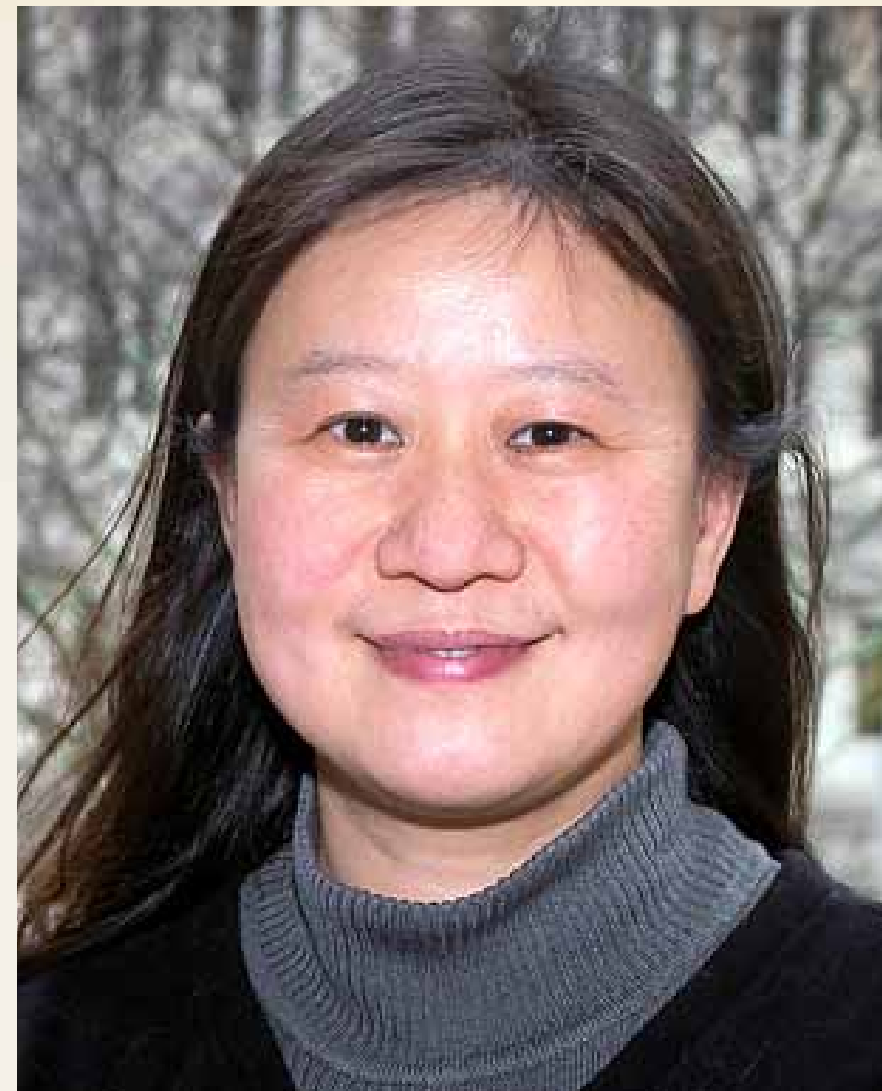


Group on Women in Medicine and Science Lunch and Learn Seminar

September 26, 2018 • 12:00-1:00 p.m. • Onyiuke Dining Room

Hosted By:

Marja Hurley, M.D., Professor of Medicine and Orthopedics
Institutional Designee, AAMC, Group on Women in Medicine and Science



Guest Speaker

Beiyuan Zhou, PhD

Associate Professor of Immunology, Department of Medicine, UConn Health

“More Than Two Directions: MicroRNA, Macrophage and Obesity”

Beiyuan Zhou, PhD, is an Associate Professor of Immunology whose interests are in diabetes, metabolism, and hematology. She holds a PhD in Biochemistry/Molecular Biology from Northwestern University, Master of Science in Molecular Biology from Peking University, and a Bachelor of Science in Biochemistry from Wuhan University, and completed a Postdoctoral Fellowship in Cell and Molecular Biology at the Whitehead Institute for Biomedical Science at the Massachusetts Institute of Technology.

The long-term goal of Zhou lab is to understand the systemic network governed by epigenetic factors in stem cells and their progenies, specifically leukocytes. Leukocytes are not only crucial cells for immune responses, but also pivotal in regulators for other tissues' function. A new dimension of our research is to investigate the interactions between leukocytes and connective tissue cells that composite the micro-environment after their emigration. Cardiovascular disease (CVD) and type 2 diabetes mellitus (T2DM) are the leading causes of mortality and morbidity in the United States. Among various CVDs, atherosclerosis associated complications account for more than half of the year mortality. Meanwhile, it

is well accepted obesity and its associated type 2 diabetes mellitus (T2DM) are major contributors for the high incidence of CVD, including atherosclerosis. Growing evidences indicated the pivotal role of macrophage mediated inflammation is one of the crucial factors for the pathogenesis of both atherosclerosis and T2DM. However, the detailed picture of how macrophage function remains vague. Our long-term goal is to elucidate the underlying mechanism of CVD risk and providing crucial information for new therapeutic strategy development for obesity induced CVD.

Dr. Zhou's lab has developed various transgenic models and ex-vivo characterization systems to critically assess the crosstalk between immune and metabolic compartment in health and disease (excess nutrient) states. Two major research directions are: A) Mechanisms of MicroRNA regulation in tissue resident immune cell functions, including innate and adaptive immune cell activation in obesity induced cardiac vascular diseases and metabolic syndromes; B) the regulation of MicroRNAs in controlling cell-cell crosstalk between hematopoietic stem cells and mesenchymal stem cells under obesity stress.

– A discussion to follow on balancing a successful academic work-life career. –

RSVP required by emailing Rollins@uchc.edu or call: (860) 679-3484.

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