - Understanding the mechanism of T cell memory inflation following persistent viral infection | 3yrs | 2012 - 2014 | 486,597.50 |
| NHMRC-PJ | McMillan, David <i>et al</i> - Evaluation of a vaccine to combat common streptococcal diseases | | 2012 - 2014 | 585,347.50 |
| NHMRC-PJ | Montgomery, Grant et al - Mechanisms increasing endometriosis risk | 3yrs | 2012 - 2014 | 592,350.00 |
| NHMRC-PJ | Khanna, Kum Kum <i>et al</i> - Understanding the role of SSB1 in embryonic development and genome maintenance | 3yrs | 2012 - 2014 | 599,685.00 |
| NHMRC-PJ | Kay, Graham <i>et al</i> - Epigenetic regulation of monoallelic gene expression during development. | 3yrs | 2012 - 2014 | 633,013.00 |
| NHMRC-PJ | Spurdle, Amanda <i>et al</i> - Extension of a two-stage genome-wide association study of endometrial cancer: validation of endometrial cancer risk-associated alleles and identification of 'multiple-cancer' risk loci | 3yrs | 2012 - 2014 | 681,325.00 |
| NHMRC-PJ | Radford-Smith, Graham et al - Genetic predictors of refactory colitis | 3yrs | 2012 - 2014 | 849,262.50 |
| NHMRC-PJ | Martin, Nick <i>et al</i> - The Brisbane Longitudinal Twin Study: Finding genes for common diseases | 5yrs | 2012 - 2016 | 968,750.00 |
| NHMRC-PJ | Webb, Penelope et al - Improving outcomes from ovarian cancer: building the evidence to help women help themselves | 5yrs | 2012 - 2016 | 1,756,731.25 |
| NHMRCQUT | Spurdle, Amanda et al - Indepth association and functional studies assessing the role of novel single nucleotide polymorphisms in PSA (Administered by QUT) | 2yrs | 2012 - 2013 | 141,575.00 |
| NHMRC-RF | Subramaniam, Nathan - NHMRC-Senior Principal Research Fellowship | 5yrs | 2012 - 2016 | 580,910.00 |
| NHMRC-RF | Anderson, Gregory - NHMRC Principal Research Fellowship | 5yrs | 2012 - 2016 | 641,855.00 |
| NHMRC-RF | Burrows, Scott - NHMRC-Senior Principal Research Fellowship | 5yrs | 2012 - 2016 | 702,795.00 |
| NHMRC-RF | Doolan, Denise - NHMRC-Senior Principal Research Fellowship | 5yrs | 2012 - 2016 | 777,795.00 |
| NHMRC-RF | Chevenix-Trench, Georgia - NHMRC Senior Principal Research Fellowship | 5yrs | 2012 - 2016 | 794,860.00 |
| NHMRC-RF | Hayward, Nicholas - NHMRC Senior Principal Research Fellowship | 5yrs | 2012 - 2016 | 794,860.00 |
| NHMRC-TF | Jordan, Susan - NHMRC Training Fellowship - Changing risk factors & cancer outcomes (transferred from University of Queensland) | 2yrs | 2012 - 2013 | 129,276.00 |
| NHMRC-UQ | Boyd, Andrew <i>et al</i> - Improved diagnostic imaging of primary (Administered by University of Queensland) | 3yrs | 2012 - 2014 | 105,000.00 |
| NHMRC-UQ | Webb, Penelope <i>et al</i> - Research Assistant - CARE Kidney Study (Administered by University of Queensland) | 3yrs | 2011 - 2013 | 245,280.00 |
| NHMRC-UQ | McCarthy, James <i>et al</i> - A Cluster RCT of the impact of a community-based hygiene and sanitation program on infection with intestinal parasites (Administered by University of Queensland) | 3yrs | 2011 - 2013 | 518,218.00 |
| NHMRC-UQ | Lavin, Martin <i>et al</i> - Role of oxidative stress in the human genetic disorder ataxi (Administered by University of Queensland) | 3yrs | 2012 - 2014 | 551,010.00 |
| NHMRC-UQ | Lavin, Martin <i>et al</i> - Generating adult stem cells for a genetic disorder (Administered by University of Queensland) | 3yrs | 2012 - 2014 | 581,010.00 |
| NHMRPG12 | Chevenix-Trench, Georgia <i>et al</i> - Molecular determinates of susceptability and progression in breast cancer | 5yrs | 2012 - 2016 | 5,604,500.00 |
| NIH-AUST | Gardiner, Donald et al - Assay Development for lead identification of anti- gametocydial agents | 1yr | 2011 - 2012 | USD 137,696.00 |
| CCQ | Leggett, Barbara et al - Molecular and clinical features of serrated adenomas that predict risk of malignant transformation and risk of development of further polyps | 2yrs | 2012 - 2013 | 197,450.00 |
| NHMRC-PJ | Boyd, Andrew et al - EphA3 is a novel therapy target in malignant glioma | 2yrs | 2012 - 2014 | 566,010.00 |
| PT-WILSN | Perpetual J T Wilson Fellowships | 4yrs | 2012 - 2015 | 1,037,848.00 |
| SMART | Ferreira, Manuel - Queensland Government Smart Futures Fellowship - Tocilizumab: A new personalised treatment for Asthma? | 4yrs | 2012 - 2015 | 360,000.00 |
| ARC-UNI NSW | Breakspear, Michael et al - Optimising autonomous system control with brain-like hierarchial control systems (Administered by University of NSW) | 1yr | 2012 | 100,100.00 |
| VMO | Breakspear, Michael - Schizophrenia/Brain imaging Research Project | 1yr | 2012 | 122,825.00 |
| MRA | Walker, Graeme et al - Discovery of Genes for Melanoma Development | 2yrs | 2012 - 2014 | USD 100,000.00 |

Codes

Page 124

| AISRF | Australia-India Scientific Research Fund |
|-------|--|
| ALF | Australian Liver Foundation |
| BPA | Bio-Platforms Australia - NCRIS |
| GESA | Gastroenterological Society of Australia |
| VMO | Queensland Health - Visiting Medical Officers Fund |
| MRA | Melanoma Research Alliance |

QIMR FELLOWS

| Name | Year Awarded |
|----------------------|-------------------|
| Macfarlane Burnet | 1981 |
| Ralph Doherty | 1981 |
| Frank Fenner | 1981 |
| Eric French | 1981 |
| Abraham Fryberg | 1981 |
| Douglas Lee | 1981 |
| Margaret Macgregor | 1981 |
| Aubrey Pye | 1981 |
| William Reeves | 1981 |
| John Sprent | 1981 |
| Harry Standfast | 1981 |
| George Taylor | 1981 |
| John Tonge | 1981 |
| Carleton Gajdusek | 1982 |
| David Henderson | 1982 |
| Owen Powell | 1982 |
| Julie Saroso | 1982 |
| Edwin Westaway | 1982 |
| Vincent Zigas | 1982 |
| Anthony Epstein | 1983 |
| Douglas Gordon | 1983 |
| Elizabeth Marks | 1983 |
| Neville Davis | 1985 |
| Robert Porter | 1985 |
| Brian Wilson | 1985 |
| Natth Bhamarapravati | 1986 |
| Louis Miller | 1986 |
| Eric Saint | 1986 |
| Robert Shope | 1986 |
| Bruce Watson | 1986 |
| The Hon Mike Ahern | 1988 |
| Neville McCarthy | 1988 |
| Gustav Nossal | 1988 |
| E D O'Callaghan | 1988 (Posthumous) |
| Frank Schofield | 1988 |
| Edward Stewart | 1989 |
| Tao Yixun | 1989 |
| Chamlong Harinasuta | 1991 |

| Name | Year Awarded |
|--------------------|--------------|
| Chev Kidson | 1991 |
| Peter Livingstone | 1991 |
| Michael Alpers | 1992 |
| Rod Wylie | 1992 |
| Graham Mitchell | 1993 |
| Mervyn Eadie | 1994 |
| Bryan Emmerson | 1994 |
| lan Wilkey | 1994 |
| Ted Brown | 1995 |
| Peter Doherty | 1997 |
| Paul Korner | 1997 |
| Stephen Lynch | 1997 |
| Michael O'Rourke | 1998 |
| Michael Barry | 1999 |
| Kay Ellem | 1999 |
| Ian Taylor | 1999 |
| Lawrie Powell | 2000 |
| Tom Veivers | 2000 |
| Phillip Desbrow | 2001 |
| William O'Sullivan | 2001 |
| Diana Cavaye | 2002 |
| Mary Dunne | 2002 |
| Clive Berghofer | 2003 |
| Bryan Campbell | 2003 |
| Sam Coco | 2003 |
| Peter Wills | 2004 |
| John Kerr | 2005 |
| Paul Wright | 2005 |
| David Lyons | 2006 |
| lan Goddard | 2007 |
| Helen Luckoff | 2007 |
| John Garnsey | 2008 |
| Graham Brown | 2008 |
| Robert MacLennan | 2008 |
| Peter Brooks | 2009 |
| Peter Roeser | 2009 |
| David Alcorn | 2011 |
| Michael Good | 2011 |

SCIENTIFIC PUBLICATIONS

Adsett J, Mullins R, Hwang R, Hogden A, Gibson E, Houlihan K, Tuppin M, Korczyk D, Mallitt KA, Mudge A. Repeat six-minute walk tests in patients with chronic heart failure: are they clinically necessary? *European Journal of Cardiovascular Prevention and Rehabilitation*. 2011

Agrawal A, Nelson E, Littlefield A, Bucholz KK, Degenhardt L, Henders A, Madden PAF, Martin NG, Montgomery G, Pergadia M, Sher K, Heath A, Lynskey M. CNR1, physical abuse and anhedonia: The role of the endocannabinoid system in stress adaptation and mood. *Behavior Genetics*. 2011

Agrawal A, Nelson EC, Littlefield AK, Bucholz KK, Degenhardt L, Henders AK, Madden PA, Martin NG, Montgomery GW, Pergadia ML, Sher KJ, Heath AC, Lynskey MT. Cannabinoid receptor genotype moderation of the effects of childhood physical abuse on anhedonia and depression. *Archives of General Psychiatry.* 2012

Ali N, Mekuria AH, Requena JM, Engwerda CR. Immunity to visceral leishmaniasis. *Journal of Tropical Medicine*. 2012

Amante FH, Engwerda CR, Good MF. Experimental asexual blood stage malaria immunity. Current Protocols in Immunology. 2012

Amin N, Byrne E, Johnson J, Chenevix-Trench G, Walter S, Nolte IM, Investigators kConFab, Vink JM, Rawal R, Mangino M, Teumer A, Keers JC, Verwoert G, Baumeister S, Biffar R, Petersmann A, Dahmen N, Doering A, Isaacs A, Broer L, Wray NR, Montgomery GW, Levy D, Psaty BM, Gudnason V, Chakravarti A, Sulem P, Gudbjartsson DF, Kiemeney LA, Thorsteinsdottir U, Stefansson K, van Rooij FJ, Aulchenko YS, Hottenga JJ, Rivadeneira FR, Hofman A, Uitterlinden AG, Hammond CJ, Shin SY, Ikram A, Witteman JC, Janssens AC, Snieder H, Tiemeier H, Wolfenbuttel BH, Oostra BA, Heath AC, Wichmann E, Spector TD, Grabe HJ, Boomsma DI, Martin NG, Van Duijn CM. Genome-wide association analysis of coffee drinking suggests association with CYP1A1/ CYP1A2 and NRCAM. Molecular Psychiatry. 2011

Amos CI, Wang LE, Lee JE, Gershenwald JE, Chen WV, Fang SY, Kosoy R, Zhang MF, Qureshi AA, Vattathil S, Schacherer CW, Gardner JM, Wang YL, Bishop DT, Barrett JH, Macgregor S, Hayward NK, Martin NG, Duffy DL, Mann GJ, Cust A, Hopper J, Brown KM, Grimm EA, Xu YJ, Han YH, Jing KY, McHugh C, Laurie CC, Doheny KF, Pugh EW, Seldin MF, Han JL, Wei QY. Genome-wide association study identifies novel loci predisposing to cutaneous melanoma. *Human Molecular Genetics.* 2011

Anderson GJ, McLaren GD. Iron Physiology and Pathophysiology in Humans (book). 2012

Andrews KT, Gupta AP, Tran TN, Fairlie DP, Gobert GN, Bozdech Z. Comparative gene expression profiling of *P. falciparum* malaria parasites exposed to three different histone deacetylase inhibitors. *PLoS ONE*. 2012

Andrews KT, Haque A, Jones MK. HDAC inhibitors in parasitic diseases. *Immunology and Cell Biology.* 2012

Andrews KT, Tran T, Fairlie DP. Towards histone deacetylase inhibitors as new antimalarial drugs. *Current Pharmaceutical Design*. 2012 Anthony B, Allen JT, Li YS, McManus DP. A role for peroxisome proliferator-activated receptors in the immunopathology of schistosomiasis? *Parasitology Research*. 2012

Anthony BA, Allen JA, James K, James K, Li Y, Ramm GA, McManus DP. The effect of schistosome eggs on host hepatic stellate cell differentiation. *Journal of Gastroenterology and Hepatology.* 2011

Antoniou AC, Kartsonaki C, Sinilnikova OM. Soucy P, McGuffog L, Healey S, Lee A, Peterlongo P, Manoukian S, Peissel B, Zaffaroni D, Cattaneo E, Barile M, Pensotti V, Pasini B, Dolcetti R, Giannini G, Putignano AL, Varesco L, Radice P, Mai PL, Greene MH, Andrulis IL, Glendon G. Ozcelik H. Thomassen M. Gerdes AM, Kruse TA, Birk Jensen U, Crüger DG, Caligo MA, Laitman Y, Milgrom R, Kaufman B, Paluch-Shimon S, Friedman E, Loman N, Harbst K, Lindblom A, Arver B, Ehrencrona H, Melin B: SWE-BBCA, Nathanson KL, Domchek SM, Rebbeck T, Jakubowska A, Lubinski J, Gronwald J, Huzarski T, Byrski T, Cybulski C, Gorski B, Osorio A, Ramón y Cajal T, Fostira F, Andrés R, Benitez J, Hamann U, Hogervorst FB, Rookus MA, Hooning MJ, Nelen MR, van der Luijt RB, van Os TA, van Asperen CJ, Devilee P, Meijers-Heijboer HE, Gómez Garcia EB; HEBON, Peock S, Cook M, Frost D, Platte R, Leyland J, Evans DG, Lalloo F, Eeles R. Izatt L. Adlard J. Davidson R. Eccles D, Ong KR, Cook J, Douglas F, Paterson J, Kennedy MJ, Miedzybrodzka Z; EMBRACE, Godwin A, Stoppa-Lyonnet D, Buecher B, Belotti M, Tirapo C, Mazoyer S, Barjhoux L, Lasset C. Leroux D. Faivre L. Bronner M. Prieur F, Nogues C, Rouleau E, Pujol P, Coupier I, Frénay M; CEMO Study Collaborators, Hopper JL, Daly MB, Terry MB, John EM, Buys SS, Yassin Y. Miron A. Goldgar D: Breast Cancer Family Registry, Singer CF, Tea MK, Pfeiler G, Dressler AC, Hansen Tv, Jønson L, Ejlertsen B, Barkardottir RB, Kirchhoff T, Offit K, Piedmonte M, Rodriguez G, Small L, Boggess J, Blank S. Basil J. Azodi M. Toland AE. Montagna M. Tognazzo S, Agata S, Imyanitov E, Janavicius R, Lazaro C, Blanco I, Pharoah PD, Sucheston L, Karlan BY, Walsh CS, Olah E, Bozsik A, Teo SH, Seldon JL, Beattie MS, van Rensburg EJ, Sluiter MD, Diez O, Schmutzler RK, Wappenschmidt B, Engel C, Meindl A, Ruehl I, Varon-Mateeva R, Kast K, Deissler H, Niederacher D, Arnold N, Gadzicki D, Schönbuchner I, Caldes T, de la Hoya M, Nevanlinna H, Aittomäki K, Dumont M, Chiquette J. Tischkowitz M. Chen X. Beesley J. Spurdle AB; kConFab investigators, Neuhausen SL, Chun Ding Y, Fredericksen Z, Wang X, Pankratz VS, Couch F, Simard J, Easton DF, Chenevix-Trench G; CIMBA. Common alleles at 6g25 1 and 1p11 2 are associated with breast cancer risk for BRCA1 and BRCA2 mutation carriers. Human Molecular Genetics. 2011

Antoniou AC, Kuchenbaecker KB, Soucy P, Beesley J, Chen X, McGuffog L, Lee A, Barrowdale D, Healey S, Sinilnikova OM, Caligo MA, Loman N, Harbst K, Lindblom A, Arver B, Rosenquist R, Karlsson P, Nathanson K, Domchek S, Rebbeck T, Jakubowska A, Lubinski J, Jaworska K, Durda K, Zlowowcka-Perlowska E, Osorio A, Durán M, Andrés R, Benítez J, Hamann U, Hogervorst FB, van Os TA, Verhoef S, Meijers-Heijboer HE, Wijnen J, Gómez Garcia EB, Ligtenberg MJ, Kriege

M, Collée JM, Ausems MG, Oosterwijk JC, Peock S, Frost D, Ellis SD, Platte R, Fineberg E, Evans DG, Lalloo F, Jacobs C, Eeles R, Adlard J, Davidson R, Cole T, Cook J, Paterson J, Douglas F, Brewer C, Hodgson S, Morrison PJ, Walker L, Rogers MT, Donaldson A, Dorkins H, Godwin AK, Bove B, Stoppa-Lyonnet D, Houdayer C, Buecher B, de Pauw A, Mazoyer S, Calender A, Léoné M, Bressacde Paillerets B, Caron O, Sobol H, Frenay M, Prieur F, Ferrer SF, Mortemousque I, Buys S, Daly M, Miron A, Terry MB, Hopper JL, John EM, Southey M, Goldgar D, Singer C. Common variants at 12p11, 12q24, 9p21, 9q31.2 and in ZNF365 are associated with breast cancer risk for BRCA1 and/or BRCA2 mutation carriers. Breast Cancer Research. 2012

Antonsson A, Bialasiewicz S, Rockett RJ, Jacob K, Bennett IC, Sloots TP. Exploring the prevalence of ten polyomaviruses and two herpes viruses in breast cancer. *PLoS ONE*. 2012

Antonsson A, Spurr TP, Chen AC, Francis G, McMillan NAJ, Saunders N, Law M, Bennett I. High prevalence of human papillomaviruses in fresh frozen breast cancer samples. *Journal of Medical Virology.* 2012

Antonsson A. Review: Antibodies to cutaneous human papillomaviruses. *Journal of Medical Virology.* 2012

Antony H, Wiegmans AP, Wei MQ, Chernoff YO, Khanna KK, Munn AL. Potential roles for prions and protein-only inheritance in cancer. *Cancer and Metastasis Reviews.* 2012

Apte S, Groves PL, Skwarczynski M, Fujita Y, Chang C, Toth I, , Doolan DL. Vaccination with lipid core peptides fails to induce epitopespecific T cell responses but confers non-specific protective immunity in a malaria model. *PLoS ONE*. 2012

Apte SH, Groves PL, Roddick JS, da Hora VP, Doolan DL. High-throughput multi-parameter flow-cytometric analysis from micro-quantities of *Plasmodium*-infected blood. *International Journal for Parasitology.* 2011

Aquino KM, Schira MM, Robinson PA, Drysdale PM, Breakspear M. Hemodynamic traveling waves in human visual cortex. *PLoS Computational Biology.* 2012

Ardjmand A, Bock CED, Molloy TJ, Bone SM, Johnstone D, Campbell DM, Shipman KL, Yeadon TM, Hoist J, Spanevello MD, Catchpoole DR, Lincz LF, Boyd AW, Burns GF, Thome RF. Altered expression of Fat1 cadherin, a novel tumor marker for acute lymphoblastic leukemia. *Clinical Biochemistry*. 2011

Argall R, Koloski NA, Radford-Smith G. Associations between stable psychological characteristics and timing of surgery in inflammatory bowel disease (IBD). *Journal of Gastroenterology and Hepatology*. 2011

Ashe A, Butterfield NC, Town L, Courtney AD, Cooper AN, Ferguson C, Barry R, Olsson F, Liem KF, Parton RG, Wainwright BJ, Anderson KV, Whitelaw E, Wicking C. Mutations in mouse Ift144 model the craniofacial, limb and rib defects in skeletal ciliopathies. *Human Molecular Genetics.* 2012

Aziz A, Zhang W, Li J, Loukas A, McManus DP, Mulvenna J. Proteomic characterisation

QIMR Annual Report 2011-2012

of Echinococcus granulosus hydatid cyst fluid from sheep, cattle and humans. Journal of Proteomics. 2011

Bacon BR, Adams PC, Kowdley KV, Powell LW, Tavill AS, American Association for the Study of Liver. Diagnosis and management of hemochromatosis: 2011 practice guideline by the American Association for the Study of Liver Diseases. *Hepatology*. 2011

Baker J, Gatton ML, Peters J, Ho MF, McCarthy JS, Cheng Q. Transcription and expression of *Plasmodium falciparum* histidine-rich proteins in different stages and strains: Implications for rapid diagnostic tests. *PLoS ONE*. 2011

Balen J, Raso G, Li YS, Zhao ZY, Yuan LP, Williams GM, Luo XS, Shi MZ, Yu XL, Utzinger J, McManus DP. Risk factors for helminth infections in a rural and a pen-urban setting of the Dongting Lake area, People's Republic of China. International Journal for Parasitology. 2011

Banovic T, Banovic T, Yanilla M, Simmons R, Robertson I, Schroder WA, Raffelt NC, Wilson YA, Hill GR, Hogan P, Nourse CB. Disseminated varicella infection caused by varicella vaccine strain in a child with low invariant natural killer T cells and diminished CD1d expression. *The Journal of Infectious Diseases*. 2011

Barnes EC, Choomuenwai V, Andrews KT, Quinn RJ, Davis RA. Design and synthesis of screening libraries based on the muurolane natural product scaffold. *Organic and Biomolecular Chemistry*. 2012

Barrett JH, Iles MM, Harland M, Taylor JC, Aitken JF, Andresen PA, Akslen LA, Armstrong BK, Avril MF, Azizi E, Bakker B, Bergman W, Bianchi-Scarra G, Bressac-de Paillerets B, Calista D. Cannon-Albright LA. Corda E. Cust AE, Debniak T, Duffy D, Dunning AM, Easton DF, Friedman E, Galan P, Ghiorzo P, Giles GG, Hansson J, Hocevar M, Hoiom V, Hopper JL, Ingvar C, Janssen B, Jenkins MA, Jonsson G. Kefford RF. Landi G. Landi MT. Lang J. Lubinski J, Mackie R, Malvehy J, Martin NG, Molven A, Montgomery GW, van Nieuwpoort FA, Novakovic S, Olsson H, Pastorino L, Puig S, Puig-Butille JA, Randerson-Moor J, Snowden H. Tuominen B. VanBelle P. van der Stoep N. Whiteman DC, Zelenika D, Han JL, Fang SY, Lee JE, Wei QY, Lathrop GM, Gillanders EM, Brown KM, Goldstein AM, Kanetsky PA, Mann GJ, Macgregor S, Elder DE, Amos CI, Hayward NK, Gruis NA, Demenais F, Bishop JAN, Bishop DT. Genome-wide association study identifies three new melanoma susceptibility loci. Nature Genetics, 2011

Barry AE, Trieu A, Fowkes FJI, Pablo J, Kalantari-Dehaghi M, Jasinskas A, Tan XL, Kayala MA, Tavul L, Siba PM, Day KP, Baldi P, Felgner PL, Doolan DL. The Stability and complexity of antibody responses to the major surface antigen of *Plasmodium falciparum* are associated with age in a malaria endemic area. *Molecular and Cellular Proteomics*. 2011

Basáñez MG, McCarthy JS, French MD, Yang GJ, Walker M, Gambhir M, Prichard RK, Churcher TS. A research agenda for helminth diseases of humans: modelling for control and elimination. *PLoS Neglected Tropical Diseases*. 2012

Batouli SA, Sachdev PS, Wen W, Wright MJ, Suo C, Ames D, Trollor JN. The heritability of brain metabolites on proton magnetic resonance spectroscopy in older individuals. *Neuroimage.* 2012 Batra J, Lose F, Chambers S, Gardiner RA, Aitken J, Yaxley J, Clements JA, Spurdle AB. A replication study examining novel common single nucleotide polymorphisms identified through a prostate cancer genome-wide association study in a Japanese population. *American Journal of Epidemiology.* 2011

Batra J, Lose F, O'Mara T, Marquart L, Stephens C, Alexander K, Srinivasan S, Eeles RA, Easton DF, Al Olama AA, Kote-Jarai Z, Guy M, Muir K, Lophatananon A, Rahman AA, Neal DE, Hamdy FC, Donovan JL, Chambers S, Gardiner RA, Aitken J, Yaxley J, Kedda MA, Clements JA, Spurdle AB. Association between prostinogen (KLK15) genetic variants and prostate cancer risk and aggressiveness in Australia and a metaanalysis of GWAS data. *PLoS ONE*. 2011

Batstone MD, Cosson J, Marquart L, Acton C. Platelet rich plasma for the prevention of osteoradionecrosis. A double blinded randomized cross over controlled trial. *International Journal of Oral and Maxillofacial Surgery.* 2011

Bauer MJ, Georgousakis MM, Vu T, Henningham A, Hofmann A, Rettel M, Hafner LM, Sriprakash KS, McMillan DJ. Evaluation of novel *Streptococcus pyogenes* vaccine candidates incorporating multiple conserved sequences from the C-repeat region of the M-protein. *Vaccine*. 2012

Beadle G, Mengersen K, Moynihan S, Yates P. Perceptions of the ethical conduct of cancer trials by oncology nurses. *European Journal of Cancer Care.* 2011

Beesley J, Pickett HA, Johnatty SE, Dunning AM, Chen XQ, Li J, Michailidou K, Lu Y, Rider DN, Palmieri RT, Stutz MD, Lambrechts D, Despierre E. Lambrechts S. Vergote I. Chang-Claude J, Nickels S, Vrieling A, Flesch-Janys D, Wang-Gohrke S, Eilber U, Bogdanova N, Antonenkova N, Runnebaum IB, Dork T, Goodman MT, Lurie G, Wilkens LR, Matsuno RK, Kiemeney LA, Aben KKH, Marees T, Massuger LFAG, Fridley BL, Vierkant RA, Bandera EV, Olson SH, Orlow I, Rodriguez-Rodriguez L, Cook LS, Le ND, Brooks-Wilson A, Kelemen LE, Campbell I, Gayther SA, Ramus SJ, Gentry-Maharaj A, Menon U, Ahmed S, Baynes C, Pharoah PD, Muir K, Lophatananon A, Chaiwerawattana A, Wiangnon S, Macgregor S, Easton DF, Reddel RR, Goode EL, Chenevix-Trench G. Functional polymorphisms in the TERT promoter are associated with risk of serous epithelial ovarian and breast cancers. PLoS ONE. 2011

Beesley VL, Price MA, Butow PN, Green AC, Olsen CM, Webb PM. Physical activity in women with ovarian cancer and its association with decreased distress and improved quality of life. *Psycho-Oncology.* 2011

Beesley VL, Price MA, Webb PM. Loss of lifestyle: health behaviour and weight changes after becoming a caregiver of a family member diagnosed with ovarian cancer. *Supportive Care in Cancer.* 2011

Benyamin B, Middelberg RP, Lind PA, Valle AM, Gordon S, Nyholt DR, Medland SE, Henders AK, Heath AC, Madden PAF, Visscher PM, O'Connor DT, Montgomery GW, Martin NG, Whitfield JB. GWAS of butyrylcholinesterase activity identifies four novel loci, independent effects within BCHE and secondary associations with metabolic risk factors. *Human Molecular Genetics*. 2011

Bertalli NA, Allen KJ, McLaren CE, Turkovic L, Osborne NJ, Constantine CC, Delatycki MB, English DR, Giles GG, Hopper JL, Anderson GJ, Olynyk JK, Powell LW, Gurrin LC. A comparison of self-reported and record-linked blood donation history in an Australian cohort. *Transfusion*. 2011

Bhatt MK, Bartlett ML, Mallitt KA, McTaggart S, Kumar ASR. Correlation of various published radionuclide glomerular filtration rate estimation techniques and proposed paediatric normative data. *Nuclear Medicine Communications*. 2011

Bhatti S, Kozlov S, Farooqi AA, Naqi A, Lavin M, Khanna KK. ATM protein kinase: the linchpin of cellular defenses to stress. *Cellular and Molecular Life Sciences.* 2011

Bis JC, DeCarli C, Smith AV, van der Lijn F, Crivello F, Fornage M, Debette S, Shulman JM, Schmidt H, Srikanth V, Schuur M, Yu L, Choi SH, Sigurdsson S, Verhaaren BF, DeStefano AL, Lambert JC, Jack CR Jr, Struchalin M, Stankovich J, IbrahimVerbaas CA, Fleischman D, Zijdenbos A, den Heijer T, Mazoyer B, Coker LH, Enzinger C, Danoy P, Amin N, Arfanakis K, van Buchem MA, de Bruijn RF, Beiser A, Dufouil C, Huang J, Cavalieri M, Thomson R, Niessen WJ, Chibnik LB, Gislason GK, Hofman A, Pikula A, Amouyel P, Freeman KB, Phan TG, Oostra BA, Stein JL, Medland SE, Vasquez AA, Hibar DP. Wright MJ. Franke B. Martin NG. Thompson PM, Enhancing Neuro Imaging Genetics through MetaAnalysis Consortium, Nalls MA, Uitterlinden AG, Au R, Elbaz A, Beare RJ, van Swieten JC, Lopez OL, Harris TB, Chouraki V, Breteler MM, De Jager PL, Becker JT, Vernooii MW, Knopman D, Fazekas F, Wolf PA, van der Lugt A, Gudnason V, Longstreth WT Jr, Brown MA, Bennett DA, Van Duijn CM, Mosley TH, Schmidt R, Tzourio C, Launer LJ. Common variants at 12q14 and 12q24 are associated with hippocampal volume. Nature Genetics. 2012

Black M, Trent A, Kostenko Y, Lee JS, Olive C, Tirrell M. Self-assembled peptide amphiphile micelles containing a cytotoxic T-cell epitope promote a protective immune response *in vivo*. *Advanced Materials*. 2012

Blokland GAM, de Zubicaray GI, McMahon KL, Wright MJ. Genetic and environmental influences on neuroimaging phenotypes: A meta-analytical perspective on twin imaging studies. *Twin Research and Human Genetics*. 2012

Blokland GAM, McMahon KL, Thompson PM, Martin NG, de Zubicaray GI, Wright MJ. Heritability of working memory brain activation. *Journal of Neuroscience*. 2011

Bloom AJ, Harari O, Martinez M, Madden PA, Martin NG, Montgomery GW, Rice JP, Murphy SE, Bierut LJ, Goate A. Use of a predictive model derived from *in vivo* endophenotype measurements to demonstrate associations with a complex locus, CYP2A6. *Human Molecular Genetics.* 2012

Boatin BA, Basáñez MG, Prichard RK, Awadzi K, Barakat RM, García HH, Gazzinelli A, Grant WN, McCarthy J, N'Goran EK, Osei-Atweneboana MY, Sripa B, Yang GJ, Lustigman S. A research agenda for helminth diseases of humans: towards control and elimination. *PLoS Neglected Tropical Diseases*. 2012 Bolton KL. Chenevix-Trench G. Goh C. Sadetzki S, Ramus SJ, Karlan BY, Lambrechts D, Despierre E, Barrowdale D, McGuffog L, Healey S. Easton DF. Sinilnikova O. Benitez J. Garcia MJ. Neuhausen S. Gail MH. Hartge P. Peock S, Frost D, Evans G, Eeles R, Godwin AK, Daly MB, Kwong A, Ma ESK, Lazaro C, Blanco I, Montagna M, D'Andrea E, Nicoletto MO, Johnatty SE, Kruger S, Jensen A, Hogdall E, Goode EL, Fridley BL, Loud JT, Greene MH, Mai PL, Chetrit A, Lubin F, Hirsh-Yechezkel G, Glendon G, Andrulis IL, Toland AE, Senter L, Gore ME, Gourley C, Michie CO, Song HL, Tyrer J, Whittemore AS, McGuire V, Sieh W, Kristoffersson U, Olsson H, Borg A, Levine DA, Steele L, Beattie MS, Chan S, Nussbaum RL, Moysich KB, Gross J, Cass I, Walsh C, Li AJ, Leuchter R, Gordon O, Garcia-Closas M, Gayther SA, Chanock SJ, Antoniou AC, Pharoah PDP. Association between BRCA1 and BRCA2 mutations and survival in women with invasive epithelial ovarian cancer. Journal of the American Medical Association, 2012

Bonazzi VF, Nancarrow DJ, Stark MS, Moser RJ, Boyle GM, Aoude LG, Schmidt C, Hayward NK. Cross-platform array screening identifies COL1A2, THBS1, TNFRSF10D and UCHL1 as genes frequently silenced by methylation in melanoma. *PLoS ONE*. 2011

Bonazzi VF, Stark MS, Hayward NK. MicroRNA regulation of melanoma progression. *Melanoma Research*. 2012

Bond CE, Umapathy A, Ramsnes I, Greco SA, Zhao ZZ, Mallitt KA, Buttenshaw RL, Montgomery GW, Leggett BA, Whitehall VLJ. p53 mutation is common in microsatellite stable, BRAF mutant colorectal cancers. *International Journal of Cancer.* 2012

Braskie MN, Jahanshad N, Stein JL, Barysheva M, Johnson K, McMahon KL, de Zubicaray GI, Martin NG, Wright MJ, Ringman JM, Toga AW, Thompson PM. Relationship of a variant in the NTRK1 gene to white matter microstructure in young adults. *Journal of Neuroscience*. 2012

Breakspear M, McIntosh AR. Networks, noise and models: reconceptualizing the brain as a complex, distributed system. *Neuroimage*. 2011

Breakspear M. Dynamic and stochastic models of neuroimaging data: A comment on Lohmann *et al. Neuroimage.* 2012

Brennan RM, Petersen J, Neller MA, Miles JJ, Burrows JM, Smith C, McCluskey J, Khanna R, Rossjohn J, Burrows SR. The impact of a large and frequent deletion in the human TCR beta locus on antiviral immunity. *Journal of Immunology*. 2012

Bridgeman JS, Sewell AK, Miles JJ, Price DA, Cole DK. Structural and biophysical determinants of alpha beta T-cell antigen recognition. *Immunology.* 2012

Britton S, van den Hurk AF, Simmons RJ, Pyke AT, Northill JA, McCarthy J, McCormack J. Laboratory-acquired dengue virus infection - a case report. *PLoS Neglected Tropical Diseases*. 2011

Broeks A, Schmidt MK, Sherman ME, Couch FJ, Hopper JL, Dite GS, Apicella C, Smith LD, Hammet F, Southey MC, van 't Veer LJ, de Groot R, Smit VTHBM, Fasching PA, Beckmann MW, Jud S, Ekici AB, Hartmann A, Hein A, Schulz-Wendtland R, Burwinkel B, Marme F, Schneeweiss A, Sinn HP, Sohn C, Tchatchou S, Bojesen SE, Nordestgaard BG, Flyger H, Orsted DD, Kaur-Knudsen D, Milne RL, Perez JIA, Zamora P, Rodriguez PM, Benitez J, Brauch H, Justenhoven C, Ko YD, Hamann U, Fischer HP, Bruning T, Pesch B, Chang-Claude J, Wang-Gohrke S, Bremer M, Karstens JH, Hillemanns P, Dork T, Nevanlinna HA, Heikkinen T, Heikkila P, Blomqvist C, Aittomaki K, Aaltonen K, Lindblom A, Margolin S, Mannermaa A, Kosma VM, Kauppinen JM, Kataja V, Auvinen P, Eskelinen M, Soini Y, Chenevix-Trench G, Spurdle AB, Beesley J, Chen XQ, Holland H, Lambrechts D, Claes B, Vandorpe T, Neven P, Wildiers H, Flesch-Janys D, Hein R, Loning T, Kosel M, Fredericksen ZS, Wang XS, Giles GG, Baglietto L, Severi G, McLean C, Haiman CA, Henders. Low penetrance breast cancer susceptibility loci are associated with specific breast tumor subtypes: findings from the Breast Cancer Association Consortium. Human Molecular Genetics. 2011

Brown JAL, Roberts TL, Richards R, Woods R, Birrell G, Lim YC, Ohno S, Yamashita A, Abraham RT, Gueven N, Lavin MF. A novel role for hSMG-1 in stress granule formation. *Molecular and Cellular Biology.* 2011

Bruder JT, Semenova E, Chen P, Limbach K, Patterson NB, Stefaniak ME, Konovalova S, Thomas C, Hamilton M, King CR, Richie TL, Doolan DL. Modification of Ad5 hexon hypervariable regions circumvents pre-existing Ad5 neutralizing antibodies and induces protective immune responses. *PLoS ONE*. 2012

Brunetti E, Garcia HH, Junghanss T, Budke CM, Chabalgoity JA, Craig PS, Gavidia CM, Gilman RH, Gonzalez AE, Heath D, Horton J, Ito A, Jensen O, Kachani M, Larrieu E, Lightowlers MW, McManus DP, Macpherson CN, Moro PM, Naquira C, Santivanhez S, Schantz P, SilesLucas M, Torgerson P, Verastegui M, Vuitton D, Zhang W. Cystic echinococcosis: chronic, complex, and still neglected. *PLoS Neglected Tropical Diseases*. 2012

Bulek AM, Cole DK, Skowera A, Dolton G, Gras S, Madura F, Fuller A, Miles JJ, Gostick E, Price DA, Drijfhout JW, Knight RR, Huang GC, Lissin N, Molloy PE, Wooldridge L, Jakobsen BK, Rossjohn J, Peakman M, Rizkallah PJ, Sewell AK. Structural basis for the killing of human beta cells by CD8(+) T cells in type 1 diabetes. *Nature Immunology.* 2012

Burdon KP, Macgregor S, Bykhovskaya Y, Javadiyan S, Li XH, Laurie KJ, Muszynska D, Lindsay R, Lechner J, Haritunians T, Henders AK, Dash D, Siscovick D, Anand S, Aldave A, Coster DJ, Szczotka-Flynn L, Mills RA, Iyengar SK, Taylor KD, Phillips T, Montgomery GW, Rotter JI, Hewitt AW, Sharma S, Rabinowitz YS, Willoughby C, Craig JE. Association of polymorphisms in the hepatocyte growth factor gene promoter with keratoconus. *Investigative Ophthalmology and Visual Science.* 2011

Burke ML, McGarvey L, McSorley HJ, Bielefeldt-Ohmann H, McManus DP, Gobert GN. Migrating *Schistosoma japonicum* schistosomula induce an innate immune response and wound healing in the murine lung. *Molecular Immunology.* 2011

Campo JJ, Whitman TJ, Freilich D, Burgess TH, Martin GJ, Doolan DL. Toward a surrogate marker of malaria exposure: Modeling longitudinal antibody measurements under outbreak conditions. *PLoS ONE*. 2011

Cardoso FC, Roddick JS, Groves P, Doolan DL. Evaluation of approaches to identify the targets of cellular immunity on a proteome-wide scale. PLoS ONE. 2011

Catts VS, Catts SV, Jablensky A, Chandler D, Weickert CS, Lavin MF. Evidence of aberrant DNA damage response signalling but normal rates of DNA repair in dividing lymphoblasts from patients with schizophrenia. *World Journal of Biological Psychiatry*. 2012

Challinor VL, Parsons PG, Chap S, White EF, Blanchfield JT, Lehmann RP, De Voss JJ. Steroidal saponins from the roots of *Smilax* sp.: Structure and bioactivity. *Steroids*. 2012

Chambers JC, Zhang WH, Sehmi J, Li XZ, Wass MN, van der Harst P, Holm H, Sanna S, Kavousi M, Baumeister SE, Coin LJ, Deng GH, Gieger C, Heard-Costa NL, Hottenga JJ, Kuhnel B, Kumar V, Lagou V, Liang LM, Luan JA, Vidal PM, Leach IM, O'Reilly PF, Peden JF, Rahmioglu N, Soininen P, Speliotes EK, Yuan X, Thorleifsson G, Alizadeh BZ, Atwood LD, Borecki IB, Brown MJ, Charoen P, Cucca F, Das D, de Geus EJC, Dixon AL, Doering A, Ehret G, Eyjolfsson GI, Farrall M, Forouhi NG, Friedrich N, Goessling W, Gudbjartsson DF, Harris TB, Hartikainen AL, Heath S, Hirschfield GM, Hofman A, Homuth G, Hypponen E, Janssen HLA, Johnson T, Kangas AJ, Kema IP, Kuhn JP, Lai S, Lathrop M, Lerch MM, Li Y, Liang TJ, Lin JP, Loos RJF, Martin NG, Moffatt MF, Montgomery GW, Munroe PB, Musunuru K, Nakamura Y, O'Donnell CJ, Olafsson I, Penninx BW, Pouta A, Prins BP, Prokopenko I, Puls R, Ruokonen A, Savolainen MJ, Schlessinger D, Schouten JNL, Seedorf U, Sen-Chowdhry S, Siminovitch KA, Smit JH, Spector TD, Tan WT, Teslo. Genome-wide association study identifies loci influencing concentrations of liver enzymes in plasma. Nature Genetics, 2011

Chan RJ, Webster J, Marquart L. A systematic review: The effects of orientation programs for cancer patients and their family/carers. International Journal of Nursing Studies. 2012

Chen A, Waterboer T, Keleher A, Morrison B, Jindal S, McMillan D, Nicol D, Gardiner RA, McMillan NAJ, Antonsson A. Papillomavirus in benign prostatic hyperplasia and prostatic adenocarcinoma patients. *Pathology and Oncology Research.* 2011

Cheng Q, Kyle DE, Gatton ML. Artemisinin resistance in *Plasmodium falciparum*: a process linked to dormancy? *International Journal for Parasitology - Drugs and Drug Resistance*. 2012

Chiang MC, Baryshev M, McMahon K, de Zubicaray G, Johnson K, Montgomery G, Martin N, Toga A, Wright M, Thompson P. Gene network effects on brain microstructure and intellectual performance identified in 472 twins. *Journal of Cardiovascular Risk.* 2012

Chuah TL, Walker DG, Wei M, Scott S, Lavin MF. Approaches to sensitizing glioblastoma to radiotherapy: use of lentiviral vectors. *International Journal of Oncology.* 2012

Chung SA, McDonald KL, Shen H, Day BW, Stringer BW, Johns T, Decollogne S, Teo C, Hogg PJ, Dilda PJ. Targeting glioblastoma metabolism with a novel arsenic-based metabolic inhibitor, Penao. *Neuro-Oncology.* 2011

Cicek MS, Cunningham JM, Fridley BL, Serie DJ, Bamlet WR, Diergaarde B, Haile RW, Le Marchand L, Krontiris TG, Younghusband HB, Gallinger S, Newcomb PA, Hopper JL, Jenkins MA, Casey G, Schumacher F, Chen Z, Derycke MS, Templeton AS, Winship I, Green RC, Green JS, Macrae FA, Parry S, Young GP, Young JP, Buchanan D, Thomas DC, Bishop DT, Lindor NM, Thibodeau SN, Potter JD, Goode EL. Colorectal Cancer Linkage on Chromosomes 4q21, 8q13, 12q24, and 15q22. *PLoS ONE*. 2012

Clement M, Ladell K, Ekeruche-Makinde J, Miles JJ, Edwards ESJ, Dolton G, Williams T, Schauenburg AJA, Cole DK, Lauder SN, Gallimore AM, Godkin AJ, Burrows SR, Price DA, Sewell AK, Wooldridge L. Anti-CD8 antibodies can trigger CD8(+) T cell effector function in the absence of TCR engagement and improve peptide-MHCI tetramer staining. *Journal* of Immunology. 2011

Collins JF, Anderson GJ. Intestinal iron absorption. Physiology of the Gastrointestinal Tract (book chapter). 2012

Colm K, Jamie N, Gandhi M. Rituximab induced Late-onset Neutropenia. *Rituximab: Pharmacology, Clinical Uses and Health Effects* (book). 2012

Conzen KD, Lowell JA, Chapman WC, Darcy M, Duncan JR, Nadler M, Turmelle YP, Shepherd RW, Anderson CD. Management of excluded bile ducts in paediatric orthotopic liver transplant recipients of technical variant allografts. *HPD* (Oxford). 2011

Cook MB, Shaheen NJ, Anderson LA, Giffen C, Chow WH, Vaughan TL, Whiteman DC, Corley DA. Cigarette smoking increases risk of Barrett's esophagus: An analysis of the Barrett's and Esophageal Adenocarcinoma Consortium. *Gastroenterology.* 2012

Coolen MW, Statham AL, Qu WJ, Campbell MJ, Henders AK, Montgomery GW, Martin NG, Clark SJ. Impact of the genome on the epigenome is manifested in DNA methylation patterns of imprinted regions in monozygotic and dizygotic twins. *PLoS ONE*. 2011

Couch FJ, Gaudet MM, Antoniou AC, Ramus SJ, Kuchenbaecker KB, Soucy P, Beesley J, Chen XQ, Wang XS, Kirchhoff T, McGuffog L, Barrowdale D, Lee A, Healey S, Sinilnikova OM, Andrulis IL, Ozcelik H, Mulligan AM, Thomassen M, Gerdes AM, Jensen UB, Skytte AB, Kruse TA, Caligo MA, von Wachenfeldt A, Barbany-Bustinza G, Loman N, Soller M, Ehrencrona H, Karlsson P, Nathanson KL, Rebbeck TR, Domchek SM, Jakubowska A, Lubinski J, Jaworska K, Durda K, Zlowocka E, Huzarski T, Byrski T, Gronwald J, Cybulski C, Gorski B, Osorio A, Duran M, Tejada MI, Benitez J, Hamann U, Hogervorst FBL, van Os TA, van Leeuwen FE, Meijers-Heijboer HEJ, Wijnen J, Blok MJ, Kets M, Hooning MJ, Oldenburg RA, Ausems MGEM, Peock S, Frost D, Ellis SD, Platte R, Fineberg E, Evans DG, Jacobs C, Eeles RA, Adlard J, Davidson R, Eccles DM, Cole T, Cook J, Paterson J, Brewer C, Douglas F, Hodgson SV, Morrison PJ, Walker L, Porteous ME, Kennedy MJ, Side LE, Bove B, Godwin AK, Stoppa-Lyonnet D, Fassy-Colcombet M, Castera L, Corneli. Common variants at the 19p13.1 and ZNF365 loci are associated with ER subtypes of breast cancer and ovarian cancer risk in BRCA1 and BRCA2 mutation carriers. Cancer Epidemiology, Biomarkers and Prevention. 2012

Cox DG, Simard J, Sinnett D, Hamdi Y, Soucy P, Ouimet M, Barjhoux L, Verny-Pierre C, McGuffog L, Healey S, Szabo C, Greene MH, Mai PL, Andrulis IL, Thomassen M, Gerdes AM, Caligo MA, Friedman E, Laitman Y, Kaufman B, Paluch SS, Borg A, Karlsson P, Askmalm MS, Bustinza GB, Nathanson KL, Domchek SM, Rebbeck TR, Benitez J, Hamann U, Rookus MA, van den Ouweland AMW, Ausems MGEM, Aalfs CM, Van Asperen CJ, Devilee P, Gille HJJP, Peock S, Frost D, Evans DG, Eeles R, Izatt L, Adlard J, Paterson J, Eason J, Godwin AK, Remon MA, Moncoutier V, Gauthier-Villars M, Lasset C, Giraud S, Hardouin A, Berthet P, Sobol H, Eisinger F, de Paillerets BB, Caron O, Delnatte C, Goldgar D, Miron A, Ozcelik H, Buys S, Southey MC, Terry MB, Singer CF, Dressler AC, Tea MK, Hansen TVO, Johannsson O, Piedmonte M, Rodriguez GC, Basil JB, Blank S, Toland AE, Montagna M, Isaacs C, Blanco I, Gayther SA, Moysich KB, Schmutzler RK, Wappenschmidt B, Engel C, Meindl A, Ditsch N, Arnold N, Niederacher D, Sutter C, Gadzicki D. Common variants of the BRCA1 wild-type allele modify the risk of breast cancer in BRCA1 mutation carriers. Human Molecular Genetics. 2011

Cox HC, Lea RA, Bellis C, Nyholt DR, Dyer TD, Haupt LM, Charlesworth J, Matovinovic E, Blangero J, Griffiths LR. Heritability and genomewide linkage analysis of migraine in the genetic isolate of Norfolk Island. *Gene.* 2012

Cozzi SJ, Ogbourne SM, James C, Rebel HG, de Gruijl FR, Ferguson B, Gardner J, Lee TT, Larcher T, Suhrbier A. Ingenol mebutate field-directed treatment of UVB-damaged skin reduces lesion formation and removes mutant p53 patches. *Journal of Investigative Dermatology.* 2012

Crough T, Beagley L, Smith C, Jones L, Walker DG, Khanna R. *Ex vivo* functional analysis, expansion and adoptive transfer of cytomegalovirus-specific T-cells in patients with glioblastoma multiforme. *Immunology and Cell Biology.* 2012

Cummings E, Hauser J, Cameron-Tucker H, Fitzpatrick P, Jessup M, Walters EH, Reid DW, Turner P. Enhancing self-efficacy for self-management in people with cystic fibrosis. *Student Health Technology Information.* 2011

Cummings MC, Waters BA, O'Rourke P. Breast fine needle aspiration cytology: A review of current practice in Australasia. *Cytopathology.* 2011

Darbro JM, Graham RI, Kay BH, Ryan PA, Thomas MB. Evaluation of entomopathogenic fungi as potential biological control agents of the dengue mosquito, *Aedes aegypti* (Diptera:Culicidae). *Biocontrol Science and Technology.* 2011

Darbro JM, Johnson PH, Thomas MB, Ritchie SA, Kay BH, Ryan PA. Effects of *Beauveria bassiana* on survival, blood-feeding success, and fecundity of *Aedes aegypti* in laboratory and semi-field conditions. *American Journal of Tropical Medicine and Hygiene.* 2012

Darshan D, Wilkins SJ, Frazer DM, Anderson GJ. Reduced expression of ferroportin-1 mediates hyporesponsiveness of suckling rats to stimuli that reduce iron absorption. *Gastroenterology.* 2011

Davis RA, Buchanan MS, Duffy S, Avery VM, Charman SA, Charman WN, White KL, Shackleford DM, Edstein MD, Andrews KT, Camp D, Quinn RJ. Antimalarial activity of pyrroloiminoquinones from the Australian marine sponge *Zyzzya* sp. *Journal of Medicinal Chemistry*. 2012

Daxinger L, Whitelaw E. Understanding transgenerational epigenetic inheritance via the gametes in mammals. *Nature Reviews Genetics.* 2012 Day BW, Stringer BW, Spanevello MD, Charmsaz S, Jamieson PR, Ensbey KS, Carter JC, Cox JM, Ellis VJ, Brown CL, Walker DG, Inglis PL, Allan S, Reynolds BA, Lickliter JD, Boyd AW. ELK4 neutralization sensitizes glioblastoma to apoptosis through downregulation of the anti-apoptotic protein McI-1. *Neuro-Oncology*. 2011

de Moor M, van den Berg S, Wouda J, Verweij K, Hansell N, Martin NG, Boomsma D. Increasing GWAS sample size using item response theory: A pilot study of the personality consortium. *Behavior Genetics*. 2011

de Moor MHM, Costa PT, Terracciano A, Krueger RF, de Geus EJC, Toshiko T, Penninx BWJH, Esko T, Madden PAF, Derringer J, Amin N, Willemsen G, Hottenga JJ, Distel MA, Uda M. Sanna S. Spinhoven P. Hartman CA. Sullivan P, Realo A, Allik J, Heath AC, Pergadia ML, Agrawal A, Lin P, Grucza R, Nutile T, Ciullo M, Rujescu D, Giegling I, Konte B, Widen E, Cousminer DL, Eriksson JG, Palotie A, Peltonen L. Luciano M. Tenesa A. Davies G. Lopez LM. Hansell NK. Medland SE. Ferrucci L, Schlessinger D, Montgomery GW, Wright MJ, Aulchenko YS, Janssens ACJW, Oostra BA, Metspalu A, Abecasis GR, Deary IJ, Raikkonen K, Bierut LJ, Martin NG, van Duijn CM, Boomsma DI. Meta-analysis of genomewide association studies for personality. Molecular Psychiatry. 2012

Dellava J, Eaves L, Heath A, Martin NG, Maes H. BMI fluctuation using an extended-twin family design. *Behavior Genetics*. 2011

Di Stasi A, Tey SK, Dotti G, Fujita Y, Kennedy-Nasser A, Martinez C, Straathof K, Liu E, Durett AG, Grilley B, Liu H, Cruz CR, Savoldo B, Gee AP, Schindler J, Krance RA, Heslop HE, Spencer DM, Rooney CM, Brenner MK. Inducible apoptosis as a safety switch for adoptive cell therapy. *Engineering Fracture Mechanics*. 2011

Diaz A, Neale RE, Kimlin MG, Jones L, Janda M. The Children and Sunscreen Study: A crossover trial investigating children's sunscreen application thickness and the influence of age and dispenser type. *Archives of Dermatology.* 2012 Ding YC, McGuffog L, Healey S, Friedman E, Laitman Y, Shimon-Paluch S, Kaufman B, Liljegren A, Lindblom A, Olsson H, Kristoffersson U, Stenmark Askmalm M, Melin B. Domchek SM. Nathanson KL. Rebbeck TR. Jakubowska A, Lubinski J, Jaworska K, Durda K, Gronwald J, Huzarski T, Cybulski C, Byrski T, Osorio A, Ramony Cajal T, Stavropoulou AV, Benítez J, Hamann U, Rookus MA, Aalfs CM, de Lange J, Meijers-Heijboer HE, Oosterwijk JC, van Asperen CJ, Gomez-Garcia EB, Hoogerbrugge N, Jager A, van der Luijt RB, Easton DF, Peock S, Frost D, Ellis SD, Platte R, Fineberg E, Evans DG, Lalloo F, Izatt L, Eeles RA, Adlard J, Davidson R, Eccles DM, Cole T, Cook J, Brewer C, Tischkowitz M, Godwin AK, Pathak HB, Stoppa-Lyonnet D, Sini-Inikova OM, Mazover S. Barihoux L. Leone M. Gauthier-Villars M, Caux-Moncoutier V, de Pauw A, Hardouin A, Berthet P, Dreyfus H, Ferrer SF, Collonge-Rame MA, Sokolowska J, Buys SS, Daly MB, Miron A, Terry MB, Chung WK, John EM, Southey MC, Goldgar DE, Singer CF, Tea MK, Gschwantler-Kaulich D, Fink-Retter A, Hansen TV, Ejlertsen B, Johannsson OT, Offit K, Sarrel K, Gaudet MM, Vijai J, Robson M, Piedmonte MR, Andrews L, Cohn D, Demars LR, Disilvestro P, Rodriguez G, Toland AE, Montagna M, Agata S, Imyanitov E, Isaacs C, Janavicius R, Lazaro C, Blanco I, Ramus SJ, Sucheston L, Karlan BY, Gross J, Ganz PA, Beattie MS, Schmutzler RK, Wappenschmidt B. Meindl A. Arnold N. Niederacher D. Preisler-Adams S, Gadzicki D, Varon-Mateeva R, Deissler H, Gehrig A, Sutter C, Kast K, Nevanlinna H, Aittomäki K, Simard J, Spurdle AB, Beesley J, Chen X, Tomlinson GE, Weitzel J, Garber JE, Olopade OI, Rubinstein WS, Tung N, Blum JL, Narod SA, Brummel S, Gillen DL, Lindor N, Fredericksen Z, Pankratz VS, Couch FJ, Radice P, Peterlongo P, Greene MH, Loud JT, Mai PL, Andrulis IL, Glendon G, Ozcelik H, Gerdes AM, Thomassen M, Jensen UB, Skytte AB, Caligo MA, Lee A, Chenevix-Trench G, Antoniou AC, Neuhausen SL. A non-synonymous polymorphism in IRS1 modifies risk of developing breast and ovarian cancers in BRCA1 and ovarian cancer in BRCA2 mutation carriers. Cancer Epidemiology Biomarkers and Prevention. 2012

Dixon MWA, Kenny S, McMillan PJ, Hanssen E, Trenholme KR, Gardiner DL, Tilley L. Genetic ablation of a Maurer's cleft protein prevents assembly of the *Plasmodium falciparum* virulence complex. *Molecular Microbiology*. 2011

Doecke J, Simms L, Hobson P, Croft A, Hartnell F, Huang N, Walker N, Walker N, Hunt S, Ford K, Norman G, Radford-Smith GL. Novel associations between ASCA antibodies and Crohn's disease in a large Australian IBD population. *Journal of Gastroenterology and Hepatology.* 2011

Donald M, Dower J, Ware R, Mukandi B, Parekh S, Bain C. Living with diabetes: rationale, study design and baseline characteristics for an Australian prospective cohort study. *BMC Public Health.* 2012

Douglas NC, Borgovan T, Carroll MJ, Williams PF, Berry EG, Siskind V, Hoedl AF, Wurm EMT, Smithers BM, Green AC, Soyer HP. Dermoscopic naevus patterns in people at high versus moderate/low melanoma risk in Queensland. *Australasian Journal of Dermatology.* 2011

Duarte-Carvajalino JM, Jahanshad N, Lenglet C, McMahon KL, de Zubicaray GI, Martin NG, Wright MJ, Thompson PM, Sapiro G. Hierarchical topological network analysis of anatomical human brain connectivity and differences related to sex and kinship. *Neuroimage*. 2012

Dubois L, Kyvik KO, Girard M, Tatone-Tokuda F, Perusse D, Hjelmborg J, Skytthe A, Rasmussen F, Wright MJ, Lichtenstein P, Martin NG. Genetic and environmental contributions to weight, height, and BMI from birth to 19 years of age: An international study of over 12,000 twin pairs. *PLoS ONE*. 2012

Duffy DL. Some new analytic procedures in the Sib-Pair statistical genetics package. *Genetic Epidemiology.* 2012

Dulhunty JM, Suhrbier A, Macaulay GA, Brett JC, van Straaten AVA, Brereton IM, Farmer JF. Guide-wire fragment embolisation in paediatric peripherally inserted central catheters. *Medical Journal of Australia*. 2012

Duncan A, Pergadia M, Montgomery G, Martin N, Madden P, Heath A. Depression as a moderator of genetic risk for overweight and obesity. *Behavior Genetics*. 2011

Dutton-Regester K, Aoude LG, Nancarrow DJ, Stark MS, O'Connor L, Lanagan C, Pupo GM, Tembe V, Carter CD, O'Rourke M, Scolyer RA, Mann GJ, Schmidt CW, Herington A, Hayward NK. Identification of TFG (TRK-fused gene) as a putative metastatic melanoma tumor suppressor gene. *Genes Chromosomes and Cancer.* 2012

Dutton-Regester K, Hayward NK. Reviewing the somatic genetics of melanoma: from current to future analytical approaches. *Pigment Cell and Melanoma Research*. 2012

Dutton-Regester K, Irwin D, Hunt P, Aoude LG, Tembe V, Pupo GM, Lanagan C, Carter CD, O'Connor L, O'Rourke M, Scolyer RA, Mann GJ, Schmidt CW, Herington A, Hayward NK. A highthroughput panel for identifying clinically relevant mutation profiles in melanoma. *Molecular Cancer Therapeutics*. 2012

Earl ST, Masci PP, de Jersey J, Lavin MF, Dixon J. Drug development from Australian elapid snake venoms and the Venomics pipeline of candidates for haemostasis: Textilinin-1 (Q8008), Haempatch™ (Q8009) and CoVase™ (V0801). *Toxicon.* 2012

Earl STH, Richards R, Johnson LA, Flight S, Anderson S, Liao A, de Jersey J, Masci PP, Lavin MF. Identification and characterisation of Kunitz-type plasma kallikrein inhibitors unique to *Oxyuranus* sp snake venoms. *Biochimie.* 2012

Easton A, Haque A, Chu KR, Patel N, Lukaszewski RA, Krieg AM, Titball RW, Bancroft GJ. Combining vaccination and postexposure CpG therapy provides optimal protection against lethal sepsis in a biodefense model of human melioidosis. *The Journal of Infectious Diseases*. 2011

Faham A, Herringson T, Parish C, Suhrbier A, Khromykh AA, Altin JG. pDNA-lipoplexes engrafted with flagellin-related peptide induce potent immunity and anti-tumour effects. *Vaccine.* 2011

Fasching PA, Pharoah PD, Cox A, Nevanlinna H, Bojesen SE, Karn T, Broeks A, van Leeuwen FE, van 't Veer LJ, Udo R, Dunning AM, Greco D, Aittomäki K, Blomqvist C, Shah M, Nordestgaard BG, Flyger H, Hopper JL, Southey MC, Apicella C, Garcia-Closas M, Sherman M, Lissowska J, Seynaeve C, Huijts PE, Tollenaar RA, Ziogas A, Ekici AB, Rauh C, Mannermaa A, Kataja V, Kosma VM, Hartikainen JM, Andrulis

IL, Ozcelik H, Mulligan AM, Glendon G, Hall P, Czene K, Liu J, Chang-Claude J, Wang-Gohrke S, Eilber U, Nickels S, Dörk T, Schiekel M, Bremer M, Park-Simon TW, Giles GG, Severi G, Baglietto L, Hooning MJ, Martens JW, Jager A, Kriege M, Lindblom A, Margolin S, Couch FJ, Stevens KN, Olson JE, Kosel M, Cross SS, Balasubramanian SP, Reed MW, Miron A, John EM, Wingvist R, Pylkäs K, Jukkola-Vuorinen A, Kauppila S, Burwinkel B, Marme F, Schneeweiss A, Sohn C, Chenevix-Trench G; kConFab Investigators, Lambrechts D, Dieudonne AS, Hatse S, van Limbergen E, Benitez J, Milne RL, Zamora MP, Pérez JI, Bonanni B, Peissel B, Loris B, Peterlongo P, Rajaraman P, Schonfeld SJ, Anton-Culver H, Devilee P, Beckmann MW, Slamon DJ, Phillips KA, Figueroa JD, Humphreys MK, Easton DF, Schmidt MK, The role of genetic breast cancer susceptibility variants as prognostic factors. Human Molecular Genetics, 2012

Feiner B, O'Rourke P, Maher C. A prospective comparison of two commercial mesh kits in the management of anterior vaginal prolapse. International Urogynecology Journal. 2012

Figueroa JD, Garcia-Closas M, Humphreys M, Platte R, Hopper JL, Southey MC, Apicella C, Hammet F, Schmidt MK, Broeks A, Tollenaar RAEM, van 't Veer LJ, Fasching PA, Beckmann MW, Ekici AB, Strick R, Peto J, Silva ID, Fletcher O, Johnson N, Sawyer E, Tomlinson I, Kerin M, Burwinkel B. Marme F. Schneeweiss A. Sohn C. Bojesen S, Flyger H, Nordestgaard BG, Benitez J, Milne RL, Arias JI, Zamora MP, Brenner H, Muller H, Arndt V, Rahman N, Turnbull C, Seal S, Renwick A, Brauch H, Justenhoven C, Bruning T. Chang-Claude J. Hein R. Wang-Gohrke S. Dork T. Schurmann P. Bremer M. Hillemanns P, Nevanlinna H, Heikkinen T, Aittomaki K, Blomqvist C, Bogdanova N, Antonenkova N, Rogov YI, Karstens JH, Bermisheva M, Prokofieva D. Gantcev SH. Khusnutdinova E. Lindblom A, Margolin S, Chenevix-Trench G, Beesley J, Chen XQ, Mannermaa A, Kosma VM, Soini Y, Kataja V, Lambrechts D, Yesilyurt BT, Chrisiaens MR, Peeters S, Radice P, Peterlongo P, Manoukian S, Barile M, Couch F, Lee AM, Diasio R, Wang XS, Giles GG, Severi G, Baglietto L, Maclean C, Offit K, Robson M, Joseph V, Gaudet M, John EM, Winqvist R, Pylkäs K, Jukkola-Vuorinen A, Grip M, Andrulis I, Knight JA, Mulligan AM, O'Malley FP. Brinton LA. Sherman ME. Lissowska J. Chanock SJ, Hooning M, Martens JW, van den Ouweland AM, Collée JM, Hall P, Czene K, Cox A, Brock IW, Reed MW, Cross SS, Pharoah P, Dunning AM, Kang D, Yoo KY, Noh DY, Ahn SH, Jakubowska A, Lubinski J, Jaworska K, Durda K, Sangrajrang S, Gaborieau V, Brennan P, McKay J, Shen CY, Ding SL, Hsu HM, Yu JC, Anton-Culver H, Ziogas A, Ashworth A, Swerdlow A, Jones M, Orr N, Trentham-Dietz A, Egan K, Newcomb P, Titus-Ernstoff L, Easton D, Spurdle AB. Associations of common variants at 1p11.2 and 14q24.1 (RAD51L1) with breast cancer risk and heterogeneity by tumor subtype: findings from the Breast Cancer Association Consortium. Human Molecular Genetics. 2011

Fischer K, Holt DC, Currie B, Kemp, DJ. Scabies: important clinical consequences explained by new molecular studies. *Advances in Parasitology.* 2012

Fischer K, Irving JA, Pike RN, Buckle AM. Structural mechanisms of inactivation in proteolytically inactive serine proteases from Sarcoptes scabiei. Proteinases as Drug Targets (book). 2012 Frazer DM, Wilkins SJ, Darshan D, Badrick AC, McLaren GD Anderson GJ. Stimulated erythropoiesis with secondary iron loading leads to a decrease in hepcidin despite an increase in bone morphogenetic protein 6 expression. *British Journal of Haematology.* 2012

Freedman ND, Murray LJ, Kamangar F, Abnet CC, Cook MB, Nyren O, Ye WM, Wu AH, Bernstein L, Brown LM, Ward MH, Pandeya N, Green AC, Casson AG, Giffen C, Risch HA, Gammon MD, Chow WH, Vaughan TL, Corley DA, Whiteman DC. Alcohol intake and risk of oesophageal adenocarcinoma: a pooled analysis from the BEACON Consortium. *Gut.* 2011

Freeman LM, Lam A, Petcu E, Smith R, Salajegheh A, Diamond P, Zannettino A, Evdokiou A, Luff J, Wong PF, Khalil D, Waterhouse N, Vari F, Rice AM, Catley L, Hart DNJ, Vuckovic S. Myeloma-induced alloreactive T cells arising in myeloma-infiltrated bones include double-positive CD8(+)CD4(+) T cells: Evidence from myeloma-bearing mouse model. *Journal of Immunology.* 2011

Freilinger T. Anttila V. de Vries B. Malik R. Kallela M, Terwindt GM, Pozo-Rosich P, Winsvold B, Nyholt DR, van Oosterhout WP, Artto V, Todt U, Hämäläinen E, Fernández-Morales J, Louter MA. Kaunisto MA. Schoenen J. Raitakari O. Lehtimäki T, Vila-Pueyo M, Göbel H, Wichmann E, Sintas C, Uitterlinden AG, Hofman A, Rivadeneira F, Heinze A, Tronvik E, Van Duijn CM, Kaprio J, Cormand B, Wessman M, Frants RR, Meitinger T, Müller-Myhsok B, Zwart JA, Färkkilä M, Macaya A, Ferrari MD, Kubisch C, Palotie A, Dichgans M, van den Maagdenberg AM, International Headache Genetics Consortium. Genome-wide association analysis identifies susceptibility loci for migraine without aura. Nature Genetics, 2012

Freyer F, Roberts JA, Becker R, Robinson PA, Ritter P, Breakspear M. A canonical model of multistability and scale-invariance in biological systems. *PLoS Computational Biology.* 2012

Friston K, Adams RA, Perrinet L, Breakspear M. Perceptions as hypotheses: saccades as experiments. *Frontiers in Perception Science*. 2012

Friston, KJ, Breakspear M, Deco, G. Perception and self-organised instability. *Frontiers in Computational Neuroscience*. 2012

Gan EK, Powell LW, Olynyk JK. Natural history and management of HFE-hemochromatosis. Seminars in Liver Disease. 2011

Gan W, Guan Y, Wu Q, An P, Zhu JW, Lu L, Jing L, Yu Y, Ruan S, Xie D, Makrides M, Gibson RA, Anderson GJ, Li HX, Lin X, Wang FD. Association of TMPRSS6 polymorphisms with ferritin, hemoglobin, and type 2 diabetes risk in a Chinese Han population. *American Journal of Clinical Nutrition.* 2012

Gandhi M, Jones K. Optimizing tumor-targeting chimeric antigen receptor T cells in B-cell lymphoma patients. *Immunotherapy*. 2011

Gandhi MK, Hertzberg MS, Han E, Seymour JF, Hicks R, Gill DS, Keane C, Crooks P, Radford K, Vari F. Monocytes are associated with impaired T-cell immunity and residual interim-PET/CT avidity after 4 cycles of CHOP-R in patients with high-risk DLBCL. *Blood.* 2011

Garvey G, Simmonds D, Clements V, O'Rourke P, Whop L, Sullivan K, Gorman D, Curnow V, Wise S, Beattie E. Understanding dementia amongst Indigenous Australians. *Aboriginal and Islander Health Worker Journal.* 2011 Gatei M, Jakob B, Chen P, Kijas AW, Becherel OJ, Gueven N, Birrell G, Lee JH, Paull TT, Lerenthal Y, Fazry S, Taucher-Scholz G, Kalb R, Schindler D, Waltes R, Dork T, Lavin MF. ATM protein-dependent phosphorylation of Rad50 protein regulates DNA repair and cell cycle control. *Journal of Biological Chemistry*. 2011

Gaze S, McSorley HJ, Daveson J, Jones D, Bethony JM, Oliveira LM, Speare R, McCarthy JS, Engwerda CR, Croese J, Loukas A. Characterising the mucosal and systemic immune responses to experimental human hookworm infection. *PLoS Pathogens*. 2012

Gharahkhani P, O'Leary CA, Kyaw-Tanner M, Sturm RA, Duffy DL. A non-synonymous mutation in the canine Pkd1 gene is associated with autosomal dominant polycystic kidney disease in Bull Terriers. *PLoS ONE*. 2011

Ghoussaini M. Fletcher O. Michailidou K. Turnbull C, Schmidt MK, Dicks E, Dennis J, Wang Q, Humphreys MK, Luccarini C, Baynes C, Conroy D, Maranian M, Ahmed S, Driver K, Johnson N, Orr N, dos Santos Silva I, Waisfisz Q, Meijers-Heijboer H, Uitterlinden AG, Rivadeneira F; Netherlands Collaborative Group on Hereditary Breast and Ovarian Cancer (HEBON), Hall P, Czene K, Irwanto A, Liu J, Nevanlinna H, Aittomäki K, Blomgvist C, Meindl A, Schmutzler RK, Müller-Myhsok B, Lichtner P, Chang-Claude J, Hein R, Nickels S, Flesch-Janys D, Tsimiklis H, Makalic E, Schmidt D. Bui M. Hopper JL. Apicella C. Park DJ. Southey M. Hunter DJ. Chanock SJ. Broeks A, Verhoef S, Hogervorst FB, Fasching PA, Lux MP, Beckmann MW, Ekici AB, Sawyer E, Tomlinson I, Kerin M, Marme F, Schneeweiss A. Sohn C. Burwinkel B. Guénel P. Truong T. Cordina-Duverger E, Menegaux F, Bojesen SE, Nordestgaard BG, Nielsen SF, Flyger H, Milne RL, Alonso MR, González-Neira A, Benítez J, Anton-Culver H, Ziogas A, Bernstein L, Dur CC, Brenner H, Müller H, Arndt V, Stegmaier C; Familial Breast Cancer Study (FBCS), Justenhoven C, Brauch H, Brüning T; Gene Environment Interaction of Breast Cancer in Germany (GENICA) Network, Wang-Gohrke S. Eilber U. Dörk T. Schürmann P. Bremer M. Hillemanns P, Bogdanova NV, Antonenkova NN, Rogov YI, Karstens JH, Bermisheva M, Prokofieva D, Khusnutdinova E, Lindblom A, Margolin S, Mannermaa A, Kataja V, Kosma VM, Hartikainen JM, Lambrechts D, Yesilyurt BT, Floris G, Leunen K, Manoukian S, Bonanni B, Fortuzzi S, Peterlongo P, Couch FJ, Wang X, Stevens K, Lee A, Giles GG, Baglietto L, Severi G, McLean C, Alnaes GG, Kristensen V, Børrensen-Dale AL, John EM, Miron A, Winqvist R, Pylkäs K, Jukkola-Vuorinen A, Kauppila S, Andrulis IL, Glendon G, Mulligan AM, Devilee P, van Asperen CJ, Tollenaar RA, Seynaeve C, Figueroa JD, Garcia-Closas M, Brinton L, Lissowska J, Hooning MJ, Hollestelle A, Oldenburg RA, van den Ouweland AM, Cox A, Reed MW, Shah M, Jakubowska A, Lubinski J, Jaworska K, Durda K, Jones M, Schoemaker M, Ashworth A, Swerdlow A, Beesley J, Chen X; kConFab Investigators; Australian Ovarian Cancer Study Group, Muir KR, Lophatananon A, Rattanamongkongul S, Chaiwerawattana A, Kang D, Yoo KY, Noh DY, Shen CY, Yu JC, Wu PE, Hsiung CN, Perkins A, Swann R, Velentzis L, Eccles DM, Tapper WJ, Gerty SM, Graham NJ, Ponder BA, Chenevix-Trench G, Pharoah PD, Lathrop M, Dunning AM, Rahman N, Peto J, Easton DF. Genome-wide association analysis identifies three new breast cancer susceptibility loci. Nature Genetics. 2012

Gloyne LS, Grant GD, Perkins AV, Powell KL, McDermott CM, Johnson PV, Anderson GJ, Kiefel M, Anoopkumar-Dukie S. Pyocyanininduced toxicity in A549 respiratory cells is causally linked to oxidative stress. *Toxicology in Vitro.* 2011

Goldgar DE, Healey S, Dowty JG, Da Silva L, Chen X, Spurdle AB, Terry MB, Daly MJ, Buys SM, Southey MC, Andrulis I, John EM, BCFR, KConFab, Khanna KK, Hopper JL, Oefner PJ, Lakhani S, Chenevix-Trench G. Rare variants in the ATM gene and risk of breast cancer. *Breast Cancer Research*. 2011

Goldshmit Y, Spanevello MD, Tajouri S, Li L, Rogers F, Pearse M, Galea M, Bartlett PF, Boyd AW, Turnley AM. EphA4 blockers promote axonal regeneration and functional recovery following spinal cord injury in mice. *PLoS ONE*. 2011

Goode EL, Chenevix-Trench G, Hartmann LC, Fridley BL, Kalli KR, Vierkant RA, Larson MC, White KL, Keeney GL, Oberg TN, Cunningham JM, Beesley J, Johnatty SE, Chen XQ, Goodman KE, Armasu SM, Rider DN, Sicotte H, Schmidt MM, Elliott EA, Hogdall E, Kjaer SK, Fasching PA, Ekici AB, Lambrechts D, Despierre E, Hogdall C, Lundvall L, Karlan BY, Gross J, Brown R, Chien J, Duggan DJ, Tsai YY, Phelan CM, Kelemen LE, Peethambaram PP, Schildkraut JM, Shridhar V, Sutphen R, Couch FJ, Sellers TA. Assessment of hepatocyte growth factor in ovarian cancer mortality. Cancer Epidemiology Biomarkers and Prevention. 2011

Gordon CA, Gray DJ, Gobert GN, McManus DP. DNA amplification approaches for the diagnosis of key parasitic helminth infections of humans. *Molecular and Cellular Probes.* 2011

Gordon L, Hirst NG, Green AC, Neale RE. Tanning behaviors and determinants of solarium use among indoor office workers in Queensland, Australia. *Journal of Health Psychology.* 2011

Gordon LG, Eckermann S, Hirst NG, Watson DI, Mayne GC, Fahey P, Whiteman DC. Healthcare resource use and medical costs for the management of oesophageal cancer. *British Journal of Surgery.* 2011

Gordon LG, Lynch BM, Beesley VL, Graves N, McGrath C, O'Rourke P, Webb PM. The Working After Cancer Study (WACS): a populationbased study of middle-aged workers diagnosed with colorectal cancer and their return to work experiences. *BMC Public Health.* 2011

Gras S, Wilmann PG, Chen ZJ, Halim H, Liu YC, Kjer-Nielsen L, Purcell AW, Burrows SR, McCluskey J, Rossjohn J. A structural basis for varied alpha beta TCR usage against an immunodominant EBV antigen restricted to a HLA-B8 molecule. *Journal of Immunology.* 2012

Gray D, Thrift AP, Williams GM, Feng Z, Li YS, Guo JG, Chen HG, Wang TP, Xin XJ, Zhu R, Zhu HQ, Cao CL, Lin DD, Zhao ZY, Li RS, Davis GM, McManus DP. Five-year longitudinal assessment of the downstream impact on schistosomiasis transmission in China following closure of the Three Gorges Dam. *PLoS Neglected Tropical Diseases*. 2012

Gray DJ, McManus DP, Li YS, Williams GM, Ross AG. Schistosomiasis elimination - Authors' reply. The Lancet Infectious Diseases. 2011

Gray DJ, Ross AG, Li YS, McManus DP. Diagnosis and management of schistosomiasis. *British Medical Journal.* 2011 Gray JX, McMillen L, Mollee P, Paul S, Lane S, Bird R, Gill D, Saal R, Martton P. WT1 expression as a marker of minimal residual disease predicts outcome in acute myeloid leukemia when measured post-consolidation. *Leukemia Research*. 2012

Green AC, Siskind V. Risk factors for limb melanomas compared with trunk melanomas in Queensland. *Melanoma Research*. 2012

Green AC, Wallingford SC, McBride P. Childhood exposure to ultraviolet radiation and harmful skin effects: epidemiological evidence. *Progress in Biophysics and Molecular Biology.* 2011

Green MR, Camilleri E, Gandhi MK, Peake J, Griffiths LR. A novel immunodeficiency disorder characterized by genetic amplification of interleukin 25. *Genes and Immunity.* 2011

Grigg J, Walters H, Sohal SS, Wood-Baker R, Reid DW, Xu CB, Edvinsson L, Morissette MC, Stämpfli MR, Kirwan M, Koh L, Suri R, Mushtaq N. Cigarette smoke and platelet-activating factor receptor dependent adhesion of *Streptococcus* pneumoniae to lower airway cells. *Thorax*. 2012

Gu W, An J, Yu P, Zhao KN, Antonsson A. Prediction of microRNA from skin and mucosal human papillomaviruses. *Archives of Virology.* 2011

Guinovart C, Dobano C, Bassat Q, Nhabomba A, Quinto L, Manaca MN, Aguilar R, Rodriguez MH, Barbosa A, Aponte JJ, Mayor AG, Renom M, Moraleda C, Roberts DJ, Schwarzer E, Le Souef PN, Schofield L, Chitnis CE, Doolan DL, Alonso PL. The role of age and exposure to *Plasmodium falciparum* in the rate of acquisition of naturally acquired immunity: A randomized controlled trial. *PLoS ONE*. 2012

Haiman CA, Chen GK, Vachon CM, Canzian F, Dunning A, Millikan RC, Wang XS, Ademuyiwa F, Ahmed S, Ambrosone CB, Baglietto L, Balleine R, Bandera EV, Beckmann MW, Berg CD, Bernstein L, Blomqvist C, Blot WJ, Brauch H, Buring JE, Carey LA, Carpenter JE, Chang-Claude J, Chanock SJ, Chasman DI, Clarke CL, Cox A, Cross SS, Deming SL, Diasio RB, Dimopoulos AM, Driver WR, Dunnebier T, Durcan L, Eccles D, Edlund CK, Ekici AB, Fasching PA, Feigelson HS, Flesch-Janys D, Fostira F, Forsti A, Fountzilas G, Gerty SM, Giles GG, Godwin AK, Goodfellow P, Graham N, Greco D, Hamann U, Hankinson SE, Hartmann A, Hein R, Heinz J, Holbrook A, Hoover RN, Hu JJ, Hunter DJ, Ingles SA, Irwanto A, Ivanovich J, John EM, Johnson N, Jukkola-Vuorinen A, Kaaks R, Ko YD, Kolonel LN, Konstantopoulou I, Kosma VM, Kulkarni S, Lambrechts D, Lee AM, Le Marchand L, Lesnick T, Liu JJ, Lindstrom S, Mannermaa A, Margolin S, Martin NG, Miron P, Montgomery GW, Nevanlinna H, Nickels S, Nyante S, Olswold C, Palmer J, Pathak H, Pectasides D, Perou CM, Peto J, Pharoah PD, Pooler LC, Press MF, Pylkäs K, Rebbeck TR, Rodriguez-Gil JL, Rosenberg L, Ross E, Rüdiger T, Silva Idos S, Sawyer E, Schmidt MK, Schulz-Wendtland R, Schumacher F, Severi G, Sheng X, Signorello LB, Sinn HP, Stevens KN, Southey MC, Tapper WJ, Tomlinson I, Hogervorst FB, Wauters E, Weaver J, Wildiers H, Winqvist R, Van Den Berg D, Wan P, Xia LY, Yannoukakos D, Zheng W, Ziegler RG, Siddiq A, Slager SL, Stram DO, Easton D, Kraft P, Henderson BE, Couch FJ. A common variant at the TERT-CLPTM1L locus is associated with estrogen receptor-negative breast cancer. Nature Genetics. 2011

Handoko HY, Box NF, Walker GJ. Modeling epidermal melanoma in mice: moving into new realms but with unexpected complexities. *Journal* of Investigative Dermatology. 2012

Hansell NK, Wright MJ, Medland SE, Davenport TA, Wray NR, Martin NG, Hickie IB. Genetic co-morbidity between neuroticism, anxiety/ depression and somatic distress in a population sample of adolescent and young adult twins. *Psychological Medicine*. 2011

Haque A, Best SE, Ammerdorffer A, Desbarrieres L, de Oca MM, Amante FH, Rivera FD, Hertzog P, Boyle GM, Hill GR, Engwerda CR. Type I interferons suppress CD4(+) T-celldependent parasite control during blood-stage *Plasmodium* infection. *European Journal of Immunology*. 2011

Harten SK, Esteban MA, Shukla D, Ashcroft M, Maxwell PH. Inactivation of the von Hippel-Lindau tumour suppressor gene induces Neuromedin U expression in renal cancer cells. *Molecular Cancer.* 2011

Hartnell FL, Radford-Smith G, Jones L, Sewell K. Anti-TNF induction and maintenance therapy for refractory Crohn's disease. *Journal of Gastroenterology and Hepatology.* 2011

Hassall E, Shepherd R, Koletzko S, Radke M, Henderson C, Lundborg P. Long-term maintenance treatment with omeprazole in children with healed erosive oesophagitis: a prospective study. *Alimentary Pharmacology and Therapeutics*. 2012

Hastie ML, Headlam MJ, Patel NB, Bukreyev AA, Buchholz UJ, Dave KA, Norris EL, Wright CL, Spann KM, Collins PL, Gorman JJ. The human respiratory syncytial virus nonstructural protein 1 regulates type I and type II interferon pathways. *Molecular and Celullar Proteomics*. 2012

Hatemi P, Medland S, McDermott R, Eaves L, Martin N. Are spouses more genetically similar for attitudes? *Behavior Genetics*. 2011

Healey CS, Ahmed S, O'Mara TA, Ferguson K, Lambrechts D, Garcia-Dios DA, Vergote I, Amant F, Howarth K, Gorman M, Hodgson S, Tomlinson I, Yang HP, Lissowska J, Brinton LA, Chanock S, Garcia-Closas M, Hall P, Liu JJ, Shah M, Pharoah PDP, Thompson DJ, Rebbeck TR, Strom BL, Dunning AM, Easton DF, Spurdle AB. Breast cancer susceptibility polymorphisms and endometrial cancer risk: a collaborative endometrial cancer study. *Carcinogenesis*. 2011

Heath AC, Whitfield JB, Martin NG, Pergadia ML, Goate AM, Lind PA, McEvoy BP, Schrage AJ, Grant JD, Chou YL, Zhu R, Henders AK, Medland SE, Gordon SD, Nelson EC, Agrawal A, Nyholt DR, Bucholz KK, Madden PAF, Montgomery GW. A quantitative-trait genomewide association study of alcoholism risk in the community: findings and implications. *Biological Psychiatry*. 2011

Heidel FH, Bullinger L, Feng ZH, Wang Z, Neff TA, Stein L, Kalaitzidis D, Lane SW, Armstrong SA. Genetic and pharmacologic inhibition of betacatenin targets imatinib-resistant leukemia stem cells in CML. *Cell Stem Cell.* 2012

Heitmann S, Ferns N, Breakspear M. Muscle cocontraction modulates damping and joint stability in a three-link biomechanical limb. *Frontiers and Neurorobotics.* 2012

Henningham A, Chiarot E, Gillen CM, Cole JN, Rohde M, Fulde M, Ramachandran V, Cork AJ, Hartas J, Magor G, Djordjevic SP, Cordwell SJ, Kobe B, Sriprakash KS, Nizet V, Chhatwal GS, Margarit IY, Batzloff MR, Walker MJ. Conserved anchorless surface proteins as group A streptococcal vaccine candidates. *Journal of Molecular Medicine*. 2012

Herath NI, Spanevello MD, Doecke JD, Smith FM, Pouponnot C, Boyd AW. Complex expression patterns of Eph receptor tyrosine kinases and their ephrin ligands in colorectal carcinogenesis. *European Journal of Cancer.* 2012

Hibar DP, Jahanshad N, Stein JL, Kohannim O, Toga AW, Medland SE, Hansell NK, McMahon KL, de Zubicaray GI, Montgomery GW, Martin NG, Wright MJ, Thompson PM. Alzheimer's disease risk gene, GAB2, is associated with regional brain volume differences in 755 young healthy twins. *Twin Research and Human Genetics*. 2012

Hill GR. Vaccinating donors to improve GVL. Blood. 2011

Hill RJ, Lewindon PJ, Withers GD, Connor FL, Ee LC, Cleghorn GJ, Davies PS. Ability of commonly used prediction equations to predict resting energy expenditure in children with inflammatory bowel disease. *Inflammatory Bowel Diseases*. 2011

Hirst NG, Gordon LG, Scuffham PA, Green AC. Lifetime cost-effectiveness of skin cancer prevention through promotion of daily sunscreen use. Value in Health. 2012

Hoffmann AA, Montgomery BL, Popovici J, Iturbe-Ormaetxe I, Johnson PH, Muzzi F, Greenfield M, Durkan M, Leong YS, Dong Y, Cook H, Axford J, Callahan AG, Kenny N, Omodei C, McGraw EA, Ryan PA, Ritchie SA, Turelli M, O'Neill SL. Successful establishment of *Wolbachia* in *Aedes* populations to suppress dengue transmission. *Nature*. 2011

Holt DC, Burgess STG, Reynolds S, Wajahat M, Fischer K. Intestinal proteases of free living and parasitic astigmatid mites. *Cell and Tissue Research.* 2012

Hopper JL, Jenkins MA, Dowty JG, Dite GS, Apicella C, Keogh L, Win AK, Young JP, Buchanan D, Walsh MD, Rosty C, Baglietto L, Severi G, Phillips KA, Wong EM, Dobrovic A, Waring P, Winship I, Ramus SJ, Giles GG, Southey MC. Using tumour pathology to identify people at high genetic risk of breast and colorectal cancers. *Pathology*. 2012

Horst D, Burrows SR, Gatherer D, van Wilgenburg B, Bell MJ, Boer IGJ, Ressing ME, Wiertz EJHJ. Epstein-Barr virus isolates retain their capacity to evade T cell immunity through BNLF2a despite extensive sequence variation. *Journal of Virology.* 2012

Hsu E, Crombie A, To P, Marquart L, Batstone MD. Manual reduction of mandibular fractures before internal fixation leads to shorter operative duration and equivalent outcomes when compared with reduction with intermaxillary fixation. International Journal of Oral and Maxillofacial Surgery. 2012

Huang RS, Johnatty SE, Gamazon ER, Im HK, Ziliak D, Duan SW, Zhang W, Kistner EO, Chen P, Beesley J, Mi SL, O'Donnell PH, Fraiman YS, Das S, Cox NJ, Lu Y, Macgregor S, Goode EL, Vierkant RA, Fridley BL, Hogdall E, Kjaer SK, Jensen A, Moysich KB, Grasela M, Odunsi K, Brown R, Paul J, Lambrechts D, Despierre E, Vergote I, Gross J, Karlan BY, DeFazio A, Chenevix-Trench G, Dolan ME. Platinum sensitivity-related germline polymorphism discovered via a cell-based approach and analysis of its association with outcome in ovarian cancer patients. *Clinical Cancer Research*. 2011

Hughes LA, Williamson EJ, van Engeland M, Jenkins MA, Giles GG, Hopper JL, Southey MC, Young JP, Buchanan DD, Walsh MD, van den Brandt PA, Goldbohm RA, Weijenberg MP, English DR. Body size and risk for colorectal cancers showing BRAF mutations or microsatellite instability: a pooled analysis. *International Journal of Epidemiology*. 2012

Hume DA, MacDonald KPA. Therapeutic applications of macrophage colony-stimulating factor-1 (CSF-1) and antagonists of CSF-1 receptor (CSF-1R) signaling. *Blood.* 2012

Hurst TP, Pittman G, O'Neill SL, Ryan PA, Nguyen HL, Kay BH. Impacts of *Wolbachia* infection on predator prey relationships: evaluating survival and horizontal transfer between *w*MelPop infected *Aedes aegypti* and its predators. *Journal of Medical Entomology*. 2012

Ibiebele TI, Hughes MC, Whiteman DC, Webb PM, Australian Cancer Study. Dietary patterns and risk of oesophageal cancers: a populationbased case-control study. *British Journal of Nutrition.* 2012

Illing PT, Vivian JP, Dudek NL, Kostenko L, Chen Z, Bharadwaj M, Miles JJ, Kjer-Nielsen L, Gras S, Williamson NA, Burrows SR, Purcell AW, Rossjohn J, McCluskey J. Immune self-reactivity triggered by drug-modified human leukocyte antigen-peptide repertoire. *Nature*. 2012

Im KM, Kirchhoff T, Wang X, Green T, Chow CY, Vijai J, Korn J, Gaudet MM, Fredericksen Z, Shane Pankratz V, Guiducci C, Crenshaw A, McGuffog L, Kartsonaki C, Morrison J, Healey S, Sinilnikova OM, Mai PL, Greene MH, Piedmonte M, Rubinstein WS; HEBON, Hogervorst FB, Rookus MA, Collée JM, Hoogerbrugge N, van Asperen CJ, Meijers-Heijboer HE, Van Roozendaal CE, Caldes T, Perez-Segura P, Jakubowska A. Lubinski J. Huzarski T. Blecharz P, Nevanlinna H, Aittomäki K, Lazaro C, Blanco I, Barkardottir RB, Montagna M, D'Andrea E; kConFab, Devilee P, Olopade OI, Neuhausen SL, Peissel B, Bonanni B, Peterlongo P, Singer CF, Rennert G. Leibkowicz F. Andrulis IL. Glendon G, Ozcelik H; Ontario Cancer Genetics Network, Toland AE, Caligo MA; SWE-BRCA, Beattie MS, Chan S; UKFOCR, Domchek SM, Nathanson KL, Rebbeck TR, Phelan C, Narod S, John EM, Hopper JL, Buys SS, Daly MB, Southey MC, Terry MB, Tung N, Hansen TV, Osorio A, Benitez J, Durán M, Weitzel JN, Garber J, Hamann U; EMBRACE, Peock S, Cook M, Oliver CT, Frost D, Platte R, Evans DG, Eeles R, Izatt L, Paterson J, Brewer C, Hodgson S, Morrison PJ, Porteous M, Walker L, Rogers MT, Side LE, Godwin AK, Schmutzler RK, Wappenschmidt B, Laitman Y, Meindl A, Deissler H, Varon-Mateeva R, Preisler-Adams S. Kast K. Venat-Bouvet L. Stoppa-Lvonnet D. Chenevix-Trench G. Easton DF. Klein RJ, Daly MJ, Friedman E, Dean M, Clark AG, Altshuler DM, Antoniou AC, Couch FJ, Offit K, Gold B. Haplotype structure in Ashkenazi Jewish BRCA1 and BRCA2 mutation carriers. Human Genetics 2011

Jahanshad N, Kohannim O, Hibar DP, Stein JL, McMahon KL, de Zubicaray GI, Medland SE, Montgomery GW, Whitfield JB, Martin NG, Wright MJ, Toga AW, Thompson PM. Brain structure in healthy adults is related to serum transferrin and the H63D polymorphism in the HFE gene. *Proceedings of the National Academy* of Sciences. 2012 Jakubowska A, Rozkrut D, Antoniou A, Hamann U, Scott RJ, McGuffog L, Healy S, Sinilnikova OM, Rennert G, Lejbkowicz F, Flugelman A, Andrulis IL, Glendon G, Ozcelik H, OCGN, Thomassen M, Paligo M, Aretini P, SWEBRCA, Kantala J, Aroer B, von Wachenfeldt A, Liljegren A, Loman N, Herbst K, Kristoffersson U, Rosenquist R, Karlsson P, Stenmark-Askmalm M, Melin B, Nathanson KL, Domchek SM, Byrski T, Huzarski T, Gronwald J, Menkiszak J, Cybulski C, Serrano P, Osorio A, Cajal TR, Tsitlaidou M, Benítez J, Gilbert M, HEBON, Rookus M, Aalfs CM, Kluijt I, Boessenkool-Pape JL, Meijers-Heijboer HE, Oosterwijk JC, van Asperen CJ, Blok MJ, Nelen MR, van den Ouweland AM, Seynaeve C, van der Luijt RB, Devilee P, EMBRACE, Easton DF, Peock S, Frost D, Platte R, Ellis SD, Fineberg E, Evans DG, Lalloo F, Eeles R, Jacobs C, Adlard J, Davidson R, Eccles D, Cole T, Cook J, Godwin A, Bove B, GEMO Study Collaborators, Stoppa-Lyonnet D, Caux-Moncoutier V, Belotti M, Tirapo C, Mazover S. Barihoux L. Boutry-Kryza N. Puiol P. Coupier I, Peyrat JP, Vennin P, Muller D, Fricker JP, Venat-Bouvet L, Johannsson OT, Isaacs C, Schmutzler R, Wappenschmidt B, Meindl A, Arnold N, Varon-Mateeva R, Niederacher D, Sutter C. Deissler H. Preisler-Adams S. Simard J, Soucy P, Durocher F, Chenevix-Trench G, Beesley J, Chen X, Rebbeck T, Couch F, Wang X, Lindor N, Fredericksen Z, Pankratz VS, Peterlongo P, Bonanni B, Fortuzzi S, Peissel B, Szabo C, Mai PL, Loud JT, Lubinski J. Association of PHB 1630 C>T and MTHFR 677 C>T polymorphisms with breast and ovarian cancer risk in BRCA1/2 mutation carriers: results from a multicenter study. British Journal of Cancer, 2012

Nourse JP, Crooks P, Keane C, Nguyen-Van D, Mujaj S, Ross N, Jones K, Vari F, Han E, Trappe R, Fink S, Gandhi MK. Expression profiling of Epstein-Barr virus-encoded microRNAs from paraffin-embedded formalin-fixed primary Epstein-Barr virus-positive B-cell lymphoma samples. *Journal of Virological Methods.* 2012

Janamian T, Myers S, O'Rourke P, Eastwood H. Responding to GPs' information resource needs: implementation and evaluation of a complementary medicines information resource in Queensland general practice. *BMC Complementary and Alternative Medicine.* 2011

Janda M, Neale RE, Youl P, Whiteman DC, Gordon L, Baade PD. Impact of a video-based intervention to improve the prevalence of skin self-examination in men 50 years or older the randomized skin awareness trial. Archives of Dermatology. 2011

Janes PW, Griesshaber B, Atapattu L, Nievergall E, Hii LL, Mensinga A, Chheang C, Day BW, Boyd AW, Bastiaens PI, Jorgensen C, Pawson T, Lackmann M. Eph receptor function is modulated by heterooligomerization of A and B type Eph receptors. *Journal of Cell Biology.* 2011

Johns TG, Day B, Wilding A, Stringer B, Boyd AW. Cell lines established under serum-free conditions accurately reflect glioma variation and can be utilized for the discovery of novel biology and therapeutic strategies. *Neuro-oncology*. 2011

Johnson J, Healey S, Khanna KK, Chenevix-Trench G. Mutation analysis of RAD51L1 (RAD51B/REC2) in multiple-case, non-BRCA1/2 breast cancer families. *Breast Cancer Research and Treatment.* 2011

Johnson JK, Waddell N, ChenevixTrench G. The application of nonsense-mediated mRNA decay

inhibition to the identification of breast cancer susceptibility genes. *BMC Cancer.* 2012

Jones K, Nourse JP, Keane C, Crooks P, Gottlieb D, Ritchie DS, Gill D, Gandhi MK. Tumor-specific but not nonspecific cell-free circulating DNA can be used to monitor disease response in lymphoma. *American Journal of Hematology.* 2012

Jones MK, Keiser J, McManus DP. Trematodes. Manual of Clinical Microbiology (book). 2011

Jordan S. Height – a universal cancer risk factor? Women's Health. 2012

Jordan SJ, Cushing-Haugen KL, Wicklund KG, Doherty JA, Rossing MA. Breast feeding and risk of epithelial ovarian cancer. *Cancer Causes and Control.* 2012

Jordan S, Lim L, Seubsman SA, Bain C, Sleigh A; Thai Cohort Study Team. Secular changes and predictors of adult height for 86105 male and female members of the Thai Cohort Study born between 1940 and 1990. *Journal of Epidemiology* and Community Health. 2012

Jostins L, Ripke S, Weersma RK, Duerr RH, McGovern DP, Hui KY, Lee JC, Schumm P, Sharma Y, Anderson CA, Essers E, Mitjovic M, Ning K, Cleynen I, Theatre E, Spain SL Raychaudhuri S, Goyette P, Wei Z, Abraham C, Achkar JP, Ahmad T, Amininijad L, Ananthakrishnan A, Andersen V, Andrews JM, Baidoo L, Balschun T, Bampton PA, Bitton A, Boucher G, Brand S, Büning C, Cohain A, Cichon S, D'Amato M, De Jong D, Devaney KL, Dubinsky M, Edwards C, Ellinghaus D, Ferguson LR, Franchimont D, Fransen K, Gearry R, Georges M, Gieger C, Glas J, Haritunians T, Hart A, Hawkey C, Hedl M, Hu X, Karlsen TH, Kupcinskas L, Kugathasan S, Latiano A, Laukens D, Lawrance IC, Lees CW, Mahy G, Mansfield J, Morgan AR, Mowat C, Newman W, Palmieri O, Ponsioen CY, Potocnik U, Prescott NJ, Regueiro M, Rotter JI, Russell RK, Sanderson JD, Sans M, Satsangi J, Schreiber S, Simms LA, Sventoraityte J, Targan SR, Taylor KD, Tremelling M, Verspaget HW, De Vos M, Wijmenga C, Wilson DC, Winkelmann J, Xavier RJ, Zeissig S, Zhang CK. Host-microbe interactions have shaped the genetic architecture of inflammatory bowel disease. Nature. 2012

Jung CG, Uhm KO, Miura Y, Hosono T, Horike H, Khanna KK, Kim MJ, Michikawa M. Betaamyloid increases the expression level of ATBF1 responsible for death in cultured cortical neurons. *Molecular Neurodegeneration.* 2011

Kalaitzidis D, Sykes SM, Punt N, Tang Y, Sinha AU, Lane SW, Souza AL, Clish CB, Anastasiou D, Gilliland DG, Scadden DT, Guertin DA, Armstrong SA. mTOR Complex 1 plays critical roles in hematopoiesis and Pten-loss-evoked leukemogenesis. *Cell Stem Cell.* 2012

Karim M, Harris JA, Morley JW, Breakspear M. Prior and present evidence: How prior experience interacts with present information in a perceptual decision making task. *PLoS ONE.* 2012

Keane C, Shen L, Han E, Nourse JP, Lea R, Mollee P, Gill DS, Gandhi MK. Tissue microarray in DLBCL patients receiving R-CHOP chemo immunotherapy shows survival benefit for coexpression of LMO2/BCL6. *Blood.* 2011 Kearns T, Andrews R, Speare R, Cheng A, McCarthy J, Carapetis J, Holt D, Holt D, Mulholland E, Currie B, Page W, McDonnell J, Shield J. Ivermectin mass drug administration program to treat endemic scabies and strongyloidiasis in a remote aboriginal community in northern Australia. Tropical Medicine and International Health. 2011

Kendall BJ, MacDonald GA, Hayward NK, Prins JB. O'Brien S. Whiteman DC. Obesity, central obesity and the risk of Barrett's oesophagus. Journal of Gastroenterology and Hepatology. 2011

Kendall BJ, MacDonald GA, Hayward NK, Prins JB, O'Brien S, Whiteman DC. Type 2 diabetes mellitus and the risk of Barrett's oesophagus. Journal of Gastroenterology and Hepatology. 2011

Khampoosa P, Jones MK, Lovas EM, Srisawangwong T, Laha T, Piratae S, Thammasiri C, Suwannatrai A, Sripanidkulchai B, Eursitthichai V, Tesana S. Light and electron microscopy observations of embryogenesis and egg development in the human liver fluke, Opisthorchis viverrini (Platyhelminthes, Digenea). Parasitology Research. 2012

Kinsinger CR, Apffel J, Baker M, Bian XP, Borchers CH, Bradshaw R, Brusniak MY, Chan DW, Deutsch EW, Domon B, Gorman J, Grimm R, Hancock W, Hermjakob H, Horn D, Hunter C, Kolar P, Kraus HJ, Langen H, Linding R, Moritz RL, Omenn GS, Orlando R, Pandey A, Ping PP, Rahbar A, Rivers R, Seymour SL, Simpson RJ, Slotta D, Smith RD, Stein SE, Tabb DL, Tagle D, Yates JR, Rodriguez H. Recommendations for mass spectrometry data quality metrics for open access data (corollary to the Amsterdam principles). Journal of Proteome Research. 2011

Kirchhoff T. Gaudet MM. Antoniou AC. McGuffog L, Humphreys MK, Dunning AM, Bojesen SE, Nordestgaard BG, Flyger H, Kang D, Yoo KY, Noh DY, Ahn SH, Dork T, Schürmann P, Karstens JH, Hillemanns P, Couch FJ, Olson J, Vachon C, Wang X, Cox A, Brock I, Elliott G, Reed MW, Burwinkel B, Meindl A, Brauch H, Hamann U, Ko YD, Network GENICA, Broeks A, Schmidt MK, van 't Veer LJ, Braaf LM, Johnson N, Fletcher O, Gibson L, Peto J, Turnbull C, Seal S, Renwick A, Rahman N, Wu PE, Yu JC, Hsiung CN, Shen CY, Southey MC, Hopper JL, Hammet F, Van Dorpe T, Dieudonne AS, Hatse S, Lambrechts D, Andrulis IL, Bogdanova N, Antonenkova N, Rogov JI, Prokofieva D, Bermisheva M, Khusnutdinova E, van Asperen CJ, Tollenaar RA, Hooning MJ, Devilee P, Margolin S, Lindblom A, Milne RL, Arias JI, Zamora MP, Benítez J, Severi G, Baglietto L, Giles GG, KConFab, AOCS Study Group, Spurdle AB, Beesley J, Chen X, Holland H, Healey S, Wang-Gohrke S, Chang-Claude J, Mannermaa A, Kosma VM, Kauppinen J, Kataja V, Agnarsson BA, Caligo MA, Godwin AK, Nevanlinna H, Heikkinen T, Fredericksen Z, Lindor N, Nathanson KL, Domchek SM, SWEBRCA, Loman N, Karlsson P, Askmalm MS, Melin B, von Wachenfeldt A, Hebon, Hogervorst FB, Verheus M, Rookus MA, Seynaeve C, Oldenburg RA, Ligtenberg MJ, Ausems MG, Aalfs CM, Gille HJ, Wijnen JT, Gómez-García EB, EMBRACE, Peock S, Cook M, Oliver CT, Frost D, Luccarini C, Pichert G, Davidson R, Chu C, Eccles D, Ong KR, Cook J. Douglas F. Hodgson S. Evans DG. Eeles R. Gold B, Pharoah PD, Offit K, Chenevix-Trench G, Easton DF. Breast cancer risk and 6q22.33: combined results from Breast Cancer Association Consortium and Consortium of Investigators on Modifiers of BRCA1/2. PLoS ONE. 2012

Knaapila A, Zhu G, Medland SE, Wysocki CJ, Montgomery GW, Martin NG, Wright MJ, Reed DR. A genome-wide study on the perception of the odorants and rostenone and galaxolide. Chemical Senses, 2012

Kochan NA, Breakspear M, Valenzuela M, Slavin MJ, Brodaty H, Wen W, Trollor JN, Turner A, Crawford JD, Sachdev PS. Cortical responses to a graded working memory challenge predict functional decline in mild cognitive impairment. Biological Psychiatry. 2011

Kochan NA, Valenzuela M, Slavin MJ, McCraw S, Sachdev PS, Breakspear M. Impact of loadrelated neural processes on feature binding in visuospatial working memory. PLoS ONE. 2011

Kohannim O, Jahanshad N, Braskie MN, Stein JL, Chiang MC, Reese AH, Hibar DP, Toga AW, McMahon KL, de Zubicaray GI, Medland SE, Montgomery GW, Martin NG, Wright MJ, Thompson PM. Predicting white matter integrity from multiple common genetic variants. Neuropsychopharmacology, 2012

Kote-Jarai Z, Olama AA, Giles GG, Severi G, Schleutker J, Weischer M, Campa D, Riboli E, Key T, Gronberg H, Hunter DJ, Kraft P, Thun MJ, Ingles S, Chanock S, Albanes D, Hayes RB, Neal DE, Hamdy FC, Donovan JL, Pharoah P, Schumacher F, Henderson BE, Stanford JL, Ostrander EA, Sorensen KD, Dörk T, Andriole G, Dickinson JL, Cybulski C, Lubinski J, Spurdle A, Clements JA, Chambers S, Aitken J, Gardiner RA, Thibodeau SN, Schaid D, John EM, Maier C, Vogel W, Cooney KA, Park JY, Cannon-Albright L, Brenner H, Habuchi T, Zhang HW, Lu YJ, Kaneva R, Muir K, Benlloch S, Leongamornlert DA, Saunders EJ. Tymrakiewicz M. Mahmud N. Guy M. O'Brien LT, Wilkinson RA, Hall AL, Sawyer EJ, Dadaev T, Morrison J, Dearnaley DP, Horwich A, Huddart RA, Khoo VS, Parker CC, van As N, Woodhouse CJ, Thompson A, Christmas T, Ogden C, Cooper CS, Lophatonanon A, Southey MC, Hopper JL, English DR, Wahlfors T, Tammela TL, Klarskov P, Nordestgaard BG, Røder MA, Tybjærg-Hansen A, Bojesen SE, Travis R, Canzian F, Kaaks R, Wiklund F, Aly M, Lindstrom S, Diver WR, Gapstur S, Stern MC, Corral R, Virtamo J, Cox A, Haiman CA, Le Marchand L, Fitzgerald L, Kolb S, Kwon EM, Karyadi DM, Orntoft TF, Borre M, Meyer A, Serth J, Yeager M, Berndt SI, Marthick JR, Patterson B, Wokolorczyk D, Batra J, Lose F, McDonnell SK, Joshi AD, Shahabi A, Rinckleb AE, Ray A, Sellers TA, Lin HY, Stephenson RA, Farnham J, Muller H, Rothenbacher D, Tsuchiya N, Narita S, Cao GW, Slavov C, Mitev V, Easton DF, Eeles RA: UK Genetic Prostate Cancer Study Collaborators/British Association of Urological Surgeons' Section of Oncology; UK ProtecT Study Collaborators, The Australian Prostate Cancer BioResource; PRACTICAL Consortium. Seven prostate cancer susceptibility loci identified by a multi-stage genome-wide association study. Nature Genetics. 2011

Kotiw M, Johnson M, Pandey M, Fry S, Hazell SL, Netter HJ, Good MF, Olive C. Immunological response to parenteral vaccination with recombinant hepatitis B virus surface antigen virus-like particles expressing Helicobacter pylori KatA epitopes in a murine H. pylori challenge model. Clinical and Vaccine Immunology. 2012

Kovac S, Anderson GJ, Alexander WS, Shulkes A, Baldwin GS. Gastrin-deficient mice have disturbed hematopoiesis in response to iron deficiency. Endocrinology. 2011

Koyama M, Kuns RD, Olver SD, Raffelt NC, Wilson YA, Don ALJ, Lineburg KE, Robb RJ, Markey KA, Varelias A, Malissen B, Hammerling GJ, Bhat P, Clouston AD, Engwerda CR, MacDonald KPA, Hill GR. Alloantigen presentation by recipient non-professional antigen presenting cells induces lethal acute GVHD. Biology of Blood and Marrow Transplantation. 2012

Koyama M, Kuns RD, Olver SD, Raffelt NC, Wilson YA, Don ALJ, Lineburg KE, Cheong M, Robb RJ, Markey KA, Varelias A, Malissen B, Hammerling GJ, Clouston AD, Engwerda CR, Bhat P, MacDonald KPA, Hill GR. Recipient nonhematopoietic antigen-presenting cells are sufficient to induce lethal acute graft-versus-host disease. Nature Medicine. 2012

Krishnaprasad K, Andrews JM, Lawrance IC. Florin T. Gearry RB. Leong RW. Mahy G. Bampton P, Prosser R, Leach P, Chitti L, Cock C, Grafton R, Croft AR, Cooke S, Doecke JD, Radford-Smith GL. Inter-observer agreement for Crohn's disease sub-phenotypes using the Montreal Classification: How good are we? A multi-centre Australasian study. Journal of Crohn's and Colitis. 2012

Kutalik Z, Benyamin B, Bergmann S, Mooser V, Waeber G, Montgomery GW, Martin NG, Madden PAF, Heath AC, Beckmann JS, Vollenweider P, Marques-Vidal P, Whitfield JB. Genome-wide association study identifies two loci strongly affecting transferrin glycosylation. Human Molecular Genetics, 2011

Kvaskoff M, Siskind V, Green AC. Risk factors for lentigo maligna melanoma compared with superficial spreading melanoma: A case-control study in Australia. Archives of Dermatology. 2012

Kvaskoff M, Whiteman DC, Zhao ZZ, Montgomery GW, Martin NG, Hayward NK, Duffy DL. Polymorphisms in nevus-associated genes MTAP, PLA2G6, and IRF4 and the risk of invasive cutaneous melanoma. Twin Research and Human Genetics, 2011

Lahmann PH, Pandeya N, Webb PM, Green AC, Whiteman DC. Body mass index, long-term weight change, and esophageal squamous cell carcinoma, Cancer, 2012

Lahmann PH, Russell A, Green AC. Prospective study of physical activity and risk of squamous cell carcinoma of the skin. BMC Cancer. 2011

Laitman Y, Kuchenbaecker KB, Rantala J, Hogervorst F, Peock S, Godwin AK, Arason A, Kirchhoff T, Offit K, Isaacs C, Schmutzler RK, Wappenschmidt B, Nevanlinna H, Chen X, ChenevixTrench G, Healey S, Couch F, Peterlongo P, Radice P, Nathanson KL, Caligo MA, Neuhausen SL, Ganz P, Sinilnikova OM, McGuffog L, Easton DF, Antoniou AC, Wolf I, Friedman E. The KL-VS sequence variant of Klotho and cancer risk in BRCA1 and BRCA2 mutation carriers. Breast Cancer Research and Treatment, 2012

Lane SW, DeVita S, Alexander KA, Karaman R, Milsom MD, Dorrance AM, Purdon A, Louis L, Bouxsein ML, Williams DA. Rac signaling in osteoblastic cells is required for normal bone development but is dispensable for hematopoietic development. Blood. 2012

Lane SW, Gill D, McMillan NA, Saunders N, Murphy R, Spurr T, Keane C, Fan HM, Mollee P. Valproic acid combined with cytosine arabinoside in elderly patients with acute myeloid leukemia has in vitro but limited clinical activity. Leukemia and Lymphoma. 2011

Lane SW, Wang YZJ, Celso CL, Ragu C, Bullinger L, Sykes SM, Ferraro F, Shterental S, Lin CP, Gilliland DG, Scadden DT, Armstrong SA, Williams DA. Differential niche and Wnt requirements during acute myeloid leukemia progression. *Blood.* 2011

Lane SW. Bad to the bone. Blood. 2012

Larsson M, Duffy DL, Zhu G, Liu JZ, Macgregor S, McRae AF, Wright MJ, Sturm RA, Mackey DA, Montgomery GW, Martin NG, Medland SE. GWAS findings for human iris patterns: Associations with variants in genes that influence normal neuronal pattern development. *American Journal of Human Genetics.* 2011

Law MH, Montgomery GW, Brown KM, Martin NG, Mann GJ, Hayward NK, Macgregor S. Meta-analysis combining new and existing data sets confirms that the TERT-CLPTM1L locus influences melanoma risk. *Journal of Investigative Dermatology.* 2012

Le AT, Miller PW, Slutske WS, Martin NG. Attitudes towards risk and the gender pay gap. *Labour Economics*. 2011

Lechner S, Ruemmele FM, Zankl A, Lausch E, Huber WD, Mihatsch W, Phillips AD, Lewindon PJ, Querfeld U, HeinzErian P, Müller T, Janecke AR. Significance of molecular testing for congenital chloride diarrhea. *Journal of Pediatric Gastroenterology and Nutrition*. 2011

Lee AJ, Zietsch BP. Experimental evidence that women's mate preferences are directly influenced by cues of pathogen prevalence and resource scarcity. *Biology Letters*. 2011

Lee N, Gatton ML, Pelecanos A, Bubb M, Gonzalez I, Bell D, Cheng Q, McCarthy JS. Identification of optimal epitopes for *Plasmodium falciparum* rapid diagnostic tests that target histidine-rich proteins 2 and 3. *Journal of Clinical Microbiology.* 2012

Lee T, Mosing MA, Henry JD, Trollor JN, Ames D, Martin NG, Wright MJ, Sachdev PS. Genetic influences on four measures of executive functions and their covariation with general cognitive ability: The Older Australian Twins Study. *Behavior Genetics.* 2012

Lee T, Mosing MA, Henry JD, Trollor JN, Lammel A, Ames D, Martin NG, Wright MJ, Sachdev PS. Genetic influences on five measures of processing speed and their covariation with general cognitive ability in the elderly: The Older Australian Twins Study. *Behavior Genetics.* 2012

Leitsch D, Burgess AG, Dunn LA, Krauer KG, Tan K, Duchene M, Upcroft P, Eckmann L, Upcroft JA. Pyruvate:ferredoxin oxidoreductase and thioredoxin reductase are involved in 5-nitroimidazole activation while flavin metabolism is linked to 5-nitroimidazole resistance in *Giardia lamblia. Journal of Antimicrobial Chemotherapy.* 2011

Leksomboon R, Chaijaroonkhanarak W, Arunyanart C, Umka J, Jones MK, Sripa B. Organization of the nervous system in *Opisthorchis viverrini* investigated by histochemical and immunohistochemical study. *Parasitology International.* 2012

Levine AJ, Win AK, Buchanan DD, Jenkins MA, Baron JA, Young JP, Long TI, Weisenberger DJ, Laird PW, McCall RL, Duggan DJ, Haile RW. Cancer risks for the relatives of colorectal cancer cases with a methylated MLH1 promoter region: Data from the colorectal cancer family registry. *Cancer Prevention Research.* 2012 Li R, Brockschmidt FF, Kiefer AK, Stefansson H, Nyholt DR, Song K, Vermeulen SH, Kanoni S, Glass D, Medland SE, Dimitriou M, Waterworth D, Tung JY, Geller F, Heilmann S, Hillmer AM, Bataille V, Eigelshoven S, Hanneken S, Moebus S, Herold C, den Heijer M, Montgomery GW, Deloukas P, Eriksson N, Heath AC, Becker T, Sulem P, Mangino M, Vollenweider P, Spector TD, Dedoussis G, Martin NG, Kiemeney LA, Mooser V, Stefansson K, Hinds DA, Nöthen MM, Richards JB. Six novel susceptibility loci for early-onset androgenetic alopecia and their unexpected association with common diseases. *PLoS Genetics*. 2012

Li Y, Yu X, Wang Z, Harn D. DNA vaccine against Schistosoma japonicum infection in water buffalos. Tropical Medicine and International Health. 2011

Li YS, Ross AG, Hou X, MD L, McManus DP. Oriental schistosomiasis with neurological complications. *Annals of Clinical Microbiology and Antimicrobials.* 2011

Liao LM, Vaughan TL, Corley DA, Cook MB, Casson AG, Kamangar F, Abnet CC, Risch HA, Giffen C, Freedman ND, Chow WH, Sadeghi S, Pandeya N, Whiteman DC, Murray LJ, Bernstein L, Gammon MD, Wu AH. Nonsteroidal anti-inflammatory drug use reduces risk of adenocarcinomas of the esophagus and esophagogastric junction in a pooled analysis. *Gastroenterology.* 2012

Lichtenbergova L, Lassmann H, Jones MK, Kolarova L, Horak P. *Trichobilharzia regenti*: Host immune response in the pathogenesis of neuroinfection in mice. *Experimental Parasitology.* 2011

Ligthart L, de Vries B, Smith AV, Ikram MA, Amin N, Hottenga JJ, Koelewijn SC, Kattenberg VM, de Moor MHM, Janssens ACJW, Aulchenko YS, Oostra BA, de Geus EJC, Smit JH, Zitman FG, Uitterlinden AG, Hofman A, Willemsen G, Nyholt DR, Montgomery GW, Terwindt GM, Gudnason V, Penninx BWJH, Breteler M, Ferrari MD, Launer LJ, van Duijn CM, van den Maagdenberg AMJM, Boomsma DI. Meta-analysis of genomewide association for migraine in six populationbased European cohorts. *European Journal of Human Genetics.* 2011

Lim YC, Roberts TL, Day BW, Harding A, Kozlov S, Kijas AW, Ensbey KS, Walker DG, Lavin MF. A role for homologous recombination and abnormal cell cycle progression in radioresistance of glioma initiating cells. *Molecular Cancer Therapeutics*. 2012

Lind PA, Macgregor S, Heath AC, Madden PA, Montgomery GW, Martin NG, Whitfield JB. Association between *in vivo* alcohol metabolism and genetic variation in pathways that metabolize the carbon skeleton of ethanol and NADH reoxidation in the alcohol challenge twin study. *Alcoholism: Clinical and Experimental Research.* 2012

Lindor NM, Petersen GM, Spurdle AB, Thompson B, Goldgar DE, Thibodeau SN. Pancreatic cancer and a novel MSH2 germline alteration. *Pancreas*. 2011

Ling MT, Luk SU, Al-Ejeh F, Khanna KK. Tocotrienol as a potential anticancer agent. *Carcinogenesis*. 2012

Liu G, Li XQ, Shu HJ, Hu YL, Anderson G, Qian JM, Nie GJ. Identification of two novel PBGD mutations in acute intermittent porphyria patients accompanying anemia in mainland China. *Blood Cells Molecules and Diseases*. 2011

Liu Y, Brindley PJ, Zeng QR, Li YS, Zhou J, Chen YX, Yang SH, Zhang ZP, Liu BY, Cai LT, McManus DP. Identification of phage display peptides with affinity for the tegument of *Schistosoma japonicum* schistosomula. *Molecular and Biochemical Parasitology.* 2011

Liu YC, Chen ZJ, Burrows SR, Purcell AW, McCluskey J, Rossjohn J, Gras S. The energetic basis underpinning T-cell receptor recognition of a super-bulged peptide bound to a major histocompatibility complex class I molecule. *Journal of Biological Chemistry.* 2012

Loehlin JC, Martin NG. What does a general factor of personality look like in unshared environmental variance? *Personality and Individual Differences.* 2011

Loehlin JC, Medland SE, Martin NG. Is CAG sequence length in the androgen receptor gene correlated with finger-length ratio? *Personality and Individual Differences*. 2011

Loffler KA, Mould AW, Waring PM, Hayward NK, Kay GF. Menin and p53 have nonsynergistic effects on tumorigenesis in mice. *BMC Cancer.* 2012

Loo CKC, Algar EM, Payton DJ, Perry-Keene J, Pereira TN, Ramm GA. Possible role of WT1 in a human fetus with evolving bronchial atresia, pulmonary malformation and renal agenesis. *Pediatric and Developmental Pathology.* 2012

Loo CKC, Pereira TN, Ramm GA. Abnormal WT1 expression in human fetuses with bilateral renal agenesis and cardiac malformations. *Birth Defects Research Part A - Clinical and Molecular Teratology.* 2012

Lord A, Horn, D, Breakspear M, Walter. Changes in community structure of resting state brain networks in unipolar depression. *PLoS ONE*. 2012

Lose F, Batra J, O'Mara T, Fahey P, Marquart L, Eeles RA, Easton DF, Al Olama AA, Kote-Jarai Z, Guy M, Muir K, Lophatananon A, Rahman AA, Neal DE, Hamdy FC, Donovan JL, Chambers S, Gardiner RA, Aitken JF, Yaxley J, Alexander K, Clements JA, Spurdle AB, Kedda MA, Australian Prostate Cancer BioResource. Common variation in Kallikrein genes KLK5, KLK6, KLK12, and KLK13 and risk of prostate cancer and tumor aggressiveness. *Urologic Oncology.* 2011

Lose F, Lawrence MG, Srinivasan S, O'Mara T, Marquart L, Chambers S, Gardiner RA, Aitken JF, Spurdle AB, Batra J, Clements JA. The kallikrein 14 gene is down-regulated by androgen receptor signalling and harbours genetic variation that is associated with prostate tumour aggressiveness. *Biological Chemistry*. 2012

Loughrey BT, Cunning BV, Healy PC, Brown CL, Parsons PG, Williams ML. Selective, cytotoxic organoruthenium(II) full-sandwich complexes: A structural, computational and *in vitro* biological study. *Chemistry - An Asian Journal.* 2012

Loukas A, Gaze S, Mulvenna JP, Gasser RB, Brindley PJ, Doolan DL, Bethony JM, Jones MK, Gobert GN, Driguez P, McManus DP, Hotez PJ. Vaccinomics for the major blood feeding helminths of humans. *Omics - A Journal of Integrative Biology.* 2011 Lubin J, Cook MB, Pandeya N, Vaughan TL, Abnet CC, Giffen C, Webb PM, Murray LJ, Casson AG, Risch HA, Ye W, Kamangar F, Bernstein B, Sharp L, Nyrén O, Gammon MD, Corley DA, Wu AH, Brown LM, Chow WH, Ward MH, Freedman ND, Whiteman DC. The importance of exposure rate on odds ratios by cigarette smoking and alcohol consumption for esophageal adenocarcinoma and squamous cell carcinoma in the BEACON Consortium. *Cancer Epidemiology.* 2012

Lucas RM, Ponsonby AL, Dear K, Valery P, Pender MP, Burrows JM, Burrows SR, Chapman C, Coulthard A, Dwyer DE, Dwyer T, Kilpatrick T, Lay MLJ, McMichael AJ, Taylor BV, van der Mei IAF, Williams D. Current and past Epstein-Barr virus infection in risk of initial CNS demyelination. *Neurology.* 2011

Luchavez J, Baker J, Alcantara S, Belizario V, Cheng Q, McCarthy JS, Bell D. Laboratory demonstration of a prozone-like effect in HRP2-detecting malaria rapid diagnostic tests: implications for clinical management. *Malaria Journal.* 2011

Luciano M, Lopez LM, de Moor MHM, Harris SE, Davies G, Nutile T, Krueger RF, Esko T, Schlessinger D, Toshiko T, Derringer JL, Realo A, Hansell NK, Pergadia ML, Pesonen AK, Sanna S, Terracciano A, Madden PAF, Penninx B, Spinhoven P, Hartman CA, Oostra BA, Janssens ACJW, Eriksson JG, Starr JM, Cannas A, Ferrucci L, Metspalu A, Wright MJ, Heath AC, van Duijn CM, Bierut LJ, Raikkonen K, Martin NG, Ciullo M, Rujescu D, Boomsma DI, Deary IJ. Longevity candidate genes and their association with personality traits in the elderly. *American Journal of Medical Genetics Part B* -*Neuropsychiatric Genetics.* 2012

Luijsterburg MS, Acs K, Ackermann L, Wiegant WW, BekkerJensen S, Larsen DH, Khanna KK, van Attikum H, Mailand N, Dantuma NP. A new non-catalytic role for ubiquitin ligase RNF8 in unfolding higher-order chromatin structure. *EMBO Journal.* 2012

Luong HTT, Chaplin J, Mcrae AF, Medland SE, Willemsen G, Nyholt DR, Henders AK, Hoekstra C, Duffy DL, Martin NG, Boomsma DI, Montgomery GW, Painter JN. Variation in BMPR1B, TGFRB1 and BMPR2 and control of dizygotic twinning. *Twin Research and Human Genetics*. 2011

Lustigman S, Prichard RK, Gazzinelli A, Grant WN, Boatin BA, McCarthy JS, Basáñez MG. A research agenda for helminth diseases of humans: the problem of helminthiases. *PLoS Neglected Tropical Diseases*. 2012

Macgregor S, Montgomery GW, Liu JZ, Zhao ZZ, Henders AK, Stark M, Schmid H, Holland EA, Duffy DL, Zhang M, Painter JN, Nyholt DR, Maskiell JA, Jetann J, Ferguson M, Cust AE, Jenkins MA, Whiteman DC, Olsson H, Puig S, Bianchi-Scarra G, Hansson J, Demenais F, Landi MT, Debniak T, Mackie R, Azizi E, Bressac-de Paillerets B, Goldstein AM, Kanetsky PA, Gruis NA, Elder DE, Newton-Bishop JA, Bishop DT, Iles MM, Helsing P, Amos CI, Wei QY, Wang LE, Lee JE, Qureshi AA, Kefford RF, Giles GG, Armstrong BK, Aitken JF, Han JL, Hopper JL, Trent JM, Brown KM, Martin NG, Mann GJ, Hayward NK. Genome-wide association study identifies a new melanoma susceptibility locus at 1g21.3. Nature Genetics. 2011

Maher BH, Kerr M, Cox HC, MacMillan JC, Brimage PJ, Esposito T, Gianfrancesco F, Haupt LM, Nyholt DR, Lea RA, Griffiths LR. Confirmation that Xq27 and Xq28 are susceptibility loci for migraine in independent pedigrees and a case-control cohort. *Neurogenetics*. 2012

Maia AT, Antoniou AC, O'Reilly M, Samarajiwa S, Dunning M, Kartsonaki C, Chin SF, Curtis CN, McGuffog L, Domchek SM, EMBRACE, Easton DF, Peock S, Frost D, Evans DG, Eeles R, Izatt L, Adlard J, Eccles D, GEMO Study Collaborators, Sinilnikova OM, Mazoyer S, Stoppa-Lyonnet D, Gauthier-Villars M, Faivre L, Venat-Bouvet L, Delnatte C, Nevanlinna H, Couch FJ, Godwin AK, Caligo MA, SWEBRCA, Barkardottir RB, Investigators kConFab, Chen X, Beesley J, Healey S, Caldas C, Chenevix-Trench G, Ponder BA. Effects of BRCA2 cis-regulation in normal breast and cancer risk amongst BRCA2 mutation carriers. *Breast Cancer Research*. 2012

Markey KA, Koyama M, Kuns RD, Lineburg KE, Wilson YA, Olver SD, Raffelt NC, Don AL, Varelias A, Robb RJ, Cheong M, Engwerda CR, Steptoe RJ, Ramshaw HS, Lopez AF, VegaRamos J, Lew AM, Villadangos JA, Hill GR, Macdonald KP. Immune insufficiency during GVHD is due to defective antigen presentation within dendritic cell subsets. *Blood*. 2012

Marquart L, Butterworth A, McCarthy J, Gatton ML. Modelling the dynamics of *Plasmodium falciparum* histidine-rich protein 2 in human malaria to better understand malaria rapid diagnostic test performance. *Malaria Journal.* 2012

Martin RE, Butterworth AS, Gardiner DL, Kirk K, McCarthy JS, Skinner-Adams TS. Saquinavir inhibits the malaria parasite's chloroquine resistance transporter. *Antimicrobial Agents and Chemotherapy*. 2012

Maugeri N, Powell JE, 't Hoen PAC, de Geus EJC, Willemsen G, Kattenberg M, Henders AK, Wallace L, Penninx B, Hottenga JJ, Medland SE, Saviouk V, Martin NG, Visscher PM, van Ommen GJB, Frazer IH, Boomsma DI, Montgomery GW, Ferreira MAR. LPAR1 and ITGA4 regulate peripheral blood monocyte counts. *Human Mutation*. 2011

Mavaddat N. Barrowdale D. Andrulis II. Domchek SM, Eccles D, Nevanlinna H, Ramus SJ, Spurdle A, Robson M, Sherman M, Mulligan AM, Couch FJ, Engel C, McGuffog L, Healey S, Sinilnikova OM, Southey MC, Terry MB, Goldgar D, O'Malley F, John EM, Janavicius R. Tihomirova L. Hansen TV. Nielsen FC. Osorio A, Stavropoulou A, Benítez J, Manoukian S, Peissel B, Barile M, Volorio S, Pasini B, Dolcetti R, Putignano AL, Ottini L, Radice P, Hamann U, Rashid MU, Hogervorst FB, Kriege M, van der Luijt RB; HEBON, Peock S, Frost D, Evans DG, Brewer C, Walker L, Rogers MT, Side LE, Houghton C; EMBRACE, Weaver J, Godwin AK, Schmutzler RK, Wappenschmidt B, Meindl A, Kast K, Arnold N, Niederacher D, Sutter C, Deissler H, Gadzicki D, Preisler-Adams S, Varon-Mateeva R, Schönbuchner I, Gevensleben H, Stoppa-Lyonnet D, Belotti M, Barjhoux L; GEMO Study Collaborators, Isaacs C, Peshkin BN, Caldes T, de la Hoya M, Cañadas C, Heikkinen T, Heikkilä P, Aittomäki K, Blanco I, Lazaro C, Brunet J, Agnarsson BA, Arason A, Barkardottir RB. Dumont M. Simard J. Montagna M. Agata S, D'Andrea E, Yan M, Fox S; kConFab Investigators, Rebbeck TR, Rubinstein W, Tung N, Garber JE, Wang X, Fredericksen Z, Pankratz VS, Lindor NM, Szabo C, Offit K, Sakr R. Gaudet MM, Singer CF, Tea MK, Rappaport C, Mai PL, Greene MH, Sokolenko A, Imyanitov

E, Toland AE, Senter L, Sweet K, Thomassen M, Gerdes AM, Kruse T, Caligo M, Aretini P, Rantala J, von Wachenfeld A, Henriksson K; SWE-BRCA Collaborators, Steele L, Neuhausen SL, Nussbaum R, Beattie M, Odunsi K, Sucheston L, Gayther SA, Nathanson K, Gross J, Walsh C, Karlan B, Chenevix-Trench G, Easton DF, Antoniou AC; Consortium of Investigators of Modifiers of BRCA1/2. Pathology of breast and ovarian cancers among BRCA1 and BRCA2 mutation carriers: Results from the Consortium of Investigators of Modifiers of BRCA1/2 (CIMBA). *Cancer Epidemiology, Biomarkers and Prevention.* 2012

Maxwell CA, Benítez J, Gómez-Baldó L, Osorio A, Bonifaci N, Fernández-Ramires R, Costes SV, Guinó E, Chen H, Evans GJ, Mohan P, Català I, Petit A, Aguilar H, Villanueva A, Aytes A, Serra-Musach J, Rennert G, Lejbkowicz F, Peterlongo P, Manoukian S, Peissel B, Ripamonti CB, Bonanni B, Viel A, Allavena A, Bernard L, Radice P, Friedman E, Kaufman B, Laitman Y, Dubrovsky M, Milgrom R, Jakubowska A, Cybulski C, Gorski B, Jaworska K, Durda K, Sukiennicki G, Lubi ski J, Shugart YY, Domchek SM, Letrero R, Weber BL, Hogervorst FB, Rookus MA, Collee JM, Devilee P, Ligtenberg MJ, Luijt RB, Aalfs CM, Waisfisz Q, Wijnen J, Roozendaal CE; HEBON; EMBRACE, Easton DF, Peock S, Cook M, Oliver C, Frost D, Harrington P, Evans DG, Lalloo F, Eeles R, Izatt L, Chu C, Eccles D. Douglas F. Brewer C. Nevanlinna H. Heikkinen T, Couch FJ, Lindor NM, Wang X, Godwin AK, Caligo MA, Lombardi G, Loman N, Karlsson P, Ehrencrona H, Wachenfeldt Av; SWE-BRCA, Barkardottir RB, Hamann U. Rashid MU. Lasa A. Caldés T. Andrés R. Schmitt M, Assmann V, Stevens K, Offit K, Curado J, Tilgner H, Guigó R, Aiza G, Brunet J, Castellsagué J, Martrat G, Urruticoechea A, Blanco I, Tihomirova L, Goldgar DE, Buys S, John EM, Miron A, Southey M, Daly MB; BCFR, Schmutzler RK, Wappenschmidt B, Meindl A, Arnold N, Deissler H, Varon-Mateeva R, Sutter C, Niederacher D, Imyamitov E, Sinilnikova OM, Stoppa-Lyonne D, Mazoyer S, Verny-Pierre C, Castera L, de Pauw A, Bignon YJ, Uhrhammer N, Peyrat JP, Vennin P, Fert Ferrer S, Collonge-Rame MA, Mortemousque I; GEMO Study Collaborators, Spurdle AB, Beesley J, Chen X, Healey S; kConFab, Barcellos-Hoff MH, Vidal M, Gruber SB, Lázaro C, Capellá G, McGuffog L, Nathanson KL, Antoniou AC, Chenevix-Trench G, Fleisch MC, Moreno V, Pujana MA. Interplay between BRCA1 and RHAMM regulates epithelial apicobasal polarization and may influence risk of breast cancer. PLoS Biology. 2011

McBride P, Olsen CM, Green AC. Tobacco smoking and cutaneous squamous cell carcinoma: A 16-year longitudinal populationbased study. *Cancer Epidemiology, Biomarkers and Prevention.* 2011

McCarthy J, Lustigman S, Yang GJ, Barakat RM, García HH, Sripa B, Willingham AL, Prichard RK, Basáñez MG. A research agenda for helminth diseases of humans: diagnostics for control and elimination programmes. *PLoS Neglected Tropical Diseases*. 2012

McCarthy JS, Marjason J, Elliott S, Fahey P, Bang G, Malkin E, Tierney E, Aked-Hurditch H, Adda C, Cross N, Richards JS, Fowkes FJI, Boyle MJ, Long C, Druilhe P, Beeson JG, Anders RF. A phase 1 trial of MSP2-C1, a blood-stage malaria vaccine containing 2 isoforms of MSP2 formulated with montanide (R) ISA 720. *PLoS ONE*. 2011 McCarthy JS, Sekuloski S, Griffin PM, Elliott S, Douglas N, Peatey C, Rockett R, O'Rourke P, Marquart L, Hermsen C, Duparc S, Mohrle J, Trenholme KR, Humberstone AJ. A pilot randomised trial of induced blood-stage *Plasmodium falciparum* infections in healthy volunteers for testing efficacy of new antimalarial drugs. *PLoS ONE*. 2011

McCutcheon VV, Grant JD, Heath AC, Bucholz KK, Sartor CE, Nelson EC, Madden PA, Martin NG. Environmental influences predominate in remission from alcohol use disorder in young adult twins. *Psychological Medicine*. 2012

McManus DP, Gray D, Zhang W, Yang YR. Diagnosis, treatment and management of echinococcosis. *British Medical Journal*. 2012

McManus DP, Gray DJ, Ross AG, Williams GM, He HB, Li YS. Schistosomiasis research in the Dongting Lake Region and its impact on local and national treatment and control in China. *PLoS Neglected Tropical Diseases.* 2011

McManus DP, Li ZZ, Yang SK, Gray DJ, Yang YR. Case studies emphasising the difficulties in the diagnosis and management of alveolar echinococcosis in rural China. *Parasites and Vectors.* 2011

McManus DP. Liver worms. Clinical Gastroeneterology and Hepatology (book). 2011

McMillan DJ, Kaul SY, Bramhachari PV, Smeesters PR, Vu T, Karmarkar MG, Shaila MS, Sriprakash KS. Recombination drives genetic diversification of *Streptococcus dysgalactiae* subspecies *equisimilis* in a region of streptococcal endemicity. *PLoS ONE*. 2011

McMillan DJ, Lutton C, Rosenzweig N, Sriprakash KS, Goss B, Stemberger A, Schuetz MA, Steck R. Prevention of *Staphylococcus aureus* biofilm formation on metallic surgical implants via controlled release of gentamicin. *Journal of Biomedical Science and Engineering.* 2011

McNally A, Hill GR, Sparwasser T, Thomas R, Steptoe RJ. CD4(+)CD25(+) regulatory T cells control CD8(+) T cell effector differentiation by modulating IL-2 homeostasis. *Proceedings of the National Academy of Sciences*. 2012

McSorley HJ, Gaze S, Daveson J, Jones D, Anderson RP, Clouston A, Ruyssers NE, Speare R, McCarthy JS, Engwerda CR, Croese J, Loukas A. Suppression of inflammatory immune responses in celiac disease by experimental hookworm Infection. *PLoS ONE*. 2011

McWilliam HEG, Driguez P, Piedrafita D, McManus DP, Meeusen ENT. Novel immunomic technologies for schistosome vaccine development. *Parasite Immunology.* 2012

Middelberg RP, Benyamin B, de Moor MHM, Warrington NM, Gordon S, Henders AK, Medland SE, Nyholt DR, de Geus EJC, Hottenga JJ, Willemsen G, Beilin LJ, Mori TA, Wright MJ, Heath AC, Madden PAF, Boomsma DI, Pennell CE, Montgomery GW, Martin NG, Whitfield JB. Loci affecting gamma-glutamyl transferase in adults and adolescents show age x SNP interaction and cardiometabolic disease associations. *Human Molecular Genetics*. 2012

Middelberg RP, Heath AC, Madden PA, Montgomery GW, Martin NG, Whitfield JB. Evidence of differential allelic effects between adolescents and adults for plasma high-density lipoprotein. *PLoS ONE*. 2012 Middelberg RPS, Ferreira MAR, Henders AK, Heath AC, Madden PAF, Montgomery GW, Martin NG, Whitfield JB. Genetic variants in LPL, OASL and TOMM40/APOE-C1-C2-C4 genes are associated with multiple cardiovascular-related traits. *BMC Medical Genetics.* 2011

Middeldorp CM, De Moor MHM, McGrath LM, Gordon SD, Blackwood, DH, Costa PT, Terracciano A, Krueger RF, De Geus EJC, Nyholt DR, Tanaka T, Esko T, Madden PAF, Derringer J, Amin N, Willemsen G, Hottenga JJ, Distel MA, Uda M, Sanna S, Spinhoven P, Hartman CA, Ripke S, Sullivan PF, Realo A, Allik J, Heath AC. Pergadia ML. Agrawal, Lin P. Grucza RA. Widen E. Cousminer DL. Eriksson JG. Palotie A, Barnett JH, Lee PH, Luciano M, Tenesa A, Davies G, Lopez LM, Hansell NK, Medland SE, Ferrucci L, Schlessinger D, Montgomery GW. Wright MJ. Aulchenko YS. Janssens ACJW, Oostra BA, Metspalu A, Abecasis GR, Deary IJ, Räikkönen K, Bierut LJ, Martin NG, Wray NR, Van Duijn CM, Smoller JW, Penninx BWJH, Boomsma DI. The genetic association between personality and major depression or bipolar disorder. A polygenic score analysis using genome-wide association data. Transational Psychiatry. 2011

Mika A, Bergstrom F, Reynolds S, Willis C, Pickering D, Pike R, Blom AM, Kemp D, Fischer K. Novel scabies mite serpins inhibit the three pathways of the human complement system. *Molecular Immunology.* 2011

Mika A, Goh P, Holt DC, Kemp DJ, Fischer K. Scabies mite peritrophins are potential targets of human host innate immunity. *PLoS Neglected Tropical Diseases*. 2011

Mika A, Reynolds S, Pickering DA, McMillan DJ, Sriprakash KS, Kemp DJ, Fischer K. Complement inhibitors from scabies mites promote streptococcal growth – a novel mechanism in infected epidermis? *PLoS Neglected Tropical Diseases*. 2012

Mika A, Reynolds SL, Mohlin FC, Willis C, Swe PM, Pickering DA, Halilovic V, Wijeyewickrema LC, Pike RN, Blom AM, Kemp DJ, Fischer K. Novel scabies mite serpins inhibit all three pathways of the human complement system. *PLoS ONE.* 2012

Miller GF, Zhu G, Wright MJ, Hansell NK, Martin NG. The heritability and genetic correlates of mobile phone use: A twin study of consumer behavior. *Twin Research and Human Genetics.* 2012

Milne RL, Goode EL, Garca-Closas M, Couch FJ, Severi G, Hein R, Fredericksen Z, Malats N. Zamora MP. Perez JIA. Benitez J. Dork T, Schurmann P, Karstens JH, Hillemanns P, Cox A, Brock IW, Elliot G, Cross SS, Seal S, Turnbull C, Renwick A, Rahman N, Shen CY, Yu JC, Huang CS, Hou MF, Nordestgaard BG, Bojesen SE, Lanng C, Alnaes GG, Kristensen V, Borrensen-Dale AL, Hopper JL, Dite GS, Apicella C, Southey MC, Lambrechts D, Yesilyurt BT, Floris G, Leunen K, Sangrajrang S, Gaborieau V, Brennan P, Mckay J, Chang-Claude J. Wang-Gohrke S. Radice P. Peterlongo P, Manoukian S, Barile M, Giles GG, Baglietto L, John EM, Miron A, Chanock SJ, Lissowska J, Sherman ME, Figueroa JD, Bogdanova NV, Antonenkova NN, Zalutsky IV, Rogov YI, Fasching PA, Bayer CM, Ekici AB, Beckmann MW, Brenner H, Muller H, Arndt V, Stegmaier C, Andrulis IL, Knight JA, Glendon G, Mulligan AM, Mannermaa A, Kataja V, Kosma VM, Hartikainen JM, Meindl A, Heil J, Bartram CR, Schmutzler

RK, Thomas GD, Hoover RN, Fletcher O, Gibson L. Confirmation of 5p12 as a susceptibility locus for progesterone-receptor-positive, lower grade breast cancer. *Cancer Epidemiology, Biomarkers and Prevention.* 2011

Milne RL, Lorenzo-Bermejo J, Burwinkel B, Malats N, Arias JI, Zamora MP, Benitez J, Humphreys MK, Garcia-Closas M, Chanock SJ, Lissowska J, Sherman ME, Mannermaa A, Kataja V, Kosma VM, Nevanlinna H, Heikkinen T, Aittomaki K, Blomqvist C, Anton-Culver H, Ziogas A, Devilee P, Van Asperen CJ, Tollenaar RAEM, Seynaeve C, Hall P, Czene K, Liu JJ, Irwanto AK, Kang D, Yoo KY, Noh DY, Couch FJ, Olson JE, Wang XS, Fredericksen Z, Nordestgaard BG, Bojesen SE, Flyger H, Margolin S, Lindblom A, Fasching PA, Schulz-Wendtland R, Ekici AB, Beckmann MW, Wang-Gohrke S, Shen CY, Yu JC, Hsu HM, Wu PE, Giles GG, Severi G, Baglietto L, English DR, Cox A, Brock I, Elliott G, Reed MWR, Beesley J, Chen XQ, Fletcher O, Gibson L, Silva ID, Peto J, Frank B, Heil J, Meindl A, Chang-Claude J, Hein R, Vrieling A, Flesch-Janys D, Southey MC, Smith L, Apicella C, Hopper JL, Dunning AM, Pooley KA, Pharoah PDP, Hamann U, Pesch B, Ko YD, Easton DF, Chenevix-Trench G. 7g21-rs6964587 and breast cancer risk: an extended case-control study by the Breast Cancer Association Consortium. Journal of Medical Genetics. 2011

Mitchell PB, Frankland A, Hadzi-Pavlovic D, Roberts G, Corry J, Wright A, Loo CK, Breakspear M. Comparison of depressive episodes in bipolar disorder and in major depressive disorder within bipolar disorder pedigrees. *British Journal of Psychiatry*. 2011

Molehin A, Gobert G, McManus DP. Serine protease inhibitors of parasitic helminths. *Parasitology.* 2012

Moore SP, Green AC, Garvey G, Coory MD, Valery PC. A study of head and neck cancer treatment and survival among indigenous and non-indigenous people in Queensland, Australia, 1998 to 2004. *BMC Cancer.* 2011

Morris C, Tomimatsu N, Richard DJ, Cluet D, Burma S, Khanna KK, Jalinot P. INT6/EIF3E interacts with ATM and is required for proper execution of the DNA damage response in human cells. *Cancer Research.* 2012

Mosing MA, Medland SE, Mcrae A, Landers JG, Wright MJ, Martin NG. Genetic influences on life span and its relationship to personality: A 16year follow-up study of a sample of aging twins. *Psychosomatic Medicine*. 2012

Mounsey KE, Willis C, Burgess ST, Holt DC, McCarthy J, Fischer K. Quantitative PCRbased genome size estimation of the astigmatid mites *Sarcoptes scabiei*, *Psoroptes ovis* and *Dermatophagoides pteronyssinus*. *Parasites and Vectors*. 2012

Mourao MM, Grunau C, LoVerde PT, Jones MK, Oliveira G. Recent advances in *Schistosoma* genomics. *Parasite Immunology*. 2012

Mudge AM, Denaro CP, O'Rourke P. Improving hospital outcomes in patients admitted from residential aged care: results from a controlled trial. *Age and Ageing.* 2012 Mudge AM, Denaro CP, Scott AC, Atherton JJ, Meyers DE, Marwick TH, Adsett JA, Mullins RW, Suna JM, Scuffham PA, O'Rourke PK. Exercise training in recently hospitalized heart failure patients enrolled in a disease management programme: design of the EJECTION-HF randomized controlled trial. *European Journal of Heart Failure*. 2011

Mullally A, Poveromo L, Schneider RK, Al-Sharhour F, Lane SW, Ebert BL. Distinct roles for the long-term hematopoietic stem cell and erythroid compartments in a murine model of Jak2V617F mediated polycythemia vera. *Blood.* 2012

Muthusamy V, Hodges LD, Theodore A, Macrides TA, Boyle GM, Piva TJ. Effect of novel marine neutraceuticals on IL1a-mediated TNFa Release from UVB-irradiated human melanocytederived cells. *Oxidative Medicine and Cellular Longevity.* 2011

Mutsando H, Fahim M, Gill DS, Hawley CM, Johnson DW, Gandhi M, Marlton PV, Mar Fan HG, Mollee PN. High dose methotrexate and extended hours high-flux hemodialysis for the treatment of primary central nervous system lymphoma in a patient with end stage renal disease. *American Journal of Blood Research*. 2012

Nagle CM, Ibiebele TI, The Australian Ovarian Cancer Study Group. Glycemic index, glycemic load and endometrial cancer risk: results from the Australian National Endometrial Cancer study and an updated systematic review and meta-analysis. *European Journal of Nutrition.* 2012

Nancarrow DJ, Clouston AD, Smithers BM, Gotley DC, Drew PA, Watson DI, Tyagi S, Hayward NK, Whiteman DC. Whole genome expression array profiling highlights differences in mucosal defense genes in Barrett's esophagus and esophageal adenocarcinoma. *PLoS ONE*. 2011

Nanguo DMM, Thivierge K, Fischer K, Mathews R, Gardiner DL, Dalton JP. Malaria M17 leucine aminopeptidase. The Handbook of Proteolytic Enzymes. 2011

Neill AS, Nagle CM, Spurdle AB, Webb PM. Use of talcum powder and endometrial cancer risk. *Cancer Causes and Control.* 2012

Nelson EC, Lynskey M, Heath AC, Wray N, Agrawal A, Shand F, Henders A, Wallace L, Todorov A, Schrage A, Madden P, Degenhardt L, Martin NG, Montgomery GW. Association of OPRD1 polymorphisms with heroin dependence in a large case-control series. *Addiction Biology.* 2012

Newton MJ, Hayes SC, Janda M, Webb PM, Obermair A, Eakin EG, Wyld D, Gordon LG, Beesley VL. Safety, feasibility and effects of an individualised walking intervention for women undergoing chemotherapy for ovarian cancer: a pilot study. *BMC Cancer.* 2011

Nguyen LAP, Clements ACA, Jeffery JAL, Nguyen YT, Vu SN, Vaughan G, Shinkfield R, Kutcher SC, Gatton ML, Kay BH, Ryan PA. Abundance and prevalence of dengue vector immatures and relationships with household water storage in rural areas in southern Viet Nam. International Health. 2012

NguyenVan Do, Keane C, Han E, Jones K, Nourse JP, Vari F, Ross N, Crooks P, Ramuz O, Green M, Griffith L, Trappe R, Grigg A, Mollee P, Gandhi M. Epstein-Barr virus-positive diffuse large B-cell lymphoma of the elderly expresses EBNA3A with conserved CD8+ T-cell epitopes. American Journal of Blood Research. 2011

Ning B, Liu G, Liu YY, Su XF, Anderson GJ, Zheng X, Chang Y, Guo MZ, Liu YF, Zhao YL, Nie GJ. 5-Aza-2 '-deoxycytidine activates iron uptake and heme biosynthesis by increasing c-Myc nuclear localization and binding to the E-boxes of transferrin receptor 1 (TfR1) and ferrochelatase (Fech) genes. *Journal of Biological Chemistry.* 2011

Noble C, Peake J, Lewindon PJ. Increase in *de novo* allergies after paediatric liver transplantation: the Brisbane experience. *Pediatric Transplantation*. 2011

Nourse JP, Lea R, Crooks P, Wright G, Tran H, Catalano J, Brighton T, Grigg A, Marlton P, Gandhi MK. The KIR2DS2/DL2 genotype is associated with adult persistent/chronic and relapsed immune thrombocytopenia independently of FCGR3a-158 polymorphisms. *Blood Coagulation and Fibrinolysis*. 2012

Nyholt DR. Using genomic data to make indirect (and unauthorized) estimates of disease risk. *Public Health Genomics.* 2012

O'Brien J, Powell LW. Non-alcoholic fatty liver disease: is iron relevant? *Hepatology International.* 2011

O'Callaghan ME, MacLennan AH, Gibson CS, McMichael GL, Haan EA, Broadbent JL, Goldwater PN, Painter JN, Montgomery GW, Dekker GA. Fetal and maternal candidate single nucleotide polymorphism associations with cerebral palsy: A case-control study. *Pediatrics.* 2012

Oey H, Whitelaw E. Commentary: Gartner's 'third component': still an open question. *International Journal of Epidemiology.* 2012

O'Grady KA, Revell A, Maguire GP, Millonig R, Newman MA, Reid DW, Hill DC, Chang AB. Lung health care for Aboriginal and Torres Strait Islander Queenslanders: breathing easy is not so easy. *Australian Health Review.* 2011

Olive C. Pattern recognition receptors: sentinels in innate immunity and targets of new vaccine adjuvants. *Expert Review of Vaccines*. 2012

Olsen CM, Pandeya N, Green AC, Webb PM, Whiteman DC. Population attributable fractions of adenocarcinoma of the esophagus and gastroesophageal junction. *American Journal of Epidemiology.* 2011

Olsen CM, Zens MS, Green AC, Stukel TA, Holman CDJ, Mack T, Elwood JM, Holly EA, Sacerdote C, Gallagher R, Swerdlow AJ, Armstrong BK, Rosso S, Kirkpatrick C, Zanetti R, Bishop JN, Bataille V, Chang YM, Mackie R, Osterlind A, Berwick M, Karagas MR, Whiteman DC. Biologic markers of sun exposure and melanoma risk in women: pooled case-control analysis. International Journal of Cancer. 2011

O'Mara TA, Ferguson K, Fahey P, Marquart L, Yang HP, Lissowska J, Chanock S, Garcia-Closas M, Thompson DJ, Healey CS, Dunning AM, Easton DF, Webb PM, Spurdle AB. CHEK2, MGMT, SULT1E1 and SULT1A1 polymorphisms and endometrial cancer risk. *Twin Research and Human Genetics*. 2011

O'Mara TA, Nagle CM, Batra J, Kedda MA, Clements JA, Spurdle AB. Kallikrein-related peptidase 3 (KLK3/PSA) single nucleotide polymorphisms and ovarian cancer survival. *Twin Research and Human Genetics*. 2011 O'Sullivan BJ, Pai S, Street S, An XY, MacDonald KPA, Wong M, Strutton G, Gerondakis S, Steptoe RJ, de St Groth BF, Hill GR, Thomas R. Immunotherapy with costimulatory dendritic cells to control autoimmune inflammation. *Journal of Immunology.* 2011

Palendira U, Low C, Chan A, Hislop AD, Ho E, Phan TG, Deenick E, Cook MC, Riminton DS, Choo S, Loh R, Alvaro F, Booth C, Gaspar HB, Moretta A, Khanna R, Rickinson AB, Tangye SG. Molecular pathogenesis of EBV susceptibility in XLP as revealed by analysis of female carriers with heterozygous expression of SAP. *PLoS Biology.* 2011

Pandeya N, Whiteman DC. Prevalence and determinants of *Helicobacter pylori* sero-positivity in the Australian adult community. *Journal of Gastroenterology and Hepatology*. 2011

Panizza B, Solares CA, Redmond M, Parmar P, O'Rourke P. Surgical resection for clinical perineural invasion from cutaneous squamous cell carcinoma of the head and neck. *Head and Neck.* 2011

Parry S, Win A, Parry B, Macrae F, Gurrin L, Church J, Baron J, Giles G, Leggett B, Winship I, Lipton L, Young GP, Young J, Lodge C, Southey M, Newcomb P, Le Marchand L, Haile R, Lindor N, Gallinger S, Hopper J, Jenkins M. Metachronous colorectal cancer risk for mismatch repair gene mutation carriers: the advantage of more extensive colon surgery. *Gut.* 2011

Parsons MT, Buchanan DD, Thompson B, Young JP, Spurdle AB. Correlation of tumour BRAF mutations and MLH1 methylation with germline mismatch repair (MMR) gene mutation status: a literature review assessing utility of tumour features for MMR variant classification. *Journal of Medical Genetics.* 2012

Pasay C, Rothwell J, Mounsey K, Kelly A, Hutchinson B, Miezler A, McCarthy J. An exploratory study to assess the activity of the acarine growth inhibitor, fluazuron, against *Sarcoptes scabei* infestation in pigs. *Parasites and Vectors.* 2012

Paternoster L, Standl M, Baurecht H, Ramasamy A, Bnnelykke K, Duijts L, Jarvelin M, Ferreira M, Wichmann HE, Strachan D, Thyssen J, Nohr E, Jarvis D, Feenstra B, Sleiman P, Glass D, Palmer L, Probst-Hensch N, Jacobsson B, Curtin J, Boomsma D, Koppelmann G, Saaf A, Bisgaard H, Heinrich J, Evans D, Weidinger S. Meta-analysis of genome-wide association studies on atopic dermatitis identifies three novel risk loci. *Experimental Dermatology.* 2012

Paternoster L, Standl M, Chen CM, Ramasamy A, Bønnelykke K, Duijts L, Ferreira MA, Alves AC, Thyssen JP, Albrecht E, Baurecht H, Feenstra B, Sleiman PM, Hysi P, Warrington NM, Curjuric I, Myhre R, Curtin JA, Groen-Blokhuis MM, Kerkhof M, Sääf A, Franke A, Ellinghaus D, Fölster-Holst R, Dermitzakis E, Montgomery SB, Prokisch H, Heim K, Hartikainen AL, Pouta A, Pekkanen J, Blakemore AI, Buxton JL, Kaakinen M, Duffy DL, Madden PA, Heath AC, Montgomery GW, Thompson PJ, Matheson MC, Le Souëf P; Australian Asthma Genetics Consortium (AAGC), St Pourcain B, Smith GD, Henderson J, Kemp JP, Timpson NJ, Deloukas P, Ring SM, Wichmann HE, Müller-Nurasyid M, Novak N, Klopp N, Rodríguez E, McArdle W, Linneberg A, Menné T, Nohr EA, Hofman A, Uitterlinden AG, van Duijn CM, Rivadeneira F, de Jongste JC, van der Valk RJ, Wjst M, Jogi R,

Geller F, Boyd HA, Murray JC, Kim C, Mentch F, March M, Mangino M, Spector TD, Bataille V, Pennell CE, Holt PG, Sly P, Tiesler CM, Thiering E. Illig T. Imboden M. Nystad W. Simpson A. Hottenga JJ, Postma D, Koppelman GH, Smit HA, Söderhäll C, Chawes B, Kreiner-Møller E, Bisgaard H, Melén E, Boomsma DI, Custovic A, Jacobsson B, Probst-Hensch NM, Palmer LJ, Glass D, Hakonarson H, Melbye M, Jarvis DL, Jaddoe VW, Gieger C; Genetics of Overweight Young Adults (GOYA) Consortium, Strachan DP, Martin NG, Jarvelin MR, Heinrich J, Evans DM, Weidinger S; EArly Genetics & Lifecourse Epidemiology (EAGLE) Consortium. Metaanalysis of genome-wide association studies identifies three new risk loci for atopic dermatitis. Nature Genetics. 2012

Pearce CL, Templeman C, Rossing MA, Lee A, Near AM, Webb PM, Nagle CM, Doherty JA, Cushing-Haugen KL, Wicklund KG, Chang-Claude J, Hein R, Lurie G, Wilkens LR, Carney ME, Goodman MT, Moysich K, Kjaer SK, Hogdall E. Jensen A. Goode EL. Fridlev BL. Larson MC, Schildkraut JM, Palmieri RT, Cramer DW, Terry KL, Vitonis AF, Titus LJ, Ziogas A, Brewster W, Anton-Culver H, Gentry-Maharaj A, Ramus SJ, Anderson AR, Brueggmann D, Fasching PA, Gayther SA, Huntsman DG, Menon U, Ness RB, Pike MC, Risch H, Wu AH, Berchuck A. Association between endometriosis and risk of histological subtypes of ovarian cancer: a pooled analysis of case-control studies. The Lancet Oncology. 2012

Peatey CL, Leroy D, Gardiner DL, Trenholme KR. Anti-malarial drugs: how effective are they against *Plasmodium falciparum* gametocytes? *Malaria Journal.* 2012

Peatey CL, Spicer TP, Hodder PS, Trenholme KR, Gardiner DL. A high-throughput assay for the identification of drugs against late-stage *Plasmodium falciparum* gametocytes. *Molecular and Biochemical Parasitology.* 2011

Pender MP, Csurhes PA, Pfluger CMM, Burrows SR. CD8 T cell deficiency impairs control of Epstein-Barr virus and worsens with age in multiple sclerosis. *Journal of Neurology, Neurosurgery and Psychiatry.* 2012

Pender MP, Csurhes PA, Pfluger CMM, Burrows SR. Decreased CD8(+) T cell response to Epstein-Barr virus infected B cells in multiple sclerosis is not due to decreased HLA class I expression on B cells or monocytes. *BMC Neurology.* 2011

Peng JB, Han HX, Gobert GN, Hong Y, Jiang WB, Wang XZ, Fu ZQ, Liu JM, Shi YJ, Lin JJ. Differential gene expression in *Schistosoma japonicum* schistosomula from Wistar rats and BALB/c mice. *Parasites and Vectors.* 2011

Pereira TN, Lewindon PJ, Greer RM, Hoskins AC, Williamson RM, Shepherd RW, Ramm GA. Transcriptional basis for hepatic fibrosis in cystic fibrosis-associated liver disease. *Journal of Gastroenterology and Hepatology.* 2011

Pergadia ML, Glowinski AL, Wray NR, Agrawal A, Saccone SF, Loukola A, Broms U, Korhonen T, Penninx BWJH, Grant JD, Nelson EC, Henders AK, Schrage AJ, Chou YL, Keskitalo-Vuokko K, Zhu Q, Gordon SD, Vink JM, de Geus EJC, Macgregor S, Liu JZ, Willemsen G, Medland SE, Boomsma DI, Montgomery GW, Rice JP, Goate AM, Heath AC, Kaprio J, Martin NG, Madden PAF. A 3p26-3p25 genetic linkage finding for DSM-IV major depression in heavy smoking families. American Journal of Psychiatry. 2011

Perry CR, Burke ML, Stenzel DJ, McManus DP, Ramm GA, Gobert GN. Differential expression of chemokine and matrix re-modelling genes is associated with contrasting schistosome-induced hepatopathology in murine models. *Journal of Gastroenterology and Hepatology*. 2011

Pharoah P, Antoniou A, Berchuck A, Chenevix-Trench G, Gayther S, Goode E, Milne R, Sellers T, Tyrer J. Association between KRAS rs61764370 and triple-negative breast cancer - a false positive? *The Lancet Oncology.* 2011

Poreba M, McGowan S, Skinner-Adams TS, Trenholme KR, Gardiner DL, Whisstock JC, To J, Salvesen GS, Dalton JP, Drag M. Fingerprinting the substrate specificity of M1 and M17 aminopeptidases of human malaria, *Plasmodium falciparum*. *PLoS ONE*. 2012

Porter KA, Cole SR, Eron JJ Jr, Zheng Y, Hughes MD, Lockman S, Poole C, Skinner-Adams TS, Hosseinipour M, Shaffer D, D'Amico R, Sawe FK, Siika A, Stringer E, Currier JS, Chipato T, Salata R, McCarthy JS, Meshnick SR. HIV-1 protease inhibitors and clinical malaria: a secondary analysis of the AIDS Clinical Trials Group A5208 study. Antimicrobial Agents and Chemotherapy. 2012

Powell JE, Henders AK, McRae AF, Caracella A, Smith S, Wright MJ, Whitfield JB, Dermitzakis MT, Martin NG, Visscher PM, Montgomery GW. The Brisbane Systems Genetics Study: Genetical genomics meets complex trait genetics. *PLoS ONE*. 2012

Powell JE, Henders AK, Mcrae AF, Wright MJ, Martin NG, Dermitzakis ET, Montgomery GW, Visscher PM. Genetic control of gene expression in whole blood and lymphoblastoid cell lines is largely independent. *Genome Research*. 2012

Prichard RK, Basáñez MG, Boatin BA, McCarthy JS, García HH, Yang GJ, Sripa B, Lustigman S. A research agenda for helminth diseases of humans: intervention for control and elimination. *PLoS Negected Tropical Diseases*. 2012

Proby CM, Harwood CA, Neale RE, Green AC, Euvrard S, Naldi L, Tessari G, Feltkamp MC, de Koning MN, Quint WG, Waterboer T, Pawlita M, Weissenborn S, Wieland U, Pfister H, Stockfleth E, Nindl I, Abeni D, Schegget JT, Bouwes Bavinck JN, EPIHPVUVCA group. A case-control study of betapapillomavirus infection and cutaneous squamous cell carcinoma in organ transplant recipients. *American Journal of Transplantation*. 2011

Protani M, Page A, Taylor R, Glazebrook R, Lahmann PH, Branch E, Muller J. Breast cancer risk factors in Queensland women attending population-based mammography screening. *Maturitas.* 2012

Protani MM, Nagle CM, Webb PM. Obesity and ovarian cancer survival: A systematic review and meta-analysis. *Cancer Prevention Research*. 2012

Quan J, Johnson NW, Zhou G, Parsons PG, Boyle GM, Gao J. Potential molecular targets for inhibiting bone invasion by oral squamous cell carcinoma: a review of mechanisms. *Cancer and Metastasis Reviews.* 2012

Quelhas D, Puyol L, Quinto L, Nhampossa T, Serra-Casas E, Macete E, Aide P, Sanz S, Aponte JJ, Doolan DL, Alonso PL, Menendez C, Dobano C. Intermittent preventive treatment with sulfadoxine-pyrimethamine does not modify plasma cytokines and chemokines or intracellular cytokine responses to *Plasmodium falciparum* in Mozambican Children. *BMC Immunology.* 2012

Radford-Smith GL, Andrews J, Bampton P, Mahy G, Croft A, Hartnell F, Walker N, Walker N, Prosser R, Grafton R, Leach P, Cooke S, Simms L, Gearry R, Bleier J, Lawrance I. Colectomy for ulcerative colitis across Australia and New Zealand: indications, risk factors and rates - an ANZ IBD consortium study. *Journal of Gastroenterology and Hepatology*. 2011

Ramm GA. Anti-chemokine therapy for the treatment of hepatic fibrosis: An attractive approach. *Hepatology.* 2011

Ramus SJ, Antoniou AC, Kuchenbaecker KB, Soucy P, Beesley J, Chen X, McGuffog L, Sinilnikova OM, Healey S, Barrowdale D, Lee A, Thomassen M, Gerdes AM, Kruse TA, Jensen UB, Skytte AB, Caligo MA, Liljegren A, Lindblom A, Olsson H, Kristoffersson U, Stenmark-Askmalm M, Melin B; SWE-BRCA, Domchek SM, Nathanson KL, Rebbeck TR, Jakubowska A, Lubinski J, Jaworska K, Durda K, Złowocka E, Gronwald J, Huzarski T, Byrski T, Cybulski C, Toloczko-Grabarek A, Osorio A, Benitez J, Duran M, Tejada MI, Hamann U, Rookus M, van Leeuwen FE, Aalfs CM, Meijers-Heijboer HE, van Asperen CJ, van Roozendaal KE, Hoogerbrugge N, Collée JM, Kriege M, van der Luijt RB; HEBON; EMBRACE, Peock S, Frost D, Ellis SD, Platte R, Fineberg E, Evans DG, Lalloo F, Jacobs C, Eeles R, Adlard J, Davidson R, Eccles D, Cole T, Cook J, Paterson J, Douglas F, Brewer C, Hodgson S, Morrison PJ, Walker L, Porteous ME, Kennedy MJ, Pathak H, Godwin AK, Stoppa-Lyonnet D, Caux-Moncoutier V, de Pauw A. Gauthier-Villars M. Mazover S. Léoné M, Calender A, Lasset C, Bonadona V, Hardouin A, Berthet P, Bignon YJ, Uhrhammer N, Faivre L, Loustalot C; GEMO, Buys S, Daly M, Miron A, Terry MB, Chung WK, John EM, Southey M, Goldgar D, Singer CF, Tea MK, Pfeiler G, Fink-Retter A, Hansen Tv, Ejlertsen B, Johannsson OT, Offit K, Kirchhoff T, Gaudet MM, Vijai J, Robson M, Piedmonte M, Phillips KA. Van Le L. Hoffman JS. Ewart Toland A. Montagna M, Tognazzo S, Imyanitov E, Issacs C, Janavicius R, Lazaro C, Blanco I, Tornero E, Navarro M, Moysich KB, Karlan BY, Gross J, Olah E, Vaszko T, Teo SH, Ganz PA, Beattie MS, Dorfling CM, van Rensburg EJ, Diez O, Kwong A, Schmutzler RK, Wappenschmidt B, Engel C, Meindl A, Ditsch N, Arnold N, Heidemann S, Niederacher D, Preisler-Adams S, Gadzicki D, Varon-Mateeva R, Deissler H, Gehrig A, Sutter C. Kast K. Fiebig B. Schäfer D. Caldes T. de la Hoya M, Nevanlinna H, Aittomäki K, Plante M, Spurdle AB; kConFab, Neuhausen SL, Ding YC, Wang X, Lindor N, Fredericksen Z, Pankratz VS, Peterlongo P, Manoukian S, Peissel B, Zaffaroni D, Bonanni B, Bernard L, Dolcetti R, Papi L, Ottini L, Radice P, Greene MH, Mai PL, Andrulis IL, Glendon G, Ozcelik H; OCGN, Pharoah PD, Gayther SA, Simard J, Easton DF, Couch FJ, Chenevix-Trench G; Consortium of Investigators of Modifiers of BRCA1/2 (CIMBA). Ovarian cancer susceptibility alleles and risk of ovarian cancer in BRCA1 and BRCA2 mutation carriers. Human Mutation. 2012

Ranaweera M, Samaratunga H, Duffy D, Klopfer K, Brunelli M, Martignoni G, Delahunt B. Tertiary Gleason pattern 5 on needle biopsy predicts greater tumour volume on radical prostatectomy. *Pathology.* 2011

Ranganathan PN, Lu Y, Fuqua BK, Collins JF. Discovery of a cytosolic/soluble ferroxidase in rodent enterocytes. *Proceedings of the National Academy of Sciences.* 2012

Ranganathan PN, Lu Y, Fuqua BK, Collins JF. Immunoreactive hephaestin and ferroxidase activity are present in the cytosolic fraction of rat enterocytes. *Biometals*. 2012

Rao FW, Chiron S, Wei ZY, Fung MM, Chen YQ, Wen G, Khandrika S, Ziegler MG, Benyamin B, Montgomery G, Whitfield JB, Martin NG, Waalen J, Hamiltoni BA, Mahata SK, O'Connor DT. Genetic variation within a metabolic motif in the chromogranin A promoter: Pleiotropic influence on cardiometabolic risk traits in twins. *American Journal of Hypertension*. 2012

Reid DW, Blizzard CL, Shugg DM, Flowers C, Cash C, Greville HM. Changes in cystic fibrosis mortality in Australia, 1979-2005. *Medical Journal* of Australia. 2011

Rey-Ladino J, Ross AG, Cripps AW, McManus DP, Quinn R. Natural products and the search for novel vaccine adjuvants. *Vaccine*. 2011

Reynolds S, Fischer K. The role of proteolytically inactive serine proteases from *Sarcoptes scabiei* in complement evasion. *Proteinases as Drug Targets.* 2012

Richards AL, Jones L, Moskvina V, Kirov G, Gejman PV, Levinson DF, Sanders AR, Purcell S, Visscher PM, Craddock N, Owen MJ, Holmans P, O'Donovan MC. Schizophrenia susceptibility alleles are enriched for alleles that affect gene expression in adult human brain. *Molecular Psychiatry*. 2012

Rivas MA, Beaudoin M, Gardet A, Stevens C, Sharma Y, Zhang CK, Boucher G, Ripke S, Ellinghaus D, Burtt N, Fennell T, Kirby A, Latiano A, Goyette P, Green T, Halfvarson J, Haritunians T, Korn JM, Kuruvilla F, Lagacé C, Neale B, Lo KS, Schumm P, Törkvist L, National Institute of Diabetes, Digestive Kidney **Diseases Inflammatory Bowel Disease Genetics** Consortium, United Kingdom Inflammatory Bowel Disease Genetics Consortium, International Inflammatory Bowel Disease Genetics Consortium, Radford-Smith G, Dubinsky MC, Brant SR, Silverberg MS, Duerr RH, Altshuler D, Gabriel S, Lettre G, Franke A, D'Amato M, McGovern DP, Cho JH, Rioux JD, Xavier RJ, Daly MJ. Deep resequencing of GWAS loci identifies independent rare variants associated with inflammatory bowel disease. Nature Genetics. 2011

Robb RJ, Hill GR. The interferon-dependent orchestration of innate and adaptive immunity after transplantation. *Blood.* 2012

Robb RJ, Kreijveld E, Kuns RD, Wilson YA, Olver SD, Don ALJ, Raffelt NC, De Weerd NA, Lineburg KE, Varelias A, Markey KA, Koyama M, Clouston AD, Hertzog PJ, MacDonald KPA, Hill GR. Type I-IFNs control GVHD and GVL responses after transplantation. *Blood.* 2011

Robb RJ, Lineburg KE, Kuns RD, Wilson YA, Raffelt NC, Olver SD, Varelias A, Alexander KA, Teal BE, Sparwasser T, Hammerling GJ, Markey KA, Koyama M, Clouston AD, Engwerda CR, Hill GR, Macdonald KP. Identification and expansion of highly suppressive CD8+FoxP3+ regulatory T cells after experimental allogeneic bone marrow transplantation. *Blood.* 2012

Roberts AR, Blewitt ME, Youngson NA, Whitelaw E, Chong S. Reduced dosage of the modifiers of epigenetic reprogramming Dnmt1, Dnmt3L, SmcHD1 and Foxo3a has no detectable effect on mouse telomere length *in vivo*. *Chromosoma*. 2011

Roberts JA, Robinson PA. Corticothalamic dynamics: Structure of parameter space, spectra, instabilities, and reduced model. *Physical Review E.* 2012

Roque JB, O'Leary CA, Duffy DL, Kyaw-Tanner M, Gharahkhani P, Vogelnest L, Mason K, Shipstone M, Latter M. Atopic dermatitis in West Highland white terriers is associated with a 1.3-Mb region on CFA 17. *Immunogenetics*. 2012

Roque JB, O'Leary CA, Duffy DL, Kyaw-Tanner M, Latter M, Mason K, Vogelnest L, Shipstone M. IgE responsiveness to *Dermatophagoides farinae* in West Highland white terrier dogs Is associated with region on CFA35. *Journal of Heredity.* 2011

Ross AG, McManus DP, Farrar J, Hunstman RJ, Gray DJ, Li YS. Neuroschistosomiasis. *Journal of Neurology.* 2012

Rosty C, Buchanan D, Walker N, Walker N, Parry S, Young J. Polyp landscape in serrated polyposis syndrome. *Modern Pathology.* 2012

Rosty C, Buchanan DD, Walsh MD, Pearson SA, Pavluk E, Walters RJ, Clendenning M, Spring KJ, Jenkins MA, Win AK, Hopper JL, Sweet K, Frankel WL, Aronson M, Gallinger S, Goldblatt J, Woodall S, Arnold J, Walker NI, Jass JR, Parry S, Young JP. Phenotype and polyp landscape in serrated polyposis syndrome: A series of 100 patients from genetics clinics. *American Journal of Surgical Pathology.* 2012

Rosty C, Buchanan DD, Walters RJ, Carr NJ, Bothman JW, Young JP, Brown IS. Hyperplastic polyp of the duodenum: a report of 9 cases with immunohistochemical and molecular findings. *Human Pathology.* 2011

Rowlands IJ, Nagle CM, Spurdle AB, Webb PM. Gynecological conditions and the risk of endometrial cancer. *Gynecologic Oncology*. 2011

Rubinov M, Bassett DS. Emerging evidence of connectomic abnormalities in schizophrenia. *Journal of Neuroscience.* 2011

Rubinov M, Sporns O, Thivierge JP, Breakspear M. Neurobiologically realistic determinants of self-organized criticality in networks of spiking neurons. *PLoS Computational Biology.* 2011

Rubinov M, Sporns O. Weight-conserving characterization of complex functional brain networks. *Neuroimage.* 2011

Ruddell RG, Ramm GA. Hepatic pathobiology of iron overload. *Physiology and Pathophysiology of Iron in Humans.* 2012

Sachdev PS, Lee T, Lammel A, Crawford J, Trollor JN, Wright MJ, Brodaty H, Ames D, Martin NG. Cognitive functioning in older twins: The Older Australian Twins Study. *Australasian Journal on Ageing.* 2011

Sampogna F, Bavinck JNB, Pawlita M, Abeni D, Harwood CA, Proby CM, Feltkamp MCW, Euvrard S, Naldi L, Neale RE, Nindl I, Pfister H, Quint WGV, Waterboer T. Factors associated with the seroprevalence of 26 cutaneous and two genital human papillomavirus types in organ transplant patients. *Journal of General Virology.* 2012

Sanfilippo PG, Medland SE, Hewitt AW, Kearns LS, Ruddle JB, Sun C, Hammond CJ, Young TL, Martin NG, Mackey DA. Ophthalmic phenotypes and the representativeness of twin data for the general population. *Investigative Ophthalmology* and Visual Science. 2011

Sartor CE, Grant JD, Lynskey MT, McCutcheon VV, Waldron M, Statham DJ, Bucholz KK, Madden PAF, Heath AC, Martin NG, Nelson EC. Common heritable contributions to low-risk trauma, high-risk trauma, posttraumatic stress disorder, and major depression. *Archives of General Psychiatry.* 2012

Schauenburg AJA, Miles JJ, Gostick E, Cole DK, Ladell K, Wynn K, McLaren J, Pentier J, Wooldridge L, Burrows SR, Rizkallah PJ, Sewell AK, Price DA. The crystal structure of latent and immunodominant Epstein-Barr virus-derived T cell epitope. *Immunology.* 2011

Schmid C, O'Rourke P, Maher C. Vaginal invagination: definition, clinical presentation and surgical management. *International Urogynecology Journal.* 2012

Schroder WA, Major L, Suhrbier A. The role of SerpinB2 in immunity. *Critical Reviews in Immunology.* 2011

Sedegah M, Tamminga C, McGrath S, House B, Ganeshan H, Lejano J, Abot E, Banania GJ, Sayo R, Farooq F, Belmonte M, Manohar N, Richie NO, Wood C, Long CA, Regis D, Williams FT, Shi M, Chuang I, Spring M, Epstein JE, Mendoza-Silveiras J, Limbach K, Patterson NB, Bruder JT, Doolan DL, King CR, Soisson L, Diggs C, Carucci D, Dutta S, Hollingdale MR, Ockenhouse CF, Richie TL. Adenovirus 5-vectored *P. falciparum* vaccine expressing CSP and AMA1. Part A: safety and immunogenicity in seronegative adults. *PLoS ONE*. 2011

Serody JS, Hill GR. The IL-17 differentiation pathway and its role in transplant outcome. Biology of Blood and Marrow Transplantation. 2012

Sikulu M, Dowell KM, Hugo LE, Wirtz RA, Michel K, Peiris KHS, Moore S, Killeen GF, Dowell FE. Evaluating RNAlater (R) as a preservative for using near-infrared spectroscopy to predict *Anopheles gambiae* age and species. *Malaria Journal.* 2011

Simonova G, Rickard CM, Dunster KR, Smyth DJ, McMillan DJ, Fraser JF. Cyanoacrylate tissue adhesives – a super effective securement technique for intravascular catheters: *in vitro* testing of safety and feasibility. *Anaesthesia and Intensive Care.* 2012

Sitas F, Egger S, Urban MI, Taylor PR, Abnet CC, Boffetta P, O'Connell DL, Whiteman DC, Brennan P, Malekzadeh R, Pawlita M, Dawsey SM, Waterboer T. InterSCOPE Study: Associations between esophageal squamous cell carcinoma and human papillomavirus serological markers. *Journal of the National Cancer Institute*. 2012

Sivaraman KK, Oellig CA, Huynh K, Atkinson SC, Poreba M, Perugini MA, Trenholme KR, Gardiner DL, Salvesen G, Drag M, Dalton JP, Whisstock JC, McGowan S. X-ray crystal structure and specificity of the *Plasmodium falciparum* malaria aminopeptidase PfM18AAP. *Journal of Molecular Biology.* 2012

Skinner-Adams T, Peatey C, Anderson K, Trenholme K, Krige D, Brown B, Stack C, Nsangou D, Mathews R, Thivierge K, Dalton J, , Gardiner D. The aminopeptidase inhibitor CHR-2863 is an orally bioavailable inhibitor of murine malaria. *Antimicrobial Agents and Chemotherapy*. 2012 Skinner-Adams TS, Butterworth AS, Porter KA, D'Amico R, Sawe S, Shaffer D, Siika A, Hosseinipour MC, Stringer E, Currier JS, Chipato T, Salata R, Lockman S, Eron JJ, Meshnick SR, McCarthy JS. The frequency of malaria is similar among women receiving either lopinavir/ritonavir or nevirapine-based antiretroviral treatment. *PLoS ONE*. 2012

Sklar P. Ripke S. Scott LJ. Andreassen OA, Cichon S, Craddock N, Edenberg HJ, Nurnberger JI Jr, Rietschel M, Blackwood D, Corvin A, Flickinger M, Guan W, Mattingsdal M, McQuillin A, Kwan P, Wienker TF, Daly M, Dudbridge F. Holmans PA. Lin D. Burmeister M, Greenwood TA, Hamshere ML, Muglia P, Smith EN, Zandi PP, Nievergelt CM, McKinney R, Shilling PD, Schork NJ, Bloss CS, Foroud T, Koller DL, Gershon ES, Liu C, Badner JA, Scheftner WA, Lawson WB, Nwulia EA, Hipolito M, Coryell W, Rice J, Byerley W, McMahon FJ, Schulze TG, Berrettini W, Lohoff FW, Potash JB, Mahon PB, McInnis MG, Zöllner S, Zhang P, Craig DW, Szelinger S, Barrett TB, Breuer R, Meier S, Strohmaier J, Witt SH, Tozzi F, Farmer A, McGuffin P, Strauss J, Xu W, Kennedy JL, Vincent JB, Matthews K, Day R, Ferreira MA, O'Dushlaine C, Perlis R, Raychaudhuri S, Ruderfer D. Hvoun PL. Smoller JW. Li J. Absher D, Thompson RC, Meng FG, Schatzberg AF, Bunney WE, Barchas JD, Jones EG, Watson SJ, Myers RM, Akil H, Boehnke M, Chambert K, Moran J, Scolnick E, Djurovic S, Melle I, Morken G. Gill M. Morris D. Quinn E. Mühleisen TW. Degenhardt FA, Mattheisen M, Schumacher J, Maier W, Steffens M, Propping P, Nöthen MM, Anjorin A, Bass N, Gurling H, Kandaswamy R, Lawrence J, McGhee K, McIntosh A, McLean AW. Muir WJ. Pickard BS. Breen G. St Clair D. Caesar S, Gordon-Smith K, Jones L, Fraser C, Green EK, Grozeva D, Jones IR, Kirov G, Moskvina V, Nikolov I, O'Donovan MC, Owen MJ, Collier DA, Elkin A, Williamson R, Young AH. Ferrier IN. Stefansson K. Stefansson H. Thornorgeirsson T, Steinberg S, Gustafsson O, Bergen SE, Nimgaonkar V, Hultman C, Landén M, Lichtenstein P, Sullivan P, Schalling M. Osby U. Backlund L. Frisén L. Langstrom N, Jamain S, Leboyer M, Etain B, Bellivier F, Petursson H, Sigur Sson E, Müller-Mysok B, Lucae S, Schwarz M, Schofield PR, Martin N, Montgomery GW, Lathrop M, Oskarsson H, Bauer M. Wright A. Mitchell PB. Hautzinger M. Reif A. Kelsoe JR. Purcell SM: Psychiatric **GWAS** Consortium Bipolar Disorder Working Group. Large-scale genome-wide association analysis of bipolar disorder identifies a new susceptibility locus near ODZ4. Nature Genetics 2011

Slutske WS, Zhu G, Meier MH, Martin NG. Disordered gambling as defined by the DSM-IV and the South Oaks Gambling Screen: Evidence for a common etiologic structure. *Journal of Abnormal Psychology.* 2011

Smith C, Miles JJ, Khanna R. Advances in direct T-cell alloreactivity: function, avidity, biophysics and structure. *American Journal of Transplantation.* 2012

Smith C, Tsang J, Beagley L, Chua D, Lee V, Li V, Moss DJ, Coman W, Chan KH, Nicholls J, Kwong D, Khanna R. Effective treatment of metastatic forms of Epstein-Barr virusassociated nasopharyngeal carcinoma with a novel adenovirus-based adoptive immunotherapy. *Cancer Research.* 2012

Sohal SS, Reid D, Soltani A, Ward C, Weston S, Muller HK, Wood-Baker R, Walters EH.

Evaluation of epithelial mesenchymal transition in patients with chronic obstructive pulmonary disease. *Respiratory Research.* 2011

Solares CA, Lee K, Parmar P, O'Rourke P, Panizza B. Epidemiology of clinical perineural invasion in cutaneous squamous cell carcinoma of the head and neck. *Otolaryngology - Head and Neck Surgery*. 2012

Soltani A, Ewe YP, Lim ZS, Sohal SS, Reid D, Weston S, Wood-Baker R. Mast cells. European Respiratory Journal. 2011

Soltani A, Muller HK, Sohal SS, Reid DW, Weston S, Wood-Baker R, Walters EH. Distinctive characteristics of bronchial reticular basement membrane and vessel remodelling in chronic obstructive pulmonary disease (COPD) and in asthma: they are not the same disease. *Histopathology.* 2012

Soltani A, Muller HK, Sohal SS, Reid DW, Weston S, Wood-Baker R, Walters EH. Reticular basement membrane vessels are increased in COPD bronchial mucosa by both factor VIII and collagen IV immunostaining and are hyperpermeable. *Histopathology.* 2012

Soltani A, Sohal SS, Reid D, Weston S, Wood-Baker R, Walters EH. Vessel-associated transforming growth factor-beta1 (TGF-beta1) Is increased in the bronchial reticular basement membrane in COPD and normal smokers. *PLoS ONE*. 2012

Sorrentino D, Radford-Smith G. Clinical remission after stopping infliximab in Crohn's disease: is all that glitters true gold? *Gastroenterology.* 2012

Spain SL, Carvajal-Carmona LG, Howarth KM, Jones AM, Su Z, Cazier JB, Williams J, Aaltonen LA, Pharoah P, Kerr DJ, Cheadle J, Li L, Casey G, Vodicka P, Sieber O, Lipton L, Gibbs P, Martin NG, Montgomery GW, Young J, Baird PN, Morreau H, van Wezel T, Ruiz-Ponte C, Fernandez-Rozadilla C, Carracedo A, Castells A, Castellvi-Bel S, Dunlop M, Houlston RS, Tomlinson IPM. Refinement of the associations between risk of colorectal cancer and polymorphisms on chromosomes 1q41 and 12q13.13. *Human Molecular Genetics.* 2012

Spurdle AB, Healey S, Devereau A, Hogervorst FBL, Monteiro ANA, Nathanson KL, Radice P, Stoppa-Lyonnet D, Tavtigian S, Wappenschmidt B, Couch FJ, Goldgar DE. ENIGMA - Evidencebased network for the interpretation of germline mutant alleles: An international initiative to evaluate risk and clinical significance associated with sequence variation in BRCA1 and BRCA2 genes. *Human Mutation.* 2012

Sriram KB, Larsen JE, Francis SMS, Wright CM, Clarke BE, Duhig EE, Brown KM, Hayward NK, Yang IA, Bowman RV, Fong KM. Arraycomparative genomic hybridization reveals loss of SOCS6 is associated with poor prognosis in primary lung squamous cell carcinoma. *PLoS ONE*. 2012

Stanley AC, Rivera FD, Haque A, Sheel M, Zhou YH, Amante FH, Bunn PT, Randall LM, Pfeffer K, Scheu S, Hickey MJ, Saunders BM, Ware C, Hill GR, Tamada K, Kaye PM, Engwerda CR. Critical roles for LIGHT and its receptors in generating T cell-mediated immunity during *Leishmania* donovani infection. *PLoS Pathogens.* 2011

Stark MS, Woods SL, Gartside MG, Bonazzi VF, Dutton-Regester K, Aoude LG, Chow D, Sereduk C, Niemi NM, Tang NY, Ellis JJ, Reid J, Zismann V, Tyagi S, Muzny D, Newsham I, Wu YQ, Palmer JM, Pollak T, Youngkin D, Brooks BR, Lanagan C, Schmidt CW, Kobe B, MacKeigan JP, Yin HW, Brown KM, Gibbs R, Trent J, Hayward NK. Frequent somatic mutations in MAP3K5 and MAP3K9 in metastatic melanoma identified by exome sequencing. *Nature Genetics.* 2012

Stein JL, Hibar DP, Madsen SK, Khamis M, McMahon KL, de Zubicaray GI, Hansell NK, Montgomery GW, Martin NG, Wright MJ, Saykin AJ, Jack CR, Weiner MW, Toga AW, Thompson PM. Discovery and replication of dopaminerelated gene effects on caudate volume in young and elderly populations (N=1198) using genomewide search. *Molecular Psychiatry*. 2011

Stein JL, Hibar DP, Madsen SK, Khamis M, McMahon KL, de Zubicaray GI, Hansell NK, Montgomery GW, Martin NG, Wright MJ, Saykin AJ, Jack CR, Jr, Weiner MW, Toga AW, Thompson PM. Genome-wide association reveals dopamine-related genetic effects on caudate volume. *Molecular Psychiatry*. 2011

Stein JL, Medland SE, Vasquez AA, Hibar DP, Senstad RE, Winkler AM, Toro R, Appel K, Bartecek R, Bergmann Ø, Bernard M, Brown AA, Cannon DM, Chakravarty MM, Christoforou A. Domin M. Grimm O. Hollinshead M. Holmes AJ, Homuth G, Hottenga JJ, Langan C, Lopez LM, Hansell NK, Hwang KS, Kim S, Laje G, Lee PH, Liu X, Loth E, Lourdusamy A, Mattingsdal M, Mohnke S, Maniega SM, Nho K, Nugent AC, O'Brien C, Papmeyer M, Pütz B, Ramasamy A, Rasmussen J, Rijpkema M, Risacher SL, Roddey JC, Rose EJ, Ryten M, Shen L, Sprooten E, Strengman E, Teumer A, Trabzuni D, Turner J, van Eijk K, van Erp TG, van Tol MJ, Wittfeld K, Wolf C, Woudstra S, Aleman A, Alhusaini S, Almasy L, Binder EB, Brohawn DG, Cantor RM, Carless MA, Corvin A, Czisch M, Curran JE, Davies G, de Almeida MA, Delanty N, Depondt C, Duggirala R, Dyer TD, Erk S, Fagerness J, Fox PT, Freimer NB, Gill M, Göring HH, Hagler DJ, Hoehn D, Holsboer F, Hoogman M, Hosten N, Jahanshad N, Johnson MP, Kasperaviciute D, Kent JW Jr, Kochunov P, Lancaster JL, Lawrie SM, Liewald DC, Mandl R, Matarin M. Mattheisen M. Meisenzahl E. Melle I, Moses EK, Mühleisen TW, Nauck M, Nöthen MM, Olvera RL, Pandolfo M, Pike GB, Puls R, Reinvang I, Rentería ME, Rietschel M, Roffman JL, Royle NA, Rujescu D, Savitz J, Schnack HG, Schnell K, Seiferth N, Smith C, Steen VM, Valdés Hernández MC, Van den Heuvel M, van der Wee NJ, Van Haren NE, Veltman JA, Völzke H, Walker R, Westlye LT, Whelan CD, Agartz I, Boomsma DI, Cavalleri GL, Dale AM, Djurovic S, Drevets WC, Hagoort P, Hall J, Heinz A, Jack CR Jr, Foroud TM, Le Hellard S, Macciardi F, Montgomery GW, Poline JB, Porteous DJ, Sisodiya SM, Starr JM, Sussmann J, Toga AW, Veltman DJ, Walter H, Weiner MW; Alzheimer's **Disease Neuroimaging Initiative; EPIGEN** Consortium; IMAGEN Consortium; Saguenay Youth Study Group, Bis JC, Ikram MA, Smith AV, Gudnason V, Tzourio C, Vernooij MW, Launer LJ. DeCarli C. Seshadri S: Cohorts for Heart and Aging Research in Genomic Epidemiology Consortium, Andreassen OA, Apostolova LG, Bastin ME, Blangero J, Brunner HG, Buckner RL. Cichon S. Coppola G. de Zubicarav GI. Deary IJ, Donohoe G, de Geus EJ, Espeseth T, Fernández G, Glahn DC, Grabe HJ, Hardy J, Hulshoff Pol HE, Jenkinson M, Kahn RS, McDonald C, McIntosh AM, McMahon FJ, McMahon KL, Mever-Lindenberg A, Morris DW, Müller-Myhsok B, Nichols TE, Ophoff RA, Paus T, Pausova Z, Penninx BW, Potkin SG, Sämann PG, Saykin AJ, Schumann G, Smoller

JW, Wardlaw JM, Weale ME, Martin NG, Franke B, Wright MJ, Thompson PM; Enhancing Neuro Imaging Genetics through Meta-Analysis Consortium. Identification of common variants associated with human hippocampal and intracranial volumes. *Nature Genetics*. 2012

Stevens KN, Fredericksen Z, Vachon CM, Wang XS, Margolin S, Lindblom A, Nevanlinna H, Greco D. Aittomaki K. Blomovist C. Chang-Claude J, Vrieling A, Flesch-Janys D, Sinn HP, Wang-Gohrke S, Nickels S, Brauch H, Ko YD, Fischer HP, Schmutzler RK, Meindl A, Bartram CR, Schott S, Engel C, Godwin AK, Weaver J, Pathak HB, Sharma P, Brenner H, Muller H. Arndt V, Stegmaier C, Miron P, Yannoukakos D, Stavropoulou A, Fountzilas G, Gogas HJ, Swann R, Dwek M, Perkins A, Milne RL, Benitez J, Zamora MP, Perez JIA, Bojesen SE, Nielsen SF, Nordestgaard BG, Flyger H, Guenel P, Truong T, Menegaux F, Cordina-Duverger E, Burwinkel B, Marme F, Schneeweiss A, Sohn C, Sawyer E, Tomlinson I, Kerin MJ, Peto J, Johnson N, Fletcher O. Silva ID. Fasching PA. Beckmann MW. Hartmann A. Ekici AB. Lophatananon A. Muir K, Puttawibul P, Wiangnon S, Schmidt MK, Broeks A, Braaf LM, Rosenberg EH, Hopper JL, Apicella C, Park DJ, Southey MC, Swerdlow AJ, Ashworth A. Orr N. Schoemaker MJ. Anton-Culver H, Ziogas A, Bernstein L. 19p13.1 is a triple-negative-specific breast cancer susceptibility locus. Cancer Research. 2012

Stevens KN, Garcia-Closas M, Fredericksen Z, Kosel M, Pankratz VS, Hopper JL, Dite GS, Apicella C, Southey MC, Schmidt MK, Broeks A, Van 't Veer LJ, Tollenaar RA, Fasching PA, Beckmann MW, Hein A, Ekici AB, Johnson N, Peto J, dos Santos Silva I, Gibson L, Sawyer E, Tomlinson I, Kerin MJ, Chanock S, Lissowska J, Hunter DJ, Hoover RN, Thomas GD, Milne RL, Arias Pérez JI, González-Neira A, Benítez J, Burwinkel B, Meindl A, Schmutzler RK, Bartrar CR, Hamann U, Ko YD, Brüning T, Chang-Claude J, Hein R, Wang-Gohrke S, Dörk T, Schürmann P, Bremer M, Hillemanns P, Bogdanova N, Zalutsky JV, Rogov YI, Antonenkova N, Lindblom A, Margolin S, Mannermaa A, Kataja V, Kosma VM, Hartikainen J, Chenevix-Trench G, Chen X, Peterlongo P, Bonanni B, Bernard L, Manoukian S, Wang X, Cerhan J, Vachon CM, Olson J, Giles GG, Baglietto L, McLean CA, Severi G, John EM, Miron A, Wingvist R, Pylkäs K, Jukkola-Vuorinen A, Grip M, Andrulis I, Knight JA, Glendon G, Mulligan AM, Cox A, Brock IW, Elliott G, Cross SS, Pharoah PP, Dunning AM, Pooley KA, Humphreys MK, Wang J, Kang D, Yoo KY, Noh DY, Sangrajrang S, Gabrieau V, Brennan P, McKay J, Anton-Culver H, Ziogas A, Couch FJ, Easton DF; GENICA Network; kConFab Investigators; Australian Ovarian Cancer Study Group. Evaluation of variation in the phosphoinositide-3-kinase catalytic subunit alpha oncogene and breast cancer risk. British Journal of Cancer. 2011

Stevens KN, Vachon CM, Lee AM, Slager S, Lesnick T, Olswold C, Fasching PA, Miron P, Eccles D, Carpenter JE, Godwin AK, Ambrosone C, Winqvist R, Brauch H, Schmidt MK, Cox A, Cross SS, Sawyer E, Hartmann A, Beckmann MW, Schulz-Wendtland R, Ekici AB, Tapper WJ, Gerty SM, Durcan L, Graham N, Hein R, Nickels S, Flesch-Janys D, Heinz J, Sinn HP, Konstantopoulou I, Fostira F, Pectasides D, Dimopoulos AM, Fountzilas G, Clarke CL, Balleine R, Olson JE, Fredericksen Z, Diasio RB, Pathak H, Ross E, Weaver J, Rudiger T, Forsti A, Dunnebier T, Ademuyiwa F, Kulkarni S, Pylkas K, Jukkola-Vuorinen A, Ko YD, Van Limbergen E, Janssen H, Peto J, Fletcher O, Giles GG, Baglietto L, Verhoef S, Tomlinson I, Kosma VM, Beesley J, Greco D, Blomqvist C, Irwanto A, Liu J, Blows FM, Dawson SJ, Margolin S, Mannermaa A, Martin NG, Montgomery GW, Lambrechts D, Silva ID, Severi G, Hamann U, Pharoah P, Easton DF, Chang-Claude J, Yannoukakos D, Nevanlinna H, Wang XS, Couch FJ. Common breast cancer susceptibility loci are associated with triple-negative breast cancer. *Cancer Research.* 2011

Stolk L, Perry JRB, Chasman DI, He CY, Mangino M, Sulem P, Barbalic M, Broer L, Byrne EM, Ernst F, Esko T, Franceschini N, Gudbjartsson DF, Hottenga JJ, Kraft P, McArdle PF, Porcu E, Shin SY, Smith AV, van Wingerden S, Zhai G, Zhuang WV, Albrecht E, Alizadeh BZ, Aspelund T. Bandinelli S. Lauc LB. Beckmann JS. Boban M. Boerwinkle E. Broekmans FJ. Burri A, Campbell H, Chanock SJ, Chen C, Cornelis MC, Corre T, Coviello AD, d'Adamo P, Davies G, de Faire U, de Geus EJC, Deary IJ. Dedoussis GVZ. Deloukas P. Ebrahim S. Eiriksdottir G, Emilsson V, Eriksson JG, Fauser BCJM, Ferreli L, Ferrucci L, Fischer K, Folsom AR, Garcia ME, Gasparini P, Gieger C, Glazer N, Grobbee DE, Hall P, Haller T, Hankinson SE, Hass M, Hayward C, Heath AC, Hofman A, Ingelsson E, Janssens ACJW, Johnson AD, Karasik D, Kardia SLR, Keyzer J, Kiel DP, Kolcic I, Kutalik Z, Lahti J, Lai S, Laisk T, Laven JSE, Lawlor DA, Liu JJ, Lopez LM, Louwers YV, Magnusson PKE, Marongiu M, Martin NG, Klaric IM, Masciullo C, McKnight B, et al. Metaanalyses identify 13 loci associated with age at menopause and highlight DNA repair and immune pathways, Nature Genetics, 2012

Stringer B, Udofa EA, Antalis TM. Regulation of the human plasminogen activator inhibitor type 2 gene: Cooperation of an upstream silencer and transactivator. *The Journal of Biological Chemistry.* 2012

Subathdrage DMS, Goodman CD, Lucke AJ, Skinner-Adams T, Sahama I, Haque A, Do TA, McFadden GI, Fairlie DP, Andrews KT. Anti-malarial activity of the anti-cancer HDAC inhibitor SB939. Antimicrobial Agents and Chemotherapy. 2012

Suhrbier A, Jaffar-Bandjee MC, Gasque P. Arthritogenic alphaviruses-an overview. *Nature Reviews Rheumatology.* 2012

Surakka I, Isaacs A, Karssen LC, Laurila PPP, Middelberg RPS, Tikkanen E, Ried JS, Lamina C, Mangino M, Igl W, Hottenga JJ, Lagou V, van der Harst P, Leach IM, Esko T, Kutalik Z, Wainwright NW, Struchalin MV, Sarin AP, Kangas AJ, Viikari JS, Perola M, Rantanen T, Petersen AK, Soininen P, Johansson A, Soranzo N, Heath AC, Papamarkou T, Prokopenko I, Tonjes A, Kronenberg F, Doring A, Rivadeneira F, Montgomery GW, Whitfield JB, Kahonen M, Lehtimaki T, Freimer NB, Willemsen G, de Geus EJC, Palotie A, Sandhu MS, Waterworth DM, Metspalu A, Stumvoll M, Uitterlinden AG, Jula A, Navis G, Wijmenga C, Wolffenbuttel BHR, Taskinen MR, Ala-Korpela M, Kaprio J, Kyvik KO, Boomsma DI, Pedersen NL, Gyllensten U, Wilson JF, Rudan I, Campbell H, Pramstaller PP, Spector TD, Witteman JCM, Eriksson JG, Salomaa V, Oostra BA, Raitakari OT, Wichmann HE, Gieger C, Jarvelin MR, Martin NG, Hofman A, McCarthy MI, Peltonen L, van Duijn CM, Aulchenko YS, Ripatti S. A genome-wide screen for interactions reveals a new locus on 4p15 modifying the effect of waist-to-hip ratio on total cholesterol. PLoS Genetics, 2011

Swerdlow AJ, Feychting M, Green AC, Kheifets L, Savitz DA. Mobile phones, brain tumors, and the interphone study: Where are we now? *Environmental Health Perspectives*. 2011

Sykes SM, Lane SW, Bullinger L, Kalaitzidis D, Yusuf R, Saez B, Ferraro F, Mercier F, Singh H, Brumme KM, Acharya S, Scholl CU, Tothova Z, Attar EC, Fröhling S, Depinho RA, Armstrong SA, Gilliland DG, Scadden DT. AKT/FOXO signaling enforces reversible differentiation blockade in myeloid leukemias. *Cell.* 2012

Tamminga C, Sedegah M, Regis D, Chuang I, Epstein JE, Spring M, Mendoza-Silveiras J, McGrath S, Maiolatesi S, Reyes S, Steinbeiss V, Fedders C, Smith K, House B, Ganeshan H, Lejano J, Abot E, Banania GJ, Sayo R, Farooq F, Belmonte M, Murphy J, Komisar J, Williams J, Shi M, Brambilla D, Manohar N, Richie NO, Wood C, Limbach K, Patterson NB, Bruder JT, Doolan DL, King CR, Diggs C, Soisson L, Carucci D, Levine G, Dutta S, Hollingdale MR, Ockenhouse CF, Richie TL. Adenovirus-5vectored *P. falciparum* vaccine expressing CSP and AMA1. Part B: safety, immunogenicity and protective efficacy of the CSP component. *PLoS ONE*. 2011

Tan TCH, Crawford DHG, Jaskowski LA, Murphy TM, Heritage ML, Subramaniam VN, Clouston AD, Anderson GJ, Fletcher LM. Altered lipid metabolism in Hfe-knockout mice promotes severe NAFLD and early fibrosis. *American Journal of Physiology - Gastrointestinal and Liver Physiology*. 2011

Tang CS, Ferreira MAR. A gene-based test of association using canonical correlation analysis. *Bioinformatics*. 2012

Tawara I, Koyama M, Liu C, Toubai T, Thomas D, Evers R, Chockley P, Nieves E, Sun Y, Lowler KP, Malter C, Nishimoto N, Hill GR, Reddy P. Interleukin-6 modulates graft-versushost responses after experimental allogeneic bone marrow transplantation. *Clinical Cancer Research*. 2012

Teuscher F, Chen N, Kyle DE, Gatton ML, Cheng Q. Phenotypic changes in artemisininresistant *Plasmodium falciparum* lines *in vitro*: Evidence for decreased sensitivity to dormancy and growth inhibition. *Antimicrobial Agents and Chemotherapy.* 2012

Thivierge K, Mathews RT, Nsangou DMM, Da Silva F, Cotton S, Skinner-Adams TS, Trenholme KR, Brown CL, Gardiner DL, Dalton JP. Anti-malaria drug development targeting the M1 alanyl aminopeptidases and M17 leucyl aminopeptidases. *Arkivoc.* 2012

Thompson ER, Boyle SE, Johnson J, Ryland GL, Sawyer S, Choong DYH, Chenevix-Trench G, Trainer AH, Lindeman GJ, Mitchell G, James PA, Campbell IG. Analysis of RAD51C germline mutations in high-risk breast and ovarian cancer families and ovarian cancer patients. *Human Mutation*. 2012

Thomsen SF, Duffy DL, Kyvik KO, Skytthe A, Backer V. Type 1 diabetes and allergic diseases in children - response to Tosca *et al. Allergy.* 2011

Thrift AP, Nagle CM, Fahey PP, Russell A, Smithers BM, Watson DI, Whiteman DC, for the Australian Cancer Study Clinical FollowUp Study. The influence of prediagnostic demographic and lifestyle factors on esophageal squamous cell carcinoma survival. *International Journal of Cancer.* 2011
Thrift AP, Nagle CM, Fahey PP, Smithers BM, Watson DI, Whiteman DC. Predictors of survival among patients diagnosed with adenocarcinoma of the esophagus and gastroesophageal junction. *Cancer Causes and Control.* 2012

Thrift AP, Pandeya N, Smith KJ, Green AC, Hayward NK, Webb PM, Whiteman DC. Helicobacter pylori infection and the risks of Barrett's oesophagus: A population-based casecontrol study. International Journal of Cancer. 2012

Thrift AP, Pandeya N, Smith KJ, Green AC, Webb PM, Whiteman DC. The use of nonsteroidal anti-inflammatory drugs and the risk of Barrett's oesophagus. *Alimentary Pharmacology and Therapeutics.* 2011

Thrift AP, Pandeya N, Smith KJ, Mallitt KA, Green AC, Webb PM, Whiteman DC. Lifetime alcohol consumption and risk of Barrett's esophagus. *American Journal of Gastroenterology.* 2011

Thurber AE, Douglas G, Sturm EC, Zabierowski SE, Smit DJ, Ramakrishnan SN, Hacker E, Leonard JH, Herlyn M, Sturm RA. Inverse expression states of the BRN2 and MITF transcription factors in melanoma spheres and tumour xenografts regulate the NOTCH pathway. *Oncogene.* 2011

Tomimatsu N, Mukherjee B, Deland K, Kurimasa A, Bolderson E, Khanna KK, Burma S. Exo1 plays a major role in DNA end resection in humans and influences double-strand break repair and damage signaling decisions. *DNA Repair.* 2012

Tomlinson IPM, Houlston RS, Montgomery GW, Sieber OM, Dunlop MG. Investigation of the effects of DNA repair gene polymorphisms on the risk of colorectal cancer. *Mutagenesis.* 2012

Tong SL, Neale RE, Shen XM, Olsen J. Challenges for epidemiologic research on the verge of a new era. *European Journal of Epidemiology.* 2011

Tonks ID, Walker GJ, Mould AW, Ferguson B, Keith P, Hayward NK, Kay GF. BRCA1 is involved in establishing murine pigmentation in a p53 and developmentally specific manner. *Pigment Cell* and Melanoma Research. 2012

Townell N, Looke D, McDougall D, McCarthy J. Relapse of imported *Plasmodium vivax* malaria is related to primaquine dose: a retrospective study. *Malaria Journal.* 2012

Tran H, Nourse JP, Lea R, Brighton TA, Grigg A, McRae S, Thurley D, Gandhi M, Catalano J. A multi-centre, single-arm, open-label study evaluating the safety and efficacy of fixed dose rituximab in patients with refractory, relapsing or chronic idiopathic thrombocytopenic purpura (R-ITP1000 study) and exploring rituximab response with the FcGammaR3A polymorphisms. *Blood.* 2011

Trieu A, Kayala MA, Burk C, Molina DM, Freilich DA, Richie TL, Baldi P, Felgner PL, Doolan DL. Sterile protective immunity to malaria is associated with a panel of novel *P. falciparum* Antigens. *Molecular and Cellular Proteomics*. 2011

Ungerer JPJ, Marquart L, O'Rourke PK, Wilgen U, Pretorius CJ. Concordance, variance, and outliers in 4 contemporary cardiac troponin assays: implications for harmonization. *Clinical Chemistry.* 2012

Valery P, Youlden D, Baade P, Ward L, Hassall T, Green A, Aitken J. Cancer incidence and mortality

in Indigenous Australian children, 1997-2006. Pediatric Blood and Cancer. 2011

Valery P, Youlden D, Baade P, Ward L, Hassall T, Green A, Aitken J. Cancer survival for Indigenous compared to non-Indigenous Australian children. *Pediatric Blood and Cancer.* 2011

Valery PC, Ibiebele T, Harris M, Green AC, Cotterill A, Moloney A, Sinha AK, Garvey G. Diet, physical activity and obesity in school-aged indigenous youths in Northern Australia. *Journal of Obesity.* 2012

van den Berg D, Gong P, Breakspear M, van Leeuwen C. Fragmentation: loss of global coherence or breakdown of modularity in functional brain architecture? *Frontiers in Systems Neuroscience.* 2012

van der Horst A, Khanna KK. Peptidyl-prolyl isomerization for cytokinetic abscission. *Cell Cycle.* 2012

van Koolwijk LM, Ramdas WD, Ikram MK, Jansonius NM, Pasutto F, Hysi PG, Macgregor S, Janssen SF, Hewitt AW, Viswanathan AC, ten Brink JB, Hosseini SM, Amin N, Despriet DD, Willemse-Assink JJ, Kramer R, Rivadeneira F, Struchalin M, Aulchenko YS, Weisschuh N, Zenkel M, Mardin CY, Gramer E, Welge-Lüssen U, Montgomery GW, Carbonaro F, Young TL, DCCT/EDIC Research Group, Bellenguez C, McGuffin P, Foster PJ, Topouzis F, Mitchell P, Wang JJ, Wong TY, Czudowska MA, Hofman A, Uitterlinden AG, Wolfs RC, de Jong PT, Oostra BA, Paterson AD, Wellcome Trust Case Control Consortium, Mackey DA, Bergen AA, Reis A, Hammond CJ, Vingerling JR, Lemij HG, Klaver CC, Van Duijn CM. Common genetic determinants of intraocular pressure and primary open-angle glaucoma. PLoS Genetics. 2012

van Uitregt VO, Hurst TP, Wilson RS.

Reduced size and starvation resistance in adult mosquitoes, *Aedes notoscriptus*, exposed to predation cues as larvae. *Journal of Animal Ecology.* 2012

Vargas AC, Reed AE, Waddell N, Lane A, Reid LE, Smart CE, Cocciardi S, Da Silva L, Song S, Chenevix-Trench G, Simpson PT, Lakhani SR. Gene expression profiling of tumour epithelial and stromal compartments during breast cancer progression. Breast Cancer Research and Treatment. 2012

Verbrugghe P, Bouwer S, Wiltshire S, Carter K, Chandler D, Cooper M, Morar B, Razif M F, Henders A, Badcock J C, Dragovic M, Carr V, Almeida O P, Flicker L, Montgomery G, Jablensky A, Kalaydjieva L. Impact of the Reelin signaling cascade (ligands-receptorsadaptor complex) on cognition in schizophrenia. *American Journal of Medical Genetics Part B* -*Neuropsychiatric Genetics.* 2012

Verweij K, Medland S, Lynskey M, Zietsch B, Heath A, Boomsma D, Martin NG. The genetic etiology of cannabis use. *Behavior Genetics*. 2011

Verweij KJ, Mosing MA, Zietsch BP, Medland SE. Estimating heritability from twin studies. *Methods Molecular Biology.* 2012

Verweij KJH, Zietsch BP, Liu JZ, Medland SE, Lynskey MT, Madden PAF, Agrawal A, Montgomery GW, Heath AC, Martin NG. No association of candidate genes with cannabis use in a large sample of Australian twin families. *Addiction Biology.* 2012

Vinkhuyzen AAE, Dumenil T, Ryan L, Gordon SD, Henders AK, Madden PAF, Heath AC,

Montgomery GW, Martin NG, Wray NR. Identification of tag haplotypes for 5HTTLPR for different genome-wide SNP platforms. *Molecular Psychiatry.* 2011

Vinkhuyzen AAE, Pedersen NL, Yang J, Lee SH, Magnusson PKE, Iacono WG, McGue M, Madden PAF, Heath AC, Luciano M, Payton A, Horan M, Ollier W, Pendleton N, Deary IJ, Montgomery GW, Martin NG, Visscher PM, Wray NR. Common SNPs explain some of the variation in the personality dimensions of neuroticism and extraversion. *Translational Psychiatry.* 2012

Wagstaff KM, Sivakumaran H, Heaton SM, Harrich D, Jans DA. Ivermectin is a specific inhibitor of importin alpha/beta-mediated nuclear import able to inhibit replication of HIV-1 and dengue virus. *Biochemical Journal*. 2012

Walker G, Hacker E. Ultraviolet light as a modulator of melanoma. *Research on Melanoma*. 2011

Walker G. P-REX1, a RAC guanine exchange factor, links melanocyte development and melanoma progression. *Pigment Cell and Melanoma Research.* 2011

Walker GJ, Soyer HP, Terzian T, Box NF. Modelling melanoma in mice. *Pigment Cell and Melanoma Research*. 2011

Walker LC, Krause L, Spurdle AB, Waddell N. Germline copy number variants are not associated with globally acquired copy number changes in familial breast tumours. *Breast Cancer Research and Treatment.* 2012

Walker NM, Andrews J, Walsh A, Radford-Smith G. Ulcerative colitis management: a survey on current practice by Australian gastroenterologists. *Journal of Gastroenterology and Hepatology.* 2011

Walker NM, Croft A, Radford-Smith G. Longterm outcome of treatment with infliximab in patients with steroid refractory acute severe ulcerative colitis. *Journal of Gastroenterology and Hepatology.* 2011

Wallace DF, Crawford DH, Subramaniam VN. The control of iron homeostasis: microRNAS join the party. *Gastroenterology.* 2011

Wallace DF, Subramaniam VN. Non-HFE haemochromatosis. Iron Physiology and Pathophysiology in Humans (book). 2012

Wallingford SC, Pilkington SM, Massey KA, Al-Aasswad NM, Ibiebele TI, Celia Hughes M, Bennett S, Nicolaou A, Rhodes LE, Green AC. Three-way assessment of long-chain n-3 PUFA nutrition: by questionnaire and matched blood and skin samples. *British Journal of Nutrition.* 2012

Wallingford SC, Alston RD, Birch JM, Green AC. Increases in invasive melanoma in England, 1979-2006, by anatomical site. *British Journal of Dermatology.* 2011

Wallingford SC, Wallingford SC, Olsen CM, Plasmeijer E, Green AC. Skin cancer arising in scars: A systematic review. *Dermatologic Surgery.* 2011 Walsh MD, Buchanan DD, Pearson SA, Clendenning M, Jenkins MA, Win AK, Walters RJ, Spring KJ, Nagler B, Pavluk E, Arnold ST, Goldblatt J, George J, Suthers GK, Phillips K, Hopper JL, Jass JR, Baron JA, Ahnen DJ, Thibodeau SN, Lindor N, Parry S, Walker NI, Rosty C, Young JP. Immunohistochemical testing of conventional adenomas for loss of expression of mismatch repair proteins in Lynch syndrome mutation carriers: a case series from the Australasian site of the colon cancer family registry. *Modem Pathology.* 2012

Warren K, Wei T, Li D, Qin F, Warrilow D, Lin MH, Sivakumaran H, Apolloni A, Abbott CM, Jones A, Anderson JL, Harrich D. Eukaryotic elongation factor 1 complex subunits are critical HIV-1 reverse transcription cofactors. *Proceedings of the National Academy of Sciences*. 2012

Warren K, Wei T, Li DS, Warrilow D, Harrich D. Cellular factors and HIV-1 reverse transcription. International Journal of Infectious Diseases. 2011

Webb BT, Guo AY, Maher BS, Zhao Z, van den Oord EJ, Kendler KS, Riley BP, Gillespie NA, Prescott CA, Middeldorp CM, Willemsen G, de Geus EJ, Hottenga JJ, Boomsma DI, Slagboom EP, Wray NR, Montgomery GW, Martin NG, Wright MJ, Heath AC, Madden PA, Gelernter J, Knowles JA, Hamilton SP, Weissman MM, Fyer AJ, Huezo-Diaz P, McGuffin P, Farmer A, Craig IW, Lewis C, Sham P, Crowe RR, Flint J, Hettema JM. Meta-analyses of genome-wide linkage scans of anxiety-related phenotypes. *European Journal of Human Genetics*. 2012

Webb PM, Ibiebele TI, Hughes MC, Beesley J, van der Pols JC, Chen X, Nagle CM, Bain CJ, Chenevix-Trench G. Folate and related micronutrients, folate-metabolising genes and risk of ovarian cancer. *European Journal of Clinical Nutrition.* 2011

Webbink D, Koning V, Vujic S, Martin NG. Why are criminals less educated than non-criminals? Evidence from a cohort of young Australian twins. Journal of Law, Economics and Organization. 2012

Webster J, Coleman K, Mudge A, Marquart L, Gardner G, Stankiewicz M, Kirby J, Vellacott C, Horton-Breshears M, McClymont A. Pressure ulcers: effectiveness of risk-assessment tools. A randomised controlled trial (the ULCER trial). *BMJ Quality and Safety.* 2011

Wei T, Pearson MN, Armstrong K, Blohm D, Liu J. Analysis of crucial factors resulting in microarray hybridization failure. *Molecular Biosystems*. 2012

Weissenborn S, Neale RE, Waterboer T, Abeni D, Bavinck JN, Green AC, Harwood CA, Euvrard S, Feltkamp MC, de Koning MN, Naldi L, Quint WG, Tessari G, Proby CM, Wieland U, Pfister H, EPIHPVUVCA group. Beta-papillomavirus DNA loads in hair follicles of immunocompetent people and organ transplant recipients. *Medical Microbiology and Immunology*. 2011

White RE, Ramer PC, Naresh KN, Meixlsperger S, Pinaud L, Rooney C, Savoldo B, Coutinho R, Bodor C, Gribben J, Ibrahim HA, Bower M, Nourse JP, Gandhi MK, Middeldorp J, Cader FZ, Murray P, Munz C, Allday MJ. EBNA3Bdeficient EBV promotes B cell lymphomagenesis in humanized mice and is found in human tumors. *Journal of Clinical Investigation*. 2012

Whitehall V, Leggett B. Microsatellite instability: Detection and management in sporadic colorectal cancer. *Journal of Gastroenterology and Hepatology.* 2011 Whitehall V, Rickman C, Bond C, Ramsnes I, Greco S, Umapathy A, McKeone D, Faleiro R, Buttenshaw R, Worthley D, Nayler S, Zhao Z, Montgomery G, Mallitt K, Jass J, Matsubara N, Notohara K, Ishii T, Leggett B. Oncogenic PIK3CA mutations in colorectal cancers and polyps. International Journal of Cancer. 2011

Whiteman DC, Pavan WJ, Bastian BC. The melanomas: a synthesis of epidemiological, clinical, histopathological, genetic, and biological aspects, supporting distinct subtypes, causal pathways, and cells of origin. *Pigment Cell and Melanoma Research.* 2011

Williams PF, Olsen CM, Hayward NK, Whiteman DC. Melanocortin 1 receptor and risk of cutaneous melanoma: a meta-analysis and estimates of population burden. *International Journal of Cancer.* 2011

Willis C, Wang CK, Osman A, Simon A, Pickering D, Mulvenna J, Riboldi-Tunicliffe A, Jones MK, Loukas A, Hofmann A. Insights into the membrane interactions of the saposin-like proteins Na-SLP-1 and Ac-SLP-1 from human and dog hookworm. *PLoS ONE*. 2011

Wilson R, Norris EL, Brachvogel B, Angelucci C, Zivkovic S, Gordon L, Bernardo BC, Stermann J, Sekiguchi K, Gorman JJ, Bateman JF. Changes in the chondrocyte and extracellular matrix proteome during post-natal mouse cartilage development. *Molecular and Cellular Proteomics.* 2012

Win A, Jenkins M, Buchanan D, Clendenning M, Young J, Giles G, Goldblatt J, Leggett B, Hopper J, Thibodeau S, Lindor N. Determining the frequency of *de novo* germline mutations in DNA mismatch repair genes. *Journal of Medical Genetics.* 2011

Win AK, Cleary SP, Dowty JG, Baron JA, Young JP, Buchanan DD, Southey MC, Burnett T, Parfrey PS, Green RC, Le Marchand L, Newcomb PA, Haile RW, Lindor NM, Hopper JL, Gallinger S, Jenkins MA. Cancer risks for monoallelic MUTYH mutation carriers with a family history of colorectal cancer. International Journal of Cancer. 2011

Win AK, Walters RJ, Buchanan DD, Jenkins MA, Sweet K, Frankel WL, de la Chapelle A, McKeone DM, Walsh MD, Clendenning M, Pearson SA, Pavluk E, Nagler B, Hopper JL, Gattas MR, Goldblatt J, George J, Suthers GK, Phillips KD, Woodall S, Arnold J, Tucker K, Field M, Greening S, Gallinger S, Aronson M, Perrier R, Woods MO, Green JS, Walker N, Rosty C, Parry S, Young JP. Cancer risks for relatives of patients with serrated polyposis. *American Journal* of *Gastroenterology*. 2012

Win AK, Young JP, Lindor NM, Tucker KM, Ahnen DJ, Young GP, Buchanan DD, Clendenning M, Giles GG, Winship I, Macrae FA, Goldblatt J, Southey MC, Arnold J, Thibodeau SN, Gunawardena SR, Bapat B, Baron JA, Casey G, Gallinger S, Le Marchand L, Newcomb PA, Haile RW, Hopper JL, Jenkins MA. Colorectal and other cancer risks for carriers and noncarriers from families with a DNA mismatch repair gene mutation: A prospective cohort study. *Journal of Clinical Oncology.* 2012

Wolanski P, Gianduzzo T, Chabert C, Jones L, Mullavey T, Walsh S. Preliminary results of robotic assisted laparoscopic radical prostatectomy following fellowship training and experience in laparoscopic radical prostatectomy. *British Journal* of Urology International. 2012 Wood MJ, Powell LW, Dixon JL, Ramm GA. Clinical cofactors and hepatic fibrosis in hereditary hemochromatosis: The role of diabetes mellitus. *Hepatology.* 2012

Wood-Baker R, Tristram S, Latham R, Haug G, Reid D, Roddam LF. Molecular detection of *Haemophilus influenzae* in COPD sputum is superior to conventional culturing methods. *British Journal of Biomedical Science*. 2012

Woodberry T, Minigo G, Piera KA, Amante FH, Pinzon-Charry A, Good MF, Lopez JA, Engwerda CR, McCarthy JS, Anstey NM. Lowlevel *Plasmodium falciparum* blood-stage infection causes dendritic cell apoptosis and dysfunction in healthy volunteers. *Journal of Infectious Diseases*. 2012

Wooldridge L, Ekeruche-Makinde J, van den Berg HA, Skowera A, Miles JJ, Tan MP, Dolton G, Clement M, Llewellyn-Lacey S, Price DA, Peakman M, Sewell AK. A single autoimmune T cell receptor recognizes more than a million different peptides. *Journal of Biological Chemistry.* 2012

Worthley DL, Phillips KD, Wayte N, Schrader KA, Healey S, Kaurah P, Shulkes A, Grimpen F, Clouston A, Moore D, Cullen D, Ormonde D, Mounkley D, Wen X, Lindor N, Carneiro F, Huntsman DG, Chenevix-Trench G, Suthers GK. Gastric adenocarcinoma and proximal polyposis of the stomach (GAPPS): a new autosomal dominant syndrome. *Gut.* 2012

Wu J, Zhang X, Zhang L, Wu CY, Rezaelan AH, Chan CH, Li JM, Wang J, Gao Y, Han F, Jeong YS, Yuan X, Khanna KK, Jin J, Zeng YX, Lin HK. Skp2 E3 ligase integrates ATM activation and homologous recombination repair. *Molecular Cell.* 2012

Wurm ET, Ferguson B, Li L, Lambie D, Walker GJ, Soyer HP. Histopathologic and clinical variability in melanocytic lesions developing in genetically modified. *Experimental Dermatology.* 2012

Wykes M, Horne-Debets J. Dendritic cells: The Trojan horse of malaria? *International Journal of Parasitology.* 2012

Wykes M, Kay JG, Manderson A, Liu XQ, Brown DL, Richard DJ, Wipasa J, Jiang, SH, Jones MK, Janse CJ, Waters AP, Pierce SK, Miller LH, Stow JL, Good MF. Rodent blood-stage *Plasmodium* survive in dendritic cells that infect naive mice. *Proceedings of the National Academy* of *Sciences*. 2011

Wykes M. Are plasmacytoid dendritic cells the misguided sentinels of malarial immunity? *Trends in Parasitology.* 2012

Yang J, Ferreira T, Morris AP, Medland SE, Madden PAF, Heath AC, Martin NG, Montgomery GW, Weedon MN, Loos RJ, Frayling TM, McCarthy MI, Hirschhorn JN, Goddard ME, Visscher PM. Conditional and joint multiple-SNP analysis of GWAS summary statistics identifies additional variants influencing complex traits. *Nature Genetics*. 2012

Yang XR, Brown K, Landi MT, Ghiorzo P, Badenas C, Xu M, Hayward NK, Calista D, Landi G, Bruno W, Bianchi-Scarra G, Aguilera P, Puig S, Goldstein AM, Tucker MA. Duplication of CXC chemokine genes on chromosome 4q13 in a melanoma-prone family. *Pigment Cell and Melanoma Research*. 2012

Yokoyama S, Woods SL, Boyle GM, Aoude LG, Macgregor S, Zismann V, Gartside M, Cust AE, Haq R, Harland M, Taylor JC, Duffy DL, Holohan K, Dutton-Regester K, Palmer JM, Bonazzi V, Stark MS, Symmons J, Law MH, Schmidt C, Lanagan C, O'Connor L, Holland EA, Schmid H, Maskiell JA, Jetann J, Ferguson M, Jenkins MA, Kefford RF, Giles G, Armstrong BK, Aitken JF, Hopper JL, Whiteman DC, Pharoah PD, Easton DF, Dunning AM, Newton-Bishop JA, Montgomery GW, Martin NG, Mann GJ, Bishop DT, Tsao H, Trent JM, Fisher DE, Hayward NK, Brown KM. A novel recurrent mutation in MITF predisposes to familial and sporadic melanoma. *Nature*. 2011

You H, Gobert GN, Jones MK, Zhang W, McManus DP. Signaling pathways and the host-parasite relationship: putative targets for control interventions against schistosomiasis. *Bioessays.* 2011

Youlden DR, Baade PD, Valery PC, Hassall TE, Ward LJ, Green AC, Aitken JF. Areabased differentials in childhood cancer incidence in Australia, 1996-2006. *Pediatric Blood and Cancer.* 2012 Youlden DR, Baade PD, Valery PC, Ward LJ, Green AC, Aitken JF. Differentials in survival for childhood cancer in Australia by remoteness of residence and area disadvantage. *Cancer Epidemiology Biomarkers and Prevention.* 2011

Zhang W, Wen H, Li J, Lin R, McManus DP. Recent advances in the immunology and serological diagnosis of echinococcosis. Serological Diagnosis of Certain Human, Animal and Plant Diseases (book). 2012

Zhang WB, Wen H, Li J, Lin RY, McManus DP. Immunology and immunodiagnosis of cystic echinococcosis: An update. *Clinical and Developmental Immunology.* 2012

Zhang ZZ, Zhang F, An P, Guo X, Shen YY, Tao YL, Wu Q, Zhang YC, Yu Y, Ning B, Nie GJ, Knutson MD, Anderson GJ, Wang FD. Ferroportin1 deficiency in mouse macrophages impairs iron homeostasis and inflammatory responses. *Blood.* 2011 Zhao KN, Masci PP, Lavin MF. Disruption of spectrin-like cytoskeleton in differentiating keratinocytes by PKC delta activation is associated with phosphorylated adducin. *PLoS ONE*. 2011

Zietsch BP, Miller GF, Bailey JM, Martin NG. Female orgasm rates are largely independent of other traits: implications for "female orgasmic disorder" and evolutionary theories of orgasm. *Journal of Sexual Medicine.* 2011

Zietsch BP, Santtila P. Genetic analysis of orgasmic function in twins and siblings does not support the by-product theory of female orgasm. *Animal Behaviour.* 2011

Zietsch BP, Verweij KJH, Heath AC, Madden PAF, Martin NG, Nelson EC, Lynskey MT. Do shared etiological factors contribute to the relationship between sexual orientation and depression? *Psychological Medicine.* 2012

Zubanov N, Webbink HD, Martin NG. The effect of schooling on problem drinking: evidence from Australian twins. *Applied Economics*. 2012



COMPLIANCE CHECKLIST

FA ACT Financial Accountability Act 2009

FPMS Financial and Performance Management Standard 2009

ARRs Annual Report Requirements for Queensland Government Agencies

| Summary of requirement | | Basis for requirement | Annual report reference |
|---------------------------------|---|---|-------------------------|
| Accessibility | Table of contents Glossary/Acronyms | ARRs – section 8.1 | Page 1 Page 148 |
| | Public availability | ARRs – section 8.2 | Inside front cover |
| | Interpreter service statement | Queensland Government Language Services Policy | Inside front cover |
| | Copyright notice | Copyright Act 1968 | Inside front cover |
| Letter of compliance | A letter of compliance from the accountable officer or statutory body to the relevant Minister(s) | ARRs – section 9 | Page 2 |
| Introductory | Agency role and main functions | ARRs – section 10.3 | Page 14 |
| mormation | Operating environment | ARRs – section 10.3 | Page 15 |
| | External scrutiny | ARRs – section 10.3 | N/A |
| | Machinery of government changes | ARRs – section 10.3 | N/A |
| | Review of proposed forward operations | ARRs – section 10.3 | N/A |
| Non-financial | Government objectives for the community | ARRs – section 11.2 | Page 14 |
| performance | Agency objectives and performance indicators | ARRs – section 11.5 | N/A |
| | Agency outputs and output performance measures | ARRs – section 11.6 | N/A |
| Financial performance | Summary of financial performance | ARRs – section 12.1 | Page 74 |
| | Disclosure of budget v actual results | ARRs – section 12.2 | N/A |
| | Chief Finance Officer (CFO) statement | ARRs – section 12.3 | N/A |
| Governance - | Organisational structure | ARRs – section 13.1 | Page 24 |
| structure | Executive management | ARRs – section 13.2 | Page 23 |
| | Related entities | ARRs – section 13.3 | Page 30 |
| | Schedule of statutory authorities or instrumentalities | ARRs – section 13.4 | N/A |
| | Boards and committees | ARRs – section 13.5 | Page 18 |
| | Public Sector Ethics Act 1994 - implementation statement giving details of the action taken during the reporting period | Public Sector Ethics Act 1994 (section 23 and Schedule) | Page 16 |
| | Whistleblowers Protection Act 1994 - public interest disclosures received | Whistleblowers Protection Act 1994 (sections 30 – 31 and Schedule) | N/A |
| Governance – risk | Risk management | ARRs – section 14.1 | Page 22 |
| management and accountability | Audit committee | ARRs – section 14.2 | Page 21 |
| | Internal Audit | ARRs – section 14.3 | Page 22 |
| Governance – human resources | Workforce planning, attraction and retention | ARRs – section 15.1 | Page 16 |
| | Early retirement, redundancy and retrenchment | Directive No.17/09 Early Retirement, Redundancy and Retrenchment | N/A |
| | Initiatives for women | ARRs – section 15.1 and 15.3 | N/A |

| Summary of requirement | | Basis for requirement | Annual report reference |
|---|--|---|-------------------------|
| Governance – operations | Consultancies | ARRs – section 16.1 | N/A |
| | Overseas travel | ARRs – section 16.2 | N/A |
| | Information systems and recordkeeping | Public Records Act 2002 | N/A |
| | Waste management | Environmental Protection (Waste Management) Policy 2000, Environmental Protection Act 1994 | N/A |
| Other prescribed requirements | Indigenous matters (Queensland Government Reconciliation Action Plan 2009–2012) | Queensland Government Reconciliation Action Plan 2009–2012 | N/A |
| | Shared services | ARRs – section 17.1 | N/A |
| | Carbon emissions | Premier's Statement | N/A |
| Optional information that may be reported | Corrections to previous annual reports | ARRs – section 18.2 | N/A |
| | Right to Information | Right to Information Act 2009 | N/A |
| | Information Privacy | Information Privacy Act 2009 | N/A |
| | Native title | N/A | N/A |
| Financial statements | Annual general purpose financial statements | Financial Reporting Requirements for Queensland Government Agencies | Page 73 |
| | Certification of financial statements | FA Act – section 62 FPMS – sections 42, 43 and 50 | Page 110 |
| | Independent Auditors Report | FA Act – section 62 FPMS – section 50 | Page 112 |
| | Remuneration disclosures | Financial Reporting Requirements for Queensland Government Agencies | N/A |

ACRONYMS

| (Hons) | With Honours degree |
|--------------|--|
| AAS | Australian Academy of Science |
| AC | Companion of the Order of Australia |
| ACVD | Australian Centre for Vaccine Development |
| AEC | Animal ethics committee |
| AIBN | Australian Institute for Bioengineering and Nanotechnology |
| AID | Australian Infectious Diseases Research Centre |
| ALF | Australian Liver Foundation |
| ANU | Australian National University |
| ARC | Australian Research Council |
| ASMR | Australian Society for Medical Research |
| ATR | Australian Twin Registry |
| ВА | Bachelor of Arts |
| BComm | Bachelor of Communications |
| CCQ | Cancer Council Queensland |
| CIMBA | Consortium for Investigators of Modifiers of BRCA1/2 |
| CF | Cystic Fibrosis |
| CMV | Cytomegalovirus |
| Colon CFR | Colon cancer family registry |
| COPD | Chronic obstructive pulmonary disease |
| CPI | Consumer price index |
| CRC | Cooperative Research Centre |
| CSIRO | Commonwealth Scientific and Industrial Research Organisation |
| DC | Dendritic cell |
| DLitt | Doctorate of Literature |
| DNA | Deoxyribonucleic acid |
| DU | Dean of University |
| EBV | Epstein-Barr virus |
| | \sim |

| EVC | Emory Vaccine Center |
|-------|---|
| FACE | Fellow of the Australian College of Educators |
| FAHA | Fellow of the Australian Academy of the Humanities |
| FAHRI | Fellow of the Australian Human Resources Institute |
| FAICD | Fellow of the Australian Institute of Company Directors |
| FAIM | Fellow of the Australian Institute of Management |
| FCA | Fellow of The Institute of Chartered Accountants in Australia |
| FQA | Fellow of the Queensland Academy of Arts and Sciences |
| FTE | Full time equivalent |
| GMP | Good manufacturing practice |
| GVHD | Graft versus Host Disease |
| HDC | Higher Degree Committee |
| HIV | Human Immunodeficiency virus |
| HKU | Hong Kong University |
| HPV | Human Papillomavirus |
| Hon | Honorary (degree) |
| HR | Human resources |
| IARC | International Agency for Research on Cancer |
| IPO | Initial Public Offering |
| ISO | International Organisation for Standardization |
| IUBMB | The International Union of Biochemistry and Molecular Biology |
| LittD | Doctorate of Literature |
| LLB | Bachelor of Laws |
| MA | Master of Arts |
| MAG | Management advisory group |
| MAICD | Member of the Australian Institute of Company Directors |
| MBus | Master of Business |
| MPhil | Master of Philosophy |
| MSc | Master of Science |

| NHMRC | National Health and Medical Research Council |
|-------|--|
| NIH | National Institutes of Health |
| NPC | Nasopharyngeal Carcinoma |
| OBE | Order of the British Empire |
| OHMR | Office of Health and Medical Research |
| OPAL | Ovarian Cancer Prognosis And Lifestyle |
| PCFA | Prostate Cancer Foundation Australia |
| PhD | Doctor of Philosophy |
| PNG | Papua New Guinea |
| QIH | Queensland Institute of Health |
| QSA | Queensland Studies Authority |
| QIMR | Queensland Institute of Medical Research |
| QTHA | Queensland Tropical Health Alliance |
| QUT | Queensland University of Technology |
| RBWH | Royal Brisbane and Women's Hospital |
| RNA | Ribonucleic acid |
| ROTRF | Roche Organ Transplantation Research Foundation |
| TGA | Therapeutic Goods Administration |
| TLR | Toll-like receptor |
| TRIM | Total Records and Information Management |
| UCLA | University of California, Los Angeles |
| UNSW | University of New South Wales |
| UQ | University of Queensland |
| UQCCR | University of Queensland Centre for Clinical Research |
| VEDS | Vector-borne disease Early Detection and Surveillance |
| VU | Vrije Universiteit, Amsterdam |
| WHO | World Health Organization |
| | |

Page 148 QIMR Annual Report 2011-2012









300 Herston Road Herston QLD 4006 Australia

Locked Bag 2000 RBH QLD 4029 Australia

- **T** +61 7 3362 0222 1800 993 000
- **F** +61 7 3362 0102
- E enquiries@qimr.edu.au

Better health through medical research | www.qimr.edu.au

V12-521 • V3-BSF333 • V3-BSF3-11 • V456-1T-25

V4-FLX V6