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Primary Research Interest:	Dietetics
Description of Research:	Strokes are very common in the United States and occur more in the elderly. The number of strokes is likely to double in the next 50 years. Individuals who have a stroke are at a greater risk for a second stroke. Many stroke survivors are sedentary and have a poor dietary intake, which results in abnormalities in fuel utilization (eg carbohydrate versus fat). This study will examine the effects of dietary modification and treadmill training on fuel utilization and physical function. We will study the interactions of the paretic and non-paretic skeletal muscle oxidative stress in hemiparetic stroke patients and the ability to employ dietary modification and exercise training to reverse these abnormalities in this ethnically diverse population.
Relevance to VA:	Identification of effective therapies that improve metabolism and reduce the risk for stroke recurrence is important for Veterans given the adverse health effects and comorbidities associated stroke survivorship. The proposed study is designed to provide insight into the biological underpinnings and molecular mechanisms for improved energy expenditure and reduced oxidative stress that occurs from regular aerobic exercise and nutritional modification in high-risk Veteran stroke survivors.