

## Focus on Faculty #4

### Jaroslav Prchal



[Dr. Jaroslav F. Prchal](#) is an Associate Professor in the Department of Oncology and a member of the Department of Oncology at St. Mary's Hospital Center where he was the Department Chair between 1993 and 2015. He has been actively involved in the Rossy Cancer Network.

Dr. Prchal was born in Prague where he graduated from Charles University, School of Medicine and taught in the Department of Experimental Physiology until the Russian invasion of Czechoslovakia in 1968. He came to Canada as a post-doctoral fellow in Biochemistry at Dalhousie University, did post-graduate training in Medicine and Hematology at Toronto General Hospital followed by a MRC fellowship at the University of Washington in Seattle in Bone Marrow Transplantation and Experimental Hematology. Between 1976 and 1979, he was an Assistant Professor at the University of Toronto in the Departments of Medicine, Anatomy, and Pathology and a Staff Physician at Toronto General Hospital.

In 1979, he accepted a position at McGill and the Royal Victoria Hospital where he opened a research laboratory developing *in vitro* culture of stem cells. This research area, which started in his student years and continued during his post-graduate years, has led to the development of technology of *in vitro* culture of red cell precursors and the discovery of Endogenous Erythroid Colonies in polycythemia vera, which remains a hallmark of the disease. In his clinical work, he has gradually moved from malignant hematology to oncology in general and he helped develop and subsequently chaired the patient-centered Oncology Department at St. Mary's Hospital. His research work in the area of polycythemia continues through an association with the laboratory of his brother Josef (JTP), through joint work done at the University of Birmingham in Alabama, Baylor College in Houston, and the University of Utah in Salt Lake City.

In recent years his passion for mountains and mountaineering (he has made multiple expeditions to mountains in Ecuador, Chile, Peru, Antarctica, the Alps, the Dolomites, Carpathian and Caucasus mountains, and regular weekend trips to Mount Washington) has led to expeditions to Russia, Bolivia, Indian Himalayas and Tibet where together with his brother Josef he collected samples from high dwellers. This work led to the discovery of 2 new types of polycythemia as well as the discovery (JTP) of genetic differences between peoples living at high altitudes compared to sea-level dwellers.

Recently he has been the editor of an oncology E-publication, Oncology for Practicing Physicians where a number of modules are authored by oncologists of the McGill teaching hospitals, (accessed through: [http://www.ccpe-cfpc.com/en/our\\_courses/oncology.html](http://www.ccpe-cfpc.com/en/our_courses/oncology.html)).

We asked Dr. Prchal to list a few of his articles whose work he is particularly proud or enjoyed the most. This is what he provided:

**Prchal J. F.**, Axelrad, A.A. (1974). Bone marrow responses in polycythemia vera. *New Eng. J. Med.* 290:1382 (letter).

Adamson, J.W., Fialkow, P.J., Murphy, S., **Prchal J. F.**, Steinmann, L. (1976). Polycythemia vera: Stem cell and probable clonal origin of the disease. *New Eng. J. Med.* 295:915-916.

Prchal, J.T., Throckmorton, D.W., Carroll, A.J., Fuson, E.W., Gams, R.A., **Prchal J. F.** (1978). A common progenitor for human myeloid and lymphoid cells. *Nature* 274:590.

Gilmore, N., **Prchal J. F.**, Jothy, S. (1983). Persistent generalized lymphadenopathy in homosexual men. *J. Can. Med. Assoc.* 129:960-965.