

School of Exercise and Nutritional Sciences

Faculty Areas of Expertise/Research

Professors

Baweja, Harsimran – Associate Professor

Understanding the neural mechanisms underlying movement lateralization, movement control and learning in young and older adults and persons with movement disorders arising from nervous system pathology; and translating these mechanisms into innovative and meaningful interventions and rehabilitation paradigms.

Bhutani, Surabhi – Assistant Professor

Understanding how sensory, metabolic, and neural signals integrate to influence ingestive behavior, weight gain, and chronic disease risk factors; role of olfactory sensory model on appetite and food choices; dietary interventions for weight gain prevention.

Buono, Mike - Professor

Environmental physiology – the effect of altitude and heat on athletic performance.

Cannon, Daniel – Associate Professor

Mechanisms of skeletal muscle dysfunction and exercise intolerance in humans and animal models of chronic cardiopulmonary diseases (COPD, pulmonary arterial hypertension, chronic heart failure).

Domingo, Antoinette - Associate Professor

Locomotion biomechanics, motor learning and control in intact and disordered nervous systems; Optimizing the use of physical guidance and rehabilitation robotics to restore gait, balance and health in individuals with neurological injury; adapted athletics.

Gombatto, Sara - Associate Professor

Mechanisms underlying musculoskeletal pain problems, with the goal of developing more targeted interventions. Emphasis on posture and movement factors associated with low back pain and lower extremity injury in the general population and in elite athletes; influence of psychological factors such as fear of movement.

Hooshmand, Shirin - Associate Professor

Improve age-related changes in musculoskeletal health (bone, joint, and muscle), cardiovascular dysfunction and impairments in cognitive function that occur with physiological aging through nutrition interventions.

Hong, Mee Young - Professor

Effect of diets, functional foods and phytochemicals on risk factors of cardiovascular disease and colon cancer prevention; Nutritional status across the lifespan, in population ranging from teenagers to frail older adult.

Kahan, David - Professor

Relationships among religion, religiosity, acculturation and physical activity in minority youth. Physical activity epidemiology and interventions among preschoolers. Policies influencing health behaviors.

Kern, Mark - Professor

The impact of diet and exercise on metabolism, appetite and weight regulation, risk factors for chronic diseases, and exercise performance.

Kressler, Jochen – Associate Professor

Metabolic responses to exercise and nutrition interventions with focus on secondary complications in spinal cord injury. Exercise modalities of interest include upper limb exercise, functional electrical stimulation exercise and exoskeleton assisted exercise.

Levy, Susan - Professor

Motivation for physical activity; Role of self-perceptions in physical activity/exercise behavior; Evaluation of physical activity interventions in special populations (e.g., post-bariatric surgery patients, individuals w/ arthritis) and older adults.

Lebsack, Denise - Associate Professor

Athletic training; Prevention; Management and rehabilitation of athletic injuries.

Liu, Changqi – Assistant Professor

Food allergen purification, characterization, and detection; nutritional and physicochemical properties of underutilized and novel food sources; and potential health benefits of functional food components.

Mahar, Matt – Professor

Promotion and measurement of physical activity and fitness in children and youth; identification of valid and reliable youth fitness testing methods; analysis of the effects of classroom-based physical activity programs on physical activity and on-task behavior.

Maluf, Katrina – Professor

Neurophysiological and biomechanical mechanisms of stress-related chronic pain conditions; Optimizing physical therapy interventions for the prevention and treatment of chronic musculoskeletal pain.

Amanda McClain – Assistant Professor

Social, cultural, and life course influences on food choice, food provisioning, diet quality, and cardiometabolic health in low-income and Hispanic/Latino populations; causes and consequences of food insecurity; the role of food assistance programs in promoting food security, diet, and health; community-based and mixed-method research approaches; behavior-change interventions.

O'Connor, Shawn – Assistant Professor

Health sensing technologies and rehabilitation strategies for improved recovery after neuromuscular injury or decline. Development of muscle and metabolic health sensing devices. Dynamics and control of locomotion. Mechanisms of fall risk in older adults. Use of computational models and experimental devices (e.g. virtual reality) for perturbing and assessing gait function.

Post, Eric – Assistant Professor

Effects of early sport specialization on overuse injury and health outcomes in youth athletes; youth sports injury epidemiology; barriers to youth sport participation; parent and coach attitudes and beliefs regarding youth sport participation and specialization.

Rosenthal, Michael – Assistant Professor

Measurement assessment and testing following neuromusculoskeletal injury (ACL injury, etc.), human performance optimization, differential diagnosis in orthopedics and sports physical therapy, electrophysiological testing and imaging of musculoskeletal injuries.

Rauh, Mitchell - Professor

Running Injuries (emphasis in high school populations), Female Athlete Triad (emphasis in high school populations), Sports Injury Epidemiology (emphasis in high school populations), Sports Medicine/Orthopedics, Stress Fracture, Sports specialization in youth sports, Sudden cardiac death and other cardiac conditions in high school athletes, Evidence-Based Practice in Physical Therapy.

Tuttle, Lori - Associate Professor

Aging, metabolism and women's health. Particular interest in the area of female pelvic floor dysfunction and the role of skeletal muscle architecture and surrounding structures on pelvic floor function and the role of rehabilitation on these structures. Fecal and anal dysfunction and rehabilitation.