



Michel Chrétien, MD

The youngest of 19 siblings, Michel Chrétien, received his MD in 1960 and trained in endocrinology and protein chemistry at Montréal, McGill, Harvard, Berkeley, Cambridge and the Salk Institute. In 1967, he first published the pro-hormone theory, which has since been applied to many functions of human biology. In 1976, he discovered human β -endorphin, and in 1990, the proprotein convertases (PCs/PCSK1-9). Dr. Chrétien's theory and its developments opened a new chapter of biology known as "Functional Endoproteolysis".

PCs play important roles in brain functions related to pain and behavior, in organ growth and development, in endocrine/neuroendocrine regulations, and in sugar and body fat homeostasis. PCs are implicated in many diseases including metabolic syndrome, diabetes, obesity, cancer, atherosclerosis, dyslipidemia, and Alzheimer's, as well as viral and bacterial infections. Dr. Chrétien discovered a beneficial PCSK9 mutation present only in French Canadian families which protected them from cardiovascular diseases. His work exemplifies: "From bedside to bench and back."

The first French-Canadian physician elected Fellow of the Royal Society of London and the second Québécois francophone to receive a Doctorate Honoris Causa from the Université Descartes de Paris, Dr. Chrétien is Officer of the Order of Canada, Officier de L'Ordre National du Québec and de "La Légion d'Honneur de France".

Dr. Chrétien has authored 602 publications, and in the 1980s, he was the seventh most cited scientist worldwide. A builder and leader, Dr. Chrétien acted as scientific director of two research institutes, the Institut de recherches cliniques de Montréal and the Loeb Health Research Institute (Ottawa), boosting their growth and enhancing their productivity. He is a fierce defender of scientific freedom in both word and deed, working tirelessly to convince governments to invest in scientific research.

Dr. Chrétien has built a unified career around his own prohormone theory, bridging basic and clinical research with immediate benefits for patients. His discoveries have helped improve our understanding of human and animal physiology and have enhanced our ability to combat pathologies that afflict humankind. His skillful, diplomatic, and persistent promotion of research funding has helped transform Canada's research landscape for decades to come.

W.L.Hoth