NUS National University of Singapore | Department of Pharmacology
Yong Loo Lin School of Medicine

PSS Pharmacological Society (Singapore)

Medical Pharmacology Seminar

Emeritus Professor R. Manjunatha Kini
Protein Science Laboratory
Department of Biological Sciences, Faculty of Science; and
Department of Pharmacology, Yong Loo Lin School of Medicine
National University of Singapore, Singapore;
Department of Biochemistry and Molecular Biology, Virginia Commonwealth University
Richmond, Virginia 23298, USA

Toxins are unsung heroes: Their contributions to basic and applied sciences

Toxins are thought as villains as they cause death and debilitation. In reality, they have contributed more to improving our lives than cause death. Toxins have played crucial roles in the discovery and development of therapeutic and diagnostic agents for human diseases. They have also contributed as important research tools and helped us to understand molecular mechanisms of normal physiological processes such as neurotransmission, blood coagulation and platelet aggregation. Toxins have contributed towards understanding evolutionary processes as well as chemistry. Our lab has been studying structure-function relationships and mechanism of actions of novel toxins from various sources. Our research has contributed to both basic and applied sciences. Based on the functional sites of the toxins, we have developed a number of therapeutic agents for various human diseases. Here, I will describe distinct lines of research straddling both basic and applied research.

Date: 27 October 2025, Monday **Time: 4.00pm – 5.00pm**

Venue: MD3-02-01 – MD3, Tiered room, level 2

Chaired by: Dr Nurulhuda Binte Mustafa