A VERY MERRY CHRISTMAS!
All the staff and students at NCIRS wish you and your families a safe and happy Christmas.

A MESSAGE FROM THE DIRECTOR
NCIRS Director reflects on the past year.

RECENT PUBLICATIONS
Journal articles recently published by NCIRS staff.

NATIONAL INDIGENOUS WORKSHOP
Summary from workshop held in WA.

JOURNAL CLUB SUMMARIES
Summaries from recent journal club presentations.

Merry Christmas from all of us at NCIRS.
A message from the Director
Professor Peter McIntyre

MERRY CHRISTMAS!

2013 HAS BEEN ANOTHER YEAR FULL OF ACTIVITY AND ACHIEVEMENT FOR THE HARD-WORKING STAFF OF NCIRS.

Technical work for the Australian Technical Advisory Group on Immunisation (ATAGI) has been focused on two key vaccines – meningococcal group B and zoster, but work on pneumococcal vaccines, pertussis and hepatitis B has also been prominent. Work in the vaccine safety area has also been substantial, supporting the Horvath Review, initiating an important study of influenza vaccine safety in children and continuing with analyses of intussusception risk (IS) following rotavirus vaccines. It was gratifying to see the national analysis of IS risk, which was a joint effort of NCIRS and the University of Melbourne, published in Clinical Infectious Diseases, and to be invited to present on this work at the US Advisory Committee on Immunization Practices meeting in the USA in June. The first National Implementation Workshop, held in Sydney from 7-8 March 2013, was very well received as an opportunity for a wide range of research and evaluation from around all states and territories to be presented, and was honoured by a visit from the Commonwealth Minister Tanya Plibersek. NCIRS was co-sponsor of the third National Indigenous Immunisation Research Workshop, held in Fremantle, WA with TICHR, WA and the Centre of Research Excellence and presentation of the latest NCIRS report on Vaccine Preventable Diseases and Vaccine Coverage in Indigenous People by Dr Rob Menzies was a highlight. There were also some notable successes on the part of our staff. Dr Julie Leask was both promoted to Associate Professor and awarded a prestigious Career Development Fellowship. Dr Nick Wood was also successful in his Career Development Fellowship application. Gulam Khandaker, Kevin Yin and Maria Chow were awarded PhD degrees and Kerrie Wiley completed her PhD, all based on work at NCIRS. The NHMRC Centre of Research Excellence has continued to sponsor research and communication initiatives, with NCIRS as a key contributor. Read more here: www.creimmunisation.com.au

Here, a key activity was a Survey Design Workshop run by the NCIRS Social Science Unit.

2014 promises to be no less busy and productive, with the PHAA Immunisation Conference, sponsored by the Public Health Association of Australia in Melbourne in June 2014, always an event of major significance on the national and NCIRS landscape. We are very grateful to all our collaborators and to those who give up their valuable time to advise NCIRS through our Scientific Advisory Committee and Advisory Board. Special thanks to Professor Chris Cowell, Director of Research for The Sydney Children’s Hospital Network, and Professor Cheryl Jones, our SAC Chair and Deputy Dean of Sydney University, for their huge contributions throughout the year.

Australian Immunisation Professionals Network

THE NCIRS-AIP EMAIL DISCUSSION GROUP CELEBRATED ITS 10TH BIRTHDAY THIS YEAR. THERE ARE NOW AROUND 700 AUSTRALIAN IMMUNISATION PROFESSIONALS SUBSCRIBED TO THE GROUP.

NCIRS-AIP provides:

- A forum for questions and feedback
- Regular international updates on immunisation news, notifications of news items, publications and meetings of interest, and summaries and commentaries on recent papers presented and discussed at the NCIRS Immunisation Journal Club.

NCIRS-AIP is intended to be an interactive forum for debate as well as serving as a source of reliable information. Posts and responses are encouraged from all members and, in the interests of open and rapid communication, discussion content is not screened before distribution to the group. If you are interested in subscribing to this group, please go to www.ncirs.edu.au/immunisation/professionals-network/index.php
NCIRS team received by Deputy Hajj Minister of Saudi Arabia

LAST MONTH, HIS HIGHNESS THE DEPUTY HAJJ MINISTER OF SAUDI ARABIA MR HATIM QADI RECEIVED THE NCIRS HAJJ RESEARCH TEAM AT HIS MECCA OFFICE.

The NCIRS research team including Drs Harunor Rashid, Gulam Khandaker and Osamah Barasheed briefed the minister about the progress of the team’s activities at Hajj. The Hajj Minister provided much assistance to the team during this year’s Hajj, especially by providing a block of tents close to the Australian Hajj camp in Mina valley, on the outskirts of Mecca. The tents were used as a research base to orchestrate studies at Hajj. The minister expressed his further support in the future.

It should be noted that the NCIRS team has started their recruitment into a mask trial at this year’s Hajj; this will continue till next year. The team also conducted a survey to quantify the vaccination uptake among Australian pilgrims and identify the pilgrims’ practice and perception about antibiotic resistance.

Handy links & resources recently updated

- The NCIRS rotavirus and pertussis fact sheets have been updated with the latest recommendations and epidemiology – see www.ncirs.edu.au/immunisation/fact-sheets/index.php
Scientists in Schools
Merrylands State High School visit

DR MELINA GEORGOUSAKIS IS TAKING PART IN THE NATIONAL SCIENTISTS IN SCHOOLS PROGRAM WHICH AIMS TO CREATE AND SUPPORT LONG-TERM PARTNERSHIPS BETWEEN PRIMARY OR SECONDARY SCHOOL TEACHERS AND SCIENTISTS OR MATHEMATICIANS.

Melina has been partnered with Merrylands State High School who has a very hands-on Head of Science, Alice Leung, and dedicated science department who are very keen to incorporate Melina’s experience into their science program. This year Melina has visited to speak to both Year 8 and Year 9 students to talk about careers in science and also the immune system and HPV vaccination. A video of mouse dendritic cells chasing down and eating Leishmania parasites particularly had the students’ attention – maybe thanks to the old-school Pacman arcade game analogy! Next year Melina is hoping to work with the Year 11 and 12 students who will be looking at the immune system in more detail.

If you are interested in the program see the program website or twitter feed:
http://www.scientistsinschools.edu.au/ or @CSIROSMiS

Summer scholar students at NCIRS

ONCE AGAIN, NCIRS IS TAKING PART OF THE UNIVERSITY OF SYDNEY SUMMER SCHOLAR PROGRAM. THROUGH THIS PROGRAM THE UNIVERSITY OF SYDNEY MEDICAL SCHOOL OFFERS UP TO 75 SUMMER RESEARCH SCHOLARSHIPS TO FUND PLACEMENTS WITHIN RESEARCH ORGANISATIONS OVER THE DECEMBER – JANUARY PERIOD.

It is open to any full time university students in undergraduate degrees in sciences or medicine to give them experience working in a research environment.

This summer period NCIRS is hosting two students; one will be working on an influenza B epidemiology project with Drs Leon Heron, Melina Georgousakis and Kevin Yin, and another working with Drs Nick Wood and Helen Quinn assessing the epidemiology of vaccine preventable diseases in infants. It will be a very busy 8 weeks for the students learning epidemiological research methods. We look forward to having them.
RECENT PUBLICATIONS


NCIRS mentoring role for AusAID Australian Award Fellowship

From 1st August to 25th October 2013, NCIRS staff played an important mentoring role for the AusAID Australian Award Fellowship ‘Timor Leste Health Leaders Program – Developing Timorese health leaders’ program run by AusAID and the University of Sydney. Ms Telphia Joseph and Dr Nick Wood (NCIRS) were mentors for Mr Carlos Sarmento and Dr Aditi Dey and Mr Brendon Kelaher (NCIRS) were mentors for Mr Juvinal Xavier. The aim of this fellowship was to develop the skills and capacity of future East Timorese health leaders to improve their knowledge and eventual impact on their return to East Timor. Our role was to mentor Carlos and Juvinal who work in immunisation service delivery in East Timor. Over the 3-month period, the NCIRS mentors facilitated visits to a range of immunisation activities, such as school vaccination programs, adverse events clinics, Aboriginal Medical Services, and attendance at the Masters of Public Health elective course run by NCIRS. We worked closely with Carlos and Juvinal to develop their ‘Project for change’ – a practical outcome. Carlos developed a project aimed at identifying under-immunised Timor Leste children and developing a mobile phone based intervention to increase the vaccination coverage. Juvinal developed a training program for vaccine providers for improving recording and reporting of vaccinations in the Ainaro District of Timor Leste. It was great for us to share our Australian experience with both Carlos and Juvinal and to learn a lot from them on how the ‘immunisation’ system works in Timor Leste.

Congratulations!

Congratulations to our very own Dr Nick Wood on his successful National Health and Medical Research Council (NHMRC) Career Development Fellowship to continue his research in immunisation safety.

A big congratulations to Melina Georgousakis who has been conferred with a conjoint lecturer appointment with the University of Sydney School of Public Health. This title is due acknowledgment of Melina’s contribution to research, teaching and service at the University.

All the best to Maria Chow as she leaves NCIRS to study medicine at The University of Sydney. She also graduated with her PhD from the University of Sydney at the end of December.

Dr Kevin Yin (pictured with Professor Robert Booy) also recently graduated with his PhD from the University of Sydney. Congratulations!

NCIRS mentoring role for AusAID Australian Award Fellowship
RECENT WORKSHOP SUMMARY

The National Indigenous Immunisation Research Workshop (NIIRW)

THE NATIONAL INDIGENOUS IMMUNISATION RESEARCH WORKSHOP (NIIRW), HOSTED BY THE TELETHON INSTITUTE FOR CHILD HEALTH RESEARCH AND CO-SPONSORED BY NCIRS, WAS HELD IN FREMANTLE ON 7–8 NOVEMBER.

Summary prepared by Dr Rob Menzies

This was the third of a series of like-minded events. The first was initiated by Menzies School of Health Research in Darwin in 2007 and the second in 2009 hosted by NCIRS in Sydney. This workshop brought together a wonderful mix of health researchers, Aboriginal Health Workers, service providers, state and territory Department of Health staff and health professionals with an interest in immunisation for Aboriginal and Torres Strait Islander people.

Presentations were made covering topics from pneumococcus which unfortunately is always too well represented, the prospects for new vaccines for Group A Strep and pneumococcus, wonderful innovations to achieve or monitor immunisation coverage, and an encouraging session on engagement, consultation and education. One highlight for me was the stimulating presentation from ENT Surgeon Kelvin Kong who used the grooves of Marvin Gaye to keep us striving to conquer otitis media. Another was a presentation from Ms Natalie Allan and her team from Hunter New England about an SMS pre-call system for parents of Aboriginal children before an immunisation was due, resulting in some very impressive results being achieved in immunisation timeliness. Presenters from NCIRS were Dr Rob Menzies, Ms Telphia Joseph, Mr Brendon Kelaher, Dr Nick Wood and Dr Heather Gidding, while Associate Professor Julie Leask and Dr Frank Beard also attended.

A meeting summary is being prepared for submission to the Medical Journal of Australia.
Measuring vaccine confidence: analysis of data obtained by a media surveillance system used to analyse public concerns about vaccines


While immunisation has been successful in reducing the global burden of illness and death, a range of issues still affect public confidence in vaccines. The intensity, speed and effects of public opinion about vaccination are growing with new modes of communication. This study aimed to develop a new application of existing surveillance systems to detect and characterise early signs of vaccine issues and design an approach to assess the priority of each concern. The researchers postulated that media monitoring might provide important information regarding perceived problems with vaccines or immunisation programs that would take longer to register through official channels. This information could then be used to tailor more effective and timely strategies to address these concerns before an effect on vaccination uptake or disease outbreak is observed.

Following preliminary research by The Vaccine Confidence Project, media reports were obtained using the HealthMap automated data collection system which was adapted to monitor online reports about vaccines, vaccination programs, and vaccine-preventable diseases. Reports were manually analysed for content and categorised by concerns, vaccine, disease, location and source as well as overall positive or negative sentiment towards vaccines. Using pre-defined criteria they were then given a priority level depending on the timing and seriousness of the reported event.

10,380 reports from 144 countries were obtained between 1 May 2011 and 30 April 2012. 7,171 (69%) contained positive or neutral content and 3,209 (31%) contained negative content. Of the negative reports, 1,977 (24%) were associated with impacts on vaccine programs and disease outbreaks; 1,726 (21%) with beliefs, awareness and perceptions; 1,371 (16%) with vaccine safety; and 1,336 (16%) with vaccine delivery programs. Proportions of positive and negative reports for each category changed when the data was disaggregated by country and vaccine type indicating potentially strong differences in vaccine confidence, priorities or opinions. Evidence of global dissemination of vaccine concerns was also apparent.

It is clear that the nature of public concerns about vaccines is complex and highly diverse. This research established a robust system for the real-time collection, categorisation and prioritisation of vaccine sentiments that could be utilised to detect local confidence issues and address public questions and concerns. However, this field of work is currently highly resource intensive and requires further investigation regarding its potential benefits to the implementation of immunisation programs.

Presented by Ms Amy Vassallo, Research Officer NCIRS

Mortality rates and cause-of-death patterns in a vaccinated population


THE VACCINE SAFETY DATALINK (VSD) IS A COLLABORATIVE PROJECT BETWEEN THE UNITED STATES CENTERS FOR DISEASE CONTROL AND TEN MANAGED CARE ORGANIZATIONS (MCOS) DESIGNED TO MONITOR IMMUNISATION SAFETY AND CONDUCT POPULATION-BASED IMMUNISATION SAFETY STUDIES.

This study provides the methodology and analyses conducted using the VSD to calculate background mortality rates and describe causes of death following immunisation. The results demonstrate a healthy vaccinee effect, with mortality rates lowest in the days immediately following vaccination. Background mortality rates in a vaccinated population are useful in evaluating new vaccines and providing baseline data to detect unusual signals due to vaccine introduction.

Presented by Dr Shopna Bag, Public Health Registrar, NCIRS
GETTING TO KNOW...

5 minutes with Research Operations Manager
Karyn Phillips

Karyn Phillips provides business support for the Centre. She is a graduate from the Australian College of Health Services Executives Management Training Program, with qualifications in Health Information Management. Karyn has experience in business management including organisational and financial management for hospital services, as well as experience in patient services and quality management.

1. WHAT DOES YOUR ROLE AT NCIRS ENTAIL?

My role within NCIRS is a varied role involved in corporate services and communication and education areas of NCIRS. I lead our administration team and provide support to the Director and the Centre as a whole in the administration of the research operations of the Centre. This involves the Centre’s activities in planning, financial and contract management, human resources, administration and business development. Within the Communication and Education group at NCIRS I’m also involved in developing our strategic communication direction and creating an environment of communication, learning and high performance, as well as facilitating and coordinating the Centre’s communication activities.

2. WHAT ISSUES IN IMMUNISATION CONCERN YOU THE MOST?

For me it is the area of information, what information on immunisation and vaccination is available out there and how can we at NCIRS improve the information to help both health professionals and the general public to make well-informed decisions in this area.

3. WHAT IS THE MOST ENJOYABLE PART OF YOUR ROLE AT NCIRS?

There are many enjoyable aspects of my role at NCIRS, but the most enjoyable I have to say would be the interaction with a wonderful and diverse group of people at NCIRS as well as with our stakeholders.

4. DESCRIBE YOURSELF IN THREE WORDS…

Calm, resourceful and cheerful

5. WHAT WOULD YOU SPEND YOUR LAST $5 ON…

Coffee if at work otherwise a nice glass of red

6. YOUR IDEA OF HAPPINESS IS…

A good book to read

7. IF YOU COULD INVITE THREE PEOPLE OVER FOR DINNER, WHO WOULD THEY BE?

Neil Gaiman, Amanda Palmer, Margaret Atwood and if I could have a fourth Jennifer Byrne

8. IF YOU COULD HAVE ANY SUPERPOWER, WHAT WOULD IT BE AND WHY?

Harry Potter I would really like a magical wand

9. DO YOU HAVE ANY HIDDEN TALENTS?

This may depend upon who you ask, but I do love cooking

10. IF YOU WEREN’T WORKING AT NCIRS YOU WOULD BE...

Travelling Australia with my family

FOR YOUR DIARY

OFFICE CLOSURE DURING CHRISTMAS & NEW YEAR

Please be aware that NCIRS will close from Monday 23 December until Wednesday 1 January 2014. We will re-open on Thursday 2 January 2014.