Professor Wissam (Sam) Musallam

October 22, 1967 – November 8, 2019

It is with great sadness that we report the passing of our friend and colleague Professor Wissam (Sam) Musallam, who died on November 8, 2019 after a long illness. Sam was born in Beirut, Lebanon in 1967. Fleeing the Lebanese civil war, he and his family moved to the United Arab Emirates, and then to Greece where he graduated high school in 1984. After several years as a chef, he began his undergraduate studies at the University of Toronto in 1991. He received his B.Sc. in Math and Physics in 1994, and his M.Sc. in Physiology and Biomedical Engineering in 1997. After a short pause as a software developer, he started his Ph.D. studies in 1998.

During his graduate research supervised by Dr. David Tomlinson at the University of Toronto, he studied how the brain encodes the position of the body in space during combined linear and rotational motion. He was awarded a fellowship from the Medical Research Council of Canada (CIHR), obtaining his Ph.D. in 2001. Joining the laboratory of Dr. Richard Andersen at the California Institute of Technology as a postdoctoral fellow shortly afterwards, he spearheaded a study to show that cognitive signals could be used to operate prosthetic devices. This led to a number of seminal articles in Science, the Journal of Neuroscience, and the Proceedings of the National Academy of Sciences that established him as a rising star in the field.

From Caltech he migrated Northwards, arriving at McGill in late 2006. What was truly surprising was that this up and coming neuroscientist elected to apply to the Department of Electrical and Computer Engineering. As he explained at the time, he needed to develop whole new technologies to acquire dense electro-physiological responses of single neurons deep within cortical structures. With the award of a Canada Research Chair in April 2007, he and his collaborators in ECE and the Department of Physiology began an ambitious three-pronged program aimed (i) developing new materials for the fabrication of dense micro-electrode arrays for cortical implantation, (ii) specialized microelectronics for maintaining the signal processing and data transmission, and (iii) the establishment of a non-human primate laboratory in the Dept. of Physiology from which to conduct experiments. Sam was the embodiment of scientific curiosity and multidisciplinary research.

Sam thrived at McGill. A popular teacher, especially among undergraduate students, and a passionate and gifted researcher – he was unstoppable. Sadly, his health deteriorated over the years sapping his strength, but never his optimism. Although he was with us for a relatively short time, he accomplished much, leaving behind an enviable body of scientific work and an excellent cadre of undergraduate and graduate students. Sam will always be remembered as a kind and generous person and the consummate family man. He is survived by his children (Christina and Sofia), his wife (Eirini), his grandmother (Khadra), his mother (Siham), his sister (Mary), his brother (Hani), his nieces, cousins and family in Canada, the US and Palestine.