

Katherine Curtis
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EDUCATION

- Ph.D. in Kinesiology, Michigan State University
 - 2024 - Present
- Masters in Kinesiology, Michigan State University
 - 2022-2024
- Bachelors in Exercise Science, Winona State University
 - 2018-2022

UNIVERSITY INVOLVEMENT

- **Sports Science Graduate Assistant**
 - **Coordinator and Data Collector**
 - Coordinated the use of Catapult for my assigned teams.
 - Collected and analyzed data from training sessions and games.
 - Created training programs and calculated position normative values.
 - Communicated and translated data to coaching staff and athletic trainers.
 - **Athlete Testing**
 - Utilized VALD technologies to test athlete's hamstring, quads, glutes, and shoulders.
 - Analyzed the data and utilized PowerBi to create reports for strength and conditioning. These reports helped inform the strength and conditioning programs as well as injured athletes returning to sport.
 - **Assigned Teams**
 - Michigan State Volleyball
 - Michigan State Field Hockey
 - Michigan State Women's Soccer
 - Michigan State Men's Soccer
 - Michigan State Football
- **Teaching Assistant**
 - **Applied Human Anatomy SS23**
 - In addition to attending every single lecture, I facilitated exam review sessions, proctored and graded exams. Guest lectured on muscle physiology and the digestive system.
 - **Exercise Physiology Lab SS25**
 - Taught two sections of Exercise Physiology Lab
 - Guided students through a variety of exercise tests and taught students how to calculate and interpret results.
 - Created additional study materials for exams.
 - Proctored and graded exams for both lecture and lab.
 - **Introduction to Exercise Physiology Lab FS25 and SS26**
 - Taught a total of six sections (~30 students a section) across the span of two semesters.
 - Guided students through a variety of exercise tests and taught students how to calculate and interpret results.
 - Proctored and graded exams for both lecture and lab.
 - **Principles of Biobehavioral Health Lab FS25**
 - Taught two sections of laboratory discussions.
 - Instructed on basic principles, concepts and issues surrounding the interaction among biological, behavioral, psychological, sociocultural and environmental variables that influence health.
 - Hosted office hours and proctored exams.
- **Kinesiology Graduate Student Organization (KGSO)**
 - **Master's Student Liasson**

- Provided guidance and facilitated opportunities for master's students to improve their experience at Michigan State University.
- **KGSO Chronicle Editor**
 - The KGSO Chronicle is a graduate student newsletter that features the research, professional, teaching, service and diversity, equity and inclusion accomplishments of the students in the Kinesiology Department.
 - I provided multiple rounds of feedback prior to its' distribution.
 - KGSO Chronicle Professional Feature
 - Invited to write a piece on my experiences working in B10 athletics as a Sports Science graduate assistant.
- **Exercise is Medicine Graduate Student Representative**
 - Act as a conduit between KGSO and Exercise is Medicine on Campus.
 - Collaborated and volunteers at Michigan State's Healthy Homecoming Walk.
- **Diversity and Equity Committee Member**
 - Contribute and facilitate conversations and activities that educate graduate students on the various topics in diversity, equity, and inclusion.
- **Panel member for "Navigating your Master's degree"**
 - Provided information on how to be successful in the pursuit of a master's degree. I was the panel's expert for the students that are pursuing the thesis route.
- **College of Education Student Advisory Committee**
 - Represent the interests of graduate students while working with the Dean and Dean Provost for the College of Education.
- **College of Education Graduate Curriculum Committee Graduate Student Representative**
 - The Curriculum Committee reviews and evaluates all changes in course, curricula and degree requirements. I serve as a non-voting member that represents the interests of the graduate students.

PROFESSIONAL INVOLVEMENT

- **American College of Sports Medicine Student Affairs Committee**
 - Served to meet the needs of the student constituency of ACSM.
 - Attended regular meetings and participated in organizing student programming, networking, membership/meeting discounts and other benefits.
- **American College of Sports Medicine, Northland Region Student Representative**
 - Represented Northland ACSM students at monthly meetings.
 - Wrote an annual newsletter that was distributed to all Northland ACSM members.
- **Student Volunteer at National Conference of American College of Sports Medicine**
 - Distributed materials that promoted student engagement.
 - Facilitated the Student Lounge and encouraged student involvement with the experts.
- **Nominated for American College of Sports Medicine Board of Trustees Graduate Student Representative**
- **ACSM Exercise is Medicine on Campus**
 - As the graduate student representative I participated in the planning of Michigan State University's Healthy Homecoming Walk.

RESEARCH EXPERIENCE

- **Presentations**
 - Curtis, K., Hamil, J., Burghardt, W & Pfeiffer, K. (2022, October) Longitudinal Effect of Athlete Workload on Countermovement Jump Characteristics [Poster] 2022 Midwest American College of Sports Medicine Annual Meeting, Indianapolis, IN, United States
 - Curtis, K., Hamil, J., Burghardt, W & Pfeiffer, K. (2023, March) Longitudinal Effect of Athlete Workload on Countermovement Jump Characteristics [Poster] 2023 Northland American College of Sports Medicine Annual Meeting, Sioux Falls, ND, United States

- Curtis, K., Hamil, J., Burghardt, W & Pfeiffer, K. (2023, March) Longitudinal Effect of Athlete Workload on Countermovement Jump Characteristics [Oral Presentation] 2023 Northland American College of Sports Medicine Annual Meeting, Sioux Falls, ND, United States
 - Outstanding Masters Oral Presentation
- Curtis, K., Hamil, J., Burghardt, W & Pfeiffer, K. (2023, June) Longitudinal Effect of Athlete Workload on Countermovement Jump Characteristics [Poster] 2023 National American College of Sports Medicine Annual Meeting, Denver, CO United States
- Curtis, K., Burghardt, W & Pfeiffer, K. (2024, October) Reliability and Validity of the Heart Rate Monitor Component of a Sport Bra [Oral Presentation] 2024 Midwest American College of Sports Medicine Annual Meeting, Grand Rapids, MI, United States
- Curtis, K., Martel, K., Deffenbach, K., Pfeiffer, A. K. (2025, October) The Effect of Bio-banding on Within Group Variance in Youth USA Hockey Players [Poster Presentation] 2025 Midwest American College of Sports Medicine Annual Meeting, Grand Rapids, MI, United States
 - Outstanding Doctoral Poster Presentation
- **Research Roles**
 - **Research Assistant for Children's Health Activity Motor Program (CHAMP)**
 - Collected anthropometrics, perceived motor competencies, conducted the TGMD-3 on preschoolers in after school programs.
 - Spliced video footage of participant's TGMD-3 for data analysis.
 - **Research Assistant for the Institute for the Study of Youth Sport**
 - Contributed to the creation of educational resources for coaches.
 - **Nike Research Labs**
 - Collected and reported MSU Volleyball data for Nike. The data informed the investigation and construction of Future Nike volleyball shoes.
 - **Human Energy Research Lab**
 - Utilized a DXA to collect body composition of B10 football players.
 - Conducted VO₂ max tests on multiple Greek adolescent basketball players.
 - **USA Hockey**
 - Collected anthropometrics and survey data on youth USA Hockey athletes participating in a Bio-banding study.
- **Publications in Review**
 - Montoye, A., Burghardt, P. W, Slater, T., Curtis, K., Melcher, R., Pfeiffer, A. P. "The relationship between lower-body muscular power and running performance in Division I American football players"
 - Montoye, A., Burghardt, P. W, Slater, T., Curtis, K., Melcher, R., Pfeiffer, A. P. "Comparisons of lower-body muscular function anthropometrics, and body composition between Division I and III collegiate soccer players"

INTERNAL FUNDING

- **Professional development**
 - Received a total of \$600 to attend the annual National American College of Sports Medicine
- **Shirley Cook Grant**
 - Received a total of \$900 to pursue certifications and attend conferences.
- **Summer Research Development Fellowship SS25**
 - Received a total of 7,000.
 - Enhanced knowledge of data collection techniques utilized in bio-banding research.
 - Wrote a literature review on bio-banding research.
- **College of education endowment FS25**
 - Received a total of 4,500 to support me in my academic pursuits.
- **Summer Research Fellowship SS26**
 - Received a total of 7,000.
 - I will travel to multiple data collection sites across the United States for bio-banding research.

- The research project will be the first to include female athletes in bio-banding research.

EXTERNAL FUNDING

- **Midwest ACSM Outstanding Doctoral Poster presentation**
 - Received \$150 for my poster “The Effect of Biobanding on Within-group Variance of Youth USA Hockey players”
- **National ACSM Medicine and Science in Team Sports Special Interest Group**
 - Received a total of \$250 to present my research at the Medicine and Science special interest group at national ACSM

AWARDS

- **Michigan State University Outstanding Master’s Student Award**
 - Recognized by Michigan State University Kinesiology department for my academic and research efforts as a master’s student.

MENTORING

- **Undergraduate Students**
 - **Melissa Murray**
 - Sports Science internship mentor
 - **Alex Causaj**
 - Graduate teaching assistant mentor
 - **Megan Blake**
 - Undergraduate research mentor
 - Megan won Outstanding undergraduate poster presentation at Midwest ACSM 2025.
- **Graduate Students**
 - **Danyle Courtley**
 - Sports Science internship mentor
 - **Rocky Morabito**
 - Graduate student mentor
 - **River Melcher**
 - Graduate student mentor