

## **Congratulations / Félicitations**

## Chris Bleackley, University of Alberta The 2006 CSI -Hardy Cinader Award Recipient

Professor of Biochemistry Canada Research Chair Department of Biochemistry University of Alberta

Born and educated in England, received a B.Sc. (first class honors, Chemistry, 1972) and a Ph.D. (Synthesis and Study of Thymine Analogues, 1975, under Professor A.S. Jones) from the University of Birmingham. Over the next 5 years, I was appointed first as a post-doctoral fellow, then a research associate and finally as a sessional instructor in the Department of Biochemistry at the University of Alberta. During this time, I worked on the organization of immunoglobulin and lymphokine genes with Dr. Vern Paetkau. In 1981, I was appointed as an Assistant Professor, in 1983 an Associate Professor and in 1989 a Professor in the Department of Biochemistry at the University at the University of Alberta.

My research is focussed on understanding the mechanisms used by the immune system to destroy virus infected and tumour cells. The immune effector cells, also known as cytotoxic lymphocytes, are also involved in rejection of organ grafts and the progression of autoimmune diseases. My laboratory discovered a protein expressed by the lymphocytes, called granzyme, that is passed to the pathogenic cell and causes the recipient to commit suicide. We have shown that granzyme is transferred from the CTL to the target were it cleaves key substrates, such as caspase and Bid, that initiate both apoptosis and necrosis. A knowledge of both the protein itself and the molecular pathway of transfer have suggested novel forms of therapy to control immune attack.

I presently hold the Canada Research Chair in Molecular Biology, and am a Howard Hughes Medical Institute International Research Scholar, an Alberta Heritage Foundation for Medical Research Medical Scientist, a Fellow of the Royal Society of Canada and was a Canadian Institutes for Health Research Distinguished Scientist. Recent awards include the Roche Diagnostics Award for Outstanding Research Achievements, the Kaplan Award for Research Excellence and the Robert Nobel Prize from the National Cancer Institute of Canada. I served on the Advisory Board of the Institute of Infection and Immunity of the CIHR, and am presently a member of the Advisory Council on Research of the NCIC and of the Research Management Committee of the Canadian Network of Excellence in Vaccines and Immunotherapeutics.