

## PRESIDENT'S SCIENCE AND TECHNOLOGY MEDAL 2020

### Professor Ranga Rama Krishnan

Chairman, National Medical Research Council  
Chief Executive Officer, Rush University System for Health

***“For his outstanding leadership contributions to advancing the health and biomedical sciences research and innovation sector in Singapore, particularly through the strengthening of academic medicine, translational and clinical research, and the promotion of technology transfer and entrepreneurship to enhance health and support economic development in Singapore”***

Professor Ranga Rama Krishnan is a renowned global leader in academic medicine and healthcare. He is currently Chairman of the National Medical Research Council (NMRC), Ministry of Health (MOH) Singapore; Chairman, National Health Innovation Centre (NHIC) Singapore; and Chief Executive Officer of the Rush University System for Health (RUSH) in the United States (US). Throughout his career, he has been a passionate and effective advocate of translational clinical research, education and entrepreneurship. He has contributed greatly to the transformation of Singapore's health and biomedical sciences sector through the formulation of novel research strategies, the development of innovative education methods, and the nurturing and recruitment of high quality talent. Professor Krishnan has had a particular impact on the strengthening of translational clinical research and innovation. These have resulted in significant health care, education and economic benefits for Singapore.

As Dean of Duke-NUS Medical School, Professor Krishnan played a critical role in laying the foundations for the SingHealth Duke-NUS Academic Medical Centre. This was done in close partnership with SingHealth, as well as the Agency for Science, Technology and Research (A\*STAR) and the National University of Singapore (NUS). Under his leadership, Duke-NUS established five signature research programmes to address the key healthcare concerns of Singapore and Asia. These cover cancer and stem cell biology, neuroscience and behavioural disorders, emerging infectious diseases, cardiovascular and metabolic diseases, as well as health services and systems research. Professor Krishnan was also instrumental in building outstanding centres of excellence, including the Centre for Ageing Research and Education, Centre for Computational Biology, Centre for Quantitative Medicine, Centre of Regulatory Excellence, Centre for Technology and Development, as well as the Lien Centre for Palliative Care.

Professor Krishnan paid close attention to recruiting and nurturing outstanding research faculty members and students. Together, these engineers, biochemists, physician-scientists and entrepreneurs formed a robust network to create new products, devices and companies focused on improving healthcare outcomes. This vibrant and productive community continues to play a significant role in the growth and prominence of the biomedical sector in Singapore.

As a member of the SingHealth Board, Professor Krishnan helped foster several important joint initiatives including the Academic Medicine Education Institute, and the Academic Medicine Research Institute. He also established strong links with A\*STAR to transfer technologies and build new ventures based on research from A\*STAR's institutes and programmes. He was Co-Chairman of the Singapore Clinical Research Institute, and built it into an effective platform and gateway for industry and public sector clinical trials.

As Chairman of NMRC, Professor Krishnan was effective in strengthening partnerships between health care institutions, hospitals, universities, the National Research Foundation

(NRF) and A\*STAR to promote the translation of fundamental research into beneficial applications. He is also the inaugural Chairman of NHIC Singapore, which provides expert support and funding to the clinical sector to expedite the development of healthcare innovations into market-ready products.

Professor Krishnan has made the science of learning a priority in his work. His leadership enabled NUS to build a strong research and translational programme in this area, and he has also chaired the evaluation of research proposals on science of learning for NRF.

His contributions extend well beyond Singapore. He has held, and continues to hold, important leadership positions in the areas of medicine and health care systems, including serving on the board of Community Health Systems in the US.

He has multiple patents and fostered numerous startups in the education, neuroscience, data science, technology and therapeutic spheres in Singapore and the US. His achievements have been recognised through numerous awards including the Laughlin award, Geriatric Research award, and the Mood Disorders Research award from the American College of Psychiatrists. He also serves as a member of several professional societies, including the American Psychiatric Association and the American Association for the Advancement of Science. He is also an elected member of the United States National Academy of Medicine.