

Kinesiology and Health student wins MARC-ACSM Award!



The Mid-Atlantic Regional Chapter of the American College of Sports Medicine (MARC-ACSM) held its 43rd annual meeting on Friday, November 6, 2020. **Nathan Stewart, a 2nd year Master's Student in the Kinesiology and Applied Physiology Graduate program within the Department of Kinesiology and Health, was awarded 1st place in the Master's Student Competition.** His work was entitled: *Nocturnal Blood Pressure Dipping Relates to Insulin Sensitivity but not Vascular Function in Metabolic Syndrome*. The co-authors were Dr. Emily Heiston, Ms. Stephanie Miller and Dr. Steven Malin.

The overall purpose was to better understand mechanisms that control blood pressure regulation in adults with obesity. While most are familiar with having their blood pressure taken when visiting the doctor's office during the daytime, less are aware of what happens to their blood pressure at night or while they sleep. This is clinically important since blood pressure reductions while asleep, compared to daytime, is an independent factor promoting cardiovascular health. To understand better how blood pressure "dips" at night, people with obesity and metabolic syndrome were recruited. All participants underwent a series of tests that included measuring: aerobic fitness, body fatness, blood lipids and glucose, endothelial function, metabolic insulin sensitivity as well as 24-hour blood pressure. The results overall suggest that metabolic insulin sensitivity is an important piece to regulating nocturnal blood pressure. While these are preliminary findings, this work may lead to improved understandings for public health recommendations on how to maximize blood pressure treatment. Additional work is underway to confirm and address control of blood pressure in the department.