

# 第243回スポーツサイエンス研究会

日時 2024年12月16日(月) 17:00 より

場所 早稲田大学所沢キャンパス 100号館 第一会議室

**演題** Indices of Peripheral and Cerebral Vascular Health and Neurocognitive Function in Non-Hispanic Black Individuals

**演者** Prof. Robert Matthew Brothers (The University of Texas at Arlington)

## 抄録

The impact of health disparities has gained recognition as a significant barrier to healthy quality of life across populations. For the last the 14+ years Dr. Brothers' laboratory has primarily focused on the investigation of mechanisms of health disparities in the non-Hispanic Black population (Black) who are at a greater risk for cardiovascular, metabolic, and cerebrovascular diseases relative to other populations. More recently, his research has focused uniquely on the Black female population. This is critical because while previous research has provided insight into mechanisms of elevated CVD in the Black population this work has been predominately conducted in men despite disease risk/prevalence being equally as elevated in Black women. Lastly, most recently he has begun to examine the link between social determinants of health and peripheral/cerebral vascular dysfunction in this population. This represents a major advancement in this field as historically, despite their well-documented contribution to elevated disease risk, these upstream social factors are often not incorporated into research studies that are systematically designed to tease out integrative physiological mechanisms of disease risk. Likewise, integrative physiological approaches to systematically tease out mechanisms are often not incorporated into studies designed around assessing the role of social determinants of health in disease risk/prevalence. This talk will incorporate key findings and proposed directions forward in this important area of scientific research.

## Bio

Dr. Brothers is a Professor and Associate Chair of Graduate Programs in Exercise Science in the Department of Kinesiology at the University of Texas at Arlington. Dr. Brothers received his BS degree in Biology from Austin College in Sherman, TX. He then received his PhD from the University of North Texas Health Science Center in Fort Worth, TX where he worked in the laboratory of Dr. Peter B. Raven. He then completed an NIH funded post-doctoral fellowship working in the laboratory of Dr. Craig Crandall at the University of Texas Southwestern Medical Center with joint appointment in the Institute of Exercise and Environmental Medicine in Dallas, TX. His area of research expertise includes mechanistic assessment of cardiovascular and cerebral vascular function in healthy individuals as well as in populations with elevated risk for various cardiovascular, metabolic, and cerebrovascular/neurocognitive diseases or conditions. Furthermore, his research is interested in the impact of various modifiable lifestyle behaviors/interventions, i.e. exercise, antioxidant supplementation, dietary behaviors etc. on these aforementioned indices of vascular health. He has 90+ peer-reviewed manuscript publications in leading scientific journals as well as numerous awards, recognitions, and invited seminars at conferences and organizations. His work has been constantly funded, for the last 14 years from various organizations including the National Institute of Health, the American Heart Association, and numerous industry partners.

