

*Vision: Inspire health science professionals to passionately pursue excellence to help athletes reach peak performance.*

*Research Foci: (1) Low energy availability (LEA) and relative energy deficiency in sport (RED-S), (2) Overtraining syndrome, (3) Interdisciplinary, evidence-based approaches.*

## SCHOLARSHIP

### 1. Relative Energy Deficiency in Sport (RED-S) in Male Athletes

- Newsletter-style article (November 2024)
- Addresses the impact of RED-S on the body composition, performance, and health of male athletes engaged in high-energy expenditure sports.

### 2. Low Energy Availability (LEA) in Male Athletes: A Review of the Literature

- Published in The Sport Journal (October 2024)
- Aims to evaluate the literature on the relationship between LEA and signs or symptoms of male athlete triad and RED-S to establish a defined low energy availability threshold specific to male athletes engaged in high-energy expenditure sports.

### 3. Blood Biomarkers of Overtraining Syndrome

- Published in Personal Training Quarterly (March 2025)
- Discusses the importance of blood biomarker monitoring as a vital tool in OTS diagnostics and recovery.

## TEACHING

### 1. Relative Energy Deficiency in Sport (RED-S): Psychological and Physiological Impacts on Athlete Health & Performance

- The teaching event aimed to inspire future health science professionals, emphasizing the importance of athlete safety and performance through RED-S prevention.
- Audience: PennWest EXSC 7130 graduate students
- Format: One-hour, virtual, synchronous, lecture-style presentation

### 2. Overtraining Syndrome: A Multifaceted Health and Performance Phenomenon

- The teaching event aimed to educate future sports managers students on overtraining syndrome and inspire them to help athletes reach peak performance effectively and safely.
- Audience: PennWest SPT 300 undergraduate students
- Format: One-hour, virtual, synchronous, lecture-style presentation

### 3. Interdisciplinary Collaboration in Sports Performance

- The teaching event aimed to immerse graduate students in interdisciplinary collaboration within the context of sports performance.
- Audience: PennWest EXSC 7500 graduate students
- Format: Five-week, virtual, asynchronous learning modules including educational videos and online discussion boards

*Principles: (1) Provide quality athlete care, (2) Foster healthy and passionate learning environments for current and future health science professionals, (3) Expand the field of human performance.*

## LEADERSHIP

### 1. Relative Energy Deficiency in Military (RED-M): A Multidisciplinary Approach to Awareness & Prevention (MAAP)

- Assemble a multidisciplinary team (MDT) to develop a concept map on RED-M to spread awareness, improve preventative methods, and establish multidisciplinary approaches among human performance specialists working with U.S. Military Service Members.

### 2. Interdisciplinary Collaboration (IC) in Sports Performance Panel Discussion

- Assemble a multidisciplinary panel of speakers for the National Exercise Trainer's Association (NETA) 2025 Virtual Fit Fest. The panel discussion aimed to help the attendees understand the difference between multidisciplinary and IC, the benefits of IC, three methods for implementing IC in their practice, and two barriers to IC and how to overcome them.

### 3. Evidence-Based Leadership (EBL): Defining and Advancing Leadership in Human Performance Science

- Interdisciplinary collaboration aimed at defining EBL, determining three best practices related to EBL, establishing barriers to implementing EBL, and examining the future of EBL.