

## PLENARY SPEAKER



### Advancing Science and Medicine Through International Partnerships: The Story of Duke-NUS

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#### **ABSTRACT**

Duke-NUS Medical School was established as a landmark collaboration between two world-ranking institutions of higher education - Duke University and the National University of Singapore (NUS) - with the objective of providing innovative approaches to enhancing the practice of medicine and advancing biomedical research. As a graduate-entry medical school, our curriculum is designed to provide an opportunity for our students to become outstanding clinicians and curious, critical thinkers who are also equipped to contribute to medicine as researchers, educators, leaders, entrepreneurs or policy makers. In addition to the MD program, we have developed of a unique PhD Program in Integrated Biology and Medicine as an integral component of Duke-NUS' mission of training translationally-savvy clinicians and scientists. Along with these education initiatives, we are a research-intensive medical school. Our Signature Research Programs in Cancer and Stem Cell Biology, Cardiovascular and Metabolic Disorders, Neuroscience and Behavioral Disorders, Emerging Infectious Diseases, and Health Services and Systems Research have facilitated research discoveries and are transforming the way we understand and treat diseases and deliver health care. Investigators in these Programs have collectively published more than 2,000 papers, garnered >\$550M in competitive funding, and founded 14 biotechnology companies. All the activities of Duke-NUS benefit greatly from our strategic partnership with Singapore Health Services (SingHealth), which includes Singapore General Hospital, recognized by Newsweek as the 3rd best hospital in the world in its 2019 rankings. Through the SingHealth Duke-NUS Academic Medical Centre, we are able to leverage our joint capabilities and infrastructure to develop outstanding clinical education programmes and cutting edge research collaborations that translate fundamental science into better health.

#### **BIOGRAPHY**

Patrick J. (Pat) Casey received his PhD in Biochemistry from Brandeis University in 1986 and did postdoctoral work at the University of Texas Southwestern Medical Center in Dallas. He joined Duke University as an Assistant Professor of Molecular Cancer Biology and Biochemistry in 1990. Prof. Casey was the founding Director of the Duke Center for Chemical Biology, established to spearhead interdisciplinary research and training in the application of fundamental chemical principles to the study of biology and the basis of disease and therapies. In 2005, he relocated to Singapore to spearhead the development of the Duke-NUS Medical School as its Senior Vice Dean of Research. He has also played major roles in the Singapore Biomedical Sciences Initiative, serving on advisory committees for the Agency for Science, Technology and Research (A\*STAR), National Medical Research Council (NMRC) and National Research Foundation (NRF). A recognized authority in the areas of G protein signaling and protein lipidation in cancer, Prof. Casey received the Established Investigator Award from the American Heart Association in 1992 and the Amgen Award from the American Society of Biochemistry and Molecular Biology in 2000. He was elected a Fellow of the American Association for the Advancement of Science in 2012, and received the Distinguished Faculty Award from the Duke Medical Alumni Association in 2018.