Jie Chen ISL Research Statement

My long-term research goal is to develop a pain and symptom self-management program among older adults with multiple chronic conditions, i.e., cancer and cardiovascular disease. My research interests align with ISL's mission of improving healthy aging and exploring the complexities of older adults’ lives through multidisciplinary approaches.

In my dissertation entitled “Pain Management in Patients with Heart Failure”, I have published three peer-reviewed manuscripts. I have collaboratively worked with Dr. Simonsick at NIH-National Institute on Aging on secondary data analysis of the NIA-sponsored Health ABC study. My original study, "Phenotype and Biomarkers of Pain in Older Adults with Heart Failure," was supported by the American Nurses Foundation (ANF) from the Virginia Stone Fund, Eastern Nursing Research Society (ENRS)/CANS dissertation award, STTI Mu Chapter research award, and CAMP PRIM funds. Preliminary data generated from this project may lead to an R01 grant application. This project will be one of the first longitudinal designs to dynamically evaluate the trajectory of pain phenotype and biomarkers to understand better the underlying mechanism of pain in older adults with heart failure. The study will be one of the first to systematically examine the potential impact of gut microbiota and inflammatory cytokines on pain in patients with HF. New pharmacologic targets for the management of pain may be revealed from data analysis.

Due to my research interest in and potential for pain and symptom management among older adults with cancer and cardiovascular disease, I was selected as a “rising star” (the only nurse scientist) to participate in the 2022 U13 Bench-to-Bedside Conference Series, Cancer, and Cardiovascular Disease, Supported by National Institute on Aging, American Geriatrics Society and American College of Cardiology. Developing and implementing non-pharmacological interventions for improving symptom management and cardiovascular health among older adults with cancer is also one of my career goals.

My current research project aims to conduct a pilot randomized controlled trial to test the feasibility and impact of meditation for managing chronic low back pain among older adults and identify the mechanisms of meditation intervention on the Gut-Brain Axis (GBA). Preliminary data generated from this project will lead to an R01 application to deliver the meditation intervention by conducting a late-stage randomized controlled trial.

In addition to my research activities, I have strengthened my leadership and community engagement skills. I currently serve on the journal “Geriatric Nursing” editorial board. Overall, my valuable research training and activities will provide me with the tools for a successful research program in pain and symptom management among older adults. Being an affiliate of ISL will allow me to engage in multidisciplinary training and scholarships for healthy aging, pave my way to success and contribute to the mission of ISL.