# College of Education and Human Development



# **Shane Caswell, PhD**

Professor, Division of Health and Human Performance Executive Director, SMART Lab

#### **Education**

PhD, Athletic Training, Ohio University

# **Key Interests**

Sports Medicine | Epidemiology | Sport-Related Concussion | Biomechanics | Video Analysis | Wearable Sensors | Motion Analysis | Youth | Pediatrics | Injury Prevention

#### CONTACT

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#### **SELECT PUBLICATIONS**

- S. V. Caswell et al., Characterizing head impacts in boys' high school varsity lacrosse players. Orthopedic Journal Sports Medicine (In press).
- Z. Y. Kerr et al., Concussion rates in U.S. middle school athletes, 2015-2016 school year. American Journal of Preventive Medicine 53(6), 914-918 (2017).
- S. V. Caswell et al., Characterizing verified head impacts in high school girls' lacrosse. American Journal Sports Medicine 45 (14), 3374-3381 (2017).
- N. Cortes et al., Video analysis verification of head impact events measured by wearable sensors. American Journal Sports Medicine 45(10), 2379-2387 (2017).

### **Research Focus**

I conduct research to prevent injury. My research focuses on the prevention, recognition, and management of concussion and other injuries among youth and scholastic athletes. Ultimately, I hope our efforts improve safety, prevent injury, and improve health care for youth and scholastic athletes.

## **Current Projects**

- Middle School ACHIEVES Project (AdvanCing Healthcare Initiatives for undErserVEd Students), strives to assist public school systems to provide free access to onsite sport health care and improve sport safety through education, injury surveillance, and evidence-based interventions. (Funded by Potomac Health Foundation and Prince William County Public Schools)
- Virginia Concussion Initiative assists schools with implementing best practices for concussion.
  (Funded by the Center for Disease Control and the Virginia Department of Health)
- Head Impacts in Lacrosse aims to understand the frequency and magnitude of head impacts in boys' and girls' youth and high school lacrosse. (Funded by US Lacrosse)
- Lax-Stick Project studies the epidemiology of youth lacrosse injuries. (Funded by US Lacrosse)
- The discovery of salivary biomarkers of concussion and repetitive head trauma.