



Adjunct Professor Tarun Weeramanthri Climate Health WA Inquiry Level 3, B Block, 189 Royal Street EAST PERTH WA 6004

Dear Adjunct Professor Weeramanthri

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RE: CLIMATE HEALTH WA INQUIRY

Thank you for your invitation to the National Health and Medical Research Council (NHMRC) to provide a submission to the inquiry into the impacts of climate change on health in Western Australia (WA).

NHMRC welcomes WA's focus on this important issue. Similarly, NHMRC has identified 'resilience to environmental change, emerging health threats and emergencies' as a significant national health issue and strategic priority for action over our current triennium (2018–2021). Quality scientific research across a range of disciplines is essential to understanding, and developing strategies to address, the impacts of environmental change on human health and on the performance of the health system.

An analysis of NHMRC research funding data from 2000 to 2018 suggests that, on average, NHMRC awards \$1.1 million per year to research on health and environmental conditions, including climate change. I have attached a list of the relevant grants over this same period for your information.

There have been relatively low numbers of applications submitted to our competitive grant schemes for research on health and environmental change. As a first step to address this issue, we will be holding a workshop in Canberra on 1 November 2019 with researchers, policy makers and other relevant stakeholders to explore NHMRC's role in addressing the health implications of environmental change, including whether a special initiative is required to stimulate more research in specific areas. I would welcome your participation in this workshop.

In short, the focus of your inquiry aligns well with NHMRC's strategic focus. However, given our own evidence-gathering phase, NHMRC is not in a position to provide a detailed submission at this time. I reiterate NHMRC's support for your inquiry and note it may be useful to us both to share its outcomes at a future NHMRC Council meeting, where it may contribute to shaping the national research agenda.

Yours sincerely

Professor Anne Kelso AO Chief Executive Officer

21 August 2019

Enc. NHMRC funded applications between 2000 and 2018 for research relevant to our strategic priority: 'Resilience to environmental change, emerging health threats and emergencies' Attachment: NHMRC funded applications between 2000 and 2018 for research relevant to our strategic priority: 'Resilience to environmental change, emerging health threats and emergencies'

Application Year	CIA Name	Title	Administering Institution	Budget Total
2000	Prof Arthur Musk	Dust-related Disease in Western Australia	University of Western Australia	\$567,227
2001	Prof Anthony McMichael	Environment and population health: research development from local to global	Australian National University	\$2,472,500
2002	Prof Shilu Tong	Climate variability and Ross River virus	Queensland University of Technology	\$168,125
2004	Dr Joseph Smith	Human health consequences of climate change: a legal framework to approaches for remediation	University of Adelaide	\$75,293
2005	Dr Mario Lobigs	The role of cell surface glycosaminoglycans in flavivirus biology	Australian National University	\$493,765
2006	Prof Anthony McMichael	Climate change, environmental epidemiology and infectious diseases	Australian National University	\$184,813
2006	Prof Anthony McMichael	Environmental influences on health	Australian National University	\$4,000,000
2007	Dr Ashwin Swaminathan	Modelling the impact of global climate change on the epidemiology of infectious diseases	Australian National University	\$118,989
2007	Dr Michelle Gatton	A mathematical approach to mosquito-borne disease management	QIMR Berghofer Medical Research Institute	\$380,559
2007	A/Pr Wenbiao Hu	Climate change and mosquito-borne diseases	University of Queensland	\$346,690
2008	Prof Andrew Tonkin	Cardiac effects of 2006/2007 Bushfire Air Pollution in Melbourne	Monash University	\$59,000
2008	Prof Shilu Tong	Climate change and environmental health risk assessment	Queensland University of Technology	\$703,081
2009	Prof Keith Dear	Changing Heat: direct impacts of temperature on health	Australian National University	\$277,916
2009	Prof Helen Berry	Climate Change: Integrated study of rural health risks and adaptations	Australian National University	\$611,600
2009	Prof Robyn Lucas	Does sun exposure impair immune responses to vaccination?	Australian National University	\$337,237
2009	Dr Ying Zhang	Adaptation to climate change in the Australian ageing population	University of Sydney	\$333,988
2010	A/Pr Wenbiao Hu	Develop an early warning system for dengue fever	University of Queensland	\$327,401
2010	A/Pr Andreas Hofmann	Finding novel therapeutic approaches and vaccines against parasitic infections	Griffith University	\$612,886
2010	A/Pr David Harley	Dengue and climate change in Northern Australia	Australian National University	\$444,294
2010	Prof Billie Wilma Giles-Corti	Exploring the relationship between urban planning and health and the application of research findings to improve the health and wellbeing of Australians by creating more healthy and sustainable communities	University of Western Australia	\$765,370
2010	Prof Shilu Tong	Climate change and Ross River virus	Queensland University of Technology	\$267,646
2010	Dr Donna Green	Health impacts of climate change on Indigenous Australians	University of New South Wales	\$361,035
2011	Prof Robyn Lucas	Toward a message of balanced sun exposure for optimal health	Australian National University	\$408,389
2011	Dr Elizabeth Hanna	Climate change impacts on workplace heat extremes: health risk estimates and adaptive options	Australian National University	\$741,939
2011	A/Pr Ignacio Correa-Velez	Impact of the Queensland floods on a cohort of refugee men living in Brisbane and Toowoomba	Queensland University of Technology	\$259,772
2012	A/Pr Barbara Coulson	Understanding how rotavirus accelerates the onset of type 1 diabetes	University of Melbourne	\$535,580
2012	Prof Alexander Khromykh	Molecular pathogenesis of emerging West Nile viruses	University of Queensland	\$594,134
2015	Dr Kathryn Bowen	Translating Research into Practice Fellowship	Australian National University	\$178,158
2016	Dr Francesca Frentiu	New vectors, new diseases: Understanding the risk of chikungunya transmission in Australia	Queensland University of Technology	\$535,356
2017	A/Pr Wenbiao Hu	Forecasting the impact of climate change on dengue transmission	Queensland University of Technology	\$513,522
2017	Prof Peng Bi	Healthcare costs of heatwaves and benefits of a heat health intervention	University of Adelaide	\$305,136
2017	A/Pr Ollie Jay	Identifying optimal sustainable cooling strategies for the most vulnerable during heatwaves	University of Sydney	\$1,115,641
2018	A/Pr Ollie Jay	An evidence-based extreme heat policy for child and youth sport	University of Sydney	\$659,057





NHMRC's role in addressing health implications of environmental change

Agenda

Date:	Friday 1 November 2019
Time:	9.30am - 4.30pm
Venue:	NHMRC Office, 16 Marcus Clarke Street, Canberra, ACT 2601
Facilitator:	Professor Brendan Crabb, member of NHMRC Council

Objective: The workshop will assist NHMRC to deliver on its strategic priority of '*Resilience to environmental change*' by discussing how NHMRC can stimulate capacity and support research to address the impacts on individual and population health, as well as implications for Australia's health system.

Time	Item	Format	Presenter
9:30	Welcome and opening. Purpose of workshop.	Presentation	Professor Anne Kelso
9:45	Current capacity and areas of focus in health and medical research on environmental change in Australia	Panel discussion	Panel
10:30	Morning tea		
11:00	What critical health issues are not being adequately researched and limit Australia's ability to develop resilience to environmental change i.e. is there a gap to address?	Table discussion, Facilitated discussion	Representative from each table
12:00	Are there challenges or barriers for future health and medical research in Australia to tackling these issues? Are they related to capacity or capability	Table discussion, Facilitated discussion	Representative from each table
13:00	Lunch		
14:00	What options could NHMRC consider to stimulate and support health and medical research on human health and environmental change through its new grant program?	Table discussion, Facilitated discussion	Representative from each table
15:00	Wrap up and summary by facilitator. Final thoughts from CEO.	Presentation	Professor Brendan Crabb Professor Anne Kelso
16:30	Close		