

	Endocrine.
	International Oncology.
2008 - present	International Journal of Oncology
2006 - present	AJP Biochemistry
2006 - present	Diabetes
2006 - present	International Immunology
2005 - present	American Journal of Physiology Endocrinology and Metabolism
2005 - present	Endocrinology

Other Research and Professional Activities

RESEARCH PROJECT

2004 May	Associate Scientist. McLaughlin Centre for Molecular Medicine, Toronto, Ontario, Canada
2001 Jul	Affiliate Scientist. Division of Molecular and Cellular Biology. Ontario Cancer Institute, Toronto, Ontario, Canada

C. Academic Profile

1. RESEARCH STATEMENTS

My research interest focuses on elucidating molecular signaling pathways that play a key role in the pathogenesis of type 1 and type 2 diabetes. We have shown that signaling pathways that provide pro-survival or apoptotic signaling such as tumour suppressors (PTEN or RB) or caspases that provide apoptotic signaling pathway have unique roles to play in the key tissues that are involved in diabetes pathogenesis. In the pancreatic beta cells, these signaling molecules play a key role in the regulation of pro-survival signaling both under homeostatic conditions as well as during diabetes pathogenesis. Interestingly these molecules also play a role in the differentiated role of glucose stimulated insulin signaling. More recently we've shown that Rb plays an important role in the survival of islet progenitors and in determining cell fate between the alpha and beta cells. We've also elucidated the role of other hormones such as erythropoietin in providing pro-survival signaling in pancreatic beta cells and we have also characterized its downstream JAK-STAT signaling pathway. We've also begun to elucidate downstream signaling pathway of Epo in peripheral tissues such as the adipocytes and liver and its effect on obesity as well as atherosclerosis. Our future work continues on elucidating the key signaling molecules in the metabolic tissues and how the specific signaling molecules in the specific metabolic tissues affect diabetes pathogenesis, and how this in turn affects emerging diabetes associated diseases including atherosclerosis and cancer.

D. Research Funding

1. GRANTS, CONTRACTS AND CLINICAL TRIALS

PEER-REVIEWED GRANTS

FUNDED

2013 Aug - 2016 Jul	Principal Investigator. Dissecting the inflammatory and growth signalling in hepatocellular carcinoma (HCC) pathogenesis. Canadian Cancer Society Research Institute (CCSRI). 199,998 CAD. [Grants]
2013 Apr	Co-Principal Investigator. Diabetes Discovery Core. CFI's Leaders Opportunity Fund. PI: Woo, Minna. Collaborator(s): Micheal Wheeler, Dan Winer. 965,505 CAD. [Grants]