

Citation for the award of Honorary Doctor of Medical Science Professor John Mathews

As a science and medical student John Mathews was inspired by some of the legendary teachers at the University of Melbourne: Pansy Wright in physiology, Maurice Belz in theoretical statistics, Michael White in genetics, and Jack Legge and Victor Trikojus in biochemistry. Through vacation projects at the Walter and Eliza Hall Institute of Medical Research (WEHI), he came under the aegis of Macfarlane Burnet. Burnet told him about kuru, the fatal neurological disease decimating the Fore population in New Guinea, and John began working on its epidemiology. After graduating MBBS in 1964 and residency at the Royal Melbourne Hospital, John moved to New Guinea with his young family to coordinate Australian research on kuru. In two memorable years he studied the spread of the disease, and collected specimens for Carleton Gajusek and other international researchers. He also wrote important papers to test the theory that kuru had been spread by cannibalism, as first proposed by Bob and Shirley Glasse,

This early exposure to epidemiology, anthropology and laboratory science helps to explain John Mathews' eclectic approach to research. Throughout his career he has demonstrated a deep understanding of the complex interplay between the biological and social drivers of health and worked to improve public health through careful research and effective policy development.

After New Guinea, John Mathews worked with Ian Mackay at WEHI on the epidemiology of autoimmunity, and also completed MD and PhD theses. After two years in Oxford as CJ Martin Research Fellow with Richard Doll and Richard Peto, he returned to Richard Lovell's Department of Medicine at the University of Melbourne where he worked with John Hopper and Nick Martin, then at ANU, to help establish the discipline of genetic epidemiology and the Australian Twin Registry.

As Foundation Director of the Menzies School of Health Research in Darwin from 1984, John Mathews built and led a multidisciplinary research team to provide new insights into the social and biological causes of ill-health in Aboriginal communities, and to advocate for improved health services, education and living conditions.

The Menzies School worked closely with Indigenous people to uphold community control over the research agenda. John worked with Indigenous leaders to create the Cooperative Research Centre (CRC) for Aboriginal and Tropical Health, with Lowitja O'Donoghue as inaugural chair. He also negotiated a ground-breaking legal agreement with the Tiwi people to guarantee their legal ownership of research information and samples held in trust by the Menzies School.

As Deputy Chief Medical Officer in Canberra (1999-2004) John Mathews provided expert technical and strategic advice and leadership on public health matters for the Federal Government.

Since returning to Melbourne as a professorial fellow, he has had the privilege of working with talented younger researchers to explore innovative models for the spread of influenza; he has also initiated a ground-breaking project, using de-identified Medicare records, to quantify cancer risks following early exposures to medical X-rays.

Over his productive career, in addition to his leadership in both research and public policy research translation, Professor Mathews has contributed to over 220

publications, and held many honorary appointments. He served as senior scientific adviser to the Agent Orange Royal Commission and has consulted and advised the Commonwealth Government on ionising radiation, HIV/AIDS, Aboriginal health, mad-cow disease, SARS, pandemic influenza and the white powder (anthrax) scares. , John has sat on numerous expert, community, international and academic review committees and committees of the National Health and Medical Research Council. He is a fellow of the Royal Australasian College of Physicians, the Royal College of Pathology of Australasia and the Australasian Faculty of Public Health Medicine and has been a reviewer and editor for several important journals.

John Mathews' contributions to the University and to health and medical research have been extraordinary in their intellectual breadth, depth and enduring impact. His lateral thinking conceived novel ways that environmental, lifestyle and genetic factors interact to determine health and disease. His enormous legacy reflects his integrity, humanity and focus on outcomes that matter.