UNIVERSITY OF MARYLAND

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Grand Challenges: Increasing Participation of Minorities and Women In STEM Through Sports Performance Analytics Research

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Grant Type: **Individual Project Grant**
Topics: **Social Justice and STEM Education**
College Represented: **CMNS**

News

Grand Challenges Project Seeks to Increase Participation of Underrepresented Students in STEM through Sports Analytics Research

September 30, 2024

Mobile Math: Connecting Students to STEM Through Sports

June 14, 2023

Get Involved

Summary:

One of the current Grand Challenges our nation faces is the educational disparity present in Science, Technology, Engineering, and Mathematics (STEM), wherein underrepresented minority students and women are significantly less likely to be retained in STEM majors. Due to under-privileged backgrounds, hardships caused by generations of discrimination, and current racial segregation patterns in schools, the pathways to STEM education are far fewer and more difficult for many of the nation's children. The project will create an enrichment outreach course for secondary-school students (ages 14-18), as well as a mobile version of the existing mathematical sports performance research laboratory that can be easily transported to schools in the DMV area. The project will focus on secondary schools in the DMV area with disproportionate numbers of underrepresented minorities. The course will be offered after school hours in collaboration with the schools and will consist of a series of bimonthly experiential learning activities where students will learn hands-on about sports performance analytics and have the opportunity to interact with state-of-the-art software and equipment used and developed in the mathematical sports performance research laboratory. Students from area schools will have the opportunity to interact with graduate and undergraduate researchers in the lab. The course will showcase to these students the relevance of STEM to their lives, and the empowerment STEM offers with respect to future potential career paths.

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