

FAU Department of Exercise Science and Health Promotion's Faculty Interests
561-297-2938, ESHPinfo@fau.edu

Michael Whitehurst, Ed.D., Department Chair. My research agenda over the years has spanned isokinetics to aging. While my earlier work was largely applied and included healthy and physically limited individuals, more recent research has focused on molecular changes in muscle following high intensity exercise in older adults as well as inflammatory responses to acute muscle damaging exercise protocols in younger persons. Ultimately, our laboratory may establish links between selected human molecular responses/adaptations to very rigorous exercise, particularly among older individuals.

Chris Boerum, M.S. My current research interests/goals are to examine the efficacy of traditionally sport/exercise based supplements (Creatine, BCAA's, etc.) on a tactical population such as police and military. I am also working to establish relationships with the local tactical population that may further our research and educational capabilities in the tactical strength & conditioning area.

Elise Eifert, Ph.D. My research agenda focuses on how individuals transition from their former role into the family caregiver role, and how that transition effects identity and the use of home and community based services.

B. Sue Graves, Ed.D. My research interests include exercise and the older adult issues (supplementation—creatine/beta alanine), tobacco use and adolescents, concussion (FAU football players), and EMG activity while using commercially-available abdominal equipment. I have conducted studies with women and resistance training, and female sport divers.

Michael Hall, Ph.D. Current research interests center around group level measurement of attitude towards health behaviors. This includes development of instruments to measure "health climate" within population studies. Once data is collected, factor analysis techniques are incorporated to determine underlying motivators in order to understand why groups engage in various lifestyle health behaviors.

Chung-Jung Huang, Ph.D. My primary research has been focused on the psychoneuroimmunology of health and human performance. Most recently, I have been examining the mechanisms related to chronic stress of obesity and how acute psychological stress may activate mechanisms related to inflammation. In addition, I am currently conducting a research project to examine the effects of chitin (a natural product) on immune regulation in obese individual, and hope the findings would help develop an effective therapy for the prevention and treatment of obesity-related diseases.

Tina Penhollow, Ph.D. My major research interests include aging, physical activity, sexual health, and college student health-risk behaviors. I have conducted several studies on the impact of religiosity on the sexual behaviors of college students. I have investigated Federal involvement as well as measurement and design issues in sexuality and abstinence education. I have also examined quality of life, aging, sexual health, and exercise/fitness among residents of an active retirement community. I intend to extend my research relative to these and other health related areas.

Ian Pyka, M.S. My passion centers on advancing athletic performance through strength and conditioning, especially when it relates to power development. My secondary interest deals with the effects of sensory deprivation on recovery, training, performance, health risk factors, sleep, etc.

Robert Zoeller, Ph.D. The current focus of my research is allometric scaling of muscular strength data derived from the study *Functional SNP's (single nucleotide polymorphisms) Associated with Muscle Size and Strength*. This NIH-funded, international, multi-site project seeks to identify potential genetic determinants of muscle size and strength in response to weight training. I also have conducted research on human performance in athletes (cycling, rowing, swimming), as well as clinical subpopulations such as the spinal cord injured and cardiopulmonary patients. Research has focused on lactate metabolism (lactate threshold, post-exercise blood lactate clearance, etc.).

Michael Zourdos, Ph.D. My research agenda focuses primarily on enhancing human performance in athletes. This encompasses optimizing periodization and program design methods to maximize strength and hypertrophy, examining skeletal muscle adaptations to resistance training, analyzing appropriate warm-up and preparation protocols to resistance and endurance training, as well as investigating sport nutrition recommendations relating to protein metabolism and anabolism. Additionally, my research aims to examine the mechanistic factors behind the performance outcomes via hormonal and gene responses to training. Ultimately, this research aims to bridge the gap between science and application to make significant and realistic alterations to current athlete training practices in regards to program design.