Dr. Rafick-Pierre Sékaly, Université de Montréal
The 2007 CSI -Hardy Cinader Award Recipient

Professor
Department of Microbiology and Immunology
Scientific Director and Program Leader
CANVAC
Université de Montréal

Dr. Sékaly, a full professor at Université de Montréal, is the Scientific Director and Program Leader of CANVAC. Dr. Sékaly obtained his Ph.D. in Biochemistry at the Université de Lausanne in 1984 and went on to perform a postdoctoral fellowship, from 1984 to 1987, on immunogenetics and molecular biology of major histocompatibility complex molecules.

He received several honours and awards including the Forgaty Fellowship of the National Institutes of Health of Maryland, USA and the fellowships named Chercheur-boursier «Senior 1» of the Fonds de la recherche en santé du Québec, Prix du jeune chercheur of the Club de recherches cliniques du Québec and Senior Scientist Salary Support Awards from the Medical Research Council of Canada. He is now the Canada chair in Human Immunology. He has been involved in the areas of AIDS and AIDS pathogenesis for the past fifteen years. Using several novel technologies developed in his lab, he was able to demonstrate in collaboration with the researchers Dr. Fauci and Dr. Pantaleo the features of the primary cellular immune responses in HIV infected patients. His work on AIDS initially involved the characterization of the interactions between CD4, the envelope protein of HIV gp120 and class II MHC molecules of the major histocompatibility complex molecules and the natural ligand of CD4. He has also generated seminal observations on the interactions between class II molecules and several of their ligands including the T cell receptor and bacterial and retroviral superantigens. His group has pioneered several new modifications to assays that allow the characterization of the qualitative and quantitative features of the immune response using multiparametric flow cytometry at the single cell level including class I and class II tetramers. His group was also amongst the first to demonstrate that the thymus, the major site of T cell production was still active in adults and was the target of viruses such as HIV.

As Founder and Scientific Director of the CANVAC Network of Centre of Excellence, Dr. Sékaly hopes to improve the quality of life of Canadians by using novel technologies and a multidisciplinary approach in order to develop vaccines for the prevention and treatment of chronic diseases like AIDS, hepatitis C and cancer.