Biography and Photo

Nabil G. Seidah, PhD, OQ, MRSC, MC

Dr. Seidah obtained his BSc in 1969 from Cairo University in Giza, Egypt, and his PhD in 1973 from Georgetown University, in Washington, DC. In 1974, he started studying the processing of precursor proteins at the Clinical Research Institute of Montreal (IRCM) and in 1976 he discovered β-endorphins and largely contributed to the biochemical characterization of the proopiomelanocortin (POMC, the β-endorphin precursor) and pro-Atrial Natriuretic factor (proANF). Since 1983, he is the director of the Laboratory of Biochemical Neuroendocrinology.

Dr. Seidah discovered and cloned seven (PC1, PC2, PC4, PC5, PC7, SKI-1 and PCSK9) of the nine known enzymes belonging to the convertase family. During this period, he also greatly contributed to demonstrating that the proteolysis by the proprotein convertases is a wide mechanism that also concerns "non-neuropeptide" proteins such as growth factors, α-integrins, receptors, enzymes, membrane-bound transcription factors, and bacterial and viral proteins. In 2003, he identified PCSK9 and showed that point mutations in the *PCSK9* gene cause dominant familial hypercholesterolemia, because of a gain of function related to the ability of PCSK9 to enhance the degradation of cell surface receptors, such as the low-density lipoprotein receptor. He has since worked on the elucidation of the functions and mechanisms of action of PCSK9 both in cells and *in vivo*, and is interested in the elaboration of specific PCSK9 inhibitors.

Over the last 40 years, Dr. Seidah has attracted more than 140 graduate students, trainees and post-doctoral fellows. He is member of numerous scientific associations including the Cancer Research Society and the American Heart Association. In 1991, he was elected fellow of the Royal Society of Canada. He is the recipient of several awards, including the 1995 Medical Research Council Scientist Award, and was made a member of the Order of Quebec in 1997 and the Order of Canada in 1999. In 2001, he received the McLaughlin Medal of the Royal Society of Canada and the Parizeau Prize of the Association Canadienne-Française pour l'avancement des sciences. He has been endowed with a Canada chair since 2003. In 2009 he received the Pfizer Distinguished Cardiovascular-Metabolic Research Jean-Davignon Award. He has been invited as a speaker to more than 400 national and international conferences. He organized the first Keystone Conference on the proprotein convertases and in 2006 was the chair of a prestigious Gordon Research Conference on Proprotein Processing, Trafficking and Secretion. In 2009, he was awarded the Pfizer Distinguished Cardiovascular-Metabolic Research Jean-Davignon Award.

He has been selected to present the prestigious "Jacques Benoît" lecture at the 7th International Congress of Neuroendocrinology held in Rouen France in July 2010. In 2011, he was awarded the Wilder Penfield prize for the best scientist in Québec working in the biomedical field. In 2013, he was awarded the Queen Elizabeth II Diamond Jubilee Medal and was invited to present the "Simon Pierre-Noël Memorial Lecture" at the Canadian Lipoprotein conference in Mont Tremblant, Quebec. In 2014, he received in Winnipeg the "Jacques Genest" Lecturer Award from the Canadian Society of Endocrinolgy and Metabolism. In 2016, he was selected as the recipient of the annual CIHR-ICRH Distinguished Lecturer Award in Cardiovascular Sciences.

Dr Seidah is internationally recognized as a world leader in convertases and their physiological roles. His numerous publications that tally more than 702 peer reviewed manuscripts have been widely recognized, and in fact he is cited as the most recognized protease expert in Canada and 6th worldwide. Indeed, Pubmed cites N.G. Seidah as the topmost in Canada and the 1st out of the worldwide 20 top scientists working on "Proprotein Convertases" since 1971. His **H** index = **87** (*Web of Science*), and his work has been cited more than 30,000 times.