



WORKING TO BUILD A HEALTHY AUSTRALIA
www.nhmrc.gov.au

Submission No:..... 16
Date Received: 27/8/08
Secretary:

Mr John Carter
The Secretary
Foreign Affairs Sub-Committee
Joint Standing Committee on Foreign Affairs, Defence and Trade
Parliament House
CANBERRA ACT 2601

Dear Mr Carter

Re: Australia's relationship with ASEAN

Thank you for your letter of 15 July 2008 inviting the National Health and Medical Research Council (NHMRC) to provide a submission to the Inquiry into Australia's Relationship with ASEAN.

NHMRC is Australia's peak body for supporting health and medical research, for developing health advice and for providing advice on ethical behaviour in health care and in the conduct of health and medical research.

Significant investments in biomedical research made by governments in Eastern Asia have resulted in the rapid growth in research in the region, particularly in Singapore, China, South Korea, Japan, India and Malaysia. This expansion in high quality health and medical research has resulted in great growth in multi-national research collaboration, with much more to come. Numerous Australian universities and medical research institutes have already established active links and collaborations. NHMRC predicts that the Asia Pacific region is likely to surpass the research efforts of North America and Europe within the next 20 years.

However, the health in less developed nations still lags well behind ours. Australia can assist the nations in our region, particularly around protecting and improving health. NHMRC is committed to supporting high quality, innovative health and medical research in the region to ensure that we better understand the health issues that impact on ASEAN member states, and also have wider regional or global implications. Examples include the heightened concerns since 2005 around the potential avian influenza-induced pandemic, or in 2002-2003 around the SARS coronavirus. I have included a summary of NHMRC supported research undertaken in response to avian influenza at [attachment 1](#).

NHMRC is well placed to be able to partner with local researchers in countries in our region to respond to such important health issues, such as emerging health implications from climate change.

NHMRC has supported research in the South East Asian region through the *International Collaborative Research Grants Scheme*. This scheme established a partnership between NHMRC, the Wellcome Trust in the United Kingdom and the Health Research Council of New Zealand to foster collaborative research between the developing countries of the region. NHMRC contributed to 10 projects, awarded in 2003. The combined investment was \$29,204,420 over five years, with NHMRC's contribution \$11,154,808. A full list of successful grants is at [attachment 2](#).

Health research relies on high ethical standards. NHMRC has a leading international position in health and research ethics and there are many opportunities for NHMRC to assist ASEAN countries as pharmaceutical and biotechnology companies expand clinical trials in the region. Already, Singapore has adopted some of our ethical guidelines.

NHMRC, through the CEO, is dedicated to establishing and fostering close ties with research leaders in the region to ensure we are able to grow collaborative research in both cutting edge medical research and on emerging health issues.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Warwick Anderson', with a long horizontal flourish extending to the right.

Professor Warwick Anderson
Chief Executive Officer

25 August 2008

**Successful applications for Urgent Research into a
Potential Avian Influenza-Induced Pandemic (2006)**

GRANT TITLE	BUDGET	ADMINISTERING INSTITUTION
DETECTION AND IDENTIFICATION OF THE VIRUS		
Development of National Protocols for the Detection of Influenza A H5N1	\$248,230	Melbourne Health
Highly pathogenic avian influenza (HPAI) improved diagnosis with quality assurance of serological & molecular diagnostics	\$248,626	University of NSW
Novel, high-throughput platform for rapid identification, quantitation, differential diagnosis, and resistance testing of influenza	\$332,750	University of Sydney
Rapid point-of-care detection of avian influenza virus using an Ion-Channel Switch Biosensor	\$425,400	University of Adelaide
Rapid, point-of-care diagnostic tests to differentiate HA subtypes in patient samples	\$167,900	Macfarlane Burnet Institute for Medical Research and Public Health
VACCINE DEVELOPMENT AND EVALUATION		
Assessment of alpha-galactosylceramide as a novel adjuvant for pandemic influenza A virus vaccines	\$218,010	University of Melbourne
Cell mediated immunity to avian influenza	\$133,483	Macfarlane Burnet Institute for Medical Research and Public Health
Chimeric virus-like particles (VLPs) displaying H1, H3 and H5 haemagglutinins – construction and immunogenicity	\$207,150	Macfarlane Burnet Institute for Medical Research and Public Health
Enhancing Australia's pandemic influenza vaccine output by increasing the yield of vaccine virus from eggs	\$248,000	University of Melbourne
Establishing the capacity for H5N1 challenge of ferrets within Australia & optimising pandemic vaccines in this model	\$400,000	University of Melbourne
Gamma-ray inactivated influenza A virus vaccine for cross-protective T cell immunity	\$239,570	Australian National University
Mucosal vaccine for influenza based on inactivated virus and mannan	\$131,600	Austin Research Institute
Pandemic influenza virus vaccine: exploiting the conserved HA cleavage site	\$243,300	University of Adelaide
Self adjuvanting CTL-based influenza vaccines for human use	\$211,800	University of Melbourne
Simplified Process Methods for Mass Vaccine Manufacture	\$158,000	University of Queensland
The use of inulin-based adjuvants to enhance the effectiveness and population coverage of influenza vaccination	\$250,000	Flinders University

ANTI-VIRAL MEDICATION USE AND EFFECTIVENESS		
A prospective study to examine the effectiveness and safety of antivirals against pandemic influenza	\$142,394	University of NSW
Are routine healthcare worker hand hygiene protocols (soap/water, alcohol-based hand rub) effective against influenza?	\$99,950	University of Melbourne
Assessment of development of resistance to neuraminidase inhibitors in A(H5N1) influenza viruses using a ferret model	\$163,940	University of Melbourne
Avian influenza: Molecular basis of potential resistance to neuraminidase inhibitors	\$87,250	St. Vincent's Institute
Determination of the efficacy and the resistance profile of a long acting neuraminidase inhibitor against several avian influenza strains	\$91,350	Biota Scientific Management Pty Ltd
Sensitive, rapid and accurate detection of the emergence of neuraminidase inhibitor resistance by real-time PCR, Ligase Chain Reaction (LCR) and Rolling Circle Amplification (RCA)	\$118,875	Sydney West Area Health Service
PUBLIC HEALTH INTERVENTIONS		
Assessment of interventions for controlling pandemic influenza and determining data needs to inform these assessments	\$183,040	Australian National University
Investigation of the optimal assessment of febrile passengers detected by infrared thermal scanning at an international airport	\$165,438	James Cook University
Modelling the biology and transmission of influenza virus – learning from 1918-19 and other outbreaks	\$113,829	University of Melbourne
Pandemic influenza: developing a model to enhance preparedness in the business sector	\$146,934	Curtin University of Technology
Spatial Simulation Modelling of Containment Strategies for Pandemic Influenza	\$99,534	University of Western Australia
Surveillance and analysis of avian influenza viruses in wild birds in Australia	\$249,625	University of Newcastle
UNDERSTANDING BEHAVIOURAL RESPONSES		
Potential Avian Influenza-Induced Pandemic: Minimising Public Panic	\$249,854	University of Wollongong
Production of nasal filters: enhanced prophylactic protection from aerosol exposure	\$147,000	University of Sydney
Strengthening the contribution of Australian general practice to the control of pandemic influenza	\$110,257	Australian National University
OTHER AREAS OF DIRECT RELEVANCE TO THE NATIONAL RESPONSE TO THE RISK OF AN AVIAN INFLUENZA INDUCED PANDEMIC		
Avian Influenza – National perception of risks to paramedics and innovative ambulance service population-based models of surveillance and triage	\$297,516	University of Queensland
Screening agents active against the late-stage inflammatory cytokines for activity against influenza	\$237,807	Australian National University
TOTAL FUNDING	\$6,568,412	

NHMRC International Collaborative Research Grants

ASEAN MEMBER STATES

- Title:** Research and training to reduce morbidity and mortality from malaria in Papua (Indonesia) and Papua New Guinea
- Total grant:** \$1,649,828 (NHMRC component: \$1,477,458)
- Institutions:** Menzies School of Health Research; Australia;
Ministry of Health, Indonesia
University of Papua New Guinea, Papua New Guinea;
University of Western Australia, Australia;
Bethesda Hospital, Indonesia
- Title:** Building evidence based research and practice in South East Asia: Impact on pregnancy and childbirth care and outcomes
- Total grant:** \$2,536,303 (NHMRC component: \$1,354,337)
- Institutions:** Queen Elizabeth II Research Institute, Australia;
Khon Kaen University, Thailand
University of Adelaide, Australia;
University of Philippines, Philippines;
Monash Medical Centre, Australia; Perak
College of Medicine, Malaysia
- Title:** Burden of disease and cost-effectiveness of intervention options: Informing policy choices and health system reform in Thailand
- Total grant:** \$3,201,159 (NHMRC component: \$787,978)
- Institutions:** School of Population Health, University of Queensland, Australia;
Ministry of Public Health, Thailand
Monash University;
Mahidol University, Thailand
- Title:** Enterovirus 71 in the Asia-Pacific region: reverse genetic approaches to virus surveillance and vaccine development
- Total grant:** \$1,058,845 (NHMRC component: \$664,856)
- Institutions:** Institute for Child Health Research, Australia;
University Malaysia Sarawak, Malaysia
Ministry of Health, Malaysia
- Title:** Thai health-risk transition: A national cohort study
- Total grant:** \$2,733,297 (NHMRC component: \$1,231,215)
- Institutions:** Australian National University, Australia;
Sukothai Thammathirat Open University, Thailand
Chiang Mai University, Thailand;
Ministry of Public Health, Thailand;
Office of National Economic and Social Development Board, Thailand;
University of Queensland, Australia

NON-ASEAN COUNTRIES

Title: The Pacific OPIC study: A four country study of obesity prevention in communities

Total grant: \$5,786,711 (NHMRC component: \$1,600,580)

Institutions: Deakin University, Australia; University of Auckland, New Zealand
Fiji School of Medicine, Fiji
University of Melbourne, Australia;
Ministry of Health, New Zealand

Title: Reducing deaths from pesticide poisoning: Establishing a regional toxicology research centre

Total grant: \$3,078,038 (NHMRC component: \$738,729)

Institutions: Australian National University; Peradeniya University, Sri Lanka
University of Newcastle;
University of Colombo, Sri Lanka;

Title Study of HPV 6 11 virus like particles as a therapeutic vaccine for genital warts and recurrent respiratory papillomatosis

Total grant: \$1,378,961 (NHMRC component: \$615,608)

Institutions: University of Queensland, Australia;
Wenzhou Medical College, China

Title: Pathways to improved, sustainable morbidity control and prevention of schistosomiasis in the People's Republic of China

Total grant: \$2,462,430 (NHMRC component: \$1,329,712)

Institutions: Queensland Institute of Medical Research, Australia;
Chinese Centre for Disease Control and Prevention, China
University of Queensland

Title: Neonatal immunisation with pneumococcal conjugate vaccine in Papua New Guinea

Total grant: \$2,314,684 (NHMRC component: \$1,181,966)

Institutions: Telethon Institute for Child Health Research, Australia;
PNG Institute of Medical Research, Papua New Guinea
University of Western Australia, Australia