

Heather Blewett (nee Hosea) completed her PhD under the supervision of Dr. Carla Taylor in the Department of Human Nutritional Sciences at the University of Manitoba in 2006. Her PhD thesis explored the effects of zinc deficiency on T-cell maturation and function in the growing rat. She went on to work with Dr. Catherine Field at the University of Alberta (2006-2008). During this time, she expanded both her nutritional and immunological training by studying the importance of amino acids and fatty acids for intestinal and immune defense against E. Coli using a novel piglet model. She also investigated the effect of a "natural" trans fat called vaccenic acid on the pro-inflammatory tendency of immune cells in a rat model of obesity. After leaving the University of Alberta, she joined Peter Zahradka's lab at CCARM to gain experience using clinical trials to test the efficacy of Canadian crops in the treatment of vascular disease (2009-2011). She was hired into her dream job as a Research Scientist with Agriculture and Agri-food Canada in May 2011 and is located at the St. Boniface Research Centre in Winnipeg, Manitoba. She uses her expertise in human nutrition to perform the clinical trials that are needed to substantiate food health claims for Canadian crops including LDL cholesterol lowering, reduction in postprandial glucose response and increased satiety. Her background in immunology also allows her to focus on the effect of Canadian food products on immune function in the context of chronic diseases (ie. cardiovascular disease, diabetes, obesity).