

## PRESIDENT'S SCIENCE AND TECHNOLOGY MEDAL 2021

### **Professor Sir Peter Gluckman**

Chief Scientific Officer, Singapore Institute for Clinical Sciences, Agency for Science, Technology and Research (A\*STAR)

Visiting Professor, Department of Obstetrics and Gynaecology, Yong Loo Lin School of Medicine, National University of Singapore (NUS)

Director, Kōi Tū: The Centre for Informed Futures, University of Auckland

Director Emeritus and University Distinguished Professor, Liggins Institute, University of Auckland

President, International Science Council

***“For his outstanding leadership in advancing health, clinical and biomedical sciences research, particularly the strengthening of developmental and early life research and enhancing Singapore’s human health and potential R&D capabilities”***

Professor Sir Peter Gluckman is an internationally renowned leader in human early life research, with a distinguished career in paediatrics and perinatal biology, developmental neuroscience, and paediatric and experimental endocrinology. He has made pivotal contributions to Singapore’s early life research landscape since 2007. Prof Gluckman was the scientific architect behind the development of cohort studies that had a strong focus on understanding maternal-infant metabolic development and on neurobehavioral, cognitive and emotional development in early childhood. The research was carried by a consortium of key institutions (National University Health System, KK Women’s and Children’s Hospital, NUS and A\*STAR) and has uncovered findings with important long-term implications. These have also had a positive impact on healthcare policy and practice in Singapore.

Prof Gluckman joined the newly-formed Singapore Institute of Clinical Sciences (SICS) at A\*STAR in 2007, and worked with NUS and SICS to develop a research plan to address the rising rates of metabolic disease in Singapore. This included developing the GUSTO birth cohort, clinical studies in metabolism, and forging networks for world class scientists to engage with SICS. Prof Gluckman was subsequently appointed Chief Scientific Officer at SICS and Honorary Professor at NUS, roles that continue today.

Prof Gluckman’s strong background in research commercialisation also attracted industry investment to Singapore. His contributions led to the establishment of the Clinical Nutritional Research Centre (CNRC) in 2012 to further human nutrition research and facilitate collaborations with industry. Today, the Centre has an active pipeline of programmes and undertakes industry collaborations to develop products and formulate diets, which seek to reduce the risk of diabetes and obesity, among other health concerns. He also successfully convinced key food and nutrition companies that Singapore would be an ideal regional R&D hub to undertake research and clinical trials in maternal and infant nutrition.

Over the last 16 years, Prof Gluckman brought together and nurtured a pipeline of talent and notable clinical research scientists. These individuals have gone on to help develop and support the capabilities required for advancing human potential, such as the developmental origins of health, as applied to both brain and metabolic health.

Prof Gluckman has spearheaded numerous studies into developmental perspectives on growth metabolism and neurodevelopment, and published more than 600 peer-reviewed articles which have garnered over 45,000 citations. To this day, he remains an active scientist

co-leading the Centre for Holistic Initiatives for Learning and Development (CHILD)<sup>1</sup> in Singapore, which aims to advance emotional and cognitive development in children, and also on major workstreams that are supported by the Wellcome LEAP Fund.

Prof Gluckman was appointed a member of the National Medical Research Council Board from 2010 - 2013, the co-Chair of the Ministry of Health's Cohort Strategy Review Committee in 2019 and an Expert Panel Member for the Health and Biomedical Sciences International Advisory Council (HBMS IAC) in 2020, providing valuable scientific advice that would shape policies and strategies for human potential research in Singapore.

Prof Gluckman has written and spoken extensively on science policy, risk assessment, science diplomacy, and science-society interactions, and continues to influence international policies and research through notable forums and platforms. He remains the founding Chair of the planning group of the International Network for Government Science Advice (INGSA), which operates under the aegis of the International Council for Science (ICSU). Prof Gluckman was formerly Chief Science Advisor to the New Zealand Prime Minister, and also led the regional network of Chief Scientific Advisors and Equivalents, an extension arm of the Asia Pacific Economics Cooperation (APEC), and the Small Advanced Economies Initiative (SAEI), which brought together Singapore, New Zealand, Israel, Finland, Denmark and Ireland to discuss issues relating to science and innovation in small country economies.

Prof Gluckman is the recipient of several prestigious awards including the American Association for the Advancement of Science (AAAS) award in Science Diplomacy (2016), the Member of the Order of New Zealand (2015), the Knight Companion of the New Zealand Order of Merit (2009) and the Rutherford Medal (2001).

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<sup>1</sup> CHILD's founding partners include the NUS Yong Loo Lin School of Medicine, Lien Foundation, Centre for Evidence and Implementation (CEI), and SICS.