

What is HOT NORTH

Bart Currie

**Infectious Diseases Department & Northern Territory Medical Program,
Royal Darwin Hospital**

Global and Tropical Health Division,

Menzies School of Health Research & Charles Darwin University



Australian Government
Department of Industry,
Innovation and Science

Office of
Northern
Australia

OUR NORTH | OUR FUTURE

*Developing Northern Australia
2017 Implementation Report*



A business friendly north

Top: Pippa Ainsworth, owner, The Trader café and bar, Darwin.

2nd row left: Magpie Goose fashion, models Amara Billy & Phelecia Daylight, Mynyem, NT.

2nd row right: Broome Camel Safaris, WA.

Bottom right: Australian Agricultural Company, established in 1824, stock in QLD.

Strong defence presence

Bottom left: Australian Defence Force in the north.



Case study: Indigenous rangers and biosecurity

Australia's pristine environment is one of our nation's greatest assets.

To protect it, the Australian Government has increased its support of the biosecurity work being undertaken by Indigenous rangers across the north.

It has almost doubled the number of groups undertaking biosecurity surveillance and protection and is providing them with expert training and equipment.

There are now 69 Indigenous ranger groups providing biosecurity protection across the north, and the Tiwi Islands which lie north of Darwin, are an important part of this effort.

The Tiwi rangers are protecting their islands' unique flora and fauna, forest plantation industry and fruit and vegetable gardens from exotic pests and diseases. They are an important biosecurity buffer for mainland Australia.

The rangers undertake fee-for-service work which is creating new opportunities for income generation in remote communities.

"Our rangers are really passionate about what they do," says Tiwi Land Ranger Supervisor and Mentor, Willie Rioli.

"Our real value is caring for and looking after country and continuing how our ancestors cared for our islands—it is for the benefit of future generations."

Three Tiwi rangers are undertaking land care surveillance and protection work across 7,800 square kilometres of country. They are active in fire management and weed control. Supporting the Department of Agriculture and

Water Resources, they undertake biosecurity surveillance to check for and manage exotic pests and diseases such as citrus canker, Asian citrus psyllid, rabies, and avian influenza.

"In the Tiwis we are playing our part by keeping dangerous pests and diseases out of our islands and the Australian mainland," Willie says.

The Tiwi Land Rangers have detected the first case of the Lesser Mango Leafhopper plant pest in the Northern Territory. Early detection and further surveillance has helped the Northern Territory's \$62 million mango industry prepare for and manage this potential pest.

"The extended support we are receiving from the Australian Government is of great value, as living in a remote area, getting the equipment that we need to do our work can be very difficult," Willie says.

"We are making a real difference, as if you don't look after the land things can be destroyed. We are proud of the way we are looking after the country and the way our Elders and the Tiwi Land Council support us in this work."

The Australian Government's White Paper on Developing Northern Australia and Agricultural Competitiveness White Paper are supporting the expansion of the Indigenous rangers program.

Read more at agriculture.gov.au/biosecurity.

Image: Bardi Jawi Rangers protecting Australia's biosecurity. (Left to right) Christopher Sampi, Kevin Dougal and Mark Shadforth, Ardyaloon, Dampier Peninsula, WA.

become a supporter

theguardian

news opinion sport arts lifestyle



australia world au politics More



Indigenous rangers: expansion call as support from One Nation voters revealed

More than 80% of Queenslanders support Indigenous land management, including more than 70% of One Nation voters

Helen Davidson

Mon 8 Jan '18 04.00 AEDT



Case study: Indigenous rangers and biosecurity

Australia's pristine environment is one of our nation's greatest assets.

To protect it, the Australian Government has increased its support of the biosecurity work being undertaken by Indigenous rangers across the north.

It has almost doubled the number of groups undertaking biosecurity surveillance and protection and is providing them with expert training and equipment.

There are now 69 Indigenous ranger groups providing biosecurity protection across the north, and the Tiwi Islands which lie north of Darwin, are an important part of this effort.

The Tiwi rangers are protecting their islands' unique flora and fauna, forest plantation industry and fruit and vegetable gardens from exotic pests and diseases. They are an important biosecurity buffer for mainland Australia.

The rangers undertake fee-for-service work which is creating new opportunities for income generation in remote communities.

"Our rangers are really passionate about what they do," says Tiwi Land Ranger Supervisor and Mentor, Willie Rioli.

"Our real value is caring for and looking after country and continuing how our ancestors cared for our islands—it is for the benefit of future generations."

Three Tiwi rangers are undertaking land care surveillance and protection work across 7,800 square kilometres of country. They are active in fire management and weed control. Supporting the Department of Agriculture and

Water Resources, they undertake biosecurity surveillance to check for and manage exotic pests and diseases such as citrus canker, Asian citrus psyllid, rabies, and avian influenza.

"In the Tiwis we are playing our part by keeping dangerous pests and diseases out of our islands and the Australian mainland," Willie says.

The Tiwi Land Rangers have detected the first case of the Lesser Mango Leafhopper plant pest in the Northern Territory. Early detection and further surveillance has helped the Northern Territory's \$62 million mango industry prepare for and manage this potential pest.

"The extended support we are receiving from the Australian Government is of great value, as living in a remote area, getting the equipment that we need to do our work can be very difficult," Willie says.

"We are making a real difference, as if you don't look after the land things can be destroyed. We are proud of the way we are looking after the country and the way our Elders and the Tiwi Land Council support us in this work."

The Australian Government's White Paper on Developing Northern Australia and Agricultural Competitiveness White Paper are supporting the expansion of the Indigenous rangers program.

Read more at agriculture.gov.au/biosecurity.

Image: Bardi Jawi Rangers protecting Australia's biosecurity. (Left to right) Christopher Sampi, Kevin Dougal and Mark Shadforth, Ardyaloon, Dampier Peninsula, WA.

Improving Health Outcomes in the Tropical North: A Multidisciplinary Collaboration (HOT NORTH)

OUR NORTH, OUR FUTURE: WHITE PAPER ON DEVELOPING NORTHERN AUSTRALIA, released on 18 June 2015

<http://northernaustralia.gov.au/files/files/NAWP-FullReport.pdf>

Call for applications under the NHMRC Northern Australia Tropical Disease Collaborative Research Programme (NATDCRP): February 2016

Menzies' successful application: *Improving Health Outcomes in the Tropical North: A Multidisciplinary Collaboration (HOT NORTH)*:

4 years funding awarded November 21st 2016

Commenced January 1st 2017

Overseen by NHMRC Scientific Advisory Panel, comprising scientific experts, health policy officials, health practitioners and consumers



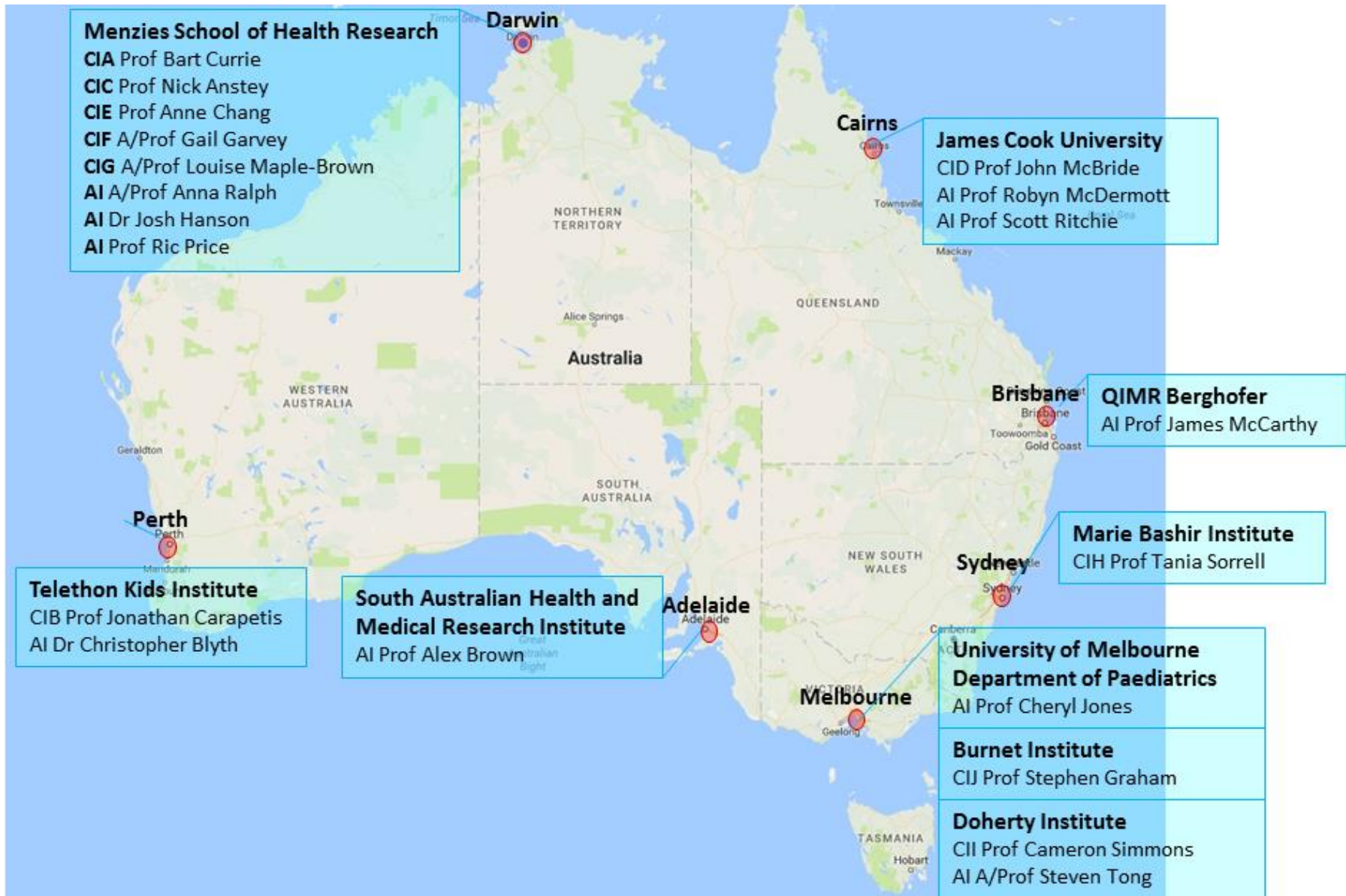
NHMRC Terms of Reference for HOT NORTH

The Northern Australia Tropical Disease Collaborative Research Programme

Undertake research into the prevention, diagnosis, and treatment of tropical disease that will translate research findings into outcomes for health in Australia and the region.

The Programme will build strong collaborations, new research capability and capacity in the health and medical research workforce, and promote effective translation of this research into health policy and practice.

HOT NORTH: Investigators



HOT NORTH Themes and Structure

Skin Health:

- Scabies
- Gp A Strep
- Staph

Respiratory Health:

- Child & adult infections
- Bronchiectasis
- Melioidosis

Antimicrobial Resistance:

- TB
- Malaria
- Gram – ve bacteria
- MRSA
- Fungi

Chronic Diseases:

- Diabetes
- Kidney Disease
- Childhood antecedents
- Rheumatic Heart Disease

Vector Borne and Emerging Diseases:

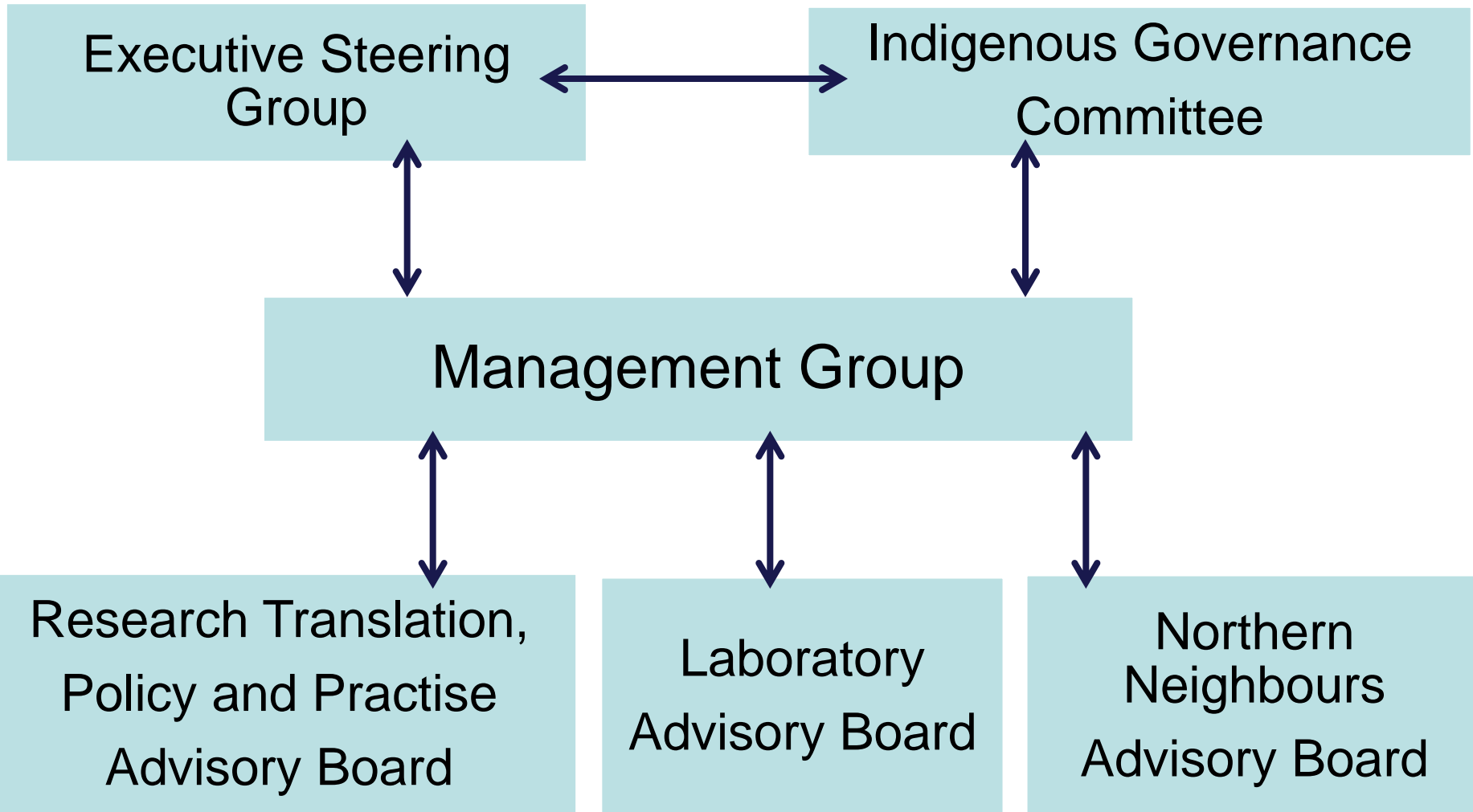
- Dengue
- Other arboviruses
- Encephalitides

Surveillance: Epidemiology, Microbiology, Molecular, Entomology

Case management and prevention: Prevention, Diagnostics, Therapeutics

Policy and Practice: Health informatics, Health Systems Strengthening

HOT NORTH Governance Structure



HOT NORTH: 2017 Fellows (n=5)

Vector Borne and Emerging Infectious Diseases theme:

Can mosquito excreta be used to enhance detection of Australian vector-borne diseases?

Dr Dagmar Meyer ECF

Supervisor: Prof Scott Ritchie, JCU



Dagmar mosquito trapping in Saibai

HOT NORTH: 2017 Fellows (n=5)

Vector Borne and Emerging Infectious Diseases theme:

Can mosquito excreta be used to enhance detection of Australian vector-borne diseases?



Northern
Territory
Government

DEPARTMENT OF HEALTH

media release

Murray Valley encephalitis alert for the Katherine region

Wednesday, 14 February 2018

Residents and visitors in the Katherine region are being urged to take precautions to protect themselves against mosquitoes, with Murray Valley encephalitis (MVE) virus activity detected.

Director of Medical Entomology, Nina Kurucz explained that the flavivirus surveillance program, carried out in liaison with the Department of Primary Industry and Resources, has detected MVE virus activity in Katherine.

The MVE virus is transmitted by the common banded and the floodwater mosquitoes that are mainly active after sundown and in the early morning.

HOT NORTH: 2017 Fellows

Chronic Diseases theme:

Torres Strait Healthy Young Women's Project

Dr Karla Canuto ECF

Supervisor: Prof Robyn McDermott, JCU



To develop and pilot a sustainable healthy lifestyle program co-designed **by** young women in the Torres Strait Islands **for** young women in the Torres Strait Islands

HOT NORTH: 2017 Fellows

Antimicrobial Resistance theme:

*Epidemiology and treatment of malaria in Sabah, Malaysia:
longitudinal patterns of disease, acquisition risk factors,
antimalarial drug resistance, and adjunctive therapy for acute
kidney injury*

Dr Matthew Grigg ECF

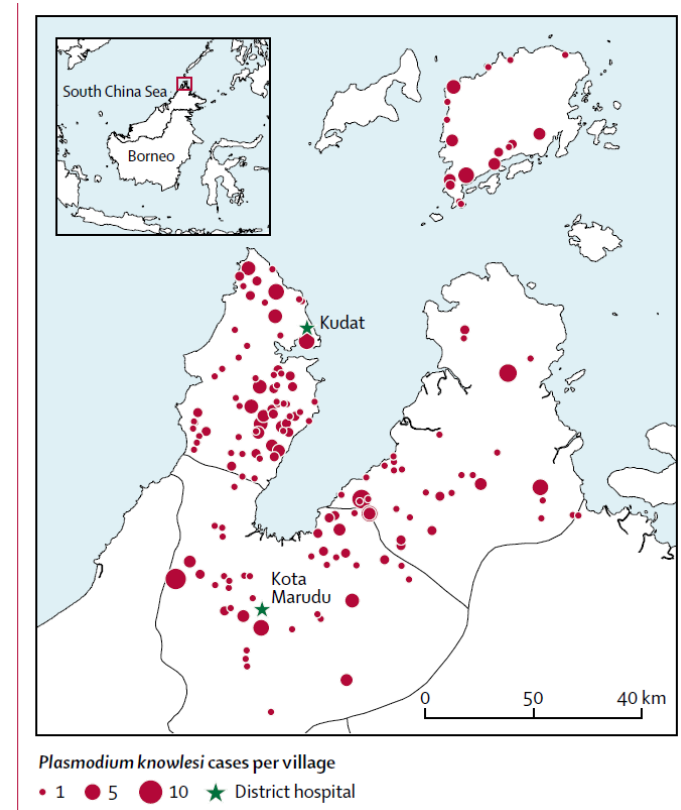
Supervisor: Prof Nick Anstey, Menzies



**Matt travelling down the river in
Kota Marudu district, Sabah, to
follow-up a malaria case**

Individual-level factors associated with the risk of acquiring human *Plasmodium knowlesi* malaria in Malaysia: a case-control study

Matthew J Grigg, Jonathan Cox, Timothy William, Jenarun Jelip, Kimberly M Fornace, Patrick M Brock, Lorenz von Seidlein, Bridget E Barber, Nicholas M Anstey, Tsin W Yeo, Christopher J Drakeley



HOT NORTH: 2017 Pilot Projects (Round 1 = 6)

Chronic Diseases theme:

Exploration of child feeding practices in Indigenous Australians

Athira Rohit

Menzies

Antimicrobial Resistance theme:

*Enhanced screening and preventive therapy for TB
in Daru, South Fly District, Papua New Guinea*

ESCAPE-TB (Study 1)

Suman Majumdar

Burnet Institute

HOT NORTH: 2017 Pilot Projects (Round 2 = 6)

Respiratory Health theme:

What causes pneumonia in children and adults living in tropical Australia

Simon Smith, Josh Hanson, Chris Blyth, Anne Chang
JCU

Prevalence of chronic moist cough in Kimberley Aboriginal children

Andre Schultz
TKI

Antimicrobial Resistance theme:

Understanding current antimicrobial prescribing practice in remote Aboriginal PHC clinics across northern Australia

Jodie McVernon & Steve Tong
Doherty Institute (Uni Melb)

HOT NORTH: 2017 PhD Scholars

Pamela D'Sylva
TKI

Improving the management and clinical outcomes of chronic suppurative lung disease in Aboriginal children in Western Australia

Anna Wood
Menzies

Diabetes and cardiovascular risk among Indigenous women after pregnancy complicated by hyperglycaemia

Aaron Weinman
Doherty Institute (Uni Melb)
The epidemiology of influenza in Northern Australia

HOT NORTH: 2018 Fellows (n=6)

Chronic Diseases theme:

An innovative student-led service in Northern Australia for Aboriginal and Torres Strait Islander people with chronic and disabling conditions

Dr Alice Cairns ECF

Supervisors: Profs Robyn McDermott & Ruth Barker, Mount Isa Centre for Rural and Remote Health, JCU



HOT NORTH: 2018 Fellows (n=6)

Chronic Diseases theme:

Understanding the lived experiences of Aboriginal and Torres Strait Islander youth with Type 2 diabetes in Northern Australia

Dr Renae Kirkham ECF

Supervisor: Prof Louise Maple-Brown, Menzies



HOT NORTH Academy & Indigenous Support

- Support for students - PhD and Honours Scholarships, Professional Development, Mentoring – regional & remote
 - RMPs, AHWs, RANs, Allied Health, Scientists
- Certificate II Community Health Research
- Support for offshore hubs (Papua Indonesia and Malaysia); reinforces linkages between HOT NORTH and the Tropical Disease Research Regional Collaboration Initiative funded through DFAT
- First HOT NORTH meeting - Broome, 8th-10th August 2017
- Second HOT NORTH meeting - Katherine February 2018
- Future meetings – Torres Strait, Mt Isa, Kununurra.....
- HOT NORTH Annual Scientific and Academy meeting – Darwin May 2018

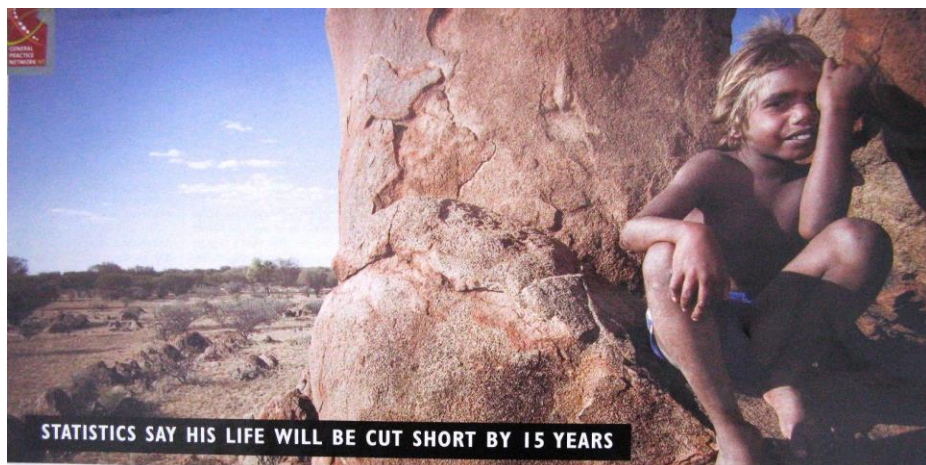
Workforce and Community Expectations 2000's

"I'm sure that every Australian would want the same. But we're blackfellas and we want health business here.....doctors. What's wrong with that? Blackfellas entitled as a human being, Im sure!"

Maningrida Community Councillor, ATSIC Regional Councillor
October, 1995

"Doctors are like ticks around a dog's arse in the city, but out in remote areas you need to go out spot lighting to find them!"

Dr Puggy Hunter, NACCHO Chairman 2000



To make her future even less certain, the remote NT community where she lives... has no access to a GP. If you're a GP who can help close the gap, you're needed.

For a comprehensive information pack about positions in the NT and the pro-active support you can expect from **General Practice Network NT** contact Dani Eveleigh Ph 08 89821007 or email dani.eveleigh@gpnnt.org.au

HOW GPs CAN HELP

TO CLOSE THE GAP... FIRST FILL THE GAPS WHERE GPs DON'T EXIST

CLOSE THE GAP

Workforce and Community Expectations 2018

Top Stories

Stan Grant: A decade after the NT 'intervention', the 'torment of powerlessness' lives on

8h ago

A | A



Mutitjulu was ground zero in what would become known as "the intervention".

ABC

Just In

All-Indigenous refuelling crew shows fly-in, fly-out workforce not needed

11m ago

A | A



The team will soon be refuelling more than a dozen helicopters a day.

ABC

By Erin Parke, ABC News

Workforce and Community Expectations 2018



Certificate 2 in Health Research



Indigenous Land and Sea Rangers

NHMRC Terms of Reference for HOT NORTH

Submission & Assessment Criteria

3. Develop the health and medical research workforce by providing opportunities to advance the training of new researchers, particularly those with a capacity for independent research and future leadership roles (20%)

Health workforce development/professional advancement

HOT NORTH will sponsor three *teaching meetings per year* for education, career development and mentoring of regional and remote health professionals. Discussion will include career aspirations and what they see from their own practice as priority areas for locally-relevant future research.

First HOT NORTH meeting Broome, 8th-10th August 2017



First HOT NORTH meeting Broome, 8th-10th August 2017



Life as a Yawuru doctor in an AMS

Dr Kim Isaacs

GP; Broome Regional Aboriginal Medical Service

First HOT NORTH meeting Broome, 8th-10th August 2017





KAMS

Kimberley Aboriginal Medical Services Ltd

Health Services in Research

Vicki O'Donnell CEO



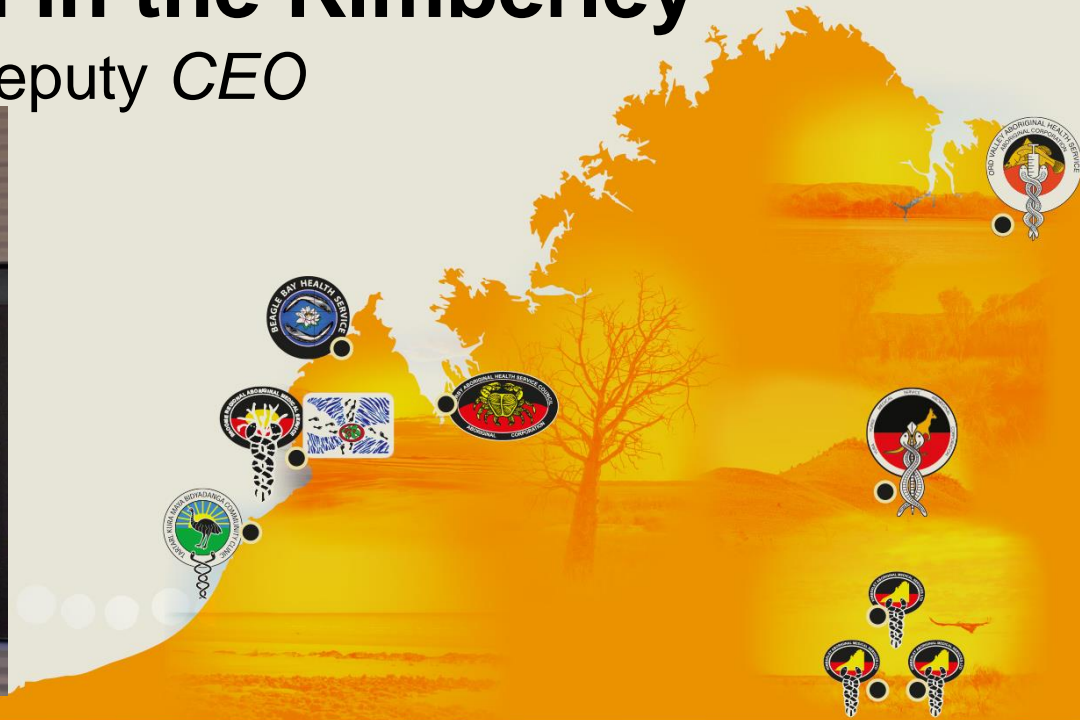


KAMS

Kimberley Aboriginal Medical Services Ltd

Research Translation in the Kimberley

Rob McPhee Deputy CEO





KAMS

Kimberley Aboriginal Medical Services Ltd

The creation of knowledge does not, of itself, lead to widespread implementation and positive impacts on health.

The knowledge must be translated into changes in practice and policy for the benefits to flow to Australians.

First HOT NORTH meeting Broome, 8th-10th August 2017



**Nirrumbuk
Environmental Health & Services**



First HOT NORTH meeting

Broome, 8th-10th August 2017

Indigenous Governance Committee Presentation



GUIDING PRINCIPLES

embrace, culture, values, diversity, acknowledgement,
translation, knowledge, leadership, opportunities, strength



HOT NORTH RESEARCH THEMES

• Skin health	• Respiratory health
• Antimicrobial resistance	• Chronic diseases
• Vector borne and emerging diseases	• Emerging Community Priorities

Caution of Unrealistic Expectations

“By 1990, no Australian child will be living in poverty.”

PM Bob Hawke, June 1987

Caution of Unrealistic Expectations

“By 1990, no Australian child will be living in poverty.”

PM Bob Hawke, June 1987

**“ By the year 2000 when the Olympic Games are on,
I will defy anybody to say we’ve got Third World conditions
in any Aboriginal Community in Australia.”**

***Minister for ATSI Affairs (also a well intentioned doctor),
August 1996***

Caution of Unrealistic Expectations

“By 1990, no Australian child will be living in poverty.”

PM Bob Hawke, June 1987

**“ By the year 2000 when the Olympic Games are on,
I will defy anybody to say we’ve got Third World conditions
in any Aboriginal Community in Australia.”**

***Minister for ATSI Affairs (also a well intentioned doctor),
August 1996***

**“ By the year 2021 when HOT NORTH’s 4 years of NHMRC
funding is over,”**

Anxious but hopeful CI, February 2018