Congratulations / Félicitations

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The John D Reynolds Award Recipient

I received my BSc at l'Université Laval and my PhD at the University of Ottawa. Both degrees were in Biochemistry and led to a Post-doctoral Fellowship in the Biochemistry Department at the University of Oxford with Nobel Laureate Professor Rodney Porter. There I learned Immunochemistry and worked with Alan F. Williams on the characterization of membrane proteins of leukocytes. This was before monoclonal antibodies and cloning strategies, and so we produced rabbit antisera and performed bucket purification strategies. I was the first to isolate Thy-1 antigen from rat thymus and this led to my future research on the identification and characterization of membrane glycoproteins.

I set up my first laboratory in 1975 at the Ontario Cancer Institute in Toronto, as an Assistant Professor in the Department of Medical Biophysics with James Till as director and next to future great Canadian scientists including Rick Miller, Bob Phillips, Alan Bernstein, Richard Stanley, Vic Ling and Tak Mak. Dr. Hardy Cinader gave me a cross-appointment to the Institute of Immunology and that was my initiation to Canadian Immunology. In 1980, I was recruited by Erwin Gelfand at The Hospital for Sick Children, to work on leukemic cell markers, and promoted to Associate Professor of Medical Biophysics and Pediatrics. The era of monoclonal antibodies and flow cytometry had arrived and my lab generated many monoclonals to leukemic cell antigens. Subsequently the cloning era began and we embarked on the cloning of two of the antigens we had identified, first CD10 and then CD105.

In 1984, I transferred my primary appointment to the newly established Department of Immunology under the leadership of Dr. Rick Miller and worked as Graduate Coordinator for the next 3 years, a position that brought me much closer to the graduate students and their needs. We all worked together to put on a very successful International Congress of Immunology in Toronto in 1986. I was appointed Full Professor in 1987, and took a sabbatical leave in Lausanne. During that time, my lab had completed the cloning of CD10, and its identification as a neutral endopeptidase. Subsequently, we cloned and sequenced endoglin (CD105), which we then identified as the gene mutated in the vascular disorder Hereditary Hemorrhagic Telangiectasia type 1 (HHT1). The next 20 years of my career were devoted to the study of endoglin, establishment of a molecular diagnostic, generation of mouse models, study of underlying mechanisms of disease and inclusion in the board of HHT International.

From 1991-2001, I served as Councillor, Vice-President, President and Past-President of CSI. John Reynolds succeeded me in these functions and I had the privilege of working closely with him over several years; he was truly efficient and devoted to moving CSI into the Internet age. I was elected to the Council of the International Union of Immunological Societies (IUIS) in 2005 and soon after was asked to chair their Education Committee, which I still do to this day.

The role of this international committee is to foster the development of Immunology in the developing world by supporting their students to attend courses and in the last 3 years, by organizing our own IUIS courses at the four corners of Africa and Latin America. So far, we have organized immunology courses in Columbia, South Africa, Tunisia, Mexico, Gambia, and the upcoming ones are in Ethiopia, Brazil and South Africa. This year, we obtained direct funding from the Gates Foundation and the Volkswagens Foundation for our activities, which increased our allocated IUIS budget. It has been an incredible journey through Immunology and I thank CSI for all their efforts and the support of students, the future of our field.