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**Academic training and previous positions:**

BSc Biochemistry, Université Laval, Québec City, 1968; PhD Biochemistry, University of Ottawa, Ottawa, 1972; Post-doctoral fellowship, MRC Immunochemistry Unit, University of Oxford, 1972-1975.

Research scientist, Princess Margaret Hospital, Toronto, and Assistant Professor, Department of Medical Biophysics, University of Toronto, 1975-1980.

Senior Research Scientist, Hospital for Sick Children, 1980-2013.

Associate Professor (1980-1986) and Professor (1987 onwards), Department of Immunology, University of Toronto; cross-appointed to Medical Biophysics, Pediatrics, and Obstetrics and Gynecology Departments.

Member of the Heart and Stroke Richard Lewar Centre of Excellence, University of Toronto (2001-2013).

Member of the advisory board of Hereditary Hemorrhagic Telangiectasia (HHT) International Foundation (1994-now).

Chair of SickKids Animal Care Committee (2001-2011).

Chair, SickKids Animal Scientific Peer Review (2012-now).

Councillor, Vice-President, President and Past-President, Canadian Society of Immunology (1991-2001).

**Current Positions:**

Senior Research Scientist Emeritus, Hospital for Sick Children;

Emeritus Professor, Department of Immunology, University of Toronto.

Chair, IUIS Education Committee (2006-now).

**Research Focus:**

The primary aim of my research was to identify and purify membrane proteins and determine their structure and function. I was the first one to purify Thy-1 antigen, and then worked on MHC class II, CD10, CD44,  $\alpha 4\beta 1$  integrin, and discovered endoglin (CD105).

Our research became focused primarily on endoglin and ALK1, which are receptors of the TGF- $\beta$  superfamily, expressed mostly in endothelial cells but also in hematopoietic stem cells and macrophages. Endoglin and ALK1 are mutated in a vascular disorder called Hereditary Hemorrhagic Telangiectasia (HHT1 & HHT2), for which we established a molecular diagnosis, currently in clinical practice in several countries. We also worked on mechanisms of disease, generated mouse models for functional studies and for testing of anti-oxidant and anti-angiogenic therapies. Recently we identified multiple novel interacting proteins for endoglin and ALK1 that might elucidate pathways defective in HHT.

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