David Ma, PhD CNS-SCN Advocacy Committee Executive and Associate Professor University of Guelph

Dr. Ma obtained his PhD in Medical Sciences in 2001 at the University of Alberta conducting research on the anticancer properties of ruminant fats, specifically, conjugated linoleic acids in breast cancer. He then moved to Texas A&M University where he did postdoctoral research investigating the role of omega-3 fatty acids and folate in colon cancer. He returned to Canada where he joined the Department of Nutritional Sciences at the University of Toronto as an Assistant Professor in 2004. Then, in 2007 joined the faculty in the Department of Human Health and Nutritional Sciences at the University of Guelph where he is currently an Associate Professor.

Dr. Ma's research encompasses investigations to better understand the role of fats in human health and disease. In particular, the role of bioactive fatty acids including, omega-3's, trans fats and CLA have been the focus of research investigations. Broadly, studies seek to enhance our understanding of the role of fats through the lifecycle from conception to later years in life and how various fats may impact on the maintenance, prevention, and treatment of chronic diseases. Studies also seek to understand the fundamental nature by which fats and other lipids 1) affect cellular biology, 2) have utility as disease markers, and 3) the how individual genetic differences involved in fat metabolism modify disease risk.

Currently, studies are focused on:

- 1) How omega-3 fatty acids may play a role in breast cancer prevention.
- 2) Role of individual omega-3 fatty acids on metabolism and health.
- 3) Effect of genetic variation in genes involved in omega-3 and omega-6 fatty acid metabolism on health