Professor Csaba Sabo, M.D., Ph.D., D.Sci., F.B.P.S., M.A.E.
Chair, Section of Pharmacology
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Professor Csaba Szabo is a physician-scientist, pharmacologist and biotechnology executive with more than 30 years of experience spanning academic biomedical research, translational pharmacology, drug discovery and drug development. His work is highly cited internationally, with an H-index of 150 and more than 97,000 citations, placing him among the most highly cited scientists in pharmacology and among the world's leading biomedical researchers. Following graduate and postgraduate training in clinical medicine, physiology and pharmacology, Professor Szabo undertook postdoctoral research at the William Harvey Research Institute in the United Kingdom in the group of Nobel Laureate Sir John Vane. There, he investigated the pharmacology of nitric oxide and its potential therapeutic applications in critical illness. He subsequently served as Research Director of the Division of Critical Care at Cincinnati Children's Hospital Medical Center and later as Professor at UMDNJ/Rutgers University, where his research focused on molecular mechanisms of cell injury during oxidative and nitrosative stress, particularly mitochondrial dysfunction, cellular bioenergetics, inflammation and vascular dysfunction. Professor Szabo is internationally recognized for his contributions to understanding the biology and pharmacology of gaseous mediators, particularly hydrogen sulfide (H_2S), and the regulation of vascular function, cellular bioenergetics and metabolism in health and disease. At the University of Texas, he established and led a multidisciplinary molecular pharmacology laboratory integrating classical and molecular pharmacology, physiology, cell and molecular biology, high-throughput screening, and animal models of disease.

Since 2018, Professor Szabo has served as Chair of the Section of Pharmacology at the University of Fribourg, Switzerland, with responsibility for graduate and postgraduate pharmacology education. He has established a multidisciplinary research program investigating gaseous mediators and free radicals in health and disease. He has also served as President of the Department of Oncology, Microbiology and Immunology and currently serves as its Vice-President.

As principal investigator or co-investigator on grants funded by the NIH, DARPA, Swiss National Science Foundation and other agencies, Professor Szabo has contributed to the discovery and characterization of numerous pathophysiological pathways and potential therapeutic targets. These include PARP1 and SHIP1 signaling, oxidative stress pathways, adenosine receptors, gaseous transmitters including NO, H_2S and HCN, and enzymes responsible for their biosynthesis. His work has frequently extended from mechanistic discovery and pharmacological characterization to the development of preclinical and clinical drug candidates.

In parallel with his academic career, Professor Szabo has served as Chief Scientific Officer of several biotechnology companies, leading multidisciplinary teams developing first-in-class therapeutics for inflammatory, vascular, oncological, pulmonary, ophthalmological and critical-care indications. These activities contributed to major commercial transactions, three publicly traded biotechnology companies—Inotek, Aquinox and Bellerophon—and the acquisition of Ikaria by Mallinckrodt for more than US$2.3 billion.

Professor Szabo has published more than 600 original peer-reviewed papers and 100 review articles. His numerous distinctions include the Novartis Award, the British Pharmacological Society's Vane Medal and ASPET's Pharmacia Award, and he has been elected to Academia Europaea and the European Academy of Sciences and Arts. He is also an active advocate for scientific research integrity and reproducibility, including authoring a book on the subject for Columbia University Press and contributing extensively to initiatives addressing research funding and publication reform.