

LKS Faculty of Medicine Department of Pharmacology & Pharmacy 香港大學藥理及藥劑學系

FRONTIERS IN VASCULAR PHARMACOLOGY **RESEARCH AND LEARNING**



PROFESSOR JO DE MEY

EMERITUS PROFESSOR OF VASCULAR PHARMACOLOGY. MAASTRICHT UNIVERSITY, THE NETHERLANDS

12 MAY 2025 (MONDAY)



2:00 - 3:00 PM

CHEN YANG FOO OI TELEMEDICINE CENTRE, 2/F, ROOM A2-08, WILLIAM M.W. MONG BLOCK

SEMINAR HIGHLIGHTS

With obesity, therapy-resistant hypertension and heart failure rising in the human population, recording of acute endothelium-dependent vasomotor responses of blood vessels from animals no longer suffices in target identification and lead finding for novel cardiovascular therapies. Challenges and opportunities will be discussed that may help remedy this. I) Adding neuroeffector mechanisms and perivascular adipose tissue to studies of cell-cell communication in the vessel wall. 2) Focus on chronic human rather than acute rodent vascular pharmacology. 3) The use of advanced microscopy techniques to quantify drug effects on (a) vascular structure (not only tone) in experimental models and biopsies from patients and (b) the life cycle of drug-receptor complexes. 4) Application of novel drug concepts such as bitopic agonists, biased agonists and allosteric modulators. 5) From "one size fits all" to precision medicine. Ideally these flourish in a (virtual) multidisciplinary environment where junior and senior vascular pharmacologists profit from input and feedback from basic and applied aspects of the academic, clinical and pharmaceutical industry aspects of the drug-discovery and drug-development chains. In this respect, I will share personal experiences with the "Research Schools" and "Public-Private Partnerships" in the Netherlands and with the "Danish Cardiovascular Academy". In such environments, hypotheses, resources, tools and insights can be shared and application of innovative learning techniques become far more effective than classical teaching.

