# The Nutrition, Immunity, and Inflammation Conference: From Model Systems to Human Trials

**Organizer Bio: Stephen Hursting, PhD**

*AICR/WCRF Distinguished Professor, Department of Nutrition, University of North Carolina, Chapel Hill, USA*

Stephen Hursting's research interests center on precision nutrition as applied to cancer prevention, particularly the molecular and metabolic mechanisms underlying obesity-cancer associations, and the interplay between obesity, metabolism, host genetics and cancer. Primarily using preclinical models (including human and mouse cell lines, genetically engineered mouse models of cancer, and genetically heterogeneous Collaborative Cross and Diversity Outbred mice) in parallel with human studies, he is currently focusing on the molecular and metabolic changes occurring in response to lifestyle-based (dietary and physical activity), surgical (bariatric surgery), or pharmacologic manipulation of energy metabolism and cell signaling pathways. His lab has established that targeting growth factor signaling pathways, inflammation-associated immunosuppression, and gut microbial dysbiosis can reverse the pro-cancer effects of obesity.

Hursting is also a Professor at the University of North Carolina (UNC) Nutrition Research Institute and the UNC Lineberger Comprehensive Cancer Center. He earned his PhD in nutritional biochemistry, his MPH in nutrition from UNC-Chapel Hill, and completed postdoctoral training in molecular carcinogenesis and cancer prevention at the National Cancer Institute (NCI).

Prior to joining the UNC faculty, Hursting was Professor and Chair of the Department of Nutritional Sciences at the University of Texas (UT) at Austin, the McKean-Love Endowed Chair of Nutritional, Molecular and Cellular Sciences in the UT College of Natural Sciences, and Professor of Molecular Carcinogenesis at the UT-MD Anderson Cancer Center. He also served as Chief of the NCI's Nutrition and Molecular Carcinogenesis Laboratory Section and Deputy Director of the NCI's Cancer Prevention Fellowship Program.