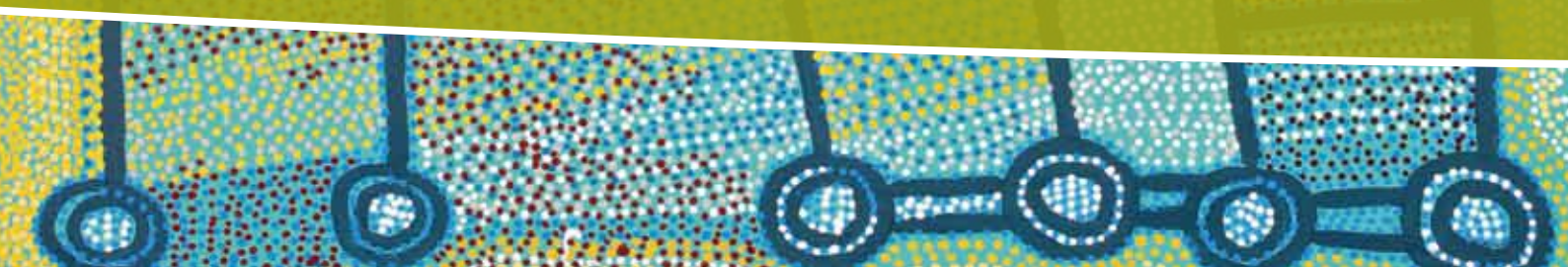


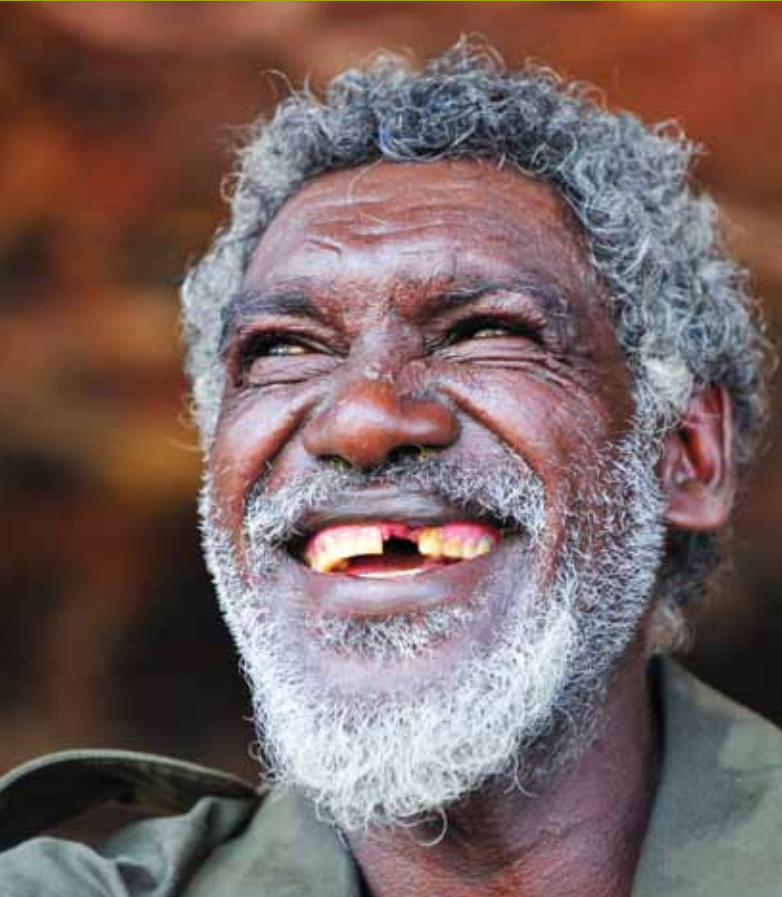
**menzies**  
school of health research

# Annual Report 2009

*discovery for a healthy tomorrow*







The Menzies School of Health Research was established in 1985 as a body corporate of the Northern Territory (NT) Government under the *Menzies School of Health Research Act 1985 (Menzies Act)*. This Act was amended in 2004 to formalise the relationship with Charles Darwin University (CDU). Menzies is now a school within CDU's Institute of Advanced Studies.

In the spirit of respect, the Menzies School of Health Research acknowledges the people and elders of the Aboriginal and Torres Strait Islander Nations, who are the Traditional Owners of the land and seas of Australia.

For the purposes of this document, 'Indigenous' refers to Australia's Aboriginal and Torres Strait Islander peoples.



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## who we are and what we do...

Through scientific excellence, education and research the team at Menzies is discovering ways to reduce the impact of disease and improve the health and well-being of people living in Australia and beyond.

As the nation's leader in Indigenous and tropical health research, our discoveries are being used to better prevent, treat and diagnose disease. Our researchers are also making a difference by showing how the social and physical environments in which we live, and in which health care is delivered, can be improved for better health outcomes.

The problems associated with poor health and disease don't stop at international borders – that is why Menzies' researchers work with governments and communities in our region and across the globe to offer their expertise and contribute our unique perspective gained from nearly twenty five years of ground-breaking research.

At Menzies we are passionate about using our unique knowledge and solutions to discover a healthy tomorrow for all.

Working within our seven Divisions our expertise includes:

- **Child Health** – we are working to combat ear, lung and skin infections that affect the healthy development of Indigenous children and are focusing on the links between health and education from pre-birth to leaving school.
- **Education and Training** – we are training the researchers, clinicians and policy makers of the future to help improve the quality of life of disadvantaged people across our region.
- **Healing and Resilience** – our researchers are helping to prevent, diagnose and treat mental illness and substance misuse in Indigenous people.
- **International Health** – we are world leaders in research into major health problems in our region including rheumatic heart disease, malaria and tuberculosis.
- **Preventable Chronic Disease** – we are working to discover the causes of chronic disease including diabetes, heart and kidney disease, and find the best ways to diagnose and prevent them.
- **Services, Systems and Society** – our researchers are finding out what we are doing right and what can be changed so we can improve the health care system and the social and physical environments in which people live and in which health care is delivered.
- **Tropical and Emerging Infectious Diseases** – the Menzies team is unearthing new health threats so we can improve treatments, prevent the spread of disease and help develop vaccines.



## where and how we work



With its main base on the Royal Darwin Hospital campus in Darwin, Northern Territory, Menzies employs over 250 staff. We operate a smaller unit in Alice Springs, have a joint facility with the Indonesian Department of Health in Timika, Indonesia and carry out work on rheumatic heart disease in the Pacific.

At Menzies we have world-class laboratory facilities where we conduct ground-breaking research including analysis of snake venom, soil samples for melioidosis, scabies mite drug resistance, malaria and deadly bacteria.

We carry out research in a number of Indigenous communities across Australia and our work touches the lives of many. Our researchers are discovering better ways to treat common problems and we are working with local people to help them improve the health of their communities.

Menzies employs some of the nation's best researchers and we are recognised as a regional leader in education and research.

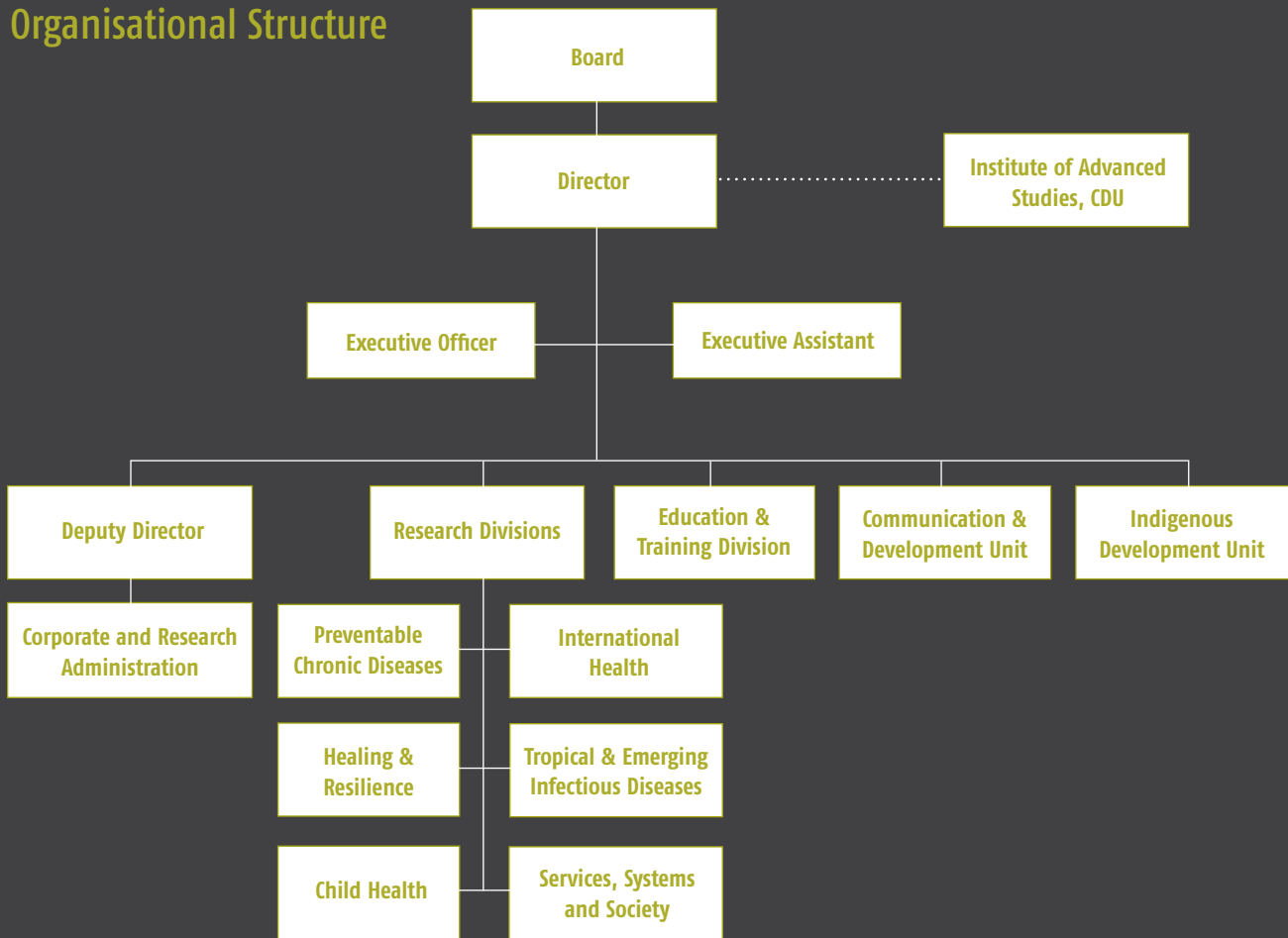
We are using our unique knowledge and know-how to discover solutions and help disadvantaged people around the world.

# menzies strategic plan

At the core of the Menzies Strategic Plan is Menzies' commitment to research, education and training, and transfer of research outcomes into policy and practice.

Our research activities continue to focus on Indigenous health and are housed in six research Divisions – Child Health; Healing and Resilience; International Health; Preventable Chronic Diseases; Services, Systems and Society; and Tropical and Emerging Infectious Diseases.

## Organisational Structure



The Strategic Plan also addresses the urgent need to improve recruitment, development and retention of Indigenous staff and research leaders of the future.

The Plan outlines our strong commitment to working hand-in-hand with Indigenous communities by establishing a Menzies Indigenous Development Unit.

Health education and training will continue to be central to everything we do and the plan outlines our commitment to not only broaden the range and scope of the courses on offer, but also increase the numbers of students enrolled at all levels, particularly Indigenous students.

There are many challenges and opportunities over the next few years and the Menzies Strategic Plan is a blueprint to enable the Board and staff of Menzies to achieve our vision and goals for research, education and Indigenous development and capacity building.

## vision

To improve health outcomes in Aboriginal and Torres Strait Islander communities, and in disadvantaged populations throughout the world, through excellence and leadership in research and training.

## values

### Communication

To undertake an ongoing dialogue with partners and stakeholders during the research process, from conception to completion.

### Innovation

To be willing to take risks, embrace new approaches, and pursue ground-breaking research.

### Responsiveness

To be responsive to health needs and shared priorities, particularly of Indigenous Australians, disadvantaged populations and others living in central and northern Australia.

### Quality

To be excellent in everything we do.

### Collaboration

To work in partnership with communities, other researchers, policy-makers and those who deliver health and other services.

### Integrity

To act with honesty and according to our values.

### Relevance

To concentrate on solving problems that matter, whether they are big or small.

### Building research capacity

To foster and develop researchers of the future, with a particular emphasis on Indigenous researchers.

## goals

To meet the challenges of today and tomorrow, Menzies has set out four strategic goals in our Strategic Plan. These are:

### Goal 1

Excellence in health research.

### Goal 2

Excellence in health education and training.

### Goal 3

Strengthened capacity of researchers, particularly Indigenous researchers, and improved engagement of Indigenous communities across the research process.

### Goal 4

Improved income generation and services to support research and education activities.



## the year at a glance

- Menzies had another successful year in terms of NHMRC Project Grants funding. Menzies was awarded seven NHMRC Project grants in 2009, totalling over \$8.3 million. Our success rate for NHMRC Project grants, 47 per cent remained considerably higher than the national average.
- The value of funding from the National Health and Medical Research Council (NHMRC), our main funding body, increased again in 2009 by 18 per cent to \$8.3 million. This has helped to increase the organisation's overall income by 41 per cent in the last two years, to more than \$30 million.
- The year started with an extremely favourable review of Menzies' research activities in the 'Quinquennial Review' conducted by a panel of three external experts. The report produced by the panel spoke very favourably of our research outcomes, stakeholder relationships and leadership, as well as outlining some solutions to the challenges that lie ahead for us.
- Menzies also held its first inaugural Community Honorary Appointments event, with the awards being presented to Mr Marius Puruntatameri and [the late] Big Frank Garawirtja from Galiwin'ku.
- Menzies was awarded Life Education Australia's prestigious (30th anniversary) 'Gold Harold Award for Education' for our outstanding contribution towards the healthy development of Indigenous children through the ground-breaking 'Early Childhood Development' research program.
- In May 2009 the first meeting was held of the Aboriginal and Torres Strait Islander Advisory Committee with staff of MIDU taking on the role of secretariat.
- Research by Professor Nick Anstey and the malaria team, was chosen by NHMRC as one of "ten of the best" NHMRC-funded projects in 2008-09.
- Menzies was appointed as lead for the vivax working group of the Asia Pacific Malaria Elimination Network (APMEN), which will coordinate a research agenda focused on eliminating malaria from ten member countries of the region.
- Professor Sven Silburn and his team have successfully tendered for a \$2.5million contract for evaluation and research into the Northern Territory Department of Education and Training's Transforming Indigenous Education Program.
- A new Substance Misuse Unit and Program with new and existing staff has started and alcohol management plan evaluations in Alice Springs and Tennant Creek have been completed.
- Menzies went Smoke Free from 1 July 2009. Dr Vanessa Johnston assisted with the transition and the new Menzies No Smoking policy.
- The National Centre for Quality Improvement in Indigenous Primary Health Care (One21seventy) was created and launched, an Executive Director appointed and consultation is underway with Australian Government and state health departments about their financial and other support for the Centre. The final annual Audit and Best Practice Chronic Disease Project (ABCD project) meeting was held in Brisbane and was attended by about 140 practitioners, managers and policy makers from across Australia.
- Alice Rumbold was named the South Australian Tall Poppy of the Year for 2009.
- Kalinda Griffiths (CIPHER Cadet) completed her undergraduate degree at CDU in February and was chosen to deliver the graduand response at the May graduation ceremony. She also completed a post-graduate course-work program in public health with Menzies during 2009.

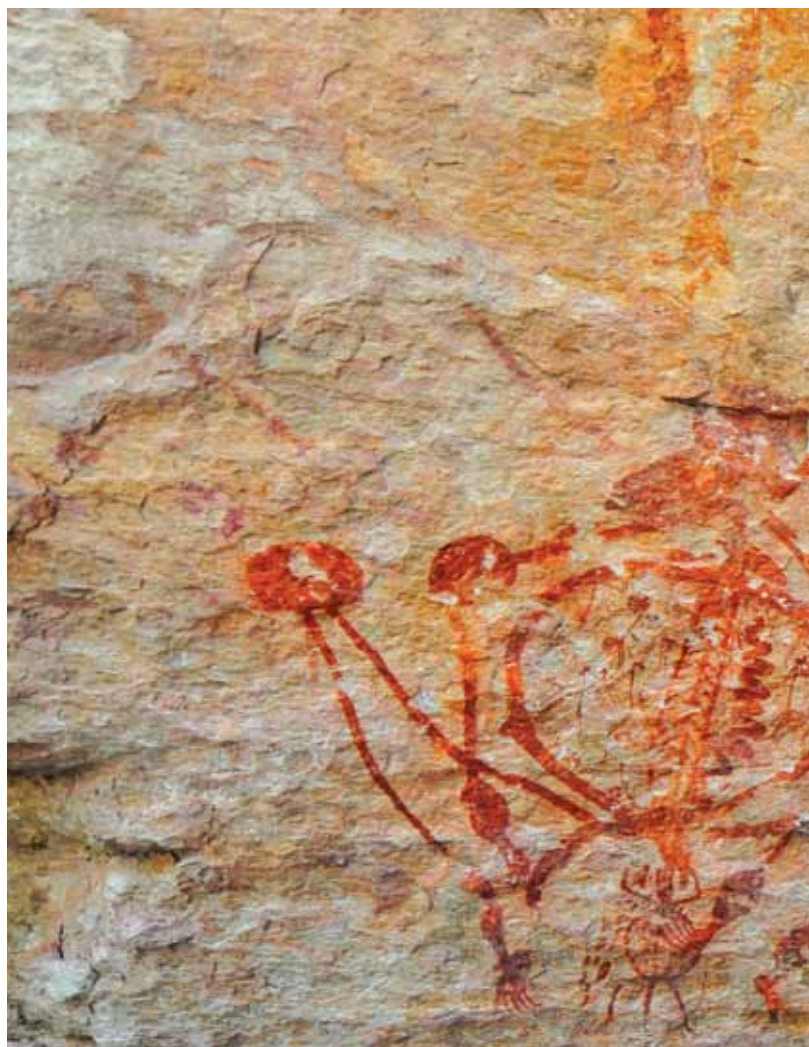




- Professor Ric Price and Professor Nick Anstey authored one of the Top 10 cited papers (2006–2008) published in Transactions of the Royal Society of Tropical Medicine and Hygiene (TRSTMH), and were presented by Elsevier with a Top Cited certificate for the article Ratcliff et al, TRSTMH 2007.
- Professor Ric Price was appointed chair of Clinical module of the World Wide Antimalarial Resistance Network (WWARN).
- Kim Mulholland was invited to co-author a special *Lancet Commission* due early next year on the Millenium Development Goals (MDG). It will critically address the MDGs and plot a future for development beyond the MDGs. Kim is responsible for MDG 4, (Child Survival). The effort is coordinated by the London International Development Centre.
- Dr Jaquelyne Hughes was runner up in the Australian and New Zealand Society of Nephrology's 2009 Young Investigator Award.
- Maria Nickels was Awarded the Aboriginal and Torres Strait Islander Health and Leadership Award by the Northern Territory Chronic Disease Network.
- Dr David Thomas was selected by NHMRC to be featured with 40 of Australia's top health researchers in its publication, *Working to Build a Healthy Australia*.
- A total of 320 people were employed at Menzies as at 31 December 2009. Twenty two per cent of staff members identified as Aboriginal or Torres Strait islander. Menzies remains committed to recruiting and retaining Indigenous employees.
- Another successful oration was held with the Hon Michael Kirby AC CMG presenting a talk on 'Closing the Gap Globally and Locally – HIV and Aids control for the most vulnerable' to over 300 people at the Darwin Convention Centre.
- Bilawara Lee was honoured to receive a Tribute to Northern Territorians Women's Award 2009.
- The National Institute of Health (NIH) malaria project in Tanzania was funded in 2008–09, with the award finalised in 2009.
- The final approval for AusAID's five years' core funding for the Timika Translational Research facility operations in Papua was approved and began in January 2009.
- Strong Teeth for Little Kids data analysis got underway, showing a positive result. Feedback to all 30 communities was completed, and the research informed recent public policy announcements.
- The inaugural Child Health Division (CHD) Indigenous Reference Group meeting was held in December 2008, with subsequent meetings in February, July and December of 2009. To date the Indigenous Reference Group has provided input on 17 projects. Representation from Alice Springs has now also been included.
- Channel Seven and Financial markets Respiratory Grants successful for \$172,500 and Susan Pizzutto received an Australian Cochrane Airways Group Network Award.
- Funding of \$1.1 million over four years has been secured for the BEAT depression project, in partnership with Beyondblue and the Northern Territory Department of Health and Families.



- In 2009, the 'Healthy Starts' project started a randomised controlled trial of a family-centred tobacco control program to reduce respiratory illness in Indigenous infants in Australia and New Zealand.
- The vulvar cancer research team organised a workshop of national and international researchers in vulvar cancer and genetic epidemiology in July to review the results of our human papillomavirus (HPV) research and recommend how to move forward with investigating susceptibility as a possible cause of the vulvar cancer epidemic in Arnhem Land communities.
- PhD candidate Annette Dougall's work to elucidate the life cycle of Leishmania in Australia revealed that phlebotomine sand flies are unlikely to be involved in the transmission of Leishmania in Australia, and has implicated an alternative vector. This is a major finding as sand flies are the only known vector of Leishmania world wide.
- The new Menzies-invented high resolution melting-based bacterial genetic fingerprinting method has proven extremely robust, rapid and easy to apply to different bacterial species. During the reporting period, methods for Klebsiella pneumoniae, Enterococcus faecium and Staphylococcus aureus were fully reduced to practice.
- Completed the generation and validation of the Burkholderia pseudomallei prediction map covering rural Darwin, and generated a preliminary map covering the whole of the Top End.
- Laboratory and field-based intervention studies have suggested there is a significant correlation between ammonium sulphates and phosphates in soils and Burkholderia pseudomallei density.
- Rapid diagnosis of melioidosis using real-time polymerase chain reaction (PCR) on clinical samples from patients has been successfully developed and studies are ongoing to improve this further.
- Menzies' studies have raised concerns that most pressure bandages used for first aid in snakebite victims are inadequate – new methods of first aid are being developed.
- Menzies' started the delivery of core units in the Doctor of Health, the new professional doctorate program, developed in collaboration with the Graduate School of Health Practice at Charles Darwin University.
- Introduction of the Menzies Research Training Seminar series developed in collaboration with the NT Department of Health and Families and the NT Clinical School.
- Nine new research students enrolled in 2009, three starting a Doctor of Philosophy, one undertaking an Honours year, two Masters of Science and three Advanced Medical Science students. The Advanced Medical Science students are Melbourne University medical students mid-way through their degree, who spend a year working alongside our researchers to experience research first-hand and to undertake a research project as part of a research team.
- Indigenous research officers Carolyn Griffin and Valerie Thompson both enrolled in further tertiary education (Bachelor of Science and Bachelor of Commerce).
- Dr David Thomas has been closely involved in the expansion of Indigenous tobacco control policy and activity, and has been an invited member of key Northern Territory and national policy committees.
- The International Health Division has hosted two international student internships this year: Joyce Hwang and Johanna Ungefehr, and hosted one student from Melbourne, Jennifer Koslovski.
- Alice Rumbold was awarded the JB Reid Fellowship, a five-year research fellowship from the University of Adelaide. She is now based at the University of Adelaide, but maintains a joint appointment with Menzies.
- Professor Phil Giffard has been appointed chair of Northern Territory Institute Biosafety Committee.
- Jacklyn Ng was awarded an International Postgraduate Research Scholarship from Charles Darwin University for her work on *Staphylococcus*.
- An independent review of administration services was conducted by an external reviewer from a leading interstate medical research institute. It found Menzies' corporate and administrative staff deliver high quality support at staffing levels well below industry benchmarks. Finance and Research Administration numbers have been increased to address this shortfall.





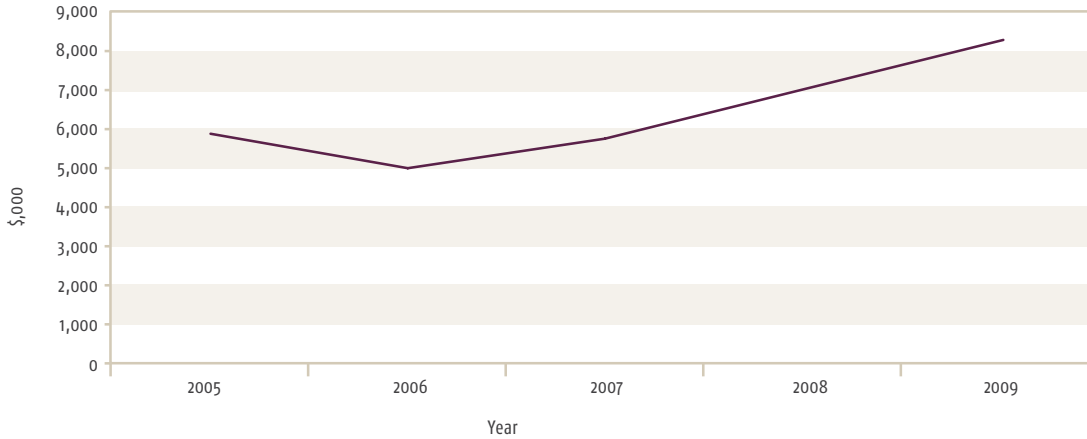
- The Human Resources (HR) team has taken on the key developmental task of initiating a new performance management system for Menzies.
- An increased focus on governance has resulted in an audit committee being established during the year with separate terms of reference to the finance committee. The audit committee will oversee the annual financial audit and the internal audit program. The first audit being conducted will be on HR/payroll function.
- The finance and risk committee commissioned a Risk Assessment on Menzies' operations, the review being conducted to Australian Standards. The output has been provided to the board and now forms the basis of the internal audit program.
- Menzies continued its reputation as a family friendly employer, with seventeen Menzies employees welcoming a new baby into their family this year.
- This year saw our rented premises at Winnellie successfully refurbished, and has accommodated staff since late-March 2009. This has made the provision of workspace and infrastructure resources much easier with our rapidly expanding staff and student list.
- The first steps have been taken in our endeavour for the laboratory to become an Australian Quarantine and Inspection Service (AQIS) approved premise. This certification will increase the scope of work available to researchers in our laboratory facility.
- Menzies Laboratory Facility has been successful in its application to be certified by the United States Centre for Disease Control/National Institute of Health (US CDC/NIH) Agencies. Plans to appoint a technical officer to assist with laboratory support have been instigated with the intention of recruitment scheduled for the first half of 2010.
- Menzies' new website was launched in May and the number of hits received has increased by over 80 per cent. We now also have the ability for on-line donations and on-line mailing list registration.
- The number of smaller donations increased year on year, and the number of people wishing to be added to our database and receive Menzies newsletters and event news increased significantly.
- It was another good year for the Rioli Fund for Aboriginal Health with the partnership with Hawthorn Football Club resulting in a number of significant donations and events, including a very successful tin rattle ahead of the Hawks 'Indigenous Round' game at the Melbourne Cricket Ground (MCG).



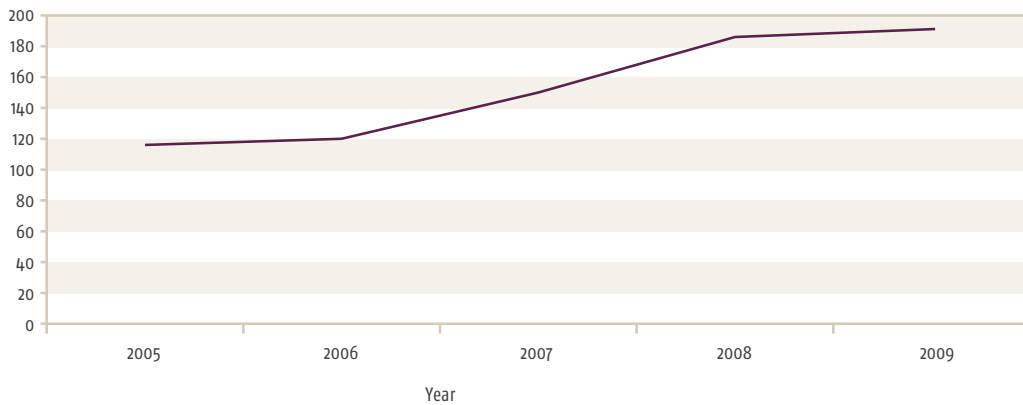


# financial and corporate overview

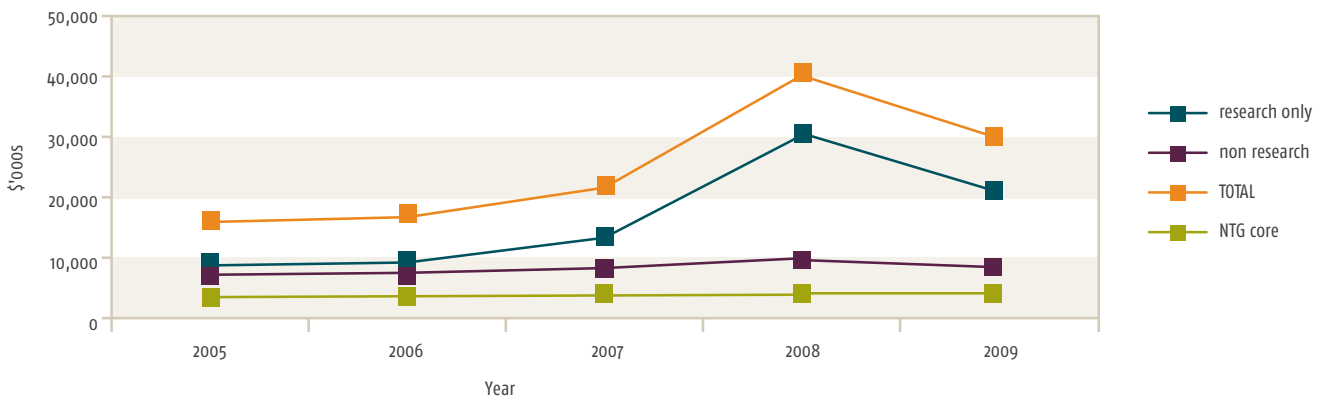
Value of NHMRC funding (income received)

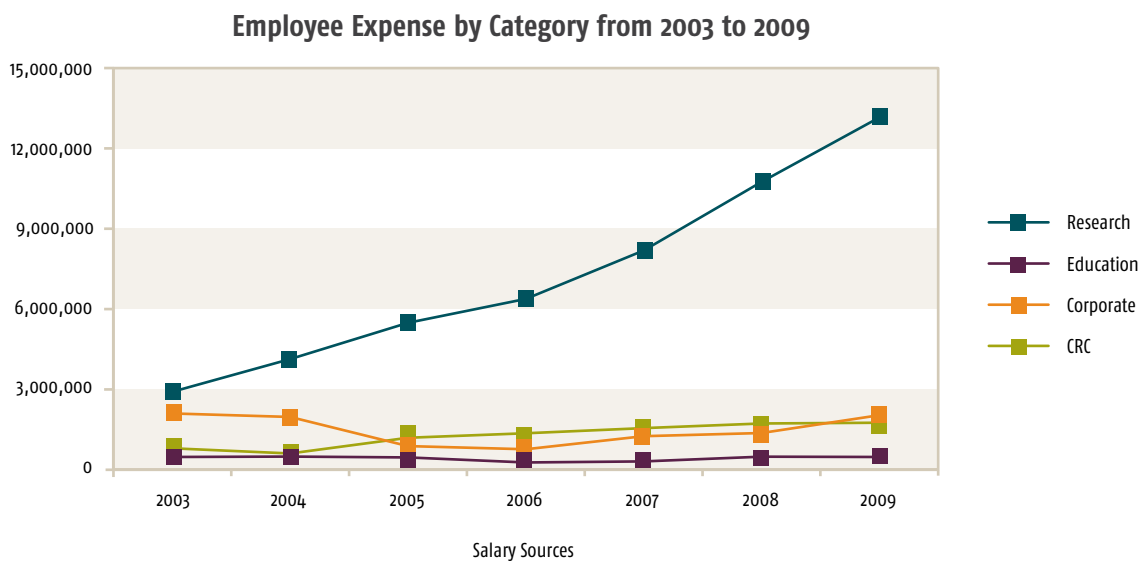
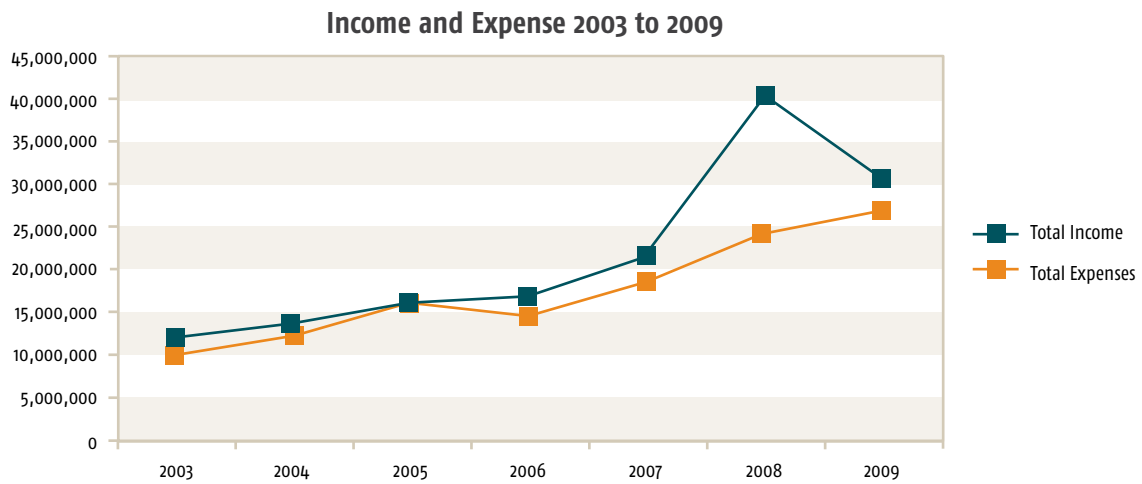
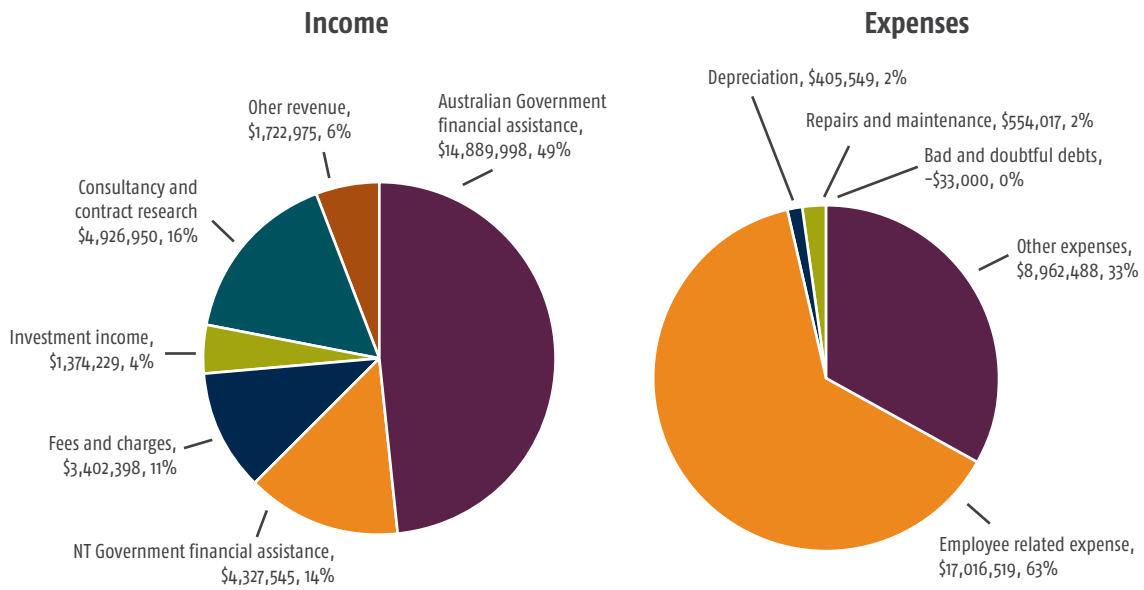


Number of staff (FTE)



Income (\$'000s) inc. building grants





Salary Sources



## a message from the chair

This has been another “big year” for the Menzies School of Health Research, a comment I seem to have made in introducing the Annual Reports for some years now!

The value of funding from the National Health and Medical Research Council (NHMRC), our main funding body, increased again in 2009 by 18 per cent to \$8.3 million. This has helped to increase the organisation’s overall income by 41 per cent in the last two years, to more than \$30 million. Thus Menzies’ ability to continue major contributions to tropical, Indigenous and international health, as well as education and training, is secured.

2009 saw our first significant external review of the organisation in some years. The Review Panel comprised Professor Steve Wesselingh (Dean, Faculty of Medicine, Nursing and Health Sciences, Monash University, Melbourne), Professor Cindy Shannon (Director, Centre for Indigenous Health, University of Queensland), and Dr Rosalyn Singleton (Immunisation Consultant, Alaska Native Tribal Health Consortium and Guest Research Associate, Arctic Investigations Program – Centre for Disease Control, USA) and they delivered a very positive and complimentary report on Menzies’ activities. The report clearly reflected Menzies’ outstanding performance and activities in recent years, raised nothing of any substantial concern to the Board, and contained some useful suggestions which will help Menzies refine its success into the future.

Menzies was successful in winning a \$34.2 million building grant from the Australian Government’s Health and Hospitals Fund, and this, together with contributions from the Northern Territory Government and Charles Darwin University, will be of enormous benefit to the organisation. Menzies is bursting out of its current location at the John Mathews Building (named after Menzies’ first Director) on the Royal Darwin Hospital campus site, and we have been forced to rent additional premises in the Darwin suburb of Winnellie. Design and planning for the new building will swing into full gear in 2010.

Menzies held its second ‘Ochre – Supporting Indigenous Health Through Art’ event – a lunch at the home of Helen and Bori Liberman in Mornington, Victoria. The Liberman’s ‘HBL’ art collection was on display throughout the day and, as well as lunch, guests were treated to performances by Territory born Mr Neil Murray, and a presentation by Professor Jonathan Carapetis. A stunning artwork by Yukultji Napangati was auctioned by MC Mr David Smorgon. Local talent Djarrin Wilson danced and played the didgeridoo alongside Adam “Edwards” Magennis – a local Mornington Peninsula Boonwurrung man. All of the money raised from the event will go towards an Indigenous health research scholarship in conjunction with the Australian Indigenous Doctors Association (AIDA) to help develop the next generation of Indigenous health researchers. The event was a great success – no mean feat in a year in which Menzies (as with other organisations no doubt) is still feeling the effects of the Global Financial Crisis.

We launched a wonderful new website in 2009 and I encourage you all to bookmark [www.menzies.edu.au](http://www.menzies.edu.au) and become a regular visitor if you are not already.

The Cooperative Research Centre for Aboriginal and Torres Strait Islander Health (CRCATSIH – previously Aboriginal Health), of which Menzies has been a core partner and centre agent, has been granted funding for another five years. During this time it will establish itself independently as The Lowitja Institute, Australia’s National Institute for Aboriginal and Torres Strait Islander Health Research. This is an enormously exciting next step for this pioneering organisation. Professor Carapetis remains on the interim Board. The administrative base of the CRCATSIH will be leaving the Northern Territory and moving to Melbourne. This will have benefits for the organisation’s evolution onto the national stage, but will also be a loss to northern Australia. A small Northern Australian Research Unit (of the CRCATSIH) will remain in Darwin.

The Menzies Board maintains its outcomes-oriented focus, ensuring governance acts to support the organisation in its achievements. This year the Finance Committee was reviewed and has become the Finance and Risk Committee. An Audit Committee was also formed and a system of internal audits initiated.

2010 is also shaping up to be a year of much anticipated achievements and new challenges. 2010 is the 25th Anniversary of the formation of the Menzies School of Health Research and we can look forward to a number of exciting events as we review our growth and development since formation, as we recognise our “coming of age” as an institution of national and international renown, and as we position ourselves for the next quarter century of rigorous research and delivery of healthy solutions. 2010 will have major challenges as well. The after effects of the Global Financial Crisis are not over as far as fundraising is concerned. The funding gap between research grants and the real costs of research is not getting any smaller despite recent Australian Government announcements, and Menzies continues to be challenged in meeting the costs of this difference.

Despite the perennial challenges of insufficient funds, as the stakeholder survey held as part of the external review found, our reputation is overwhelmingly positive. Our stakeholders believe that Menzies is a leader in its field, with significant standing in the research community and clearly ‘punching above its weight’ in the Indigenous and tropical health area. The report reinforced that Menzies’ staff, friends and stakeholders have every reason to be proud of our successes – and we are!

My congratulations and thanks to all the staff and supporters of the Menzies School of Health Research for their continued hard work, the exciting results of which are reflected in this Annual Report. There is much to celebrate!

Professor Simon Maddocks, Chair





*"We launched a wonderful new website in 2009 and I encourage you all to bookmark [www.menzies.edu.au](http://www.menzies.edu.au) and become a regular visitor if you are not already."*





## *a message from the director*

2009 was a year of contrasts for Menzies – growth together with consolidation, stability together with change. In the space of 12 months, we dealt with a range of these opposing factors and came through as a stronger, more cohesive team with increased financial resources, more staff and further tangible research outcomes.

The year started with an extremely favourable review of Menzies' research activities in the 'Quinquennial Review' conducted by a panel of three external experts. The report produced by the panel spoke very favourably of our research outcomes, stakeholder relationships and leadership, as well as outlining some solutions to the challenges that lie ahead for us. I would like to take this opportunity to thank the panel – Professors Steve Wesselingh, Cindy Shannon and Ros Singleton – and to also thank all Menzies staff, collaborators and stakeholders who assisted them in their deliberations.

Once again Menzies had outstanding success in the annual National Health and Medical Research Council funding allocation. We saw seven projects and programs funded to the tune of over \$8 million. That's an increase of 18 per cent on the previous year and is again a testament to the hard work and visions of Menzies' staff.

As well as once again increasing our research income during 2009, we were thrilled with the announcement in the federal budget that we had been awarded \$34.2 million (in addition to \$10 million previously awarded through federal and Northern Territory budgets) to build a new Menzies headquarters in Darwin. Planning is underway for the new building and we hope to begin the construction of our new state-of-the-art research facility in 2011.

Our research outputs remained extremely strong in 2009 with a record number of publications from Menzies' researchers, many of which were published in prestigious journals with high impact factors. In addition to this, Menzies' staff continued to be sought after as speakers and presenters at many international conferences and to provide expert opinion on issues around Indigenous, tropical and international health.

We continued to strengthen our expertise in child health throughout 2009 with the arrival of Professor Sven Silburn, who was appointed as Professor of Education and Child Development Research. Professor Silburn is one of Australia's foremost researchers in these fields, and his arrival brings solidity and permanence to our intention, as outlined in our Strategic Plan, to establish a program linking health and education research. Among the impressive achievements of Sven's team has already been a \$2.5 million contract for evaluation and research around the Northern Territory Government's 'Transforming Indigenous Education Program', an NHMRC project grant to fund an evaluation of the NT's Mobile Preschool Program, and recruitment of Associate Professor Gary Robinson and his parenting research team from Charles Darwin University. We are also delighted to welcome Associate Professor Fiona Arney as the new head of Child Protection Research. Fiona will be arriving in early 2010, and in many ways is the future of child protection research in this country.

The Healing and Resilience Division also experienced a period of growth in 2009 with the new Substance Misuse Unit getting underway under the expert guidance Professor Peter D'Abbs. Peter is a social science researcher who is acknowledged as an Australian leader in

Indigenous alcohol and other drugs policy research, and returned to Menzies after several years at James Cook University.

We made a decision during 2009 to dissolve the Services, Systems and Society Division, but our work on issues such as health services and systems will continue. The senior researchers associated with that Division have relocated to other Divisions, and in addition we have created a new Centre for Primary Health Systems Research under the leadership of Professor Ross Bailie. This Centre includes "One21seventy" (a name chosen to reflect the aspiration to increase life expectancy for Indigenous people beyond age one in infancy, beyond 21 in children and young adults and beyond 70 in the lifespan). This is another initiative to ensure the translation of the outcomes of Menzies' research into policy and practice. It will have the dual aims of extending the functions of the highly successful 'Audit and Best Practice in Chronic Disease' (ABCD) project, which provided support to more than 120 Aboriginal and Torres Strait Islander health services around the country in the use of Continuous Quality Improvement (CQI) methods, and to conduct research around quality improvement in primary health care.

It was extremely pleasing to see the start of the AusAID Knowledge Hub in Women and Children's Health in early 2009. Researchers from Menzies' International Health Division are leading the focus on nutrition, with a long term plan to develop a regional network and focal point for maternal and child nutrition-based here at Menzies. The coming year will be aimed at developing strategic links in nutrition with Thailand, Philippines, Cambodia and Laos.

During a visit to Timor Leste, as part of the Northern Territory Chief Minister's delegation, Charles Darwin University Vice Chancellor Barney Glover and I announced two Menzies-based health PhD scholarships for Timor Leste. We hope to award these scholarships in early 2010 and look forward to building upon the already strong relationship we have with our neighbours in Timor Leste by helping them to develop their capacity in health research.

We are also working with the Australian Indigenous Doctors' Association (AIDA) on a Menzies-AIDA PhD scholarship for an Indigenous doctor, which will be part-funded by money raised from 'Ochre – Supporting Indigenous Health Through Art' fundraising dollars. This will help us to strengthen our critical mass of Indigenous researchers here at Menzies and develop the next generation of Indigenous research leaders.

It has been a challenging year for the Education and Training Division with the budget announcing the end of the Commonwealth Government Public Health Education and Research Program (PHERP) in 2011. This funding source has provided much of our Education and Training budget in recent years. I am pleased that Louise Clark is already leading plans for a refocused Education program, focusing on the unique skills and perspective which Menzies and its team of highly skilled researchers and educators can offer.



The year also saw growth in our capacity to deliver quality research training, and to expand our capacity to conduct high quality evaluations, with the establishment of the Evaluation and Research Support Unit under the leadership of Associate Professor Sue Skull. This Unit aims to improve direct support and training for researchers throughout all stages of the research process, as well as to assist in business management and quality assurance of evaluation research.

Individuals from all Divisions won a number of recognitions and awards during 2009 and my congratulations goes out to them all. One award particularly worth mentioning is that Menzies won Life Education Australia's prestigious (30th Anniversary) 'Gold Harold Award for Education' for our outstanding contribution towards the healthy development of Indigenous children through the groundbreaking 'Early Childhood Development' research program. The Award marks Life Education's commitment to the protection and caring of Australian children, using the "mystical and iconic Harold the Giraffe" to celebrate and honour people who could never get an Oscar, but who get a "Harold" instead. This award is the first major recognition that our expansion into the area of linking health and education research is striking a chord on the national stage.

Head of Menzies' International Health Division, Professor Nick Anstey and his research team based in Darwin and Timika (Indonesia), were selected as one of the 'ten of the best' research projects in 2009 in the highly prestigious NHMRC publication. This project involved a number of interventions aimed at reducing death from severe malaria.

It was also very pleasing to some of Menzies' young, up and coming researchers receive awards and accolades. This included Dr Alice Rumbold, a young researcher in our Services, Systems and Society Division, who was awarded the South Australian 'Tall Poppy' Award for her work examining the incidence and cause of rare gynaecological cancers in Indigenous women and ways to provide the most appropriate care in pregnancy for Aboriginal women. This work is actively informing health programs to optimise the health of young Aboriginal women now and in the future.

Menzies held a number of events during 2009 including another successful Oration. The Honourable Michael Kirby AC CMG delivering a fascinating talk to an audience of more than 250. His talk was entitled 'Closing the Gap Globally and Locally: HIV/AIDS Strategies for the most vulnerable' and he spoke of the need to increase research in the area of Sexually Transmitted Infections (STIs) and youth health in the Indigenous communities, something that we certainly aim to do over the next couple of years.

The coming year will be a year of celebration and further challenges. We will be celebrating our 25th Anniversary and we hope that the activities we have planned – including a national television advertising campaign – will give Menzies a more prominent profile at a national level but at the same time bring us closer to our friends and supporters in the Northern Territory and northern Australia.



*"Menzies continues to be a wonderful organisation, a fantastic place to work or study and, despite unprecedented growth and expansion in recent times, true to its values and true to itself."*

To everyone who has been involved with Menzies during 2009, and for the past 25 years, I extend my gratitude, thanks and respect. Menzies continues to be a wonderful organisation, a fantastic place to work or study and, despite unprecedented growth and expansion in recent times, true to its values and true to itself.

Professor Jonathan Carapetis





# *a message from the manager, menzies indigenous development unit*

Wow what a year – activities, events, celebrations and new responsibilities.



Aboriginal and Torres Strait Islander staff continued to contribute their unique expertise to a broad range of research programs and projects spanning the spectrum of Menzies' work. I am proud of the skills and talent of many of our Indigenous staff, they continue to amaze me with their passion, dedication and professionalism as we all strive to raise the health standards of our families, communities and the Aboriginal and Torres Strait Islander peoples in general.

One big change in 2009 for the staff of Menzies Indigenous Development Unit (MIDU) is the beginning of our important role as secretariat for a number of committees.

1. In May 2009 the first meeting was held of the Aboriginal and Torres Strait Islander Advisory Committee with staff of MIDU taking on the role of secretariat. Menzies Board member Kate George is the Advisory Committee's Chair. This committee was established because a key aspect of Menzies' strategies is to get high level input into the overall directions and program areas of Menzies'. To help with this the high-level Indigenous Advisory Committee was established, to advise the Director Jonathan Carapetis on overall directions, new initiatives and other strategic issues relating to Menzies' work in Aboriginal and Torres Strait Islander health.
2. Staff of MIDU started work as the secretariat for the overarching Child Health Division's Indigenous Reference Group. The reference group held three meetings in 2009, with community members actively engaged in discussion and information sharing on Child Health Division projects. Dr Ngiare Brown was elected to the position of Chair.
3. The Menzies Indigenous Employment Strategy working group completed the final draft of the updated employment strategy which will be taken forward to the next level by the Associate Director Aboriginal Programs.
4. MIDU continued with their ongoing support to the Indigenous Staff Network. The network met once a month to discuss staff's involvement in Menzies' activities and provided targeted professional development opportunities for its members. The network meetings hosted different guest speakers, not only from within Menzies, but with staff of key organisations. Menzies' staff attended meetings to get advice on projects and to inform members of new research proposals. We were also able to workshop ideas around community engagement and promotional material for different projects.

During the Quinquennial Review (QQR) period the staff of MIDU was kept busy hosting community visitors who were invited to meet with the QQR panel and escorting panel members on community visits. One memorable visit was to Ngiuu on the Tiwi Islands, where the panel members enjoyed meeting with local community leaders and shopping for arts and craft items to take home.

Another first was the inaugural Community Honorary Appointments event, with the awards being presented to Mr Marius Puruntatameri and [the late] Big Frank Garawirtja from Galiwin'ku. Director Jonathan Carapetis and myself travelled to Galiwin'ku to present Big Frank with his awards as ill-health prevented him from coming to Darwin for the event. A large community celebration was held to honour Big Frank by, not only the Galiwin'ku community, but by many family and friends from neighboring regions. The Chooky Dancers, led by Big Frank's son and the women's Line Dancing group, which included Big Frank's daughters, put on a wonderful performance. The Soft Sands band played wonderful music well into the night.

On the very sad passing of Mr Garawirtja, Menzies' staff were privileged to take part in honouring the health pioneer. A select group attended the Memorial Service including myself, Julie Brimblecombe, Yvonne Coleman, Maria Scarlett, Therese Kearns and Ross Sparks. It was a very moving event and Menzies was acknowledged for its support and work with Big Frank. Rest in Peace Big Frank, we will not forget you or your contribution to improving Indigenous health.

MIDU staff attended many festivals, open days, careers fairs and other public events throughout the year ensuring that Menzies' health messages and opportunities were communicated to Aboriginal communities, networks and individuals. The Community Engagement Officers supported the Communication Unit with the Red Ball Drop event in Alice Springs, and with the Hawthorn Hawks in the Katherine region.

I was honoured to receive a Tribute to Northern Territorians Women's Award 2009, and I thank the Menzies' staff who nominated me and for their support throughout the year. In receiving this award I would also like to acknowledge the encouragement and support of the good, hardworking colleagues and staff who have underwritten the success of my career at Menzies.

I would like to take the opportunity to thank the MIDU staff Normie, Nadine, Liana and Donna for all their hard work and support and to acknowledge the efforts of our Aboriginal and Torres Strait Islander staff and students, our community partners and their representatives and the Indigenous organisations and individuals who, not only facilitate our research, but are the heart of our culturally rich environment – those who offer us generosity, trust and friendship above and beyond the workplace and research projects.

Thank You

Bilawara Lee



*"I am proud of the skills and talent of many of our Indigenous staff, they continue to amaze me with their passion, dedication and professionalism as we all strive to raise the health standards of our families, communities and the Aboriginal and Torres Strait Islander peoples in general."*







# child health division



The building blocks for good health are laid early in life. That is why Menzies' researchers are striving to discover ways to prevent and treat conditions which are affecting the health of Indigenous children.

It's a sad fact that young Indigenous people are more likely to suffer from diseases such as pneumonia than non-Indigenous children and that four in five children in remote Indigenous communities have hearing loss because of severe ear infections. Young Indigenous children are more likely to be hospitalised than non-Indigenous kids, and seven out of every ten Indigenous children can expect to have scabies and skin sores in the first year of their life.

Poor health and poor education are strongly linked. A child suffering from poor nutrition or multiple ear infections will have poor concentration and learning ability, which can seriously affect the way they live their lives into the future.

Here at Menzies, we want to help the Indigenous children of today become the healthy adults of tomorrow. Our researchers are discovering better ways to prevent and treat common problems and we are working with local people to help them gain the skills to improve the health of the next generation of Indigenous adults.

*Professor Ross Andrew*





The aim of the Child Health Division is to bring together existing Menzies' child health research, increase research into immunisation and vaccine-preventable disease, intervention studies to prevent infections and improve management of common diseases affecting Indigenous children.

The Division's newest research agenda examining the links between education and health and novel approaches to improving health and developmental outcomes in early childhood is expanding rapidly. Child Protection has now been added to the Child Health Division's portfolio.

The landmark Aboriginal Birth Cohort (ABC) study continues to provide unparalleled insights into the links between early childhood experiences and chronic disease in later life. Research into ear, oral, respiratory and skin health remain a major focus of the Division's work.

## Research Projects

### Immunisation

- Effectiveness and use of the 23-valent pneumococcal polysaccharide vaccine in Indigenous adolescents and adults
- PneuMum – a randomised controlled trial of pneumococcal polysaccharide immunisation for Aboriginal and Torres Strait Islander mothers to protect their babies from ear disease
- TROVE – Case control study of rotavirus vaccine effectiveness in the Northern Territory

### Rheumatic Heart Disease

- Screening for rheumatic heart disease in Indigenous children
- Establishment of the National Coordination Unit for Rheumatic Heart Disease

### Child Education and Development

- Menzies-Department of Education and Training Partnership
- Australian Early Development Index
- Mobile Preschool Program
- Developmental Screening Tool Evaluation
- 'Lets Start' – Indigenous Parenting Program
- Longitudinal Study of Australian Children & Longitudinal Study of Indigenous Children

### Skin, Strep & Scabies

- Global GAS vaccine based on the M-Protein
- Beating scabies and strongyloidiasis in a remote Aboriginal community in the Northern Territory
- Alternative Treatment for Skin Sores





## Life Course

- Aboriginal Birth Cohort Study (ABC) – from childhood to adulthood
- Top End Cohort – age matched to ABC
- Prevalence of iodine deficiency in Northern Territory Aboriginals of reproductive age
- Establish inter-sectoral approach to improving children's environmental health in remote communities
- Reproductive and Maternal Health – including interaction of metabolic and reproductive health, antenatal screening for fetal anomalies and pre-conception and adolescent reproductive health

## Oral Health

- A community-randomised controlled trial of fluoride varnish application to children's teeth and health promotion to prevent dental decay in Aboriginal pre-school children Strong Teeth for Little Kids (STLK)
- SMiLE (the microbiological aspect of the STLK study) investigating the oral microbiology by studying levels of the most implicated cariogenic bacterium, *Streptococcus mutans*, as well as the total bacterial load

## Ear Health

- Azithromycin versus placebo in the treatment of asymptomatic acute otitis media in young Aboriginal children
- Defining the interaction between respiratory viruses and bacteria as an important cause of acute tympanic membrane perforation in Indigenous infants (VIABLE)
- MICROBIOME: Microbiological investigations of otitis media ecology
- Pneumococcal Epidemiology
- The Australian Indigenous EarInfoNet – An Ear Health and Hearing Web Resource and Network
- Mathematical modelling of bacterial carriage in children (MMAPS)

## Respiratory Health

- Burden of influenza and other respiratory viruses among Aboriginal children in the Top End
- Multi-centre Bronchiectasis Study: A collaborative and international study of Bronchiectasis in Indigenous children
- Multi-centre evaluation of a clinical pathway for chronic cough in children – can its use improve clinical outcomes?







### Highlights of 2009

1. Strong Teeth for Little Kids (STLK) data analysis got underway, showing a positive result. Feedback to all 30 communities was completed, and the research informed recent public policy announcements.
2. The Aboriginal Birth Cohort (ABC) Top End cohort reached its recruiting target.
3. The Child Health Division (CHD) had a number of projects completed to publication phase including:
  - a panel of 17 respiratory viruses infecting Indigenous children, and associations with otitis media and respiratory bacterial load
  - the development and testing of pneumococcus and Haemophilus quantitative polymerase chain reaction (PCR) assays for use on sera to improve aetiological diagnosis of bacteraemic pneumonia in children
  - a comparison of nasopharyngeal and lung microbiology in children with bronchiectasis
4. Clinical Trials Workshop (for Child Health staff) was held in November 2009 with additional input from staff at the National Health and Medical Research Council (NHMRC) Clinical Trials Centre.
5. Staff contributed to the 'Tropical Health and Infectious Diseases Short Course' 20–22 May, 2009 at Royal Darwin Hospital (RDH).
6. The inaugural CHD Indigenous Reference Group meeting was held in December 2008, with subsequent meetings in February, July and December of 2009. To date the Indigenous Reference Group has provided input on 17 projects. Representation from Alice Springs has now also been included.
7. The Cooperative Research Centre (CRC) for Aboriginal Health provided \$200,000 towards consultations and training at Galiwin'ku for the Ivermectin RCT.
8. Professor Sven Silburn and his team have successfully tendered for a \$2.5 million contract for evaluation and research into the Northern Territory Department of Education and Training's Transforming Indigenous Education Program.
9. Channel Seven and Financial markets Respiratory Grants successful for \$172,500 and Susan Pizzutto received an Australian Cochrane Airways Group Network Award.
10. Liz MacDonald has been successful with a tender (as part of a larger New Zealand company) for an evaluation of national child health checks program.
11. Establishment of the National Rheumatic Heart Disease Coordination Unit, RHD Australia, in collaboration with Baker/DI and James Cook University.





## Looking Forward

The Child Health Division aims to strengthen the capacity of its researchers by engaging with key stakeholders and policy makers. Our annual stakeholders meeting was held in August with more than 20 participants from government and non-government organisations meeting to discuss future research directions.

Throughout 2009, Menzies' partnership with the NT Department of Education has evolved and now includes research and evaluation by the Child Education and Development Group to support the Transforming Indigenous Education Unit and 'Closing the Gap' initiatives.

The Child Health Division has a number of other new initiatives underway including expanding the respiratory research program to address respiratory illness in hospitalised children, completing trials in prevention and treatment of otitis media, establishing an Indigenous Immunisation Research Network and improving treatments for common skin infections.

Work has begun on a description of a new pneumococcal serotype, development of assays to study microbial communities in respiratory specimens, microbial analysis of oral specimens from children in the Strong Teeth for Little Kids Study, role of *Alloiococcus otitidis* in otitis media in Indigenous children, immune function in children with CSLD/bronchiectasis and bronchiolitis, and ongoing microbiological and molecular analyses of specimens as outcomes of our trials.

The Division is also focusing on developing several new initiatives. Dr Rosalind Harding from Oxford University and Dr Lea-Ann Kirkham from Telethon Institute for Child Health Research (TICHR), visited Menzies in 2009 to discuss current and future collaborative efforts in *Haemophilus* research. The Centre for Clinical Trials at Sydney University is also exploring possible collaboration and the Division is awaiting outcomes on Centre of Excellence funding in the a) Public Health Stream: Building capacity around nutrition and child development (with Victoria, Western Australia and the Northern Territory) and b) Clinical Stream: Upper and Lower Respiratory Health in Indigenous Children.



## Publications

1. Anne Chang and Roslyn Singleton guest edited the publication *Health Issues in Indigenous Children: An Evidence Based Approach for the General Pediatrician*. *Pediatric Clinics North America* 2009; 56 (6). The book includes contributions from other Divisional staff namely: Ross Andrews, Jonathan Carapetis, Amanda Leach, Peter Morris, Kerry-Ann O'Grady, Susan Sayers and Gurmeet Singh.
2. Andrews R, Moberley SA. The controversy over the efficacy of pneumococcal vaccine. *Canadian Medical Association Journal* 2009;180(1):18-9.
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9. McDonald E, Bailie R, Grace J, Brewster D. A case study of physical and social barriers to hygiene and child growth in remote Australian Aboriginal communities. *BMC Public Health* 2009;9:346.
10. O'Grady KA, Carlin JB, Chang AB, Torzillo PJ, Nolan T, Ruben A, et al. 7-Valent Pneumococcal Conjugate Vaccine Effectiveness against WHO Defined Radiologically Diagnosed Pneumonia in Indigenous Australian Infants. *Bulletin of the World Health Organisation* 2009.
11. Sayers S, Singh G, Mott S, McDonnell J, Hoy W. Relationships between birthweight and biomarkers of chronic disease in childhood: Aboriginal Birth Cohort Study 1987-2001. *Paediatrics Perinatal Epidemiology* 2009;23(6):548-56.
12. Snelling TL, Schultz R, Graham J, Roseby R, Barnes GL, Andrews RM, et al. Rotavirus and the Indigenous children of the Australian outback: monovalent vaccine effective in a high-burden setting. *Clinical Infectious Diseases* 2009 Aug 1;49(3):428-31.



## Awards and Achievements

- Menzies awarded Life Education Australia's prestigious (30th Anniversary) 'Gold Harold Award for Education' for our outstanding contribution towards the healthy development of Indigenous children through the groundbreaking 'Early Childhood Development' research program.
- Anne Chang (29 January – 2 February 2009) was invited to present at the Evaluation of a Child with Chronic Cough: Masters of Pediatrics Conference at the Miller School of Medicine: University of Miami.
- Jonathan Carapetis, Therese Kearns and Ross Andrews (12-15 July 2009) Conference Abstract, The Australian Society for Parasitology Inc. ASP & ARC/NHMRC Research Network for Parasitology Annual Conference Beating scabies and strongyloidiasis in the Northern Territory with an ivermectin MDA.
- Gurmeet Singh, 12-13 November 2009, Workshop Participant Department of Families, Housing, Community Services and Indigenous Affairs (FaHCSIA) & Australian Research Alliance for Children & Youth (ARACY). Workshop "Maximising the Value of Longitudinal Studies for Policy and Science: Methodological and Analysis Issues.
- Susan Pizzutto, 03-06 December 2009, Workshop Participant Advanced Training Course in Immunology, Queensland, Federation of Immunological Societies of Asia Oceania (FIMSA) & Australian Society for Immunology (ASI).





*"There have been quite a few highlights over the years, that's why I'm still here, but the best thing has been the opportunity to do so many jobs."*

## Menzies Staff under the Microscope

### Melita McKinnon

*Melita McKinnon's career with Menzies has been colourful and varied to say the least. She's worked in projects on skin sores and scabies, ear health and heart health and everything in between.*

"I started with Menzies in May 1998 as a trainee doing lab skills. It was a lab support role so we autoclaved the equipment, made sure teams had all the equipment they needed. Then I started working with Dr Amanda Leach and Associate Professor Peter Morris on one of their projects and it led me into microbiology."

She's been at Menzies ever since, changing jobs regularly and constantly up-skilling.

"There've been quite a few highlights over the years, that's why I'm still here, but the best thing has been the opportunity to do so many jobs. I could do a bit of molecular biology while I was working with the scabies team in the lab, which was quite interesting, and I could also get involved in data collection and management."

Melita was Born in Rabaul, in Papua New Guinea, to a family of five girls.

She moved to Australia when she was six months old, living in Garden Point on Melville Island, Numbulwar, Cairns and Katherine before settling in Darwin for High School. Although she lived in remote settings growing up, it wasn't until Melita started working with Menzies that she developed a real passion for improving health.

"I got to start travelling out to communities and seeing the field work, and doing the field work. I'd done a little bit with the ear team early on, and just going into communities... it really captures you... you realise just how bad the health problems really are."

Through Menzies Melita has had the opportunity to develop her health knowledge and share it with the rest of the world.

"I went to South Africa for the second annual international conference for pneumococcal and pneumococcus diseases. The networks we formed were amazing. You find someone working on similar research on the other side of the world and troubleshoot with them, then and there."

Over the past 12 years Melita's held several positions across a number of different projects, most recently the Getting Every Child's Heart Okay (gECHO) program, screening for Rheumatic Heart Disease in remote communities, and on the PneuMum project which is trying to find an effective vaccine to reduce ear disease in Indigenous children.

Next year Melita is planning to grow her responsibilities further, focusing on new projects within the Child Health Division and taking on new study challenges.

She's been awarded a position in a Diploma of Project Management which she'll start in 2010.







# healing and resilience division



Strong family, strong culture and strong identity are important building blocks for the health of Indigenous youth. Many Indigenous youth are at high risk of developing mental disorders as their families struggle with disharmony and disadvantage.

Menzies is looking for ways to improve the mental health of families. We are also looking at mental health prevention and ways for people and communities to stay socially, spiritually, emotionally and mentally strong.

Research has shown that Indigenous people have physical, mental and social problems linked with alcohol, kava, petrol and marijuana use.

At Menzies we are striving to understand the impact of substance use and social and family stress on health, and partner with communities to find ways to improve the health of families.

We are communicating 'two-way' mental health messages which overcome language and literacy barriers.

Menzies' Healing and Resilience Division researchers give people the tools to recognise and overcome the problems causing mental illness and related social problems.

*Dr Tricia Nagel*







## Research Priorities

The establishment of a Division dedicated to healing and resilience research represents a new research direction for Menzies. With a focus on Indigenous wellbeing, this Division includes existing research into mental health and substance misuse as well as an ambitious research agenda into social and family structures and function, factors that promote resilience and good mental, physical and emotional health and how those factors differ between individuals and communities in Indigenous and non-Indigenous settings. The Division is exploring new approaches to delivering mental health care and substance misuse prevention and evaluation programs and developing practical strategies to improve mental health and wellness in an environment that accommodates cultural diversity and respect.



## Research Projects

### Substance Misuse

- Neurocognitive and social changes associated with unleaded petrol sniffing and abstinence from further sniffing
- Develop culturally-appropriate cognitive assessments with applications in substance abuse and mental health with Indigenous clients
- Best practice guidelines for evaluating Indigenous residential alcohol and drug programs
- Evaluate Alice Springs and Tennant Creek Alcohol Management Plans
- Alcohol, Drugs and the Brain – Evaluating health communication strategies
- Community understanding of substance misuse
- Changing patterns of substance misuse
- Developing appropriate evaluation strategies for Indigenous rehabilitation services

### Mental Health

- Australian Integrated Mental Health Initiative (AIMHI NT) – development of educational and treatment resources
- Cultural security in hospital mental health care
- Gambling worries in remote communities: exploring attitudes and strategies for change
- BEAT Depression: Best practice in early intervention assessment and treatment of depression and substance misuse in remote communities

### Youth Health

- 'Our lives' culture context and risk, is a four year project funded by the Australian Research Council (ARC) to examine sexual decision making among youth in remote Aboriginal communities in Northern Territory, Western Australia and South Australia, in collaboration with the sexual health and Blood borne diseases unit of the Northern Territory Department of Health and Families
- Develop a project to investigate the dynamics of gang membership in a remote Aboriginal community
- Continue to evaluate the Balunu Foundation's diversionary interventions for at risk Indigenous youth

### Palliative Care

- Quality of life and palliative care for clients in remote communities in the Northern Territory

## Highlights of 2009

- A new Substance Misuse Unit and Program with new and existing staff has started and alcohol management plan evaluations in Alice Springs and Tennant Creek have been completed.
- Partnership with Amity – ‘gambling worries’ in remote communities – has resulted in a three year funded grant exploring attitudes and strategies for change.
- The AIMhi strengths-based approach to mental health has been introduced to routine care in the hospital and in-patient unit data collection is progressing.
- A project to study the dynamics of gang membership in Port Keats has been funded by the Institute of Criminology/ Australian Criminology Research Council.
- Two Indigenous research officers Carolyn Griffin and Valerie Thompson are enrolled in further tertiary education (Bachelor of Science and Bachelor of Commerce).
- The AIMhi ‘train the trainer’ in Indigenous mental health course has been delivered to alcohol and other drug services in two sites in Western Australia (Kununnurra and Albany).
- AIMhi training was delivered throughout 2009 in mental health, primary care, chronic disease, youth and alcohol and other drug services in New South Wales, Western Australia and the Northern Territory.
- Cooperative Research Centre for Aboriginal Health (CRAH) has funded the publication of updated and new AIMhi resources including the popular ‘Yarning about mental health’ flip chart and the ‘stay strong’ plan and further development of petrol sniffing and alcohol and cannabis flipcharts has taken place.
- Richard Chenhall and Kate Senior, and other members of the division, contributed to the Scientific Committee for the organisation of the successful Australian Professional Society for Alcohol and Other Drugs Conference held in Darwin, November 2009.
- Collaborative research is taking place with Save the Children and WA Health to examine strategies on how to engage with youth about sexual decision making.
- Funding of \$1.1 million over four years has been secured for the BEAT depression project, in partnership with Beyondblue and the Northern Territory Department of Health and Families.

## Looking Forward

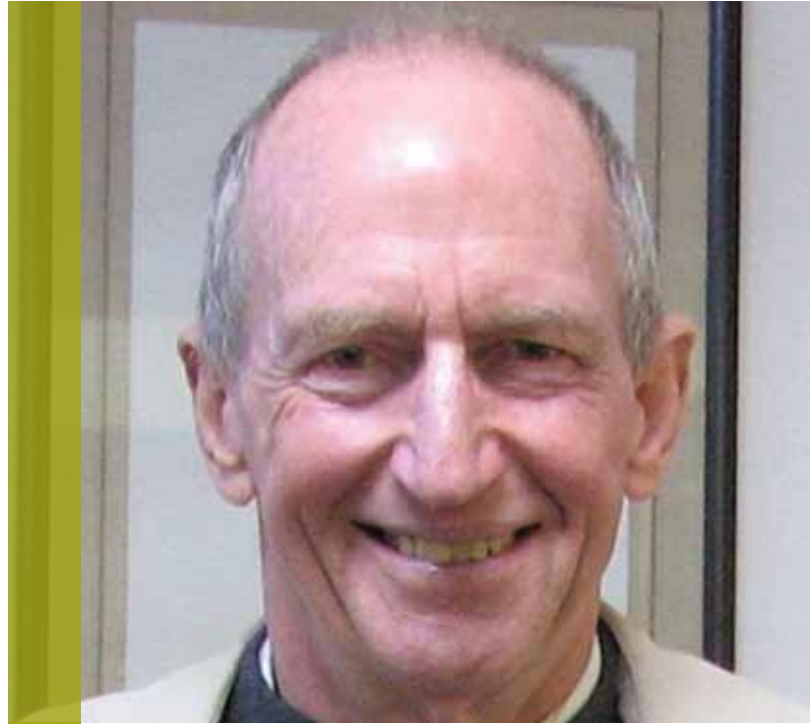
There are a number of exciting new initiatives taking place in the Healing and Resilience Division. In 2010 the division will continue working across a number of projects throughout the Northern Territory, while extending its reach into other jurisdictions. The Division has been invited to roll out its successful AIMhi mental health program to the West Australian and New South Wales Alcohol and Other Drugs Indigenous services networks. The team will also be extending its reach along the eastern seaboard, taking part in a review of all Indigenous drug and alcohol services in New South Wales, funded by NSW Health and Office for Aboriginal and Torres Strait Islander Health (OATSIH).

## Publications

1. Cairney S, Maruff P, Currie J, Currie BJ. Increased anti-saccade latency is an isolated lingering abnormality in Sydenham chorea. *Journal of Neuro-ophthalmology* 2009; 29: 143-5.
2. Chenhall, R and Senior, K, 2009, “Those young people all crankybella” Indigenous youth mental health and globalisation’ *International Journal of Mental Health*, 38(3): 28-43.
3. Cunningham T. Restorative justice and pre-court diversion: Implications for the development of social policy in the Northern Territory. *Just Policy* 2009; 50: 62-9.
4. Dingwall K, Cairney S. The importance and challenges of assessing cognition in Indigenous Australians. *Australasian Psychiatry* 2009; 17 (Suppl) : 547-50.
5. Dingwall KM, Lewis MS, Maruff P, Cairney S. Reliability of repeated cognitive testing in healthy Indigenous Australian adolescents. *Australian Psychology* 2009; 44: 224-34.
6. Jackson KE, Currie B, Cairney S, Maruff P, Snyder PJ. Hunger and the perception of the scent of petrol: A potential neurobiological basis for increased risk of petrol inhalation abuse. *Addiction Research and Theory* 2009; 17: 518-24.
7. Nagel T, Robinson G, Condon J, Trauer T. Approach to treatment of mental illness and substance dependence in remote Indigenous communities: Results of a mixed methods study. *Australian Journal of Rural Health* 2009; 17: 174-82.
8. Nagel TM, Thompson C, Robinson G, Condon J, Trauer T. ‘Two way’ approaches to Indigenous mental health literacy. *Australian Journal of Primary Health* 2009; 15: 50-5.
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## Awards and Achievements

1. Tricia Nagel participated in Advisory Consultative Activities for the federal Office of Aboriginal and Torres Strait Islander Health. OATSIH Stakeholder consultation: 'Development of a Culturally Appropriate Mental health Tool Kit'. Canberra.
2. Tricia Nagel was invited to speak at the Northern Territory Council of Social Services Conference on Menzies' AIMhi, Alcohol and Other Drug services.
3. Kate Senior was invited to present her workshop 'Culture: Context and Risk. Socio-cultural influences on the sexual health of Indigenous young people'. Title: Publications and other outputs. Menzies School of Health Research.
4. Kate Senior was invited to present her workshop 'Culture: Context and Risk. Socio-cultural influences on the sexual health of Indigenous young people'. Title: PhD Project. Menzies School of Health Research.
5. Tricia Nagel was involved in the Consultation: the National Indigenous Health Equality Council's Indigenous adolescent roundtable to explore the wellbeing of Indigenous youth.



*"You want to feel that your research is actually being taken into account in making decisions and not just being used to give a gloss to legitimise decisions which have already been made."*





## Menzies Staff under the Microscope

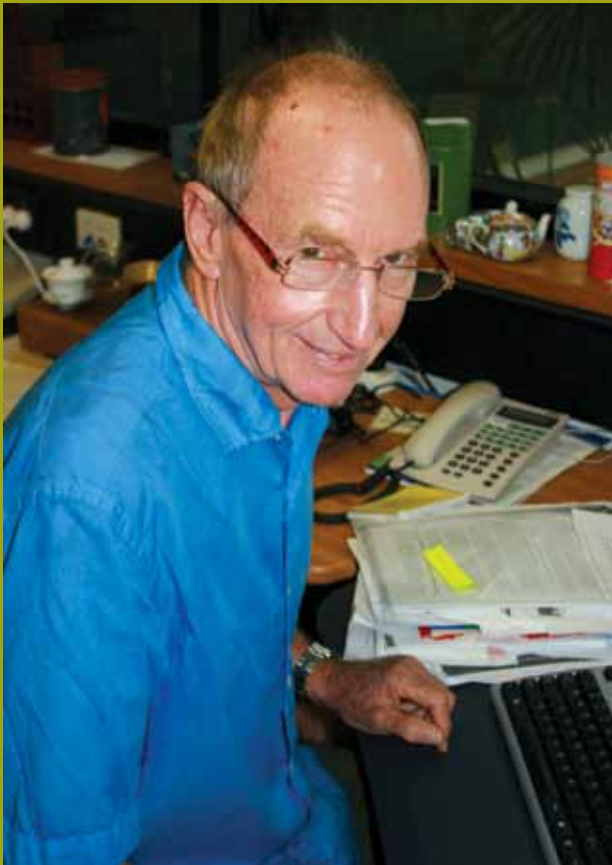
### The proof in the policy: the life & times of Professor Peter d'Abbs

*We shine a light on the good Professor known for speaking his mind, and respected as a world authority on substance misuse – the research he's so passionate about.*

"I don't think we should overstate the influence we can have on government policy but we can have influence. That's still my greatest motivation, that's why I'm doing this, because I think research can make a difference to the kind of decisions that are made."

Professor Peter d'Abbs was born in London in 1944. His father was a member of the British Army, whose tenure in Her Majesty's service would ensure young Peter was well travelled at an early age. After a stint in India a pivotal moment would arrive when his family was offered one of two postings to either Rhodesia or Australia. It's to Menzies' good fortune that they would choose Australia.

Ever the adventurer Professor Peter d'Abbs took the road less travelled into health research, embarking upon the first steps of what would be a defining career in social policy research. After attaining an



Arts honors degree in Politics and Indonesian studies, he travelled widely throughout Asia as a magazine journalist during the late 1960's and early 1970's.

"Then I went to England and got a job doing what was effectively social policy research, evaluating a policy of trying to combat rural de-population in north Devon in England. The research for the job actually gave me an entry to do a masters and that was 1974."

In the early 1980's the Professor arrived in Darwin and began work on the restricted areas provision of the Northern Territory Liquor Act. This would be his debut into the world of Alcohol Policy Research, and the beginning of his decades-long contribution to the Northern Territory. He would then become part of the Menzies' team in 1991.

"The most exciting time was undoubtedly through the 1990's when, in 1991, the then CLP government under Marshall Perron's leadership, embarked on what in fact was by far the most comprehensive alcohol policy in the country – indeed by world standards it was quite innovative and it was well funded, so I was part of a group that helped to launch that. I think it was a time when there was a real search for workable policies and research played a big part – it was a good feeling. You knew the research was looked at, listened to, and taken into account, research isn't always like that so it was a bit of a golden era that tailed off through the 1990's as the energy ran out."

Professor Peter d'Abbs then moved to Cairns where he worked as a lecturer at James Cook University. He was drawn back to Menzies School of Health Research late this year to lead the evaluation of several of the current Northern Territory Government's Alcohol Management Plans (AMP's).

"Pretty well all my research has had a strong link to social policy. The main thing I imagine for anyone who works in the social policy research area, but certainly it's true in my case, is that you want to feel that your research is actually being taken into account in making decisions and not just being used to give a gloss to legitimise decisions which have already been made, and by and large my experience in the Territory has been positive."

Working in the Northern Territory Professor Peter d'Abbs' research has included the misuse of alcohol and kava, and extensive work on petrol sniffing.

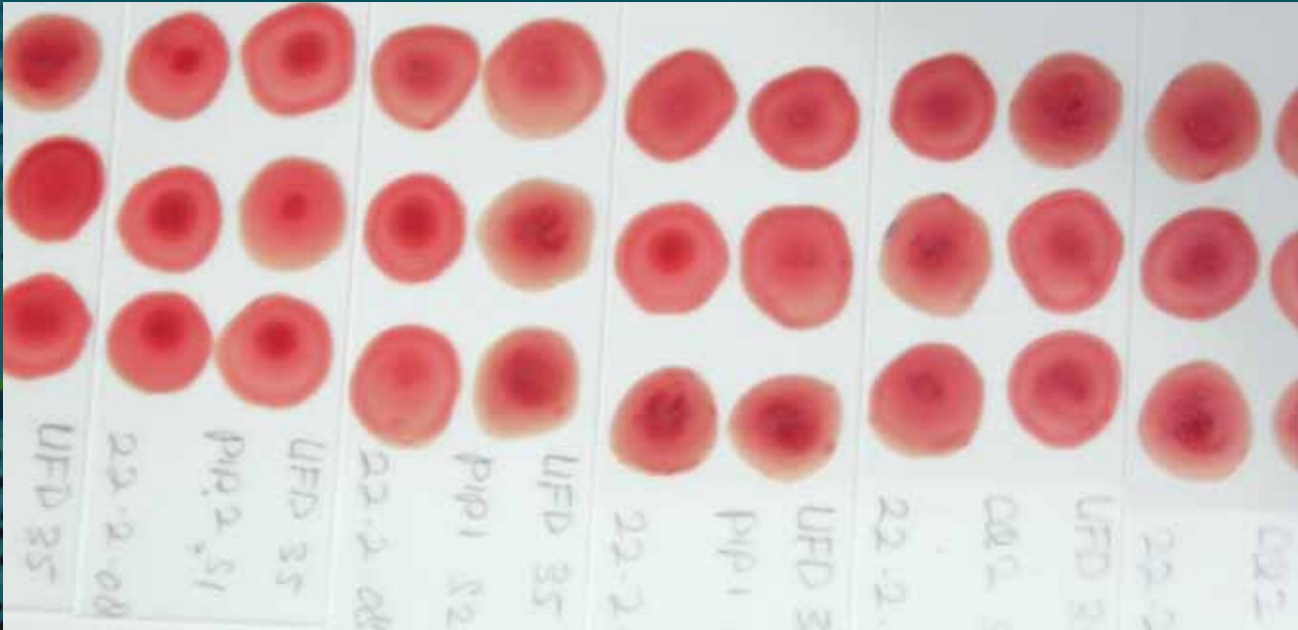
Professor d'Abbs continues his important research into substance misuse, ensuring social policy in the Northern Territory is met with the same razor-sharp integrity that has characterised his research in a career spanning 30 years – the same research that is helping Menzies in its discovery for a healthy tomorrow.







# international health division

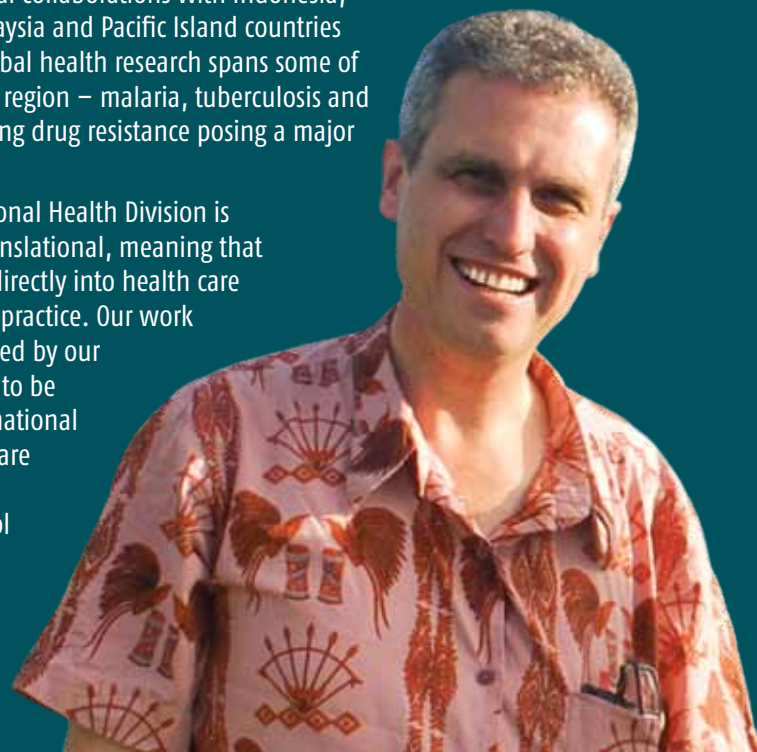


The International Health Division aims to undertake research and training with partners in our region to better prevent and treat infections of major public health importance and improve women's and children's health. We have five research groups; malaria, tuberculosis and bacterial infections, international nutrition, international child health and rheumatic heart disease.

The Division has established a reputation as a centre for research and training in global health, including major regional collaborations with Indonesia, Thailand, the Philippines, Vietnam, Malaysia and Pacific Island countries including Fiji, Samoa and Tonga. Our global health research spans some of the major public health problems of our region – malaria, tuberculosis and severe bacterial infections, with worsening drug resistance posing a major threat to controlling these diseases.

The research carried out by the International Health Division is comprehensive, interdisciplinary and translational, meaning that many of our findings can be translated directly into health care policies and/or improvements in clinical practice. Our work focuses on the research priorities identified by our collaborating partners, and always aims to be capacity-building. We strive to provide national and regional policy makers and health care providers with relevant information to optimise malaria and tuberculosis control programs and improve the health of women and children in the region.

*Professor Nicholas Anstey*







## Research Priorities

The primary focus from 2003–09 has been on malaria and tuberculosis research in Indonesia and Timor Leste, and on controlling streptococcal diseases, particularly rheumatic heart disease in Pacific Island countries. During 2009, the Division expanded its scope across a range of new initiatives including a partnership with AusAID's Women's and Children's Health Knowledge Hub, where we have a lead role in nutrition activities and child survival work aimed at contributing to the achievement of Millennium Development Goals 4 and 5. We are also commencing new malaria research collaboration with partners in Sabah, Malaysia, and are starting new child health vaccine studies in the region. The newly established Asia Pacific Malaria Elimination Network (APMEN) was announced in 2009, with the International Health Division hosting the Vivax Working Group, which will see us working with malaria researchers and governments across the Asia and Pacific region.

## Research Projects

### Malaria

- Optimising the management of drug resistant vivax malaria in Papua, Indonesia
- Artemisinin combination therapy to reduce morbidity and mortality from malaria in Papua, Indonesia
- Advanced In Vitro and Molecular Studies on *P. vivax* Malaria in Papua, Indonesia and Sabah, Malaysia
- Adjunctive treatment studies in severe malaria
- Pathophysiology and immunology of severe malaria

### Women's and Children's Health

- Impact of malaria on women's and infant health and strategies for its prevention
- Global Action Plan against Pneumonia
- Improving nutrition in pregnancy
- Developing critical appraisal tools to evaluate nutritional intervention programs

### Tuberculosis

- Mechanisms of disease in tuberculosis
- A randomised control trial of L-arginine or Vitamin D to improve outcomes in pulmonary tuberculosis (TB)

### Sepsis and Rheumatic Heart Disease studies

- Auscultation and Echocardiography of primary aged children in Fiji for the detection of rheumatic heart disease
- World Heart Federation Rheumatic Fever Secondary Prevention Program in the Pacific Island Nations
- Endothelial function, immunology and adjunctive therapies in sepsis
- The role of arginine and tryptophan metabolism in sepsis

## Highlights of 2009

1. Research by Professor Nick Anstey and the malaria team was chosen by the National Health and Medical Research Council (NHMRC) as one of "ten of the best" NHMRC-funded projects in 2008–09.
2. Phase 1 of the Gates funded project: Investment Case for financing equitable progress towards Millennium Development Goals (MDGs) 4 & 5 completed, with Phase II underway and due for completion in May 2010.
3. The NIH malaria project in Tanzania is commencing in 2010.
4. Two NHMRC project grants, one post-doctoral scholarship and one PhD scholarship were funded in 2009.
5. AusAID's core funding for the Timika Translational Research facility operations in Papua commenced in January 2009.
6. Menzies was appointed lead for the vivax working group of the Asia Pacific Malaria Elimination Network, (APMEN) which will be coordinating a research agenda focused on eliminating malaria from ten member countries of the region.
7. WCH Hub staff invited to review and evaluate a Pre-Pregnancy Package project in nutrition in the Philippines. Recommendations from the review were taken up by the stakeholders and the WCH Hub team is now involved in redesigning the project with a view to scaling out within the region.
8. The division has hosted two international student internships this year: Joyce Hwang and Johanna Ungefehr, and hosted one student from Melbourne, Jennifer Koslovski.

## Looking Forward

2010 is going to be an exciting year for International Health. We're involved in many new projects with partners in the Asia Pacific region.

The AusAID Knowledge Hub in Women and Children's Health was funded in March 2009. The Menzies component of the WCH has a focus on nutrition, with a long term plan to develop a regional network and focal point for maternal and child focused nutrition based here at Menzies. The coming year will be aimed at developing strategic links with Thailand, Philippines, Cambodia and Laos and the Solomon Islands.

During 2009 researchers in the division were preparing to start a NHMRC vaccine trial planned for Fiji and due to begin in 2010, and linkages were established with colleagues in Chengdu China, Hanoi, Ho Chi Minh City and Nha Trang in Vietnam with a view to developing future research collaborations.

The Asia Pacific Malaria Elimination Network (APMEN) was announced by AusAID during 2009 and Menzies will host the Vivax Working Group for the region. This will involve working with malaria and public health researchers and national governments to focus strategies on elimination of malaria.

Plans were finalised for the Director of Timika Translational Research facility, Dr Enny Kenangalem, an Indigenous Papuan, to begin Masters training in 2010.

Work on an NIH-funded malaria project in Tanzania started in 2009 and will continue into 2010, with collaboration with Duke University in the United States, and the Herbert Kairuki University in Tanzania.

The International Health Division and the Education and Training Division developed two scholarships for Timor Leste which were announced by the Menzies Director and Vice Chancellor of Charles Darwin University during their visit to Timor Leste as part of the Northern Territory Chief Minister's delegation.

## Publications

This division had a sharp increase in publications during 2009 with a total of 28 peer reviewed papers published. A full list of Divisional Publications can be found on page 82.

1. Anstey NM, Russell B, Yeo TW, Price RN. The pathophysiology of vivax malaria. *Trends in Parasitology* 2009; 25: 220–7.
2. Minigo G, Woodberry T, Piera K, et al. *Parasite-Dependent Expansion of TNF Receptor II-Positive Regulatory T Cells with Enhanced Suppressive Activity in Adults with Severe Malaria*. *Plos Pathogens* 2009; 5:e 1000402.
3. Davis JS, Yeo TW, Thomas JH et al. Sepsis-associated microvascular dysfunction measured by peripheral arterial tonometry: an observational study. *Critical Care* 2009; 13: R155.
4. Grant GB, Campbell H, Dowell SF, Graham SM, Klugman KP, Mulholland EK, Steinhoff M, Weber MW, Qazi S; World Health Organization Department of Child and Adolescent Health and Development. Recommendations for treatment of childhood non-severe pneumonia. *Lancet Infectious Diseases*. March 2009; 9(3):185–96.
5. Hasugian AR, Tjitra E, Ratcliff A, et al. In vivo and in vitro efficacy of amodiaquine monotherapy for treatment of infection by chloroquine-resistant Plasmodium vivax. *Antimicrobial Agents Chemotherapy* 2009; 53:1094–1099.
6. Poespoprodjo JR, Fobia W, Kenangalem E et al. Vivax malaria: a major cause of morbidity in early infancy. *Clinical Infectious Diseases* 2009; 48: 1704–12.
7. Price RN, Douglas NM, Anstey NM. New developments in Plasmodium vivax malaria: Severe disease and the rise of chloroquine resistance. *Current Opinion in Infectious Diseases* 2009; 22: 430–5.
8. Ralph AP, Anstey NM, Kelly PM. Tuberculosis into the 2010s: is the glass half full? *Clinical Infectious Diseases* 2009; 49: 574–83.
9. Steer AC, Kado J, Jenney AW, Batzloff M, Waqatakirewa L, Mulholland EK, Carapetis JR. Acute rheumatic fever and rheumatic heart disease in Fiji: prospective surveillance, 2005–2007. *Medical Journal of Australia*. 2009 Feb 2;190(3):133–5
10. Yeo TW, LAmph DA, Tjitra E, et al. Relationship of cell-free hemoglobin to impaired endothelial nitric oxide bioavailability and perfusion in severe falciparum malaria. *Journal of Infectious Diseases*. 2009 Nov 15;200(10):1522–9.

## Awards and Achievements

1. Researchers within the Division have been invited speakers or presenters to meetings and conferences on over 41 occasions, including two keystone conference invitations to Nick Anstey.
2. Professor Kim Mulholland delivered an address to the London International Development Centre on the Millennium Development Goals
3. Division researchers authored one of the top 10 cited papers (2006–2008) published in Transactions of the Royal Society of Tropical Medicine and Hygiene, and were presented by Elsevier with a Top Cited certificate for the article Ratcliff et al, Transactions of the Royal Society of Tropical Medicine and Hygiene (TRSTMH) 2007.
4. Ric Price appointed chair of Clinical module of the WorldWide Antimalarial Resistance Network (WWARN).
5. Kim Mulholland was invited to co-author a special *Lancet* commission due early next year on the Millennium Development Goals (MDGs). It will critically address the MDGs and plot a future for development beyond the MDGs. Kim is responsible for MDG 4, (Child survival). The effort is coordinated by the London International Development Centre.
6. Dr Tsin Yeo was awarded an NHMRC Training Fellowship.
7. Dr Enny Kenangalem, Director of the Timika Research Program in Papua was awarded a World TB Day Award for her TB work with Menzies.



*“During my studies in biomedical sciences, I was always interested in infectious diseases. It may sound strange to somebody who is not working in the field, but to investigate and understand the interaction between what I call the bug and us, the host, is just fascinating.”*



## Menzies Staff under the Microscope

### One Foot in the Lab: Meeting Dr Jutta Marfurt (Postdoctoral Research Fellow)

*Parasites by their very nature appear designed to repulse. They are without a doubt the least endearing of organisms, which is why we had to ask Jutta Marfurt how they found such a special place in her heart – figuratively speaking.*

“During my studies in biomedical sciences, I was always interested in infectious diseases. It may sound strange to somebody who is not working in the field, but to investigate and understand the interaction between what I call the bug and us, the host, is just fascinating” Jutta said.

“All that the parasites want is to survive. In order to do so, they apply clever strategies to evade our immune system. The development of drug resistance is another example, we treat the patients against the disease and at the same time, the parasites get gradually adapted to the drug and finally become resistant. Though this is of course disastrous for the host, it is not only interesting and exciting, but absolutely necessary to understand how they do it.”

Jutta Marfurt has been working in medical parasitology for more than 20 years. During that time she has focused on a number of different infectious diseases, such as amoebiasis, HIV/AIDS and leishmaniasis, but it was malaria that captivated her.

Although, her early research efforts focused on *Plasmodium falciparum*, the malaria species which can cause severe and often fatal disease, she decided to switch to *Plasmodium vivax*, which has been neglected in the past, but is in fact responsible for a huge burden of disease and can also cause severe outcome.

“In research terms, vivax research is lagging behind falciparum research. That is the main reason why I wanted to work on vivax malaria – there is such a lot to do! We talk about malaria eradication and it has been shown that it can be achieved. We have eradicated falciparum malaria from some regions, but the eradication of vivax malaria is much more challenging. The main reason is that we can not culture the parasite in the laboratory and therefore, drug resistance

testing or any molecular investigations have to be done on parasite isolates collected in the field.”

Jutta Marfurt describes herself as a hybrid between a laboratory scientist and an epidemiologist, with a passion for both field and laboratory-based research. Another important aspect of her research is its translational nature. The research projects she has been involved in the past include the establishment and implementation of improved laboratory tests for the diagnosis and management of leishmaniasis and the development and validation of molecular tools for the surveillance of drug resistant

*P. falciparum* malaria. She has conducted field work in Tanzania, Papua New Guinea and Indonesia where she was not only focusing on her research projects, but also played an important role in capacity building at the respective local research units.

After completing her PhD at the Swiss Tropical and Public Health Institute (Swiss TPH), she was looking for a new challenge that would meet her interests and match her job profile.

“I wanted to switch from falciparum to vivax malaria research and was therefore specifically looking for a postdoc position in a research team focusing on vivax malaria. That’s why I approached Nick Anstey and Ric Price. I knew about their work on vivax malaria from their research publications and conference presentations. That’s how I came to work at Menzies.”

Jutta Marfurt packed her pipette set and hiking boots and left her native Switzerland bound for Australia’s Northern Territory to start working with Menzies School of Health Research. She says the job was a perfect fit.

“I have one foot in the lab – addressing the core of the project which is improving methodologies and tools for the assessment of drug resistance in vivax malaria. On the other hand, I spend a lot of time in the field – training and supervising local staff and performing lab experiments in our field laboratories. We work with a malaria research team in Papua, Indonesia and will soon set up a second site in Sabah, Malaysia, where I plan to conduct my projects focusing on drug resistance surveillance.”

She says the next few years will be momentous as the International Health Division at Menzies prepares to take on a leadership role in the Asia Pacific Malaria Elimination Network (APMEN) – a vital step in moves to eradicate the disease.

“Professor Ric Price is leading the vivax working group and we will have new people here at Menzies in 2010 to coordinate that network.”

The significance of the Menzies-led APMEN cannot be overstated, and thanks to Jutta and her colleagues in the International Health Division, Menzies is at the cutting edge of international efforts to fight the disease, working towards a healthier future for the hundreds of millions afflicted with malaria every year.









# preventable chronic diseases division



At least half of the health 'gap' between Indigenous and other Australians is caused by chronic diseases such as heart disease, stroke, diabetes, chronic respiratory disease and kidney disease.

Most chronic diseases are preventable and our Preventable Chronic Diseases Division researches ways to reduce risk factors such as smoking, prevent and treat conditions such as diabetes and chronic kidney disease, and support healthy eating and active lifestyles in Indigenous communities.

We are researching both the causes and prevention of chronic disease and we work at all levels from influencing policy with our findings to transferring those findings into workable, everyday solutions in clinical and community settings.

Our researchers work in both urban and remote Indigenous communities to introduce solutions that reduce the risk and impact of chronic diseases.

Indigenous people are involved in all stages of research in the Division. Indigenous people help set and refine the research agenda, are chief investigators on grant applications, are involved in data collection and analysis, are authors of publications and present the findings of the research at seminars and conferences. Division researchers also work closely with Aboriginal community controlled health services, especially Danila Dilba in Darwin.

*Dr David Thomas*







## Research Priorities

The Preventable Chronic Disease Division’s research is focusing on treatment and prevention of diabetes and kidney disease, tobacco control interventions and promotion and support of healthy eating and active lifestyles within Indigenous communities.

## Research Projects

### Clinical Research

- Tiwi Pakajura Primary Prevention Program
- Accurate assessment of renal function and progression of chronic kidney disease in Indigenous Australians (eGFR Study)
- The relationship of body composition, renal impairment and inflammatory cytokines in Indigenous people with diabetes

### Tobacco control

- Monitoring and Evaluating Aboriginal Tobacco Control
- Healthy Starts Program – a randomised controlled trial of a family-centred tobacco control program to reduce respiratory illness in Indigenous infants in Australia and New Zealand

### Nutrition and Active Living

- Good Food Systems: Good Food For All project – a continuous quality improvement approach to achieving food security
- An examination of food security and its determinants in an urban context
- Indigenous perspectives of the meaning of physical activity and its relationship with health and wellbeing
- Impact of income management on store sales in relation to dietary quality and tobacco sales
- Enhancement of the Remote Indigenous Stores and Takeaway Keeping Track of Healthy Food tool
- An evaluation of store-based initiatives to support increased fruit and vegetable sales

## Highlights of 2009

1. In 2009, the 'Healthy Starts' project started: a randomised controlled trial of a family-centred tobacco control program to reduce respiratory illness in Indigenous infants in Australia and New Zealand. Staff were employed, trained and the first participants were recruited. Aboriginal community workers on this study are based at and employed by Danila Dilba. The most exciting news was that we were approached by colleagues from the University of Auckland, and this is now a trans-Tasman international collaboration with Maori participants from Auckland also in the study.
2. Menzies went Smoke Free from 1 July 2009, the same day as all Northern Territory Department of Health and Families hospitals and facilities went smoke free. Dr Vanessa Johnston helped with the transition and the new Menzies No Smoking policy.
3. Dr David Thomas has been closely involved in the expansion of Indigenous tobacco control policy and activity, and has been an invited member of key Northern Territory and national policy committees.
4. An evaluation of a voluntary food budgeting tool, developed by the Arnhem Land Progress Aboriginal Incorporated (ALPA), was extended to examine the impact of income management on store sales in relation to fruit and vegetable, soft drink and tobacco. The ALPA FOODcard evaluation has been completed and we began a collaboration with them on a fruit and vegetable study.
5. The division has had success with transferring findings from its nutrition (food, supply and access) research with Outback Stores developing a set of key performance indicators (KPIs) based on our findings.
6. Wide implementation of a point-of-sale remote community stores monitoring tool, based on the RIST Keeping Track of Healthy Food tool developed by our division, was a key recommendation to the Australian Government from the Senate inquiry into remote community stores.
7. A project management committee has been established for Food Systems: Food for All project, which is extending its boundaries beyond the Northern Territory, and a Steering Committee and Reference Group established for the Physical Activity Project. Partnerships have been formed with local government, store associations and community store committees. Field work started for both projects with the Physical Activity Project recruiting and training Indigenous researchers to help with qualitative data collection.
8. The food security in an urban setting study is well underway and working closely with Danila Dilba and Bagot community.
9. The evaluation of the Red Cross Breakfast Program in Northern Territory remote communities informed the Red Cross's strategic planning in this area.
10. The eGFR Study has progressed well across several sites and has now recruited just over 300 participants.
11. The Tiwi primary prevention study has completed recruitment of participants and is now in the maintenance phase of the intervention.
12. Healthy Top-Enders study started late in 2009. The study focuses on healthy young-adults in two groups – Aboriginal and non-Indigenous Territorians. This is a comprehensive study of body shape, and its relationship with common and novel markers of health and illness.

## Looking Forward

The Preventable Chronic Disease Division is preparing for further expansions in 2010.

1. Our research project 'Accurate assessment of renal function and progression of chronic kidney disease in Indigenous Australians' (eGFR Study), is continuing strongly. In 2010 the project is expanding staff and data collection to sites in North Queensland and Western Australia. We have already recruited participants in Kalgoorlie, Thursday Island, Tennant Creek, Katherine and other sites in Central Australia and Top End of the Northern Territory.
2. The "Teeth, Gums and Hearts Study" (Association between periodontal disease and cardiovascular surrogate endpoints in an adult Indigenous population) begins in 2010, funded by NHMRC. This study will assess the impact of treatment for periodontal (gum) disease on risk markers for heart disease in Indigenous Australians in both Darwin and Alice Springs.
3. The "Good Food Systems: Good Food For All" project is facilitating a continuous improvement cycle of planning, action and checking in four communities to support healthy eating. The project is well supported in Gunbalanya and Nyirripi communities. Indigenous Project Officers are employed in these two communities and are a critical link between the community and Menzies. By mid-2010, this project will support two additional communities.
4. In 2010, the 'Monitoring and Evaluating Aboriginal Tobacco Control' will end but then be re-born. We will collaborate with the Northern Territory Department of Health and Families, who plan to expand the monitoring of wholesale orders of tobacco, which we developed, to all outlets in the Northern Territory as part of Tobacco Retail Licenses.
5. New opportunities will arise with the increased attention to reducing Indigenous smoking and new funding from all governments, led by the Commonwealth and the Council of Australian Governments. In particular, with colleagues from Melbourne, we are well-advanced in plans for a cohort of Indigenous smokers to answer how local and national tobacco control policies and activities need to be modified, or not, to make the most impact.
6. The Division will add a new research Health Services research program in 2010, following a re-structure at Menzies. Joan Cunningham will lead the research program, which includes some projects from the former Systems, Services and Society Division.
7. And we await with anticipation the outcome of several grant applications submitted in 2009 and the beginning of 2010 by the Tobacco Control program and one from the Health Services program.



## Publication highlights

1. Brimblecombe JK, O'Dea K. The role of energy cost in food choices for an Aboriginal population in northern Australia. *Medical Journal of Australia* 2009; 190 (10):549-551.
2. Johnston V. Australian asylum policies: have they violated the right to health of asylum seekers? *Australian and New Zealand Journal of Public Health* 2009; 33 (1):40-46.
3. Johnston V, Allotey P, Mulholland K, Markovic M. Measuring the health impact of human rights violations related to Australian asylum policies and practices: a mixed methods study. *BMC International Health and Human Rights* 2009; 9:1.
4. Maple-Brown L, Hodge A, Cunningham J, Celermajer DS, O'Dea K. Risk factors for cardiovascular disease do not fully explain differences in carotid intima-media thickness between Indigenous and European Australians without diabetes. *Clinical Endocrinology* 2009; 71 (2):189-194.
5. Maple-Brown LJ, Cunningham J, Barry RE, Leylsey L, O'Rourke MF, Celermajer DS, O'Dea K. Impact of dyslipidaemia on arterial structure and function in urban Indigenous Australians. *Atherosclerosis* 2009; 202 (1):248-254.
6. Thomas DP, Johnston V, Fitz JW, McDonnell J. Monitoring local trends in Indigenous tobacco consumption. *Australian and New Zealand Journal of Public Health* 2009; 33 (1):64-66.
7. Thomas DP. Smoking prevalence trends in Indigenous Australians, 1994-2004: a typical rather than an exceptional epidemic. *International Journal of Equity in Health* 2009; 8:37.



## Awards and Achievements



- Dr Jaquelyne Hughes was runner up in the Australian and New Zealand Society of Nephrology's 2009 Young Investigator Award.
- Maria Nickels was awarded the Aboriginal & Torres Strait Islander Health and Leadership Award by the Northern Territory Chronic Disease Network.
- Dr Louise Maple-Brown was awarded an NHMRC Training Fellowship in Aboriginal and Torres Strait Islander Health Research
- Dr Mark Lock successfully completed his PhD 'The participation of Indigenous people in national Indigenous health policy processes' at the University of Melbourne, supervised by David Thomas. Mark is an Indigenous graduate of Menzies' Master of Public Health (MPH) program.
- Dr Danielle Green was awarded a High Distinction for her MPH Project supervised by Dr Vanessa Johnston and Dr David Thomas.
- Dr David Thomas was selected by NHMRC to be featured with 40 of Australia's top health researchers in its publication Working to Build a Healthy Australia.

## Menzies Staff under the Microscope

### Jaquelyne Hughes

*Dr Jaquelyne Hughes is fabulous for so many reasons!*

Her research projects are nationally and internationally important, she's passionate about improving Aboriginal and Torres Strait Islander health, and she's committed to learning, having spent five years training to be a doctor, six years training to be a nephrologist and currently completing what is to be the last year of her PhD at Menzies School of Health Research.

For many Territorians though, Jaqui Hughes is extra-special because she was schooled locally, followed her dreams interstate, and returned with tools that will improve the health of generations.

"I really wanted to do something in kidney disease because there are big ramifications for people and families. There are reasons why people get kidney disease that they have absolutely no control over, but then there is also a great deal of disease that is influenced by lifestyle, by social factors and by education, and that's my passion. How do I help those people to never see a dialysis unit, to never see a nephrologist, to just have really good quality of life."

It was this passion that drew Jaqui into Medical Research. In 2008 she started her PhD with Menzies with an interest in understanding body composition and how it relates to health and illness. She is currently involved in two clinical studies aimed at preventing chronic disease.

The Healthy Top Enders Study is examining links between good health and body composition. Jaqui is leading this research, exacting out the healthy balance of fat and muscle for Indigenous Territorians. Having a measurable optimum will help in the prevention of devastating illnesses such as diabetes, heart disease and kidney disease, which are dramatically over represented in Indigenous populations.

Jaqui's also involved in the internationally important eGFR study: 'The accurate assessment of kidney function and progression of chronic kidney disease in Indigenous Australians'. The project is operating across the Northern Territory, Queensland and Western Australia, testing the validity of a universal blood test currently used to measure kidney function.

"We are challenging how the current blood test works and proving its accuracy. We're doing that because that blood test works by measuring a protein that comes from muscle – but it's based on a European body build. So it's fantastic if you have a European body build because we know how to measure your kidney function well, but there are many people around the world that have different body compositions. The eGFR study is about making the kidney blood test more accurate for people of any body build, and is particularly relevant for Aboriginal and Torres Strait Islander people."

It's the start of a brilliant career that Jaqui Hughes is describing as a team effort. She's working to use her success to help draw more Aboriginal and Torres Strait Islander people into research roles.

"It's been really valuable being a Torres Strait Islander and actually working to improve job security and job focus among Aboriginal and Torres Strait Islander people here at Menzies. Our research work can only be as successful as the team we build and contribute to. I can only be passionate and talk about my PhD with such enthusiasm because Senior Menzies employees like Louise Maple-Brown and Kerin O'Dea have been very kind in supporting me with my aspirations, so it's just a lovely little domino effect."



Photographer: Garth Oriander

*"There are reasons why people get kidney disease that they have absolutely no control over, but then there is also a great deal of disease that is influenced by lifestyle, by social factors and by education, and that's my passion."*







# services, systems and society division



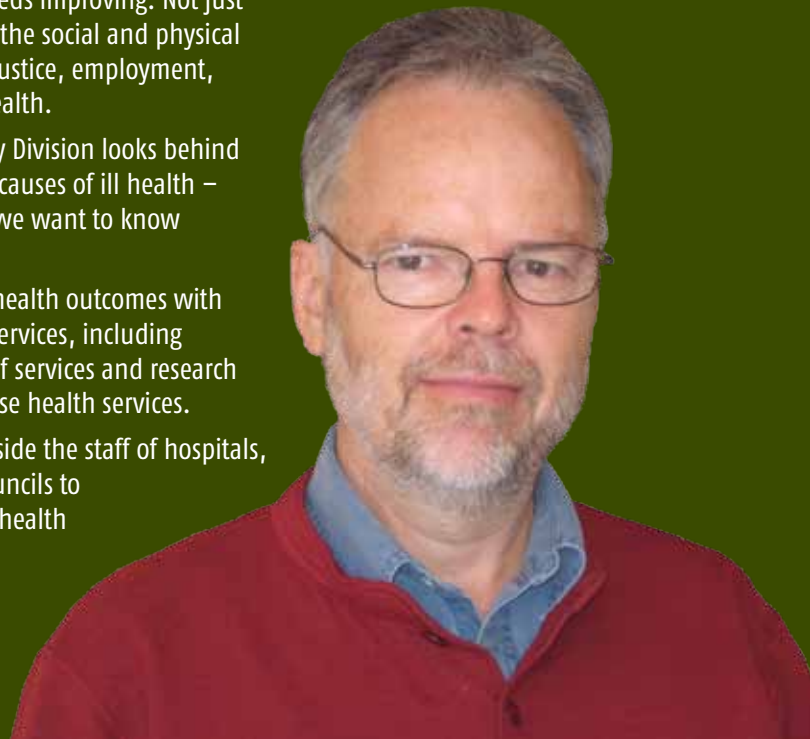
To improve Indigenous health we need to find out what we are doing right and what needs improving. Not just in the health care system but in the social and physical environment – housing, social justice, employment, women's and environmental health.

Our Services, Systems and Society Division looks behind the symptoms to determine the causes of ill health – if our systems are not working, we want to know why and how to fix them.

We are striving to address poor health outcomes with better health, social and other services, including better access and coordination of services and research into the different ways people use health services.

Menzies researchers work alongside the staff of hospitals, clinics and local government councils to discover the best way to deliver health care across Australia.

*Professor John Condon*





## Research Priorities

The work of the Services, Systems and Society Division is highly applied, with an underpinning philosophy of promoting health equity and social justice. This includes adding value through the analysis of existing datasets or documents as well as the collection of new data from individuals, groups and organisations.

The Division's applied research program aims to improve access to and use of affordable health and social services, improve the quality and coordination of health and social systems, improve our understanding of how social contexts, processes and socioeconomic factors can impact upon individual health and well being and develop and improve information systems to enable monitoring of performance outcomes and support evidence-based decision making.

## Looking Forward

From late 2009, the work of the Services, Systems and Society Division will be spread across Menzies, with staff joining other existing Divisions. In addition, a new National Centre for Quality Improvement (CQI) in Indigenous Primary Health Care has been created in Brisbane to build on the Division's extensive work in this area. This Centre, which is called One21Seventy, has been established with \$1.8 million of seed funding from Menzies.

## Research Projects

### Comprehensive Primary Health Care

- Audit and Best Practice for Chronic Disease Extension
- Implementing the Aboriginal and Torres Strait Islander Adult Health Check
- How do we facilitate the development, implementation and evaluation of sustainable strategies for integrating key concepts for working in an Indigenous primary health care context into the curricula of universities and in the wider academy?
- Using environmental health indicators to promote healthy living environments in remote Indigenous communities
- Research to develop children's environmental health frameworks, indicators and survey tools
- The Better Environmental Health, Housing and Child Health Study (BEHHCH)

### Services & Systems for Chronic Disease

- Healthy for Life program – the Support, Collection, Analysis and Reporting Function (SCARF)
- A structured systems approach to improving health promotion practice for chronic disease prevention in Indigenous communities
- Improving health promotion practice for chronic disease in Indigenous communities through CQI
- Examining a core assumption of policy and services for older Indigenous Australians
- Health system performance and outcomes for Indigenous Australians with cancer – a national study

### Social Epidemiology

- CIPHER: Capacity Building in Indigenous policy-relevant health research
- The DRUID Study: Diabetes and Related disorders in Urban Indigenous people in the Darwin region
- Racism and health
- Examining the social determinants of Indigenous health – adding value to national surveys
- IMPAKT: Improving access to kidney transplants for Indigenous Australians

### Women's Health

- An epidemic of vulvar cancer in young women – investigating the role of Human Papillomavirus and genetic susceptibility
- Antenatal screening for fetal anomalies in Indigenous women – views of Indigenous people and their health care providers
- Can fetal fibronectin predict labour at term?
- STI in Remote communities: ImproVed and Enhanced primary health care (STRIVE)
- Reproductive health at risk: challenges associated with pelvic inflammatory disease in Central Australia

## Highlights of 2009

1. The National Centre for Quality Improvement in Indigenous Primary Health Care was created and launched, an Executive Director appointed and consultation is underway with the Commonwealth, state and territory health departments about their financial and other support for the Centre. The final annual Audit and Best Practise Chronic Disease (ABCD) project meeting was held in Brisbane and was attended by about 140 practitioners, managers and policy makers from across Australia.
2. The Capacity-building in Indigenous Policy-relevant Health Research (CIPHER) program, a \$2.5 million, five-year program funded under the NHMRC Population Health Capacity Building scheme, was completed at the end of 2009. Overall, the program trained 13 individuals (five of whom are Indigenous) at the undergraduate, postgraduate and post-doctoral level (some at more than one level). All eight post-doctoral fellows have already secured their own independent funding (for research projects and/or salary support). Five PhD students have graduated, and two students are making excellent progress in their studies. One cadet completed both an undergraduate degree and post-graduate degree in 2009 and is now undertaking training in cancer epidemiology.
3. The CIPHER program supported the extension of the Division's Indigenous aged care research (in collaboration with Charles Darwin University's School for Social Policy and Research), the first major research project investigating aging and aged care issues for Indigenous Australians.
4. The vulvar cancer research team organised a workshop of national and international researchers in vulvar cancer and genetic epidemiology in July to review the results of our HPV research and recommend how to investigate genetic susceptibility as a possible cause of the vulvar cancer epidemic in Arnhem Land communities.
5. Division staff continue to engage in the delivery of a wide range of formal and informal training activities, both through the Menzies postgraduate coursework program and in other settings. For example, Yin Paradies worked with VICHealth (at their request) to develop a short course on anti-discrimination, which was conducted in late 2009.
6. Ongoing support for the national Healthy for Life program beyond the end of the SCARF contract in June 2009 was successfully negotiated with the Office of Aboriginal and Torres Strait Islander Health (OATSIH). The SCARF team has moved into new office space in Adelaide and is co-located with a number of Cooperative Research Centre for Aboriginal Health (CRAH) staff. The successful application for extension of the CRAH is expected to bring significant opportunities for further work in the division's priority areas.

## Publications

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7. Maple-Brown L, Hodge A, Cunningham J, Celermajer DS, O'Dea K. Risk factors for cardiovascular disease do not fully explain differences in carotid intima-media thickness between Indigenous and European Australians without diabetes. *Clinical Endocrinology* 2009; 71:189-94.
8. Maple-Brown LJ, Cunningham J, Barry RE, Leysley L, O'Rourke MF, Celermajer DS, O'Dea K. Impact of dyslipidaemia on arterial structure and function in urban Indigenous Australians. *Atherosclerosis* 2009; 202: 248-254.
9. Paradies YC, Cunningham J. Experiences of racism among urban Indigenous Australians: Findings from the DRUID study. *Ethnic & Racial Studies* 2009; 32: 548-73.
10. You J, Condon JR, Zhao Y, Guthridge S. Incidence and survival after acute myocardial infarction in Indigenous and non-Indigenous people in the Northern Territory, 1992-2004. *Medical Journal of Australia*. 2009;190(6):298-302.



## Awards and Achievements

- Joan Cunningham was awarded an NHMRC Research Fellowship. She is currently at 65 per cent full time equivalent and is based in Melbourne.
- Alice Rumbold was awarded the JB Reid Fellowship, a five-year research fellowship from the University of Adelaide. She is now based at the University of Adelaide, but maintains a joint appointment with Menzies. Alice was named the South Australian Tall Poppy of the Year for 2009.
- CIPHER program members Sanchia Shibasaki and Mark Lock were awarded their PhDs from the Australian National University and the University of Melbourne, respectively. Sanchia and Mark are CIPHER's second and third Indigenous PhD graduates.
- Kalinda Griffiths (CIPHER Cadet) completed her undergraduate degree at CDU in February and was chosen to deliver the graduand response at the May graduation ceremony. She also completed a post-graduate coursework program in public health with Menzies during 2009.
- Kalinda Griffiths was selected to attend the Oxfam Aboriginal and Torres Strait Islander Women's Summit (Straight Talk Feb 2009). This national forum was held to discuss Indigenous women's issues with 90 other Indigenous women from throughout Australia and with selected women national parliamentarians for advice on becoming more effective in national policy and political processes.







*"The encouragement I receive from my team gave me the confidence to present at the Australasian Sexual Health conference last year and this year I am presenting at the Australasian Women's Health conference."*

## Menzies Staff under the Microscope

### Bronwyn Silver: Improving Sexual & Reproductive Health Services and Systems

*Bronwyn Silver is an experienced Territory nurse and midwife. From early in her career her passion was to provide safe birthing to women around the world.*

"To this end I studied Midwifery and then public health. I moved to the Northern Territory to teach Aboriginal Health workers, and I guess research was a natural career progression for me.

Bronwyn first heard of Menzies School of Health Research in 1990 whilst doing her nursing training. It wasn't until early 2008 though that she took up the role as Sexually Transmitted Infection Research Fellow with the school.

"It was really by chance that I saw a job advertised at the Menzies office in Alice Springs and realised I had all the necessary experience and skills to apply. The job seemed perfect for me."

Bronwyn is now involved in a number of Sexual Health research projects aimed at improving the quality of service delivery in remote Australia.

"The STI KPI project is looking at what is best practice for Primary Health Care services in delivering sexual health care to remote indigenous communities. "

She's also involved in the STI in Remote Communities: ImproVed and Enhanced Primary Health Care project (STRIVE). STRIVE is an NHMRC funded randomised community control trial being run in collaboration with the National Centre in HIV Epidemiology and Clinical Research at UNSW. It is testing whether an intensive sexual health quality improvement program can support clinic staff to increase the testing and treatment of sexually transmitted infections, and if so will it reduce community prevalence of STIs.

"STIs are easily screened for and treated but can have serious long term consequences to reproductive health if undiagnosed or left untreated."

In the Northern Territory we record the nation's highest rates of bacterial sexually transmitted infections. Bronwyn Silver says working to reduce that burden of disease is an important job.

"I feel privileged to be part of such an experienced and professional team. I appreciate having the independence Menzies fosters knowing I'm well supported and valued. The encouragement I receive from my team gave me the confidence to present at the Australasian Sexual Health conference last year and this year I am presenting at the Australasian Women's Health conference." Bronwyn Silver said.

The sky is the limit for Bronwyn Silver. She plans to continue contributing to the ground breaking research that Menzies carries out in Central Australia, but is hoping to return to a focus on Midwifery and reproductive health.

Like so many at Menzies School of Health Research, Bronwyn is committed to life-long learning and has enrolled in further studies exploring the interface between sexual and reproductive health in remote Indigenous women, which she'll start in 2010.







# tropical and emerging infectious diseases division



The north of Australia may be a tropical paradise, but it also boasts some of the deadliest creatures in the world and its climate provides a fertile breeding ground for many tropical infectious diseases.

The Tropical and Emerging Infectious Diseases Division at Menzies is world renowned for its pioneering work in preventing and treating tropical infections and life threatening stings and bites and tracing the natural history of microscopic and macroscopic killers.

Our state-of-the-art laboratory equipment and methods are used to unravel the mysteries of infectious diseases in our region and to guard against new and expanding threats to our health in the light of environmental challenges such as climate change.

*Professor Bart Currie and Associate Professor Phil Giffard*





## Research Priorities

In 2009, the division continued to investigate diseases that have high impact upon Indigenous people and others living in tropical and remote environments, and are consequently of high priority. The Division's research portfolio encompasses scabies, staphylococci and streptococci, which are agents of skin infection, mechanisms of antibiotic resistance, the serious tropical soil-borne disease melioidosis and tropical toxinology.

Epidemiology, clinical observations and basic laboratory work are interlinked in our multi-disciplinary approach to seek a better understanding of the underlying disease processes and the complex influences over our unique and changing environment.

The research of this Division, along with that of the International Health Division, will continue to strengthen Australia's capacity to prevent and respond to emerging tropical health threats in our region.

## Research Projects

### Skin Pathogens

- An Immunodiagnostic Assay for Scabies
- Australian *Leishmania lifecycle* investigation
- Towards novel therapies for scabies: functional analysis of *Sarcoptes scabiei* aspartic proteases
- Mechanisms of acaricide resistance
- Community-associated *Staphylococcus aureus*: epidemiology, emergence and treatment
- Genetic diversity of *Staphylococcus aureus* CC75
- Molecular detection of the H275Y oseltamivir resistance mutation in influenza A /H1N1 2009
- Rapid typing of vancomycin-resistant enterococcus in an outbreak setting using MLST derived high-resolution melting analysis

### Antibiotic Resistance

- Promoter variants and expression of SHV  $\beta$ -lactamase in *Klebsiella pneumoniae*
- Adaption of *Klebsiella pneumoniae* to increased antibiotic concentrations

### Melioidosis and Emerging Infections

- Melioidosis clinical and diagnostic studies in the NT
- Molecular studies of *Burkholderia pseudomallei*
- Presence of the melioidosis bacterium in bore water in rural Darwin
- Using real time PCR to detect the ecological niches of melioidosis bacteria *Burkholderia pseudomallei* in endemic tropical Australia
- High-resolution/Highly sensitive assays for forensic analysis and attribution of bacterial biothreat agents

### Tropical Toxinology

- Australian Snakebite Project
- Improving First Aid for Snakebite

## Highlights of 2009

1. PhD candidate Annette Dougall's work to elucidate the lifecycle of *Leishmania* in Australia revealed that phlebotomine sand flies are unlikely to be involved in the transmission of *Leishmania* in Australia, and has implicated an alternative vector. This is a major finding as sand flies are the only known vector of *Leishmania* world wide.
2. The new Menzies-invented high resolution melting (HRM)-based bacterial genetic fingerprinting method has proven extremely robust, rapid and easy to apply to different bacterial species. During the reporting period, methods for *Klebsiella pneumoniae*, *Enterococcus faecium* and *Staphylococcus aureus* were fully reduced to practice.
3. The tractability of the HRM technology was further emphasised by the development within one week of an HRM-based diagnostic for a variant of the PVL toxin associated with enhanced virulence in community acquired *Staphylococcus aureus*.
4. *Staphylococcus/ Streptococcus* antibiotic resistance/parasitology groups have completed the determination of the phylogenetic position of the *Staphylococcus* clonal complex 75 (CC75). This confirmed using multiple isolates that CC75 is allied to but distinct from *Staphylococcus aureus*. This study is likely to be high impact and disruptive to *Staphylococcus* taxonomy.
5. Completed development of a diagnostic that discriminates the two forms of the gene that encodes the CA-MRSA PVL toxin. In the course of that study, some typing anomalies were resolved, and it became clear that ST121 is a really major and previously unrecognised CA-MRSA clone in this region.
6. Completed the generation and validation of the *Burkholderia pseudomallei* prediction map covering rural Darwin, and generated a preliminary map covering the whole of the Top End.
7. Laboratory and field-based intervention studies have suggested there is a significant correlation between ammonium sulphates and phosphates in soils and *Burkholderia pseudomallei* density.
8. Rapid diagnosis of melioidosis using real-time PCR on clinical samples from patients has been successfully developed and studies are ongoing to improve this further.
9. The origins of the melioidosis bacterium, *Burkholderia pseudomallei*, have been confirmed to be probably from the Australian environment, with spread globally from Australia.
10. Menzies' studies have raised concerns that most pressure bandages used for first aid in snakebite victims are inadequate – new methods of first aid are being developed.



## Looking Forward

The emerging areas of research interest for the Division are as follows:

1. **Bacterial genomics:** It is now clear that the bacterial pathogens in tropical north Australia have unique population structures, patterns of dissemination and clinical effects. The Division is increasingly harnessing the extraordinary power of recently developed methods for genome sequence determination to understand the diversity and properties of the bacterial pathogens in this environment.
2. **Parasite genomics:** Similar strategies will reveal much of the disease process of parasites such as the scabies mite.
3. **Development of laboratory methods suitable for remote or resource-poor environments:** In recent years, the Division's activities have encompassed a significant program of methods development. The near future focus is a scabies diagnostic kit, and genetic fingerprinting methods based upon high resolution melting technology. It is the intention that these methods will be utilised widely. In general, they are designed to be robust, easy to perform, and cost effective in terms of consumables, capital item and time required.



## Publications

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3. Currie BJ, Haslem A, Pearson T, Hornstra H, Leadem B, Mayo M, Gal D, Ward L, Godoy D, Spratt BG, Keim P. Identification of melioidosis outbreak by multilocus variable number tandem repeat analysis. *Emerging Infectious Diseases* 2009 February;15(2):169–174.
4. Hodgson WC, Isbister GK. The application of toxins and venoms to cardiovascular drug discovery. *Current Opinion in Pharmacology* 2009; 9: 173–6.
5. Isbister GK. Procoagulant Snake Toxins: Laboratory Studies, Diagnosis, and Understanding Snakebite Coagulopathy. *Seminars in Thrombosis and Hemostasis* 2009; 35: 93–103.
6. Kaestli M, Mayo M, Harrington G, Ward L, Watt F, Hill JV, Cheng AC, Currie BJ. Landscape Changes Influence the Occurrence of the Melioidosis Bacterium *Burkholderia pseudomallei* in Soil in Northern Australia. *PLoS Neglected Tropical Diseases* 2009; 3(1):e364.
7. Ng JS, Holt DC, Lilliebridge RA et al. Phylogenetically distinct *Staphylococcus aureus* lineage prevalent among Indigenous communities in Northern Australia. *Journal of Clinical Microbiology* 2009; 47: 2295–300.
8. Pearson T, Giffard P, Beckstrom–Sternberg S et al. Phylogeographic reconstruction of a bacterial species with high levels of lateral gene transfer. *BMC Biology* 2009; 7: 78.
9. Tong SYC, Bishop EJ, Lilliebridge RA et al. Community-Associated Strains of Methicillin-Resistant *Staphylococcus aureus* and Methicillin-Susceptible *S. aureus* in Indigenous Northern Australia: Epidemiology and Outcomes. *Journal of Infectious Diseases* 2009; 199: 1461–70.

## Awards and Achievements

1. Professor Phil Giffard has been appointed chair of the Northern Territory Institute Biosafety Committee. He attended a meeting of the Australian Biosecurity Intelligence Network on May 1, and renewed the claim for this organisation to support the development of bioinformatics capacity at Menzies.
2. Senior Researcher Mark Mayo's case study/vignette was recently published in the Cooperative Research Centre (CRC) for Aboriginal Health book *Supporting Indigenous researchers: a practical guide for supervisors*. Mark was invited to attend the Julia Gillard hosted Canberra book launch.
3. Dr Geoffrey Isbister, Australasian College for Emergency Medicine: Winter Symposium 2009, Darwin: Plenary: "Snake bite coagulopathy: can we rationalise snake antivenom in Australia" 24 – 26 June 2009



*"I was always interested in things that existed totally independent of humans – I guess if something exists that wasn't made by people then to me it makes it more interesting."*

4. Annette Dougall, Conference Abstract, The Australian Society for Parasitology Inc. ASP & ARC/NHMRC Research Network for Parasitology Annual Conference. The search for a vector of Leishmania in the Northern Territory 12 – 15 July 2009
5. Deborah Holt, Conference Abstract. The Australian Society for Parasitology Inc. ASP & ARC/NHMRC Research Network for Parasitology Annual Conference Role of elevated transcription of Glutathione S-transferases (GSTs) in pyrethroid resistant scabies mites. 12 – 15 July 2009
6. Jacklyn Ng was awarded an International Postgraduate Research Scholarship from Charles Darwin University for her work on *Staphylococcus*.
7. Annette Dougall was awarded the student poster prize at the 209 Australian Society for Parasitology conference for her work on *Leishmaniasis* vectors.

## Menzies Staff under the Microscope

**All the Small Things:** Associate Professor Phil Giffard has spent his career behind the lens of a microscope, today we've turned the tables and put him under ours.

*Molecular Microbiology in its current form didn't exist when Phil Giffard was at school, but his early passion for science would lead him into a career investigating the structure and activity of "genes and germs".*

"I wasn't a super geek, I was a pretty normal school kid, but I was always interested in the science subjects and always found the biological sciences particularly interesting. I watched a lot of nature programs on TV and persuaded my parents to buy me a microscope I think when I was about 10. I was always interested in things that existed totally independent of humans – I guess if something exists that wasn't made by people then to me it makes it more interesting."

Associate Professor Giffard was born and raised on the Gold Coast in Queensland. He completed a microbiological degree at the University of Queensland in his late teens/ early twenties, but unsure what career path to take he took a gap year and travelled overseas.

"I just back packed around Europe. I wasn't even sure if I wanted to be a scientist or not. I managed to get into the University of Aberdeen in northern Scotland in the mid 80's to do post graduate studies and I've been involved in research ever since."

He returned to Australia in the late 1980s, and after a post doctorate stint in Sydney, began work as a lecturer at the Queensland University of Technology. In 2008, after flirting with the idea of working with Menzies School of Health Research, he took the plunge.

"I was an academic at Queensland University of Technology for 15 years and that was a great job and I had a great time there, I guess I saw an option for a change that, at the very least, would be interesting and sometimes you just have to make that leap when the easier and safe option is just to stay put."

At the Menzies School of Health Research Phil Giffard is the head of laboratory science and research leader for several molecular microbiology projects.

"I work on bacteria – and at Menzies that means working primarily on bacteria that cause diseases in people. When I say molecular it means I'm interested in the molecular details of what they are and how they work."

Associate Professor Giffard analyses the genes of different bacteria to find out the diversity and dissemination of bacteria and to develop techniques to enable rapid and cheap genetic analysis of large numbers of isolates.

His work has significant implications for clinicians.

"A lot of the information that's developed using these techniques is correlated with clinical information that's also developed during research projects and that allows us to understand the relationship between exactly what sort of bacterium it is or what it might do, or is likely to do when it makes someone sick, and how they get passed around. [Some] varieties get passed around very quickly, where as other varieties get passed around slowly."

Thanks to Associate Professor Giffard and his colleagues, Menzies School of Health Research is continuing to lead the nation on research into tropical and emerging infectious diseases. Just another way Menzies is making discoveries for a healthier tomorrow.









# education and training division



The Education and Training Division offers a unique range of post-graduate public health courses, short courses and support for research students enrolled at Charles Darwin University. Teaching is undertaken by public health experts and health researchers with content that links the development of core public health competencies to the evidence provided by the Menzies research focus on Indigenous, international and tropical health. The program participants are drawn from a range of professional backgrounds and countries which adds to the diversity of the courses on offer.

In 2009, coursework programs on offer included:

- Undergraduate unit in Public Health
- Graduate Diploma in Public Health
- Master of Public Health
- Doctor of Health, a professional doctorate program
- A range of professional development short courses in Public Health

Louise Clark







The Education and Training Division had a number of staff changes during 2009, including Dr Malcolm McDonald managing the team prior to the arrival of the Division Leader, Louise Clark, in March. Associate Professor Sue Skull provided leadership in research training from the Division and progressed to setting up the Evaluation and Research Support Unit in the later part of the year. Tim Earnshaw made a major contribution to developing the Doctor of Health core units during 2009. The new Senior Lecturer, Dr Suzanne Belton, will contribute her many skills, alongside Dr Kate Senior, to continue developing this course in 2010. Leanne Ramsamy ran very successful short courses, focused on health promotion and community development, with strong engagement of the local Indigenous expertise. The academic administration team, capably led by Catherine Richardson, oversaw the many changes in administrative processes with the leaving of long term education officer Belinda Hosking and the arrival of Anita Campos Diaz. Increased support was offered to research students with the creation of a Scholarships Officer role held by Kalotina Halkitis.

Looking back on 2009, we accomplished a great deal in the challenging context of the Australian Governments' announcement that the Public Health Education and Research Program, a key funding source, will cease at the end of 2010.

## Key Achievements of 2009

1. Started delivery of core units in the Doctor of Health, the new professional doctorate program, developed in collaboration with the Graduate School of Health Practice at Charles Darwin University.
2. Delivered a new public health undergraduate level unit, taught by Georges Oteng, in the Bachelor of Biomedical Science.
3. Developed new short course options Current Issues in Tropical and Remote Health and Practical Approach to Health Research Methods.
4. Introduction of the Menzies Research Training Seminar series developed in collaboration with the Northern Territory Department of Health and Families and the Northern Territory Clinical School.
5. Development of a Menzies Network of research expertise including a staff survey to identify areas of expertise.
6. Alignment of the public health course work units to the draft Australian Network of Academic Public Health Institutions set of core public health competencies.
7. Provided additional support for students undertaking research degrees, monitoring progress and support supervisors with the requirements of candidature, creating peer interaction and advice on research training opportunities.
8. Nine new research students enrolled in 2009, three beginning a Doctor of Philosophy, one undertaking an Honours year, two Master of Science and three Advanced Medical Science students. The Advanced Medical Science students are Melbourne University medical students mid-way through their degree who spend a year working alongside our researchers to experience research first hand and to undertake a research project as part of a research team.
9. New format for the Menzies Research Students Forum. Students have the opportunity to present their work and discuss the process of conducting research with their peers and senior research staff. These sessions were recorded and made available to external students via the website.

## Coursework Student Statistics 2009

Semester	Continuing Students		Commencing Students		Graduations	
	1	2	1	2	1	2
Graduate Diploma in Public Health	19	24	8	4	6	9
Master of Public Health	13	11	10	5	9	8
Doctor of Public Health (enrolments ceased 2008)	5	5	Nil	Nil	Nil	1
Doctor of Health (course commenced 2009)	Nil	4	7	Nil	Nil	Nil
<b>TOTAL</b>	<b>37</b>	<b>44</b>	<b>25</b>	<b>9</b>	<b>15</b>	<b>19</b>

## Looking Forward

The Education and Training Division has a massive year ahead in 2010, with continued curriculum development, a new unit in health policy, a new format and 'look' for online coursework units for the increasing student numbers. To keep up-to-date, join our on-line newsletter: LearnVine.

For more information go to [www.menzies.edu.au/education-and-training](http://www.menzies.edu.au/education-and-training)



*"Menzies cares about students and their careers."*

## Menzies Staff under the Microscope

**Catching the next wave: Kalotina Halkitis and the researchers of the future.**

*Kalotina Halkitis is the embodiment of the Menzies spirit, a deep desire to meet the challenges of the future, and an abiding commitment to research – both in her professional role supporting PhD students at Menzies, and as a PhD student herself.*

Although she calls Darwin home, Kalotina is widely travelled and deeply immersed in her Greek heritage.

"Although I was born in Darwin, I grew up in Greece. I completed my undergraduate (Business Administration) and postgraduate education (MBA) in the United Kingdom and came back to Darwin in 2007 to pursue my PhD studies".

Soon after returning to Darwin, Kalotina joined the Menzies team. Initially she worked as a project manager with Research Administration, she then joined Education and Training and now works in the newly created role as the Research and Scholarships Officer.

This role has been fundamental to enhancing the support to research students with their application for university admission, scholarships and access to research training opportunities.

Louise Clark, Division Leader, Education & Training believes Kalotina has created a vital and effective information nexus for Menzies research students.

"Kalotina's role is about linking Menzies' students to learning opportunities. This should have a huge impact on the success of our students – particularly in creating a stimulating environment for emerging researchers".

Kalotina has a unique insight into the needs of students, completing her own PhD, through Charles Darwin University's School for Social and Policy Research.

"I am balancing the editing on my draft thesis, lecturing at Charles Darwin University and working with Menzies for a couple of days. But would I change anything? No! I love having full and challenging days".

Kalotina hopes to pursue an academic career with research in Greece and Asia, and thrives on working in an environment that fosters excellence and innovation.

"In both of my capacities (Menzies employee and PhD student) I can confidently say that Menzies offers great expertise and support to students. Menzies students have the opportunity to work on cutting edge projects while enjoying the benefits of peer support, access to world renowned researchers, and interaction from activities such as the research student seminars. Menzies cares about students and their careers".







# corporate and research administration division



Ensuring that Menzies research divisions have first class support services is just one of the many roles of the Corporate and Research Administrative Division. Balancing budgets, coordinating grant applications, communicating our work and engaging corporate and philanthropic partners are just a few of the varied and crucial services which this division delivers.



*Professor Ross Spark*





## A Message from the Deputy Director

2009 saw the introduction of new and improved systems and strategies in the Corporate and Research Administration Division to help Menzies researchers manage their work with greater efficiency and effectiveness. An independent review of administration services conducted by an external reviewer from a leading interstate medical research institute found what we already suspected – Menzies' corporate and administrative staff deliver high quality support at staffing levels well below industry benchmarks. An increase in Finance and Research Administration numbers following the review has begun to address this shortfall.

In the context of its importance in the attraction and retention of talented staff, a key developmental project of the human resources (HR) team was to initiate a new performance management system for Menzies. Following an invited tender process, a suitably experienced company was selected to develop and implement the system in consultation with Menzies' staff and management and this is planned to be rolled out in 2010.

## Financial Services

With Menzies growth continuing, 2009 was another busy year for Financial Services. Year on year increases in the volume of financial transactions, payroll activity of 155 commencements and 95 staff leaving. The year also saw increases in the number of projects under management, grants and tenders reviewed and submitted.

During the year Financial Services took on the role of contract advice and travel services, continued with commercialisation support to successful research projects and the provision of business development advice and support to Menzies. Financial services also continued to work closely with other sections of Corporate Service to improve the efficiency and effectiveness of services provided.

An increased focus on governance has resulted in an audit committee being established during the year with separate terms of reference to the finance committee. The audit committee will oversee the annual financial audit and the internal audit program. The first audit being conducted will be on HR/payroll function.

The finance and risk committee commissioned a risk assessment on Menzies' operations, the review being conducted to Australian Standards. The output from the risk review has been provided to the Board and now forms the basis of the internal audit program. The committee is currently reviewing the investment strategy of Menzies.

The annual review of Menzies' Insurance coverage was conducted, resulting in combining public liability, medical malpractice, professional indemnity and clinical trials insurance. This has resulted in greater coverage for a reduced premium.

Financial Services also continued as Centre Agents for the Cooperative Research Centre for Aboriginal Health in providing financial management services and advice on a wide range of matters.

All team members of Financial Services look forward to 2010 being another great year and continuing to provide a high level of service to Menzies' staff and broader stakeholders.

## Human Resources

Although there was no turnover of employees within the HR Unit in 2009, in April, the 3.5 full time equivalent (FTE) staffing level of the Unit became 2.5 FTE as one of our valued team members went on 12 month maternity leave. In December 2009 three positions in HR were reclassified in an effort to redress the discrepancy between the classifications of HR positions and other similar roles in the Corporate and Research Administration Division.

Recruitment and contract renewals were the primary activity for Menzies Human Resources Unit in 2009. Strategic HR activities took a back seat as the 35 per cent staff turnover consumed the bulk of the HR team's time. Seventy eight positions were advertised and 169 people (including casuals) began working at Menzies while 94 people (including casuals) departed. In an effort to better understand the reasons for the high staff turnover, HR began a formal exit process which includes exit interviews for all staff leaving Menzies. It is anticipated that the results of these surveys will provide the necessary information to begin addressing Menzies high employee turnover rate.

With the high number of new staff starting with Menzies, induction continued to be a high priority. All new staff received an individual induction covering their employment conditions and other essential information. The HR team continued to improve the twice yearly Organisational Induction Day.

Of interest is the high ratio of female to male employees at Menzies which may go some way to explaining the high birth rate at Menzies. Altogether seventeen Menzies employees welcomed a new baby into their family this year. Judging by the first three months of 2010, the trend looks set to continue.

## Operations

This year saw our rented premises at Winnellie successfully refurbished, and has accommodated staff since late-March 2009. This has made the provision of workspace and infrastructure resources much easier with our rapidly expanding staff and student list. Key staff members, Joanne Bex and Tash Herrmann, were instrumental in project managing the new premises brief for Menzies. Senior Operations Technical Officer Joanne Bex is now successfully managing the operational side of the Winnellie premises.

Management of Travel shifted from Operations to Finance within Corporate Services Support mid-year and the Operations Team bid a sad farewell to Travel Clerk Di Stall, who is leaving in 2010 after four years as a valued member of our team.

The first steps have been taken in our endeavour for the laboratory to become an Australian Quarantine and Inspection Service (AQIS) approved premise. This certification will increase the scope of work available to researchers in our Laboratory Facility. Another big plus for the Menzies Laboratory Facility this year has been our successful application to be certified by the United States Centre for Disease Control/ National Institute of Health (US CDC/NIH) Agencies. Plans to appoint a technical officer to help with laboratory support have been instigated with the intention of recruitment scheduled for the first half of 2010.

Operational support for the Alice Springs-based staff remains a challenge simply because of the distance involved between bases and the impersonal nature of correspondence by email/phone.

Maintenance of the Nguiu house used by Menzies' researchers on Bathurst Island has always been onerous but has improved since one of our staff members now lives on the island and has become a part-time caretaker.

Overall another successful and rewarding year for the Operations Team thanks to dedicated team members, the Deputy Director and the Corporate Service Team Leaders Committee.

## Information Technology

The 2009 Questnet Seminar proved very rewarding for Menzies. Information Technology (IT) were able to obtain a number of concessions from providers and industry suppliers. Probably the most exciting of these was a commitment from the Australian Academic Research Network (AARNET) for the free use of their Video Conferencing Bridge Services and IP Recording and real time webcasts of video conferences and seminars.

In February 2009 Menzies made a substantial change to the support mechanisms for IT. Previously Charles Darwin University (CDU) had provided Helpdesk support services and systems administration. After a Strategic Planning review a decision was made by the Board to change this model and a request for tender went out to some of the larger businesses in Darwin capable of supporting Menzies. Area9 has partnered with Menzies to provide us with a higher level of Helpdesk and systems administration support.

February 2009 also saw a visit from Andrew Alexander from the Australian Research Collaboration Service (ARCS). He discussed many of the new tools available for researchers to collaborate remotely. Of special significance was the discussion about the Federal Government's investment into e-Research and how this may affect Australian organisations and institutions like Menzies.

Menzies' IT made a commitment to virtualisation infrastructure in 2008 (running many virtual servers inside one host server). As of 2009 we have managed to reduce the total server count down from more than 26 to 12 Servers representing substantial savings in electricity of more than 50 per cent. Over this period Menzies has seen phenomenal growth and the total number of virtual servers has increased from 26 to 40 active machines and 25 on standby.

Voice over IP (VOIP) trials conducted during 2009 were very successful. A small test group of (10) people were selected to replace their conventional telephones for VOIP handsets. The VOIP handsets provided normal telephone services plus some additional features like voicemail to email and the ability to use the handsets on Home ADSL (your extension follows you). This could provide significant savings for Divisions or individuals paying for conventional services in their remote locations.

Storage continues to be one of the most challenging areas in IT with the amount of storage institutions are using increasing at a dramatic pace.

The cost of enterprise class storage can be exorbitant. In an effort to reduce the investment required and provide researchers with more storage IT have opted to build our own. A storage solution from an American company (Backblaze.com) was released into the public domain. The design incorporated chassis and technical details for a do-it-yourself solution. IT have built the units and they are currently being tested. It is expected the additional storage will be made available in early 2010.

2009 saw the completion of an encrypted Menzies Wireless Network. An array of wireless access points in the John Mathews Building and in Winnellie now provide high speed network access to researchers using wireless laptops or computers in these areas. Coverage is good in both locations and provides an experience similar to being physically plugged into the network.

Lastly we continue to work on IT business continuity and disaster recovery programs for Menzies. The process has involved several stages and uses the Winnellie building as a disaster recovery point should something happen to our main facility at Royal Darwin Hospital.

The project has not yet been completed however we have finished the first (three) phases (connectivity, switching, servers and storage) and are working on the final phase (process and procedures). We aim to have a draft document ready for the next IT audit scheduled for the third quarter of 2010.

## Biostatistics and Database Management

Menzies is currently conducting a large number of projects on a wide range of topics including Indigenous health, malaria, melioidosis and the relationship between low birth weight and chronic disease in later life. The biostatistician and database manager provide assistance with writing grant applications and in the planning, design and implementation of individual projects. We are responsible for the maintenance of the databases (using Access and/or MySQL), including Menzies' corporate databases, providing assistance with data input and analysis, interpreting results and for archiving the data when a project is complete. We also offer training courses in the use of the statistical and database packages. Menzies also works with health professionals working at the Royal Darwin Hospital, CDU and other external agencies.

In 2010 Biostatistics and Database Management will form part of the Evaluation and Research Support Unit (ERSU).

## Communications and Development

It was a challenging year for the Communications and Development unit with several staffing changes and relocations and a global financial crisis (GFC) to contend with, resulting in lower than expected income from fundraising and corporate partnerships.

Media mentions throughout the year remained steady with more than 300 mentions in total. The quality of the stories remained high with many featured nationally and hitting key target audiences.

The new website was launched in May and the number of hits received has increased by more than 80 per cent. We now also have the ability for on-line donations and on-line mailing list registration. Construction of the new intranet commenced in 2009 with launch in early 2010 expected.

Another successful Oration was held with the Honourable Michael Kirby AC CMG presenting a fascinating talk to more than 300 people at Darwin Convention Centre. The title of his talk was 'Closing the Gap Globally and Locally – HIV and Aids control for the most vulnerable'.





Fundraising revenue was severely hit due to the GFC. Plans to hold another Ochre art auction were put on hold until the economy and art market can recover and confidence returns. A total of \$180,000 of cash and in-kind donations was received (target for 2009 was \$182,000) in 2009 compared to a total of over \$600,000 in 2008.

A major Ochre fundraising lunch was held at the home of Menzies' supporters Helen and Bori Liberman which raised over \$40,000 towards an Indigenous health scholarship in association with the Australian Indigenous Doctors' Association. We would like to thank Mr and Mrs Liberman for their generosity in hosting the Ochre lunch and also Mr David Smorgon, Ochre Ambassador.

The number of smaller donations increased year on year, and the number of people wishing to be added to our database and receive Menzies' newsletters and event news increased significantly.

It was another good year for the Rioli Fund for Aboriginal Health with the partnership with Hawthorn Football Club resulting in a number of significant donations and events including a very successful tin rattle ahead of the Hawks' 'Indigenous Round' game at the Melbourne Cricket Ground. We would once again like to extend our thanks to Mr Kevin Sheedy who did a wonderful job as Rioli Fund ambassador during 2009.

The Menzies Development Committee continued to go from strength to strength with the addition of Mrs Deborah Fracarro as a Darwin-based member. The committee was saddened by the resignation of Mrs Liza Boston from the committee in late 2009 and wish her the best of luck in future.

2009 saw several staffing changes. Julie Carmichael, long-term Communications and Development Manager relocated to New South Wales in early 2009 and was replaced in late 2009 with former ABC news presenter Laetitia Lemke. Melbourne-based External Relations Manager, Lisa Stapels, stepped down in late 2009 and will be replaced in early 2010 by Patricia Pinto.

Our team started filming Menzies' first ever national TV advertising campaign in late 2009. This will be aired across Australia throughout 2010. Thanks to the Menzies Foundation as the major sponsor of the campaign and also the Australian Football League.

2010 will be a big year for Menzies as it is our 25th Anniversary year. This will be marked by a number of major events and campaigns including a major Darwin fundraising event, community open day, corporate partnership fundraising campaign, extra special Menzies medallion presentation and Oration as well as staff party and the TV campaign.

## Menzies Social Club

The dynamic nature of Menzies' projects means that it is not always easy to get to know our colleagues. Menzies' very active staff Social Club organised events regularly in 2009 to help staff get together. Making time to socialise with colleagues is one of the many things that make Menzies such a fabulous place to work. As well as these events giving staff an opportunity to relax, they can also open up pathways for future collaboration.

Due to the expansion of Menzies and the need to locate staff away from the central John Mathews Building, teams located elsewhere, such as Winnellie, Melbourne and Adelaide, sometimes organise their own social events.



*"I grew up in the Northern Territory and it's important to me that we're making this sort of contribution to the Territory."*

The Social Club arranged a number of events for staff during 2009. The Menzies team enjoyed themed lunches including a curry lunch, barbecues, and quiche and salad, morning teas, and a Melbourne Cup luncheon with prizes for best male and female fashionista.

There was also great support for the raffles we held which included Easter, Meat, Monster Raffle, Fruit and Veggies, Father's Day Bunnings Voucher and a coffee machine.

Menzies Social Club organised a very successful trivia night at the Casuarina Club in August, and a family BBQ was held at the St Mary's football club prior to Menzies Director Jonathan Carapetis going on long service leave in October.

To end the year, Menzies celebrated with a Christmas party at Darwin Sailing club. The theme of the night was "loud shirt" and most of our Menzies staff dressed for the occasion – some "very loud".

Lots of hard work and effort go into arranging these events and it is tremendous to see such great support and turnout from staff.

# Menzies Staff under the Microscope

## The House that Gab built

*The American 19th Century writer and philosopher Ralph Waldo Emerson once wrote "Every spirit builds itself a house and beyond a house a world and beyond its world a heaven. Know then that the world exists for you ... build therefore your own world". From the bricks and mortar laid 25 years ago signalling Menzies' humble beginnings, we bid adieu to one of our most enduring spirits who, for 22 of those years helped to build our house.*

In her pivotal role in Research Administration, Gabrielle has grown Menzies' government competitive grants income from modest amounts into the multi million dollar portfolio it is today, providing the life-blood that sustains Menzies' groundbreaking research into Indigenous health.

But Gabrielle says her beginnings with Menzies were humble. She says she had no idea how the health research organisation would change her life, or how her contribution would ensure its future.

"I didn't have a qualification to my name. There was just so much opportunity here at Menzies."

Twenty Two years ago Gabrielle (known affectionately as Gab) was working as a secretary on the psychiatric ward in the Royal Darwin Hospital, and as fate would have it, an advertisement for an administrative research assistant at Menzies School of Health Research would spark her interest.

"I came to Menzies for the interview with a gentleman named Hedley Peach. The interview went well and at the end of it I asked Hedley, 'Do you have a sense of humour? I'm here for two thirds of my waking time and if you don't have a sense of humour then this isn't the job for me'. He contacted me 24 hours later and said, 'To prove I have a sense of humour I'm going to offer you the job'. That was 22 years ago, and it was a one year contract."

Over the years that followed Gab worked in a number of roles including Research Assistant with the Menzies Chlamydia Project and in PR and Communications, but it wasn't until 1992 while working as PA to the new Deputy Director Dave Kemp that Gabrielle Falls would have her first foray into grant applications.

"It was with Dave Kemp that I worked on my first grant application. He was coming up to Darwin from Melbourne and fossicking for rocks along the way. He would ring me from the odd public phone booth saying 'oh throw this in' and 'we've got to do that'. I'd never worked on a grant application before. We got the grant and away we went. That was my introduction to research administration as it is today."

At that time Menzies didn't have a dedicated Research Administration role, but by 1996 the organisation had grown so, that it required a full time grants officer. Gabrielle Falls was the first port of call.

"I got handed a little double sided sheet of paper and they said here are the grants that we hold, will you look after them. Today we have some huge number of grants, we have continuous quality improvement practices and databases and a staff of six."

Over more than two decades Gabrielle Falls has witnessed Menzies develop from a small organisation with 30 to 40 staff, into an international operation with over 300 employees spread around Australia and throughout the Asia Pacific region. What's more, she has been pivotal in building a grants income portfolio worth 10's of millions of dollars that boasts a massive 43% grant approvals rate.

"Yes I feel really good about the contribution I've made to Menzies but I feel particularly good about the contribution that Menzies has made to the community. We've got a long way to go – but geez we've come a long way as well – and yeah – I just look forward to watching it continue to grow and continue to contribute to the improvement of Aboriginal health. I grew up in the Northern Territory and it's important to me that we're making this sort of contribution to the territory."

It's with much love, and a little sadness that Menzies School of Health Research prepares to farewell Gabrielle Falls in early 2010. After 22 years of service she's calling it a day. Her parting message to anyone looking to start a career at Menzies is 'grab it with both hands'.

"Go for it! There's so much opportunity at Menzies, if you have the skills and you have the stamina. Thank you to Menzies for my professional development, particularly to John Mathews and Dave Kemp who had so much faith in me. They put the wind under my wings."

Like any institution, both in its buildings and the services it provides, its successes, endurance and continued relevance leans heavily on the strength of its foundations – from all the team at the Menzies School of Health Research, thank you Gab for your care and dedication in building our house... one that has changed the world around it, and one that continues to help those reliant on our research, to build their own worlds.







# supporters, donors and sponsors in 2009

*We apologise in advance for any omissions or misspellings and ask that you alert us to any inaccuracies so that we can update our records.*

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 In memory of Mr George Young

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# governance

The Menzies School of Health Research is an independent body corporate under the control of a governing Board. Menzies is also a controlled entity of Charles Darwin University.

Menzies School of Health Research is required to furnish an annual report and audited financial statements to an Annual General

Meeting, with financial results consolidated within those of Charles Darwin University.

Menzies accounts are subject to audit by the Auditor-General of the Northern Territory.

## Menzies School of Health Research Board 2009



### 1. Professor Simon Maddocks (Chair)

Professor Simon Maddocks is the South Australian Chief Scientist, South Australian Research Development Institute Livestock Systems, Roseworthy Campus, University of Adelaide. His research interests are in reproductive immunology and cell biology, and epigenetic influences on foetal development. Professor Maddocks is a Director of the Board of the Sir Robert Menzies Memorial Foundation, and is the Menzies Foundation nominee to the Menzies Board.

### 2. Mr Peter Carew, AM (Deputy Chairman)

Peter Carew is General Manager of Wood Group Darwin. A Fellow of the Australian Institute of Company Directors (AICD), Mr Carew is Chairman of Group Training Northern Territory (NT), Australian Technical College – Darwin, as well as the NT Executive of the AICD. Mr Carew is a past President of the Chamber of Commerce NT and in 2003 was appointed a Member of the Order of Australia.

### 3. Professor Jonathan Carapetis

Professor Jonathan Carapetis is Director of the Menzies School of Health Research. He is a specialist paediatric physician, infectious diseases physician and specialist public health physician. Professor Carapetis' wide range of research interests includes group A *streptococcal* and *pneumococcal* diseases and other vaccine preventable diseases.

### 4. Mr Michael Martin OAM

Mr Michael Martin OAM is the Chairman of the Menzies Finance Committee and the Menzies Development Committee (MDC). Mr Martin is currently Company Director and a Partner in MDS Partners and lectures at the Batchelor Institute of Indigenous Tertiary Education. Mr Martin is a Fellow of the CPA Australia and a graduate member of the Australian Institute of Company Directors.



#### 5. Professor Bob Wasson

Professor Bob Wasson is the Deputy Vice Chancellor Research Charles Darwin University (since April 2004). Professor Wasson was educated in earth sciences, with a PhD in geomorphology and has subsequently developed his research skills in natural resource management, environmental change, environmental history and interdisciplinary environmental studies. Professor Wasson has had substantial involvement with national committees in natural resource management and international global change programs, particularly International Geosphere and Biosphere Program (IGBP).

#### 6. Professor Shane Houston

Professor Shane Houston is a Gangulu man from Central Queensland. He has worked in Aboriginal Affairs for more than 30 years mainly in the health and employment areas and is currently Executive Director Systems Performance and Aboriginal Policy at the Northern Territory Department of Health and Community Services.



#### 7. Ms Kate George

Ms Kate George is from the Murchison District of Western Australia and belongs to the Putejurra people. Ms George is the Principal Consultant of Claypan Services Pty Ltd. She holds a law degree from the Australian National University and was admitted to practice as a barrister and solicitor in Western Australia (1992) and New South Wales (1989). Ms George has provided national consultancy services to private and government sectors as well as Aboriginal communities.

#### 8. Mr Robert Wells

Mr Robert Wells is Co-Director of the Menzies Centre for Health Policy and Executive Director of the College of Medicine and Health Sciences at the Australian National University, Canberra. He works on a range of health policy and systems issues, including primary care, private health insurance, rural health and health workforce. He has participated in national advisory committees on neurosciences research and attracting greater private sector investment in health and medical research.



#### 9. Mr Ken Davies

Mr Ken Davies is currently Deputy Chief Executive at the Northern Territory Department of the Chief Minister. In the past Mr Davies has been the Deputy Chief Executive, Education Services, Department of Employment, Education and Training. He has worked in the Northern Territory for the past 29 years, having commenced his teaching career at Papunya in 1978 as a young graduate from Western Australia. He is the former Brailling Primary School Principal and has worked as Principal in Katherine and remote Central Australian community schools.

#### 10. Dr David Ashbridge

Dr David Ashbridge was appointed Chief Executive of the Northern Territory Department of Health and Community Services in March 2007. Dr Ashbridge has a long history of service to the Department Health and Community Services dating back to 1998 when he started as a District Medical Officer in the Top End. He has held a number of senior management positions in the department. David is a Fellow of Royal Australian College of Physicians (Public Health) and a Member of Royal College of General Practitioners. He holds a Masters Degree in Public Health and an MB.BS as well as Diplomas in Child Health and Tropical Medicine. Dr Ashbridge also holds a Graduate Diploma from the Australian Institute of Company Directors.



#### 11. Professor David Celermajer

Currently Professor David Celermajer is Scandrett Professor of Cardiology, University of Sydney, Director of Echocardiography and Cardiologist, Royal Prince Alfred Hospital, Clinical Director, The Heart Research Institute, Sydney and Chairman, Research Committee, National Heart Foundation of Australia.

#### 12. Professor Barney Glover

Professor Barney Glover is Vice-Chancellor, Charles Darwin University in Darwin, Northern Territory. He also holds an Adjunct Professorial Fellowship in the Western Australia Centre of Excellence in Industrial Optimisation. Professor Glover has held various Board positions on Cooperative Research Centres and other research organisations and maintains a strong interest in research management and professional development. He has held positions at several Australian universities and has an extensive research background in applied mathematics and mathematics education. Professor Glover graduated from the University of Melbourne in 1993 with a PhD in Applied Mathematics, he also holds Bachelor of Science (Honours) and Master of Science degrees and a Diploma in Education from the University of Melbourne.





## Observers of the Board

### Secretary to the Board

Ms Adrienne Farago

### MENZIES Staff Representative

Mr Trevor Hopps/Ms Rachel Mayhead

## Board Committees

The Governing Board was assisted by the following committees.

### Finance and Risk Committee

Mr Michael Martin (Chair)

Mrs Sue Bradley (Independent member)

Prof Jonathan Carapetis

Mr Peter Carew

Mr Shane Smith (Financial Controller & Secretary)

### Audit Committee

Mr Michael Martin (Chair)

Mr Peter Carew

Mrs Sue Bradley (Independent member)

Mr Shane Smith (Secretary)

### Academic Standing Committee

Prof Bob Wasson – Chair

Prof Jonathan Carapetis

Prof Robyn McDermott

Prof Bart Currie (from Feb 2009)

Prof Lesley Barclay

### Development Committee

Mr Michael Martin (Chair)

Mr Brandon Carp

MS Pauline Wrobell

Mr Dean Rioli

Ms Liza Boston

Mr Ben Rozenes

Ms Lisa Stapels/ Mrs Julie Carmichael (Secretary)

### Other Committees

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Mr Marius Puruntatameri

Dr Alex Brown

Prof Cindy Shannon

Ms Paula Arnol

Assoc Prof Jacinta Elston

#### Child Health Division Indigenous Reference Group

Mr Marius Puruntatameri

Mr Dennis Bonney

Mr Kane Ellis

Mr Lorna Murakami-Gold

Assoc Prof Ngiare Brown

Mr Geoffrey Barnes

Ms Christine Campbell

#### Human Research Ethics Committee

Dr Michael Nixon (Chair)

Mr Mathew Antcliff

Ms Colleen Atkinson

Ms Ruth Billany

Assoc Prof Pascale Detwiller (from August 2009)

Ms Denise Dickson (until April 2009)

Dr Deborah Holt (until June 2009)

Assoc Prof Phil Giffard (from August 2009)

Mr David Pryce

Dr Gurmeet Singh

Dr Thomas Snelling (until December 2009)

Ms Helen Spiers

Ms Leonique Swart (from February 2009)

Ms Karyl Taylor

Dr Steven Tong (until June 2009)

Major Geneen Wright

Ms Helen Wodak (until January 2009)

Ms Maria Scarlett (Secretary)

#### Aboriginal Ethics Sub Committee

Assoc Prof Ngiare Brown (Chair)

Ms Joanne Garnggulkpuy (until April 2009)

Mr Peter Pangquee

Ms Kalinda Griffiths

Ms Diane Walker

Mrs Jennifer Ward

Mr Bruce Lee King (until August 2009)

Mr Mathew Turner

Dr Malcolm McDonald (Scientific Adviser)

Maria Scarlett (Secretary)

#### Darwin Regional Institutional Biosafety Committee

Mrs Susan Hutton (until January 2009)

Assoc Prof Phil Giffard (chair from February 2009)

Dr Valerie Asche

Dr Lorna Melville

Ms Pamela Trotman

Mr Michael Howard

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Ms Jo Bex

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Dr Valerie Asche

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Dr John Hargrave AO MBE

Mrs Susan Hutton

Prof David Kemp FAA

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Mr Ray Norman AM

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### Life Members

Dr Keith Fleming

Dr Ella Stack CBE

### Menzies Ambassadors

Mr Dean Rioli

Mr Kevin Sheedy

Mr David Smorgon AO

\* Deceased

## Honorary Appointees

Dr Brian Angus	Malaria and Melioidosis Collaboration
Mr Suresh Benedict	Working with Professor Bart Currie
Dr Ivan Bastian	IMVS facilities and expertise in research projects in East Timor and Indonesia
Prof Lesley Barclay	Is on ASC and close collaborator with the Services, Systems and Societies Division
Dr Craig Boutlis	Infectious diseases: staphylococcus, malaria and pneumonia
Assoc Prof Simon Brown	Toxinology
Dr Alex Brown	Metabolic and vascular disease research
Dr Alan Cass	Research into renal disease in Indigenous populations
Assoc Prof Allen Cheng	Ex-staff member and strong collaborator
Dr Alan Clough	Substance misuse
Ms Samantha Coloquhoun	International child health and rheumatic heart disease
Assoc Prof Kate Conigrave	Epidemiology and substance misuse
Dr Christine Connors	Collaboration into remote area chronic disease
Dr Yvonne Cunningham	Healthy for life and clinical audit protocols
Prof Nigel Curtis	Collaborative research into host factors responsible for rheumatic fever pathogens
Prof Peter d'Abbs	Collaboration on substance misuse
Mr Peter Ebsworth	Collaborative research in international health projects
Ms Chris Flavell	Disaster preparedness
Assoc Prof Russell Gruen	Population health and epidemiology
Prof Wendy Hoy	Renal disease in Indigenous populations
Assoc Prof Paul Kelly	Collaborative research in international health projects
Dr Vicki Krause	Collaborative research in infectious diseases
Mr Richard Lumb	Mycobacteriology at IMVS and IMVS labs for research in East Timor
Dr Dorothy Mackerras	Chronic disease collaboration
Dr Graeme Maguire	Lung disease collaboration
Dr Matthias Maiwald	Tropical infectious diseases collaboration
Dr Joao Martins	Collaborative research efforts in public health
Prof John Mathews	Collaborative research and mentorship
Dr Lorna Melville	Cooperation with Zoonotic diseases with Prof Bart Currie
Prof Kerin O'Dea	Collaborations with Preventable Chronic Disease Division
Dr Bridie O'Rielly	Public health coursework and teaching
Dr Barbara Patterson	Collaborative research and teaching
Dr Anna Ralph	International TB research
Prof Karl Rieckmann	Collaborative research into tropical disease particularly malaria
Dr Sue Sayers	Aboriginal Birth Cohort study
Dr Steven Skov	Collaboration with substance misuse team
Dr Cathy Stilton	Cooperation with Zoonotic Diseases with Prof Bart Currie
Dr Sri Sriprakash	Streptococci
Dr Emiliana Tjitra	Strengthening ties with Indonesia especially in malaria collaboration
Dr Tarun Weeramanthri	Preventable Chronic Disease Program in the Northern Territory
Dr Richard Weir	Cooperation with Zoonotic diseases with Prof Bart Currie
Dr Al Yonovitz	Audiology



# research funding

Funding Body	Chief Investigators	Grant Type
AusAID	DOUGLAS Brendon; ANSTEY Nicholas; PRICE Ric	Program
AusAID 44748 (administered by AusAID Timika)	MULHOLLAND Edward; ANSTEY Nicholas	Capacity Building
AusAID 44748 (administered by Macfarlane Burnet Institute for Medical Research & Public Health)	MULHOLLAND Edward; ANSTEY Nicholas	Capacity Building
Australian Academy of Science	BOYLE Jacqueline	Scholarship
Australian Academy of Science	BAR-ZEEV Naor	Scholarship
Australian Academy of Science	HUGHES Jaquelyne	Scholarship
Australian Academy of Science	KEARNS Therese	Scholarship
Australian Biosecurity CRC for Emerging Infectious Diseases 2.29EI	WALTON Shelley; DOUGALL Annette	Scholarship
Australian Research Council DP0877513 (administered by Curtin University of Technology)	ZUBRICK S; SILBURN Sven; TREWIN D; SANSON Ann; LOUDEN William; LAWRENCE David	Discovery Project
Australian Research Council LP0667619 (administered by Charles Darwin University)	BOWMAN David; BROOK Barry; BRADSHAW Corey; MORGAN Geoffrey; BOGGS Guy	Linkage Projects
Australian Research Council LP0775506 (administered by University of Sydney)	DIXON Robert; BROWN Graeme; MALIK Richard; TORIBIO Jenny-Anne; DIXON Roselyn; WALTON Shelley	Linkage Projects
Australian Research Council LP0882670 (administered by Charles Darwin University)	LEA Tess; BARCLAY Lesley; SENIOR Kate; CHENHALL Richard	Linkage Project
Australian Research Council LP0882860 (administered by University of New South Wales)	DUNN Kevin; PEDERSON Anne; FORREST James; PARADIES Yin; IP David; BABACAN Hurriyet	Linkage Project
Australian Research Council LP0990680 (administered by Charles Darwin University)	SENIOR Kate; CHENHALL Richard; PITTS Marian; SAGGERS Sherry; BURBANK Victoria; NAGEL Tricia	Linkage Project
Australian Research Council RN0460368 (administered by University of Technology, Sydney)	SMITH Nick; ANSTEY Nicholas	Research Network
Australian Rotary Health Research Fund (administered by Maari Ma Health Aboriginal Corporation)	BURKE H; BAILIE Ross; LYLE D; WESTON Richard; KENNEDY Catherine; COOK Margaret-Ann	Project
Balunu Foundation SE275	SENIOR Kate; CHENHALL Richard	Program
Beyondblue Limited 09-534	NAGEL Tricia	Contract
Bill and Melinda Gates Foundation 44748 (administered by University of Queensland)	MULHOLLAND Edward; ANSTEY Nicholas	Capacity Building
Cabrini Health	CARAPETIS Jonathan	Project
CardioVascular Lipid	HUGHES Jaquelyne; MAPLE-BROWN Louise; O'DEA Kerin	General Clinical Research
Caritas Australia	CARAPETIS Jonathan; COLQUHOUN Samantha	Program
Channel 7 Children's Research Foundation of SA Inc	BAR-ZEEV Naor	Project
Channel 7 Children's Research Foundation of SA Inc	SMITH-VAUGHAN Heidi	Project
Channel 7 Children's Research Foundation of SA Inc	CHANG Anne	Project
Channel 7 Children's Research Foundation of SA Inc	LEACH Amanda	Project
Children's First Foundation	CARAPETIS Jonathan; KELPIE Lorraine	Contract
Community Benefit Fund	NAGEL Tricia	Project
CRC for Aboriginal Health	MORRIS Peter; LEACH Amanda; SMITH-VAUGHAN Heidi; CHANG Anne; VALERY Patricia; TORZILLO Paul	Project
CRC for Aboriginal Health	BAILIE Ross	Consultancy
CRC for Aboriginal Health	THOMAS David	Project
CRC for Aboriginal Health	BAILIE Ross	Project

Title	From	To	Total \$ Awarded
Strengthening the Timika Translational Research Facility (AusAID Timika)	1-Jan-09	31-Dec-13	\$1,222,487.00
Women's and Children's Knowledge Hub Initiative	7-Apr-08	30-Jun-11	\$397,350.00
Women's and Children's Knowledge Hub Initiative	7-Apr-08	30-Jun-11	\$6,000,000.00
Polycystic ovary syndrome, reproductive health and metabolic abnormalities in Indigenous women in the Northern Territory	21-Jun-06	31-May-09	\$17,500.00
Vaccination strategies to reduce ear disease in Aboriginal and Torres Strait Islander children in the Northern Territory	1-Jan-07	23-Jan-09	\$14,000.00
The relationship of body composition, renal impairment & inflammatory cytokines in Indigenous persons with diabetes	1-Jan-08	31-Dec-10	\$21,000.00
Epidemiological study of scabies and strongyloides infections in a remote indigenous community in the NT before and after a community wide treatment intervention with Ivermectin	23-Feb-09	23-Feb-11	\$21,000.00
Australian Leishmania lifecycle investigation	3-Jul-06	2-Oct-09	\$105,000.00
Measuring and modelling the childhood determinants of human capital formation	1-Jan-08	31-Dec-11	\$688,259.00
Modelling and control of mosquito-borne diseases in Darwin using long-term monitoring	1-Jan-06	30-Jun-09	\$638,251.00
Evaluating the impact of new interdisciplinary interventions to enhance dog health to benefit community health outcomes in remote Indigenous communities	1-Jan-07	31-Dec-09	\$396,543.00
The invisible parents project – exploring the barriers to effective parental and community involvement in three Northern Territory schools	1-Jan-08	31-Dec-10	\$182,000.00
Constructing regionally appropriate anti-racism strategies for Australia	1-Jan-09	31-Dec-11	\$188,680.00
Culture, context and risk: Socio-cultural influences on the sexual health of Indigenous young people	1-Jul-09	30-Jun-13	\$306,140.00
Australian Research Council Network for Parasitology	1-Jan-05	31-Dec-09	\$2,465,261.00
ABCD in a remote NSW context	1-Jan-08	31-Dec-09	\$80,000.00
Substance Abuse Research	1-Jan-09	31-Dec-09	\$48,000.00
BEAT: Best Practice in Early Intervention Assessment & Treatment of Depression and Substance Misuse	1-Jan-09	31-Dec-14	\$801,340.00
Women's and Children's Knowledge Hub Initiative	7-Apr-08	30-Jun-11	\$93,988.50
Cabrini Contribution to gECHO Project	1-Jul-08	30-Jun-10	\$50,000.00
The relationship of obesity, insulin resistance and inflammation in Aboriginal and Torres Strait Islanders with diabetes mellitus and renal impairment: Top End Study	1-Jul-08	30-Jun-09	\$50,000.00
Rheumatic Heart Disease Control and Prevention Programme	1-Jan-09	31-Dec-09	\$40,000.00
Burden of severe disease due to influenza and other respiratory viruses in Aboriginal children in the Northern Territory	1-Jan-08	15-Sep-09	\$80,000.00
Do atypical pathogens explain the high rates of acute otitis media treatment failure in Indigenous children?	1-Jan-09	31-Dec-09	\$45,000.00
Does azithromycin improve the clinical recovery of hospitalised bronchiolitis in Indigenous and non-Indigenous infants: A randomised controlled trial	1-Jan-09	31-Dec-09	\$50,000.00
Study of microbiology linked to evaluation of Strong Teeth for Little Kids (SMILE_STLK)	1-Jan-09	31-Dec-10	\$40,000.00
Getting Every Child's Heart Okay (gECHO)	28-May-08	30-Sep-10	\$207,000.00
Gambling worries: attitudes to gambling in NT remote communities	1-Jan-09	31-Dec-11	\$300,000.00
Azithromycin versus placebo in the treatment of asymptomatic acute otitis media in young Aboriginal children: A RCT	1-Jan-09	31-Dec-10	\$34,000.00
Activity development for Program 1 (Healthy Start, Healthy Life)	1-Oct-09	30-Dec-09	\$23,000.00
Monitoring and Evaluating Aboriginal Tobacco Control	19-Feb-07	30-Apr-09	\$240,028.00
Audit and Best Practice for Chronic Disease Extension	10-Feb-09	31-Dec-09	\$275,649.00





# research funding

Funding Body	Chief Investigators	Grant Type
CRC for Aboriginal Health	ANDREWS Ross; CONNORS Christine	Project
CRC for Aboriginal Health	BAILIE Ross; GUTHRIDGE Steve; ULAMARI Harold; LONERGAN Katrina; BREWSTER David; ROBINSON Gary; STEVENS Matthew; HALPIN Stephen; SCHOBEN Xavier; THORNTON Peter; DONO	Project
CRC for Aboriginal Health	NAGEL Tricia; KAVANAGH David	Project
Criminology Research Council	SENIOR Kate; CHENHALL Richard; IVORY William; NAGEL Tricia; CUNNINGHAM Teresa	Project
CSL Biotherapies	ANDREWS Ross; CARAPETIS Jonathan	Network
Dept of Health & Ageing	MORRIS Peter	Closing the Gap Program
Dept of Health & Ageing	CAIRNEY Sheree	Project
Dept of Health & Ageing	CARAPETIS Jonathan; DOUGLAS Brendon; SMITH Shane	Medical Research Infrastructure
Dept of Health & Ageing	BAILIE Ross	Project
Dept of Health & Ageing – OATSIH	CARAPETIS Jonathan; MCDONALD Malcolm; CURRIE Bart; ILTON Marcus; MAGUIRE Graeme	Project
Dept of Health & Ageing ITA 043/0809	CARAPETIS Jonathan; FARAGO Adrienne; GREEN Brenda	Program
Dept of Health & Ageing REI-224/0708	MORRIS Peter; LEACH Amanda; ANDREWS Ross	Program
Dept of Health & Ageing RFT 071/0607	CONDON John; BAILIE Ross; AL-YAMAN Fadwa; SHIBASAKI Sanchia; SIBTHORPE Beverly; BEATTY Zoe; HALL Sam; HALLIDAY Bianca	Tender
Financial Markets Foundation for Children 2009-014	CHANG Anne; MACLENNAN Carolyn; MORRIS Peter	Project
Flinders University of South Australia	SKULL Sue	Capacity Building
GlaxoSmithKline Australia 113313	LEACH Amanda	Investigator Initiated Collaborative Research Trial
GlaxoSmithKline Australia111721	CARAPETIS Jonathan; KIRKWOOD Carl; ROSEBY Rob; ROBINS-BROWNE Roy; SNELLING Thomas; ANDREWS Ross	Project
Health Research Council of New Zealand (administered by University of Auckland)	WALKER Natalie; GLOVER Marewa; BULLEN Chris; VANDER HOORN Stephen; TRENHOLME Adrian; FENTON Debra; THOMAS David	Project
Ian Potter Foundation 20070455	LEE Bilawara; BRIMBLECOMBE Julie; MCCARTHY Leisa	Capacity Building
Ian Potter Foundation 20080506	DOWDEN Michelle	Travel
JTAI	CHANG Anne; D'APRANO Anita; HARRISON Nea; BAILIE Ross	Sub-Contract
Mallee Family Care	NUTTON Georgie	Evaluation
Murdoch Children's Research Institute	ROBINS-BROWNE Roy; CARAPETIS Jonathan	Project
National Heart Foundation G 06B 2464	TOWERS Rebecca; FAGAN Peter; CURRIE Bart; CARAPETIS Jonathan	Project
National Institutes of Health (administered by University of Utah, USA)	GRANGER Donald; ANSTEY Nicholas; LOPANSRI Bert; HYLAND Keith; STODDARD Greg; PASQUALI Marzia	Project
National Institutes of Health 151315 (administered by Duke University, USA)	ANSTEY Nicholas	Sub-Contract
National Institutes of Health A1041764/151315 (administered by Duke University, USA)	WEINBERG J; ANSTEY Nicholas; GRANGER Donald; MWAIKAMBO Esther	Project
National Institutes of Health R01 A1041764-10 (administered by Duke University, USA)	ANSTEY Nicholas; TIJTRA Emiliana; WEINBERG J	Project
National Institutes of Health U01 A1060579 (administered by Queensland Institute of Medical Research)	GOOD Michael; CARAPETIS Jonathan; MULHOLLAND Edward; BATZLOFF Michael; HOYER W; MCLEAN Allen; OLIVE C; SRIPRAKASH Kadaba; TOTH Istvan	Project
National Institutes of Health U01 A1075568 (administered by Northern Arizona University, USA)	KEIM Paul; CURRIE Bart; MAYO Mark	Project
National Rural Health Alliance Inc	BRIMBLECOMBE Julie	Project

Title	From	To	Total \$ Awarded
Community consultation at Galiwin'ku for an ivermectin-based treatment intervention to reduce scabies and strongyloides	12-Aug-08	1-Sep-09	\$20,000.00
Housing Improvement and Child Health Study (HICH)	20-Apr-04	30-Jun-09	\$100,102.19
Australian Integrated Mental Health Initiative – NT	1-Jul-03	31-Dec-09	\$225,420.00
Developing successful diversionary schemes for youth from remote Aboriginal communities	1-Jan-09	31-Dec-11	\$169,280.00
Annual Sponsorship for Menzies School of Health Research to assist with communicating its Research on Paediatric and Adult Vaccines.	25-Mar-09	25-Mar-12	\$45,000.00
OATSIH Contribution to Evidence Based Dental Caries Prevention Programs in Remote Indigenous Communities of the Northern Territory	18-May-09	31-Aug-09	\$48,000.00
Innovative and interactive multimedia communication strategies aimed at reducing tobacco consumption among Indigenous young people	1-Oct-09	31-Aug-12	\$761,300.00
Menzies Building Extension Project	1-Jul-07	30-Sep-12	\$5,000,000.00
Audit and Best Practice Chronic Disease Extension	1-Jul-05	31-Dec-07	\$287,800.00
Screening for rheumatic heart disease in Indigenous children	1-Jan-07	30-Sep-10	\$1,365,338.00
Rheumatic Fever Strategy – National Coordination Unit	1-Jan-09	30-Jun-12	\$2,358,000.00
Evaluation of a comprehensive case management support program for prevention of hearing loss associated with otitis media with perforation in Indigenous children 0–5 years of age	1-Sep-08	30-Apr-12	\$1,044,879.00
The Healthy for Life Support, Collection, Analysis and Reporting Function	30-Mar-07	31-Dec-09	\$8,649,138.60
Improving the management and outcomes for infants hospitalised with bronchiolitis	1-Jun-09	30-May-11	\$132,644.00
Research Support and Education Program	28-Oct-08	30-Sep-11	\$171,000.00
Surveillance of ear disease and nasal carriage of respiratory pathogens in the NT in 2009	1-May-09	31-Mar-10	\$416,356.08
Effectiveness of rotavirus vaccine for the prevention of gastroenteritis among hospitalised children in the NT	13-Feb-08	13-Feb-09	\$179,481.00
A family tobacco control program to reduce respiratory illness in Maori infants	1-May-09	30-Apr-11	\$749,448.48
The Ian Potter Foundation Indigenous Research Fellowship	1-Jan-07	31-Aug-10	\$249,000.00
International Forum of Quality and Safety in Healthcare, Paris, France 22–25 April 2008	20-Apr-08	10-Jun-08	\$2,000.00
Australian Nurse–Family Partnership Program (ANFP) – Monitoring and Evaluation – Phase 1	22-Apr-09	30-Jun-10	\$212,625.00
Evaluation of TLC Transition to School Project 2009–09. Beyond the Rainbow – Story–play	2-Mar-09	30-Dec-10	\$10,909.20
Pathogenic strains of group A streptococci that lack an essential virulence determinant	1-Jan-09	31-Dec-09	\$38,000.00
Investigation of human heart antigens identified by screening a cDNA library using ARF sera	1-Jan-07	30-Jun-09	\$30,000.00
Hyperphenylalaninemia in cerebral malaria	1-Jul-05	30-Jun-10	\$1,250,000.00
Arginine, Nitric Oxide, and Severe Malaria	1-Aug-08	31-Jul-09	\$135,000.00
Arginine, nitric oxide, and severe malaria	1-Aug-08	31-Dec-13	\$135,000.00
Nitric oxide and severe malaria (II)	1-Sep-03	30-Apr-09	\$1,600,000.00
Global GAS vaccine based on the M–Protein	15-Sep-04	31-Aug-09	\$33,264,835.00
Burkholderia: international collaborative development of novel diagnostics	10-Sep-07	31-Aug-12	\$1,295,782.00
Remote Indigenous Stores Project	5-Feb-07	31-Dec-09	\$98,800.00





# research funding

Funding Body	Chief Investigators	Grant Type
National Water Commission RFT NWC4/2008	BAILIE Ross; MCDONALD Elizabeth	Consultancy
NHMRC 236235	CUNNINGHAM Joan; ANDERSON Ian; BAILIE Ross; LEWIS Jennifer; BARNES Anthony	Capacity Building
NHMRC 264582 (administered by University of Melbourne)	NOLAN Terry; CARAPETIS Jonathan; BUTTERY J; JOHNSTON L; SAWYER S; MULHOLLAND Edward; CURTIS Nigel; OBERKLAID Frank	Centre for Clinical Research Excellence
NHMRC 283303	BAILIE Ross	Research Fellowship
NHMRC 283312	LEACH Amanda	Career Development
NHMRC 283321	ANSTEY Nicholas; TJITRA Emiliana	International Collaborative Research
NHMRC 320869	ISBISTER Geoffrey	Career Development
NHMRC 323248	CHENHALL Richard	Training Fellowship
NHMRC 333421	BURGESS C; JOHNSTON Fay; CONNORS Christine; MCDERMOTT Robyn; ROBINSON Gary; BAILIE Ross	General Practice Clinical Research
NHMRC 383500	GUNTHORPE Wendy; SAYERS Sue; CAIRNEY Sheree; PARADIES Yin	Project
NHMRC 383507	CAIRNEY Sheree; MARUFF Paul; CLOUGH Alan; TORZILLO Paul; CURRIE Bart	Project
NHMRC 383511	WALTON Shelley	Career Development
NHMRC 383515	BOYLE Jacqueline	Scholarship
NHMRC 389837	MORRIS Peter; VALERY Patricia; CHANG Anne; GRIMWOOD Keith; SINGLETON Rosalyn; TORZILLO Paul	Project
NHMRC 390121	GIFFARD Philip; TURNIDGE John; BELL Jan	Project
NHMRC 402797 (administered by University of Sydney)	CASS Alan; BROWN Alex; PATEL Anushka; EADES Sandra	Health Services Research
NHMRC 422501 (administered by Charles Darwin University)	CONDON John; ANDERSON Ian; SMITH Leonard; COTTER Philippa	ARC/NHMRC Ageing Well, Ageing Productively Program
NHMRC 422503 (administered by Charles Darwin University)	BARCLAY Lesley; CARAPETIS Jonathan; KILDEA Sue; KRUSKE Sue; NORRIS Gweneth; MCGREGOR Carolyn; CURRY Joanne; TRACY Sally; WARDAGUGU Molly	A Healthy Start to Life for all Australians
NHMRC 436006	WALTON Shelley; CURRIE Bart	Project
NHMRC 436009	CHENG Allen; MATHEWS John; LEACH Amanda; CARAPETIS Jonathan; CURRIE Bart	Project
NHMRC 436011	SINGH Gurmeet; MACKERRAS Dorothy	Project
NHMRC 436013	CONDON John; RUMBOLD Alice; GARLAND Suzanne; STANKOVICH Jim; BROWN Ngjare	Project
NHMRC 436014	CONDON John; JELFS Paul; RODER David; CUNNINGHAM Joan; COORY Michael; THRELFALL Tim	Project
NHMRC 436023	MORRIS Peter; LEACH Amanda; SMITH-VAUGHAN Heidi; CHANG Anne; VALERY Patricia; TORZILLO Paul	Project
NHMRC 436031	DAVIS Joshua	Scholarship
NHMRC 436032	SNELLING Thomas	Scholarship
NHMRC 436033	TONG Steven	Scholarship
NHMRC 436034	TOWERS Rebecca	Training Fellowship
NHMRC 436039	BAR-ZEEV Naor	Scholarship
NHMRC 436041	DINGWALL Kylie	Scholarship
NHMRC 436606	HODGSON Wayne; ISBISTER Geoffrey; NICHOLSON Graham; SEYMOUR Jamie	Project
NHMRC 437008	ANDREWS Ross	Training Fellowship
NHMRC 490300	THOMAS David; JOHNSTON Vanessa; FITZ Joe	General Practice Clinical Research
NHMRC 490302	BAILIE Ross; CLELLAND Nikki; TSEY Komla; SIBTHORPE Beverly	Project
NHMRC 490305	ISBISTER Geoffrey; BROWN Simon; BUCKLEY Nicholas; SELDON Michael	Project

Title	From	To	Total \$ Awarded
National Water Commission National Risk Assessment	21-Sep-08	31-Mar-10	\$36,960.00
Building capacity in policy relevant, quantitative, social analysis and research in Indigenous health	1-Jan-04	31-Dec-09	\$2,437,000.00
Centre for Clinical Research Excellence in Childhood and Adolescent Immunisation	1-Jan-05	31-Dec-09	\$2,000,000.00
Fellowship in Indigenous Environmental Health and Health Services Research	1-Jan-04	31-Dec-10	\$810,250.00
Reducing the burden of infectious disease in young Aboriginal children – an evidence-based, multidisciplinary approach	1-Mar-04	28-Feb-09	\$426,250.00
Research and training to reduce morbidity and mortality from malaria in Papua (Indonesia) and Papua New Guinea	1-Jan-04	31-Dec-09	\$1,649,830.00
Prospective evaluation of terrestrial and marine envenoming in humans: clinical effects, predictors of severity, toxicokinetics and potential treatments	1-Jan-05	31-Dec-09	\$486,250.00
Best practice guidelines for evaluating Indigenous residential alcohol and drug programs	1-Jul-05	30-Jun-10	\$264,000.00
Implementing the Aboriginal and Torres Strait Islander Adult Health Check. Improving early detection and evaluating innovative prevention activities in remote areas	1-Apr-06	30-Jun-10	\$229,875.00
Strong Souls Study	1-Jan-06	31-Dec-09	\$189,875.00
Neurocognitive and social changes associated with unleaded petrol sniffing and abstinence from further sniffing	1-Jan-06	31-Dec-09	\$625,000.00
Strategies to Improve the Diagnosis, Prevention, Treatment and Control of Scabies	1-Jan-06	31-May-11	\$436,250.00
Polycystic ovary syndrome, reproductive health and metabolic abnormalities in Indigenous women in the Northern Territory	1-Jan-06	30-Jun-09	\$91,800.00
MULTICENTRE BRONCHIECTASIS STUDY : A collaborative and international study of bronchiectasis in Indigenous children	1-Jan-06	31-Dec-10	\$1,444,500.00
Beta-lactamase mediated antibiotic resistance in Gram-negative pathogens : How does genotype relate to phenotype	1-Jan-06	31-Dec-09	\$262,500.00
Improving health outcomes for Aboriginal Australians with chronic disease through strategies to reduce systems barriers to necessary care	1-May-06	30-Apr-11	\$2,800,000.00
Examining a core assumption of policy and services for older Indigenous Australians	1-Feb-07	31-Jan-09	\$127,000.00
1+1 = A Healthy Start to Life: Targeting the year before and the year after birth in Aboriginal children in remote areas	1-Jan-07	1-May-11	\$528,000.00
An Immunodiagnostic Assay for Scabies	1-Jan-07	31-Dec-09	\$364,500.00
Mathematical modelling of bacterial carriage in children	1-Jan-07	31-Dec-09	\$409,750.00
Aboriginal Birth Cohort Study: from childhood to adulthood	1-Jan-07	31-Dec-09	\$481,275.00
An epidemic of vulvar cancer in young women: investigating the role of Human Papillomavirus and genetic susceptibility	1-Jan-07	31-Dec-09	\$476,625.00
Health system performance and outcomes for Indigenous Australians with cancer: a national study	1-Jan-07	31-Dec-10	\$393,688.00
Azithromycin versus placebo in the treatment of asymptomatic acute otitis media in young Aboriginal children: A RCT	1-Jan-07	31-Dec-10	\$1,290,125.00
Endothelial function and adjuvant therapies in sepsis	1-Jan-07	31-Mar-10	\$94,266.00
Rotavirus gastroenteritis in the Aboriginal population and the effect of immunisation	1-Jun-07	30-Oct-10	\$94,266.00
Community-associated methicillin-resistant Staphylococcus aureus: epidemiology, emergence and treatment	1-Jan-07	31-Dec-09	\$94,266.00
Investigation of cardiac autoantigens identified by screening a cDNA library with acute rheumatic fever sera	1-Jan-07	30-Jun-11	\$274,000.00
Vaccination to reduce ear disease in Aboriginal and Torres Strait Islander children in the Northern Territory	1-Jan-07	31-Dec-11	\$94,266.00
The nature of brain function recovery following abstinence from petrol sniffing	1-Jan-07	31-Jul-10	\$65,598.00
Molecular toxinology of Australian box jellyfish venoms	1-Jan-07	31-Dec-09	\$271,750.00
Prevention of pneumococcal diseases, streptococcal disease and influenza among Indigenous populations	1-Jan-07	31-Dec-10	\$274,000.00
Monitoring tobacco consumption to evaluate Indigenous tobacco control	1-Jan-08	31-Dec-10	\$217,000.00
A structured systems approach for improving health promotion practice for chronic diseases in Indigenous communities	1-Jan-08	31-Dec-10	\$640,514.00
A randomised controlled trial of factor replacement therapy in snake bite coagulopathy	1-Jan-08	31-Dec-10	\$689,500.00





# research funding

Funding Body	Chief Investigators	Grant Type
NHMRC 490307	ANSTEY Nicholas	Practitioner Fellowship
NHMRC 490314	RUMBOLD Alice; BOYLE Jacqueline; KILDEA Sue; WALLACE Euan; THOMPSON Robyn	Project
NHMRC 490317	LEACH Amanda; SMITH-VAUGHAN Heidi; NISSEN Michael; CHENG Allen	Project
NHMRC 490320	ANDREWS Ross; LEACH Amanda; MORRIS Peter; TORZILLO Paul; TANG Mimi; MULHOLLAND Edward	Project
NHMRC 490321	CHANG Anne; MORRIS Peter; ROBERTSON Colin; VAN ASPEREN Peter; GLASGOW Nicholas; MASTERS Ian	Project
NHMRC 490335	MCDONALD Elizabeth	Training Fellowship
NHMRC 490337	CLELLAND Nikki	Scholarship
NHMRC 490338	O'GRADY Kerry-Ann	Training Fellowship
NHMRC 490339	MARSH Robyn	Scholarship
NHMRC 490340	SKULL Sue	Training Fellowship
NHMRC 490344	MCMAHON Rachael; SENIOR Kate; BOUGHEY Mark	Palliative Care Research Program
NHMRC 490345	MOUNSEY Kate	Training Fellowship
NHMRC 490348	HUGHES Jaquelyne	Scholarship
NHMRC 496600 (administered by Queensland Institute of Medical Research)	KEMP David; GOOD Michael; MCMANUS Donald; TOTH Istvan; ANSTEY Nicholas; SRIPRAKASH Kadaba; DOOLAN Denise; ENGWERDA Christian; LOUKAS Alexander; WOODBERRY Tonia	Program
NHMRC 496635 (administered by Queensland Institute of Medical Research)	MCCARTHY James; WALTON Shelley; PASAY Cielo; HOLT Deborah	Project
NHMRC 545200	CUNNINGHAM Joan	Research Fellowship
NHMRC 545202	MAPLE-BROWN Louise; LAWTON Paul; HOY Wendy; CASS Alan; JERUMS George; MACISAAC Richard; WARD Leigh; THOMAS Mark	Project
NHMRC 545203	THOMAS David; JOHNSTON Vanessa; BROWN Ngiare; CHANG Anne; SEGAN Cathy	Project
NHMRC 545207	BRIMBLECOMBE Julie; BAILIE Ross; MCCARTHY Leisa; RITCHIE Jan; COVENEY John; HOBSON Vivienne; WOOD Margaret; LEONARD Dympna	Project
NHMRC 545216	CHANG Anne	Practitioner Fellowship
NHMRC 545220	HOLT Deborah; WALTON Shelley; BAKER Bo; DUNN Ben	Project
NHMRC 545223	LEACH Amanda; CHANG Anne; CHENG Allen; MCDONALD Malcolm; TORZILLO Paul; BROWN Ngiare; HARE Kim	Project
NHMRC 545224	CARAPETIS Jonathan; ELLIOTT Alison; ALPERSTEIN Garth; ANDREWS Ross; LOUDEN William; NUTTON Georgie; MCTURK Nicholas	Project
NHMRC 545228	ISBISTER Geoffrey; BROWN Simon	Project
NHMRC 545232	LEACH Amanda; SMITH-VAUGHAN Heidi; ANDREWS Ross; RILEY T; O'GRADY Kerry-Ann	Project
NHMRC 545233	ANDREWS Ross; CARAPETIS Jonathan; KIRKWOOD Carl; ROSEBY Rob; SNELLING Thomas	Project
NHMRC 545234	CARAPETIS Jonathan; CURRIE Bart; MCDONALD Malcolm; ANDREWS Ross; TONG Steven	Project
NHMRC 545239	KEARNS Therese	Scholarship
NHMRC 545241	JOHNSTON Vanessa	Training Fellowship
NHMRC 545245	MINIGO Gabriela	Training Fellowship
NHMRC 545253	BRIMBLECOMBE Julie	Training Fellowship
NHMRC 566792	MULHOLLAND Edward; RUSSELL Fiona; CARAPETIS Jonathan; TANG Mimi; BALLOCH Anne	Project
NHMRC 566855 (administered by University of Melbourne)	SIMPSON Julie; DUFFULL Stephen; PRICE Ric	Project
NHMRC 568806 (administered by University of New South Wales)	KALDOR John; WARD James; RUMBOLD Alice; GUY Rebecca; MCDERMOTT Robyn; MAHER Lisa; DONOVAN Basil	Project
NHMRC 580017	FALLS Gabrielle	Equipment

Title	From	To	Total \$ Awarded
Pathophysiology and treatment of malaria and other tropical infectious diseases in our region	1-Jan-08	31-Dec-12	\$463,975.00
Antenatal screening for fetal anomalies in Indigenous women: views of Indigenous people and their health care providers	1-Jan-08	31-Dec-10	\$360,350.00
Do respiratory viruses explain high rates of acute otitis media with perforation in young Aboriginal children?	1-Jan-08	31-Dec-09	\$200,050.00
PneuMum: An RCT of maternal pneumococcal vaccination for protection of Indigenous children from ear disease	1-Jan-08	31-Dec-10	\$573,100.00
Multicentre evaluation of a clinical pathway for chronic cough in children – can its use improve clinical outcomes	1-Jan-08	31-Dec-10	\$932,975.00
The Better Environmental Health, Housing and Child Health Study (BEHHCH)	1-Jan-08	31-Dec-11	\$279,000.00
Improving Health Promotion Practice through Continuous Quality Improvement	1-Jan-08	31-Dec-10	\$66,771.00
The aetiology and prevention of pneumonia of Indigenous children in Northern Australia	1-Apr-08	31-Mar-12	\$279,000.00
Nasopharyngeal metagenomics in Indigenous children: correlations with otitis media aetiology and treatment failure	1-Jan-08	31-Dec-10	\$66,771.00
Optimising prevention and vaccination policy for pneumococcal disease, influenza and RSV in Indigenous Australians	1-Jan-08	31-Dec-11	\$139,500.00
Case conferencing, quality of life and palliative care for clients from remote communities in the Northern Territory	1-Jan-09	31-Dec-10	\$42,750.00
Molecular mechanisms of ivermectin resistance in the ectoparasitic mite, <i>Sarcoptes scabiei</i>	1-Jan-08	31-Dec-11	\$279,000.00
The relationship of body composition, renal impairment & inflammatory cytokines in Indigenous persons with diabetes	1-Jan-08	31-Dec-10	\$96,009.00
Immunity and Pathogenesis in Tropical and Infectious Diseases: Implications for Vaccines and Drug Development	1-Jan-08	31-Dec-12	\$14,902,357.80
Diagnostics for drug resistance in scabies	1-Jan-08	31-Dec-10	\$334,875.00
Fellowship on Social and System Determinants of Indigenous Health	1-Jan-09	31-Dec-13	\$560,000.00
To improve the accuracy and precision of estimated GFR (eGFR) measurements in Indigenous Australians	1-Jan-09	31-Dec-11	\$926,200.00
A randomised controlled trial of a family tobacco control program to reduce respiratory illness in Indigenous infants	1-Apr-09	31-Dec-12	\$1,100,875.00
Improving capacity of Aboriginal and Torres Strait Islander communities to influence food systems for food security	1-Jan-09	31-Dec-13	\$1,537,450.00
Clinical research and evidence-based approaches to management of respiratory illnesses	1-Jan-09	31-Dec-13	\$504,875.00
Towards novel therapies for scabies: functional analysis of <i>Sarcoptes scabiei</i> aspartic proteases	1-Jan-09	31-Dec-11	\$315,150.00
Is long term weekly azithromycin use for bronchiectasis in Indigenous children associated with antibiotic resistance?	1-Jan-09	31-Dec-11	\$384,875.00
Evaluation of the effectiveness of mobile preschool for child health and development in remote Aboriginal communities	1-Jan-09	31-Dec-10	\$442,276.00
Randomised controlled trial of intravenous antivenom versus placebo in the treatment of redback spider bite	1-Jan-09	31-Dec-11	\$439,000.00
Community based surveillance of bacterial respiratory pathogens in the NT & WA	1-Jan-09	31-Dec-10	\$751,150.00
A case control study of rotavirus vaccine effectiveness against gastroenteritis hospitalisation of children in the NT	1-Jan-09	31-Dec-11	\$449,925.00
A randomised controlled trial of alternative treatments to intramuscular penicillin for impetigo in Aboriginal children	1-Jan-09	31-Dec-12	\$1,268,925.00
Community treatment intervention with ivermectin to reduce the prevalence of scabies and strongyloides	1-Jan-09	31-Dec-11	\$85,827.00
Researching effective strategies to tackle tobacco use in Indigenous populations in Northern Australia	1-Jan-09	31-Dec-12	\$345,000.00
Immune regulation during uncomplicated and severe <i>P. falciparum</i> and <i>P. vivax</i> malaria	1-Apr-09	31-Mar-13	\$285,000.00
Improving food systems in remote Aboriginal and Torres Strait Islander communities for better food security	1-Jan-09	31-Dec-12	\$285,000.00
Impact of DTP schedules on the immunogenicity of 2 doses of 13v-PCV followed by an early booster	1-Jan-09	31-Dec-11	\$2,555,649.00
Design of antimalarial pharmacokinetic studies	1-Jan-09	31-Dec-11	\$107,125.00
A randomised trial to control sexually transmitted infections in remote Aboriginal communities	1-Jan-09	31-Dec-13	\$1,746,789.00
NHMRC Standard Equipment Grant – 2008	1-Nov-08	30-Jun-09	\$97,337.00





# research funding

Funding Body	Chief Investigators	Grant Type
NHMRC 640317	FALLS Gabrielle	Equipment
Northern Arizona University MGN35TR-01	CURRIE Bart; MAYO Mark	Contract
Northern Territory Government	CARAPETIS Jonathan	Fellowship
Northern Territory Government – DET	CARAPETIS Jonathan; NUTTON Georgie	Program
Northern Territory Government – DET	CARAPETIS Jonathan; NUTTON Georgie	Program
Northern Territory Government – DHF	MORRIS Peter	Project
Northern Territory Government – DHF	NAGEL Tricia	Project
Northern Territory Government – DHF	MCDONALD Elizabeth	Project
Northern Territory Government – DHF	NAGEL Tricia	Education
Northern Territory Government – DHF	SKULL Sue	Capacity Building
Northern Territory Government – DHF	SENIOR Kate; CHENHALL Richard	Project
Northern Territory Government – DHF	SILBURN Sven	Program
Northern Territory Government – DHF	BRIMBLECOMBE Julie; MCDONALD Elizabeth; CHENHALL Richard; BAILIE Ross; THOMPSON Sharon	Contract
Northern Territory Government – DHF and DoJ	D'ABBS Peter; SENIOR Kate	Program
Northern Territory Government – DLGHS	MCDONALD Elizabeth; BAILIE Ross	Project
Northern Territory Government – DOJ	SENIOR Kate; CUNNINGHAM Teresa; IVORY William	Project
Northern Territory Government – NTRIB	BAR-ZEEV Naor; CARAPETIS Jonathan; ANDREWS Ross; CHANG Anne; NISSEN Michael; KRAUSE Victoria; GUTHRIDGE Steve	Project
Northern Territory Government – NTRIB	KEARNS Therese; ANDREWS Ross; CARAPETIS Jonathan; CURRIE Bart; CHENG Allen; MCCARTHY James; SPEARE Richard; SHIELD Jenny; PITTMAN Barbara; CONNORS Christine	Project
Northern Territory Government – NTRIB	BAR-ZEEV Naor; O'GRADY Kerry-Ann; CARAPETIS Jonathan; ANDREWS Ross; LAMBERT Stephen; TORZILLO Paul; SMITH-VAUGHAN Heidi	Project
Northern Territory Government – NTRIB	KAESTLI Mirjam; CURRIE Bart; MAYO Mark	Project
Northern Territory Government – NTRIB	TONG Steven; GIFFARD Philip; CURRIE Bart; MOSER Ralf	Project
Northern Territory Government – NTRIB	BOYLE Jacqueline; SAYERS Sue; SILBURN Sven; NUTTON Georgie	Project
Pratt Foundation	HOPKINS Susie; MORRIS Peter	Project
Queensland Government M142822 (administered by Queensland Institute of Medical Research)	MCCARTHY James; WALTON Shelley; PASAY Cielo; HOLT Deborah	Project
Red Cross	BRIMBLECOMBE Julie	Evaluation
Sidney Myer Fund	KEARNS Therese	Scholarship
Sidney Myer Fund	ANDREWS Ross; SKULL Sue	Project
Swiss National Science Foundation Fellowship	MARFURT Jutta	Fellowship
Trust Company Limited	SMITH-VAUGHAN Heidi	Project
UNICEF	BAILIE Ross; MCDONALD Malcolm; CARAPETIS Jonathan; EDWARDS Keith	Project
Wellcome Trust ME028458MES	ANSTEY Nicholas; TIJTRA Emiliana	International Collaborative Research
Wellcome Trust ME032027 (administered by John Radcliffe Hospital, UK)	PRICE Ric	Career Development
Western Australian Government – DoH	SENIOR Kate; CHENHALL Richard	Project
World Health Organization WPI/08/902802	BAR-ZEEV Naor	Contract
World Heart Federation/ Vodaphone	CARAPETIS Jonathan	Program

Title	From	To	Total \$ Awarded
NHMRC Standard Equipment Grant – 2009	1-Oct-09	30-Jun-10	\$100,559.00
High Resolution/Highly Sensitive Assays for Forensic Analysis & Attribution of Bacterial Biothreat Agents	21-Sep-06	30-Apr-10	\$75,000.00
Father Frank Flynn Fellowship	1-Jun-05	1-Jun-12	\$522,000.00
Transforming Indigenous Education	1-Jan-09	31-Dec-13	\$2,516,369.97
Transforming Indigenous Education 09-177 DET variation NT AEDI data release	1-Dec-09	30-Jun-10	\$250,000.00
DHF Contribution to Evidence Based Dental Caries Prevention Programs in Remote Indigenous Communities of the Northern Territory	1-Dec-08	31-Dec-09	\$50,000.00
BEAT Project : Best practice in Early intervention Assessment and Treatment of depression and substance misuse	1-Jul-09	30-Jun-14	\$387,800.00
Research to develop children's environmental health frameworks, indicators and survey tool	1-Mar-08	30-Jun-09	\$13,636.36
AIMHi(NT) Mental Health Care Planning Training	1-Sep-06	30-Jun-09	\$50,000.00
Research Support Program	1-Jul-08	30-Jun-11	\$240,000.00
Investigation of Young People's Understandings of Sexual Behaviour and Sexual Risk	22-Apr-09	30-Jun-10	\$20,000.00
Child Protection Research and Education	1-Jun-08	30-May-11	\$1,359,138.00
Remote Indigenous Physical Activity Report	1-Jul-08	30-Jun-09	\$200,000.00
Substance Abuse Research	1-Jul-08	30-Jun-11	\$1,349,700.00
Research to develop children's environmental health frameworks, indicators and survey tool	23-Jan-08	30-Jun-09	\$15,000.00
Developing successful diversionary schemes for youth from remote Aboriginal communities	1-Jan-09	31-Dec-11	\$186,000.00
Burden of Influenza and respiratory viruses among Aboriginal children in the Top End	1-Jan-08	31-Dec-10	\$60,000.00
Beating scabies and strongyloides in Galiwin'ku	1-Jan-09	31-Dec-11	\$46,000.00
Impact of bacterial colonisation and viral co-infection on rates of respiratory illness among Aboriginal children	1-Jan-09	31-Dec-10	\$25,000.00
The microhabitat of the melioidosis bacterium Burkholderia pseudomallei in Darwin	1-Jan-09	31-Dec-10	\$7,000.00
High-throughput SNP based molecular typing of Burkholderia pseudomallei	1-Oct-09	1-Aug-10	\$25,000.00
A better future – preconception reproductive health for Indigenous women	1-Oct-09	30-Sep-10	\$30,000.00
The Australian Indigenous EarInfoNet – An Ear Health and Hearing Web Resource and Network	28-Feb-06	31-Dec-09	\$356,077.12
The mechanism of acaricide resistance	1-Mar-07	31-Dec-09	\$566,250.00
Evaluating the Red Cross breakfast program in remote communities in the Northern Territory	1-Apr-08	30-Jun-09	\$40,000.00
Beating scabies and strongyloides in Galiwin'ku	1-Jan-09	31-Mar-12	\$50,049.00
Vaccine Response Study	1-Sep-07	30-Jun-09	\$50,000.00
	1-Feb-09	31-Jan-10	\$55,917.99
Defining the bacterial cause of chronic ear disease in Indigenous infants	31-Dec-07	1-Apr-09	\$19,800.00
Proposal for integrating the principles of the National Guidelines for Rheumatic Fever and Rheumatic Heart Disease into the Audit and Best Practice for Chronic Disease (ABCD) program	1-Mar-08	31-Dec-10	\$115,888.00
Research and training to reduce morbidity and mortality from malaria in Papua (Indonesia) and Papua New Guinea	1-Jan-04	31-Dec-09	\$1,502,089.00
Optimising the management of drug resistant vivax malaria in Papua, Indonesia	1-Aug-04	31-Jul-09	\$712,530.00
Investigation of Young People's Understandings of Sexual Behaviour and Sexual Risk	22-Apr-09	31-Dec-10	\$40,000.00
Update the integrated management of childhood illness (IMCI) information package for the Western Pacific Region	15-Apr-08	1-Jan-09	\$10,000.00
World Heart Federation Rheumatic Fever/ Rheumatic Heart Disease Secondary Prevention Programme in the Pacific Island Nations – Coordination Costs	1-Jul-05	1-Jan-09	525,468.54



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## Refereed Journal Articles

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Warlukurlangu Artists, Yuendumu NT

## Cover Art

SHORTY JANGALA ROBERTSON, born 1925

Ngapa Jukurrpa  
(*Water Dreaming*) – Puyurru

183 x 122cm, 2008  
Acrylic on canvas

Warlukurlangu Artists,  
Yuendumu, NT

The site depicted in this painting is Puyurru, west of Yuendumu. In the usually dry creek beds are water soakages or naturally occurring wells. Two Jangala men, rainmakers, sang the rain, unleashing a giant storm. It travelled across the country, with the lightning striking the land. This storm met up with another storm from Wapurtali, to the west, was picked up by a 'kirrkarlan' (Falco berigora or brown falcon) and carried further west until it dropped the storm at Purlungyanu, where it created a giant soakage. At Puyurru the bird dug up a giant snake, 'warnayarra' (the 'rainbow serpent') and the snake carried water to create the large lake, Jillyiumpa, close to an outstation in this country. This story belongs to Jangala men and Nangala women.

In contemporary Warlpiri paintings traditional iconography is used to represent the Jukurrpa, associated sites and other elements. In many paintings of this Jukurrpa curved and straight lines represent the 'ngawarra' (flood waters) running through the landscape.

Motifs frequently used to depict this story include small circles representing 'mulju' (water soakages) and short bars depicting 'mangkurdu' (cumulus & stratocumulus clouds).



*discovery for a healthy tomorrow*