



POPULATION SCIENCES PROGRAM GRANT

Project Overview

The Population Sciences Program Grant is funded by the National Health and Medical Research Council (NHMRC) with some supplementation by the University of Western Australia.

The Program Grant is designed to enable the continuation of a significant program of work within the Division of Population Sciences of the Telethon Institute for Child Health Research (TICHR).

The Program Grant specifies research aims within five themes, one of which is the Aboriginal Health theme.

It also undertakes to ensure collaboration between the various themes.

Research Focus

Despite increasing prosperity in Australia, many health and developmental problems are not abating and some appear to be increasing. These include low birth weight, behavioural and mental health problems, autism, obesity and, in Indigenous children, infections. This program investigates these problems with a view to prevention. It has a focus on a healthy start to life and to preventative health care.

There are considerable challenges to the study of complex health and developmental problems in children and young people.

The program is unique in that it brings together a multi-disciplinary team of researchers of international repute to investigate these issues.

The factors influencing how children develop into young adults include genetic inheritance, nutrition and growth, and family, socio-economic and environmental conditions. This work demands new ways of measuring and analysing these factors in populations of children and their families.

Western Australia is one of only three sites in the world to have comprehensive linked health data on the whole of its population of children and young people and their families.

The program also aims to increase understanding of complex pathways to health problems and to develop effective prevention programs.

This program comprises five overlapping themes of research planned around these unique population databases.

The five themes are:

1. Social, economic and psychological influences in child health and development - many paths to poor health are linked to social disadvantage. Examining these issues may explain why some childhood conditions are worsening or not improving.
2. Pathways to wellbeing, resilience and developmental disorders, including intellectual disability, autism, birth defects and cerebral palsy.
3. Nutrition and growth, particularly as it relates to low birth weight, childhood obesity and mental health.
4. Infectious disease, its causes and its influence on lifelong health problems and disabilities.
5. Aboriginal health - whilst spanning each of the other themes, it presents its own unique challenges and requires its own unique solutions.

The research aims of the Aboriginal Health theme of the Program Grant link closely to the NHMRC Roadmap and include:

- o to continue to quantify the burden of morbidity, mortality and disability in Aboriginal children and youth from infectious diseases, birth defects, intrauterine growth restriction and mental and social problems
- o to identify the causal pathways to these conditions in Aboriginal children and youth
- o to identify social, cultural and emotional factors which may promote emotional resiliency and to use this information to devise strategies to promote emotional and social wellbeing in Aboriginal children and youth
- o to develop culturally appropriate and context relevant methods to evaluate such strategies in terms of efficacy, acceptability and cost effectiveness.

The Program Grant supports the engagement of a Research Assistant who, as part of Kulunga's staffing contingent, guides Kulunga's involvement in the program Grant. The Research Officer works closely with the Aboriginal Health Theme Leader to progress matters of particular priority. A major involvement currently relates to recent announcements about the introduction of folate to flour in a bid to reduce the incidence of spina bifida.

Further Information

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