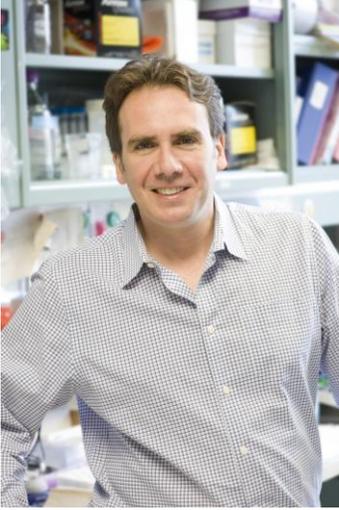


Alexandre Prat, MD, PhD, FRCP(C)



Dr Prat obtained his undergraduate degree (B.Sc.) in biochemistry from Université de Montréal in 1990 and an MD-MSc in 1995. Dr Prat completed his Neurology residency training at McGill University (Montreal Neurological Institute) in 2003, after having completed a Ph.D. degree (2000) in the laboratory of Dr Jack P. Antel. His PhD work focused on the development of the human Blood-Brain Barrier. Dr Prat is an active member of the Royal College of Physician and Surgeons of Canada (Neurology) since 2003. In 2000, he received the prestigious S. Weir Mitchell Award of the *American Academy of Neurology*.

Dr Prat is a staff neurologist at the CHUM-Notre Dame Hospital (Montréal) and is Full Professor of Neurosciences (with Tenure) at Université de Montréal. Dr Prat held the Donald Paty Research Chair of the Multiple Sclerosis Society of Canada and was a senior Scholar of the FRQ-S (2012-2016). He now holds the Senior Canada Research Chair en Multiple Sclerosis and was inducted at the College of researcher of the Royal Society of Canada in 2015. From 2015 until 2018, he was Deputy Director for Development at the CHUM Research Center, a research institution with over 120 investigators and 2000 employees. In 2015, he was elected at the Royal Society of Canada.

The current research interests of the Prat lab include the immunological roles of the BBB, the mechanisms of monocytes and lymphocyte migration across the BBB and the physiological regulation of the Blood-Brain Barrier functions by glial cells. The underlying hypothesis of Dr Prat's work is that deciphering the mechanisms by which the Blood-Brain Barrier controls the passage of cells and molecules to the CNS should lead to the understanding of diseases such as MS and brain tumors, as well as to the discovery of novel routes for delivery of drugs and chemotherapies into the CNS. The research activities of the Prat lab include a special emphasis towards the biology of human and mouse TH1 and TH17 lymphocytes, as well as the important role of B lymphocytes in MS. The lab routinely performs 16 color flow cytometry analysis of human or mouse CNS and peripheral blood cells, multiphoton dynamic imaging of CNS vessels, confocal microscopy of human MS brain samples, active adoptive transfer and spontaneous/transgenique EAE, as well as primary cell culture of human or mouse CNS endothelial and glial cells.

Currently, the research team of Dr Prat is composed of 6 post-doctoral fellows, 6 Ph.D. students, 4 M.Sc. students and 3 technicians. Most of the students and post-docs in the Prat lab hold prestigious National or International studentship or fellowships. The lab is supported by 3 operating grants from the CIHR, 2 CIHR team grants, 1 ERANET Neuron EU-CIHR-FRQS International team grant, 2 operating grants from the MS Society of Canada, one large operating grant from the MS Research Foundation of Canada and one grant from the Progressive MS Alliance. Dr Prat has published more than 80 peer-reviewed research articles in international journals such as *Science*, *Nature Medicine*, *Nature Immunology*, *PNAS*, *The Journal of Neuroscience*, *The Journal of Immunology*, *Annals of Neurology*, *PLOSone* and *Brain*.