

DEPARTMENT OF REHABILITATION, EXERCISE AND NUTRITION, SCIENCES  
COLLEGE OF ALLIED HEALTH

## SUMMER RESEARCH OPPORTUNITIES FOR UNDERGRADUATE WOMEN

APPLICATION DEADLINE: 03/01/2018

PROJECT TITLE: Women Moving Women

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**Project Description**

1. Area of the research: Field techniques and assessments and human body functional movement exercises and biomechanics for youth female athletes. Youth sport development and safety.
2. Research tasks the student will be performing: For the past five years I have been able to create research teams of undergraduate, graduate and high school female students (Women Exercise Initiative, aka WEI). The teams have generally consisted of two to four members. The focus of the teams has been to foster faculty and peer mentoring activities while performing scientific research predominately on females, ie., graduate students mentoring undergraduate or classmates mentoring each other, etc. For the past two summers I have directed a 8-12 week movement camp which focused on youth female athletes and helping them develop correct and safe movement patterns for sport. I would like to continue my movement camps this summer with the support of a team of one or two college females or one or two high school female students to assist me with coordinating the movement field assessments and corrective interventions for biomechanical flaws in the youth athletes. Primarily the students will learn how to establish data collection, perform movement assessments and movement interventions, and direct progression exercises for specific movement deficits.
3. Training that the mentor will provide to the WISE student: Students will receive biomechanical knowledge and skill sets for field assessments and interventions targeting movement dysfunctions specific to youth and female athletes. Progressions for biomechanical and maturity development in movement

will be taught to the students. Students will also gain experience in managing excel data sheets and minor graph techniques.

4. Specific requirements, if any, that the mentor expects the student to meet. Students will need to have a scientific background in basic anatomy, basic biomechanics and exercise. I would anticipate the students to be active participants in mentoring and learning. Further, By the end of the summer camp I would expect the collegiate students to be proficient with computer skills for data collection, analysis, and video software to produce a student poster or presentation for a local or department presentation.