

## **Focus on Faculty #81**

### **Simone Chevalier**



I became a scientist after completing my PhD in Biochemistry at Université de Montréal and postdoctoral training in Biochemistry at the University of British Columbia and Endocrinology at Maisonneuve-Rosemont Hospital Research Centre. The awarding of a Junior Scholarship from the “Fonds de la Recherche en Santé du Québec” and grants from the Medical Research Council of Canada have opened the doors to a nearly 40 years’ career focusing on prostate physiopathology.

At first, I became a member of the Reproduction team at Maisonneuve-Rosemont and Assistant Professor in Medicine and Biochemistry at Université de Montréal. Ten years later, I was invited by the McGill Division of Urology and Department of Surgery to become the director of new research facilities focusing on urologic oncology to be built at the Montreal General Hospital. With tenure positions at both Universities, I chose to partner with clinician scientists at McGill and moved in 1994. I had then reached the time to adopt “a bench to bedside approach” in my research to better integrate molecules and signaling pathways studied in isolated prostate cells from dogs, a rare mammalian species developing prostate cancer with age, into the patient setting.

Over the years, I defended concepts explaining prostate cancer progression through barely known stem (reserve) and neuroendocrine cells, along with luminal-like cells surviving and evolving in environments containing no or low androgens. These concepts finally gained acceptance in the scientific community and remain among my topics of interest. In 2007, I became the Scientific Director of the prospective PROCURE Prostate Cancer Biobank, a pan-provincial initiative involving four Quebec university hospitals. The aim was to build a large cohort of 2000 radical prostatectomy patients and to bank their frozen prostate tissues and liquid biopsies throughout their trajectory. After reaching its target in 2013, the bank remained operational and is still collecting blood and urine from recurrent cases. The cohort maturity and

bank content now allow me to team up with my colleague, Dr Armen Aprikian, to conduct a comprehensive molecular study to identify drivers of prostate cancer lethality and to trace them back in patients' liquid biopsies.

Being Director of McGill Urology Research, Professor in Surgery, Associate Member in Medicine and Oncology, and Senior Scientist of the Research Institute at the McGill University Health Centre, I continue to mentor young colleagues, residents, graduate students, post-doctoral fellows, and personnel, assisting them in their endeavors. My door is always open... my work leitmotiv has been and still is "someone's success is rewarding to the whole Urology family". Throughout my career I have supervised more than 70 trainees, published more than 140 papers, and contributed to over 500 presentations at local, national, and international meetings.

I wish to end by mentioning that battles won during childhood with not many opportunities as a girl from a poor underprivileged family living in a small village in Quebec, have heavily influenced my resilience and perseverance and led me to university at the age of 16, fascinated by sciences. This has inspired me to advocate for what is rightfully appropriate, for a woman to decide on her own education. As a result of my determination and of "angels" on my path from high school and later, I attained a successful and goal-driven career in oncology research. My motivation has been to make a positive difference in patients' lives, either through scientists I have trained or my own research and achievements. I take time to educate and encourage men in the community in their quest for basic knowledge on prostate cancer since every death from cancer is one too many!