I. General Research Interest
A. Pediatric Chronic Illness, Youth and Parental Adaptation
   1. Coping and family resilience
   2. Parental and youth quality of life
   3. Family management

B. Pediatric Diabetes, Type 1 or Type 2, and Pediatric Obesity
   1. Cardiovascular risks
   2. Diet and physical activity
   3. Cardiovascular fitness
   4. Cardiovascular autonomic measurement; heart rate variability
   5. Inflammatory markers
   6. Community-based personalized exercise intervention

C. mHealth Approaches for Pediatric Research
   1. Internet-based intervention
   2. Text messaging intervention

D. Transitional Care for Youth with Chronic Illness
   1. Strategies for planning care provision to adult health providers

II. Current Research
A. Differences in Heart Rate Variability and Sleep in African American Adolescent Females versus Males with Type 2 Diabetes
B. Social, Behavioral and Biological Determinants of Cardiometabolic Risks in African American Adolescents
C. An Integrative Review on Preconception Counseling in Overweight and Obese Women of Reproductive Age
D. Development of Early vs. Late Onset Type 2 Diabetes in the Coronary Artery Risk Development in the Young Adults CARDIA Cohort
E. Development of Diabetes Complications in Persons with Early Versus Late Onset Type 2 Diabetes: Coronary Artery Risk Development in Young Adults CARDIA Cohort
F. Web-based Modules to Support Young Children Who Require Medical Technology and Their Caregivers
   1. Creating Opportunities for Personal Empowerment: Symptom and Technology Management Resources (COPE-STAR)
III. **Research Expertise**

A. Concept analysis
B. Intervention fidelity assessment
C. Study design and critique – expertise as NIH grant reviewer for R series grants, K awards, P50 and U54 grant applications
D. Integrative reviews
E. Quantitative and qualitative methods and analysis
F. Accelerometry measurement for physical activity
G. Twenty-four hour heart rate variability analysis using power spectral and time domain analysis