

SEVEN TRANSMEMBRANE RECEPTORS

ABOUT THE LECTURE

Seven transmembrane receptors (7TMRs), also known as G protein coupled receptors (GPCRs), represent by far the largest, most versatile, and most ubiquitous family of plasma membrane receptors. They regulate virtually all known physiological processes in humans. In my lecture, I will briefly review how the field has evolved over the past 40 years, hanging some of the story on my own research throughout this period. Then I will discuss recent developments in the field that are changing in fundamental ways our concepts of how the receptors function and are regulated. Finally, I will discuss recent biophysical and structural studies of GPCRs and interacting proteins.

Speaker: Dr Robert J. Lefkowitz, MD

*James B. Duke Professor of Medicine
Investigator, Howard Hughes Medical Institute
Duke University Medical Center*

Host: Prof Patrick Casey
*Senior Vice Dean of Research
Duke-NUS Graduate Medical School*

Date: Friday, 30 May 2014

Time: 11.30 AM — 12.30 PM
(Light refreshments will be served at 11.00 AM)

Venue: Duke-NUS Graduate Medical School
Amphitheatre, Level 2

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ABOUT THE SPEAKER

Dr. Lefkowitz received his M.D. from Columbia University and completed medical residency and research training in cardiovascular disease at the Massachusetts General Hospital. He then joined the faculty of Duke University Medical Center in 1973, and in 1977 he was promoted to Professor of Medicine; he is also Professor of Biochemistry. Prof. Lefkowitz, an Investigator of the Howard Hughes Medical Institute since 1976, is most well-known for his detailed characterizations of the sequence, structure and function of the β -adrenergic and related receptors and for the discovery and characterization the family of G-protein coupled receptors and their regulators. He is a member of the US National Academy of Science and has received numerous awards, including the 2007 US National Medal of Science and the 2012 Nobel Prize in Chemistry.

