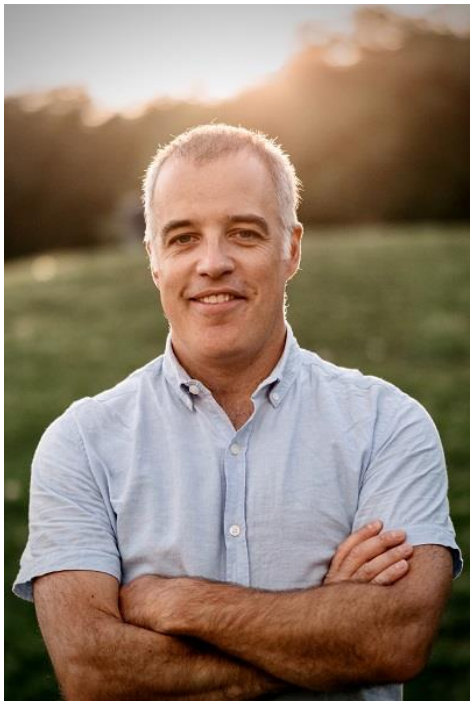
Focus on Faculty #84
Ives Levesque



Ives Levesque, PhD, FCCPM, is an Assistant Professor in the Gerald Bronfman Department of Oncology. He is a Member of the Medical Physics Unit and an Associate Member of Physics and Biomedical Engineering.

Ives first came to McGill as a graduate student in 2000, eventually completing both the MSc in Medical Physics and PhD in Physics. After three years of postdoctoral training at Stanford University, he returned to Montreal in 2013 to join the MUHC as a medical physicist and McGill as an Assistant Professor (CAS). He transitioned to the tenure-track at McGill in 2018. He is based at the Cedars Cancer Centre at the MUHC–Glen Site.

During his graduate studies, Ives studied MR physics and brain imaging methods at the McConnell Brain Imaging Centre of the Montreal Neurological Institute. As a postdoc, he worked on image reconstruction methods and MR imaging at 7 tesla. At the MUHC, Ives transitioned to clinical MR physics and became the lead physicist in the development and expansion of the MRI-based treatment simulation program in radiation oncology at the Cedars, which he continues to oversee to this day. His research is on the development of advanced *in vivo* MR imaging methods to measure blood supply in cancer, tissue oxygenation, and tumor microstructure, and on the translation of MR imaging for radiation therapy planning and image guidance. His main interests lie in understanding and exploiting the fundamental physics of the MR signal in human tissue to generate quantitative imaging approaches. Ives' research, made entirely possible by a fantastic group of graduate students in the MRI Methods Research Group, has been supported by NSERC, CIHR, FRQS, and the Montreal General Hospital Foundation.

Following the recent change in leadership at the MPU, Ives recently took on the role of Co-Director (Interim) and Graduate Program Director for the MSc program in medical physics. He is passionate about teaching, student supervision, and graduate student success.

Ives is involved with various organizations to serve the MR imaging science and medical imaging physics communities, including with the International Society for Magnetic Resonance in Medicine, the American Association of Physicists in Medicine, the Canadian Organization of Medical Physicists, and the Quebec Bio-Imaging Network. He was notably the Chair of 2019 Canadian Winter School in Medical Physics and has contributed to a few other international events. Ives has been a member of the Canadian College of Physicists in Medicine since 2015 and was recently made a Fellow of the CCPM.

Ives was raised in Moncton, New Brunswick, before moving to Montreal to study. Outside work, he can be found having fun with his wife and daughter, riding a bike, cross-country skiing, or running.

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