Investigator:	**Jeanie Park** Phone: (404) 321-6111 ext. 207070 Email: jeanie.park@emory.edu
Primary Research Interest:	Internal Medicine
Description of Research:	Dr. Park's human physiology research is focused on the regulation of the sympathetic nervous system in patients at high cardiovascular risk, particularly those with chronic kidney disease, hypertension, smokers, and stress disorders such as post-traumatic stress disorder (PTSD). Current studies in the lab include: 1) the exercise pressor reflex, functional sympatholysis, alpha-1 adrenergic sensitivity, exercise training, and other novel therapies in patients with chronic kidney disease; 2) sympathetic and hemodynamic reactivity during mental stress, arterial baroreflex function, heart rate variability, inflammatory markers, angiotensin receptor blockade and device guided slow breathing in patients with PTSD. The lab is funded by NIH, VA Merit, and foundation awards.
Relevance to VA:	Chronic renal failure (CRF) is highly prevalent amongst the aging veteran population because of the high preponderance of diabetes, hypertension, and vascular disease. The study of exercise-induced sympathetic and vascular responses will give insight into mechanisms of baseline physiologic derangements that contribute to increased cardiovascular (CV) risk in this population, as well as help develop therapeutic targets to improve physical functioning, and ultimately improve quality of life and mortality. New therapies to improve BP and endothelial function are urgently needed in CRF, and BH4 may be one such novel therapeutic agent that has potential to impact exercise capacity, as well as CV morbidity and mortality. This translational research could impact our mechanistic understanding and therapeutic approach to CV risk in veterans with renal disease. An additional focus in the lab is to understand mechanisms contributing to increased cardiovascular risk in Veterans with post-traumatic stress disorder (PTSD). Veterans with PTSD are significantly higher risk of developing hypertension and cardiovascular disease, but the mechanisms are unknown. Our lab investigates the potential role of abnormal autonomic, hemodynamic, and regulatory responses during mental stress, as well as interventions that could ameliorate abnormal responses in PTSD patients.