



Bibliography: **Kausalia Vijayaragavan** completed her PhD with Dr. Mohamed Chahine in 2004 and the viva was examined by Drs Richard Horn and Yves De Koninck. Her thesis was based on the biophysical characterization of the $Na_v1.7$ & $Na_v1.8$ channels; particularly eliciting the role(s) of inflammatory signals (driven by PKC/PKA) and the auxiliary subunits on the channel function. The findings were important in providing a perspective of how, then newly identified $Na_v1.7$ & $Na_v1.8$ gating properties and their modulation could mediate nociceptive responses (J. Neurosci. 2001, J. Neurophysiol. 2004 and BBRC 2004).

She cultivated an interest in studying the development of human sensory neurons that expressed these channels. There were only few groups using human ESCs to model early development in Canada among them, was Dr Mick Bhatia whom had established an expertise for hematopoietic development. It was a priceless opportunity to learn and understand how to use human ESC culture, applying it to any developmental lineages. She principally worked on the Wnt signalling pathway in human ESCs development toward the mesoderm/blood lineage. She managed to publish her findings in 2008 in Cell Stem Cell. She also carried out some collaborative work with Dr James Ellis group (Toronto) on the human iPS technology (Nature Methods 2009) and is a co-author of a patented method to generate human iPSCs and progenitors from fibroblast (2010). During her time in Mick's lab, she also participated in studies understanding the human ESCs culture dynamics (Nature 2007). She acquired invaluable knowledge and knowhow about the human pluripotent stem cell (PSCs) system. She has been a group leader in INBIOMED since 2012, with the institutional start-up fund, two extramural grants and a "Ramón y Cajal" tenure-track. Her laboratory is focused on understanding cellular and molecular basis human nociceptors genesis. They use human embryonic stem cells and induced pluripotent stem cells to model the development of nociceptors.