Charles Perkins Centre Project Nodes

Aboriginal nutrition, physical activity and wellbeing

Project node lead: Dr Josephine Gwynn

Understanding the substantial changes to dietary intake and participation in physical activity of Australia's first peoples since colonisation and informing education programs for local communities.

Active ageing

Project node lead: Professor Lindy Clemson

Developing solutions to improve the physical, social, and mental wellbeing of older people living at home. From aged care treatment to policies, education for health professionals, and rehabilitation programs in the community.

BABY1000

Project node lead: Dr Adrienne Gordon

Identifying and dealing with interactions before and during pregnancy that can contribute to the development of health disorders that impact future generations.

Bias in research

Project node lead: Professor Lisa Bero

Good research has always been about evidence. Reliable evidence. This node aims to ensure that research, and related policy decisions, rest on strong and unbiased pillars of evidence.

Biology of ageing

Project node lead: Professor David Le Couteur

Increasing the understanding of ageing and interventions that delay ageing in order to increase human lifespan and health span.

Brain and body

Project node lead: A/Professor Greg Sutherland

Exploring the connection between body disorders like obesity and diabetes, and brain diseases like Alzheimer's.

Building system wide capacity for complex and big data analysis and storage in T2D

Project node lead: Professor Jean Yang, Dr Rima Chaudhuri, Professor David James

Promoting strong collaboration between clinicians, biologists, mathematicians, engineers and computational scientists.

Businesses, markets and the social context of health

Project node lead: TBA

Understanding the interconnected roles of business, social context and consumer behaviour in improving health.

Cardiac translational imaging

Project node lead: Professor Stuart Grieve

Guiding effective decision-making in cardiac health by using emerging technologies that provide better detection of early stages of disease.

Charles Perkins Centre networks

Project node lead: TBA

Exploring the transformative effect that the Charles Perkins Centre has on the University's academic population and its external collaborators.

Citizen Science

Project node lead: Professor Yun-Hee Jeon

Citizen science enhances diversity of thought and can accelerate transformative outcomes for health and quality of life. Through this node, we will establish a framework and platform for the enhancement of citizen science.

Climate adaptation and health

Project node lead: A/Professor Ollie Jay

Our climate is constantly changing. As increasingly high temperatures accelerate mortality and morbidity rates, this node explores the heightened health risks created by these climate issues.

Developmental origin of health and disease (DOHaD)

Project node lead: Professor Ralph Nanan

A study on pregnant women in Western Sydney to determine whether disease begins developing in the womb through fetal immune programming.

Digital solutions in cardiovascular disease prevention

Project node lead: Professor Clara Chow

Improving preventative care through the development of digital health interventions designed to educate patients and reduce the number of secondary cardiovascular episode.

Dog ownership and human health

Project node lead: Professor Emmanuel Stamatakis

Examining the influence of dog ownership on human physical and mental health and social wellbeing.

Early prevention of obesity in childhood

Project node lead: Professor Louise Baur

Making a direct impact on the community through research into lifestyle changes made in the early years and their effect on obesity-related diseases.

Economics of human development

Project node lead: Professor Stefanie Schurer

Why are some people more likely to succeed than others? This node addresses the question of long-term effects of socioeconomic disadvantage on the evolution of human potential.

E-health in gaming and avatars

Project node lead: Professor Stephen Twigg

An artificial intelligence-based clinical intervention for patients with Type-2 diabetes that aims to help them achieve health and wellness goals.

Evidence synthesis

Project node lead: Professor Lisa Bero

Working towards synthesizing all kinds of evidence around obesity, diabetes and cardiovascular disease, and uniting key researchers to collaborate on solutions.

Family obesity

Project node lead: Dr Kathryn Williams

Finding solutions to prevent and manage obesity within individuals, families and communities, in Greater Western Sydney and beyond.

Fibrosis and wound healing

Project node lead: Professor Stephen Twigg

Bringing together researchers from a diverse range of disciplines to prevent, treat and reverse fibrosis across a diversity of diseases.

Food governance

Project node lead: Dr Alexandra Jones, Dr Belinda Reeve

Exploring how governments can use legal strategies to create conditions for people to live healthier lives.

Gut microbiome

Project node lead: A/Professor Andrew Holmes

Discovering the influence of our gut microorganisms over our metabolism, immune and nervous systems, our food choices and other behaviours.

Health and economics

Project node lead: Dr Michelle Cunich

Using health research and applied economics to influence government decision-making so we can improve cross portfolio policy, and in turn, the health and wellbeing of Australians.

Health and wellness in the air

Project node lead: Professor Stephen Simpson

Working with Qantas to provide integrated health and wellbeing advice, education and research to improve the experience of long-haul flying.

Health humanities

Project node lead: Dr Olaf Werder

A holistic exploration on how the arts and humanities can promote human health and wellbeing in hospitals, households, and communities.

Digital Health Information Network

Project node lead: Professor Jonathan Morris, Professor Tim Shaw

Demonstrating how the integration of data in the public and private sector can be used to map individual health journeys, and make our health system more efficient

Health literacy chronic disease network

Project node lead: Professor Kirsten McCaffery

A multidisciplinary, international research network improving the management of chronic disease for adults with lower literacy.

Immune therapies

Project node lead: Professor Barbara Fazekas

Developing new partnerships in clinical medicine, biomedical research, computing and systems biology to apply new immune therapies and diagnostic tools for monitoring patient response.

Implementation science

Project node lead: Professor Tim Shaw

Biomedical and health service research often stays in the laboratory longer than it should. This node addresses the urgent need for this new evidence to be put into practice.

Incidental physical activity and sedentary behaviour

Project node lead: Professor Emmanuel Stamatakis

Understanding the cultural, economic and individual circumstances leading to habit-formation to help people adopt healthy habits.

Judy Harris Writer in Residence Fellowship

The program invites Australian creative writers to apply for a generous University of Sydney fellowship, including a $100,000 grant, to begin a project exploring issues around health.

Kidney health

Project node lead: Professor Steven Chadban

Identifying and understanding the incidence, prevalence and history of kidney disease at a population level to find solutions and treatments for this disease.

Living healthier lives under the Australian sun

Project node lead: A/Professor Scott Byrne

Finding novel strategies to block the harmful effects of sunlight and UV, while retaining the beneficial effects so we can all absorb a healthy amount of sunlight.

Nutritional ecology and human health

Project node lead: Professor David Raubenheimer

Drawing on theory, methods and empirical findings from the field of nutritional ecology to view humans in the broader context of biological diversity, along with the fundamental theoretical frameworks in biology, evolution and ecology, to inform the study of human diet, nutrition and health.

Nutrition and cardiovascular health

Project node lead: Professor Michael Skilton

Exploring which types of healthy diets can lower the risk of developing heart disease, and how these differ from person to person.

Nutritional immunometabolism

Project node lead: A/Professor Laurence Macia

Exploring whether poor diets lead to disease and how a change in diet can help treat or prevent disease.

One welfare

Project node lead: Professor Paul McGreevy

Improving and better understanding the clinical application of animal welfare and ethics throughout Australasia.

Oral and systemic health

Project node lead: Professor Joerg Eberhard

Understanding the complex interplay between oral health and general health including its links with cardiovascular disease, diabetes, dementia, arthritis, and pregnancy outcomes.

Pharmaceutical policy

Project node lead: Associate Professor Barbara Mintzes, Dr Lisa Parker

We improve the lives of people with chronic conditions by improving pharmaceutical policies to optimise medical treatments, facilitate equal access to medications, and foster transparency.

Placebo research network

Project node lead: A/Professor Ben Colagiuri

We aim to understand the placebo effect so that we can evaluate new and existing health interventions to improve health outcomes.

Politics of obesity

Project node lead: Professor Paul Griffiths, Professor Warwick Anderson

Navigating the line between the government's responsibility to protect public health and fears of a 'nanny state' by developing and targeting arguments for/against policies in Australia.

Positive computing in health systems

Project node lead: Professor Rafael Calvo

Psychology experts and technology designers collaborating to investigate how technology can promote motivation, autonomy and self-empowerment to support physical wellbeing.

Precision Sleep Medicine (PRISM)

Project node lead: Professor Peter Cistulli, A/Professor Kristina Kairaitis

Looking at insomnia, obstructive sleep apnoea, and shift work disorder, and their links to chronic diseases such as obesity, diabetes, cardiovascular disease, and cancer.

Preventative cardiology

Project node lead: Professor Robyn Gallagher

Addressing the prevalent issues in the prevention of cardiovascular disease through collaborative, interdisciplinary research.

Prospective Physical Activity, Sitting and Sleep (ProPASS) Consortium

Project node lead: Professor Emmanuel Stamatakis

A collaborative platform aimed at generating evidence to be used in the next generation of physical activity, sleep and exercise medicine guidelines.

Science of learning science

Project node lead: Professor Philip Poronnik, Professor Peter Goodyear

Improving the learning experience for students by focusing on the emerging challenges and opportunities for multidisciplinary education in a research-intense environment.

Schizophrenia: cardiometabolic and other medical comorbidity

Project node lead: Professor Tim Lambert

Identifying and addressing high-risk schizophrenia patients for whom intensive interventions will be of great value.

Tissue engineering and regenerative medicine (TERM)

Project node lead: Professor Tony Weiss

Developing a set of interfaced, artificial solutions that repair and replace malfunctioning body parts and damaged tissue.

Twin project node

Project node lead: Ms Susan Carrick

Encouraging the growth and development of twin research to dissolve research obstacles in the wider research community.

Type 1 diabetes

Project node lead: Professor Peter Thorn, Dr Kirstine Bell

Our multidisciplinary team is working towards improvement management and, ultimately, preventing & curing type 1 diabetes

Wireless wellbeing and personalised health

Project node lead: Professor Margaret Allman-Farinelli

A research into mobile phone apps, wireless sensing and communications to empower people to improve their quality of life while preventing obesity, diabetes and cardiovascular disease.