MUREP Precollege Summer Institute (PSI) - (MUREP PSI)

Title: Tuskegee's summer institute for Increasing diversity among incoming STEM undergraduates

Institution: Tuskegee University

City/State: Tuskegee, AL

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Summary:

We propose the creation of a Pre-college Summer Institute (PSI) in the college of arts and sciences (CAS) at Tuskegee University (TU) titled "Tuskegee's Summer Institute for Increasing Diversity among Incoming STEM Undergraduates". The focus of the project will be preparation for college and retention in the Science, Technology, Engineering, and Mathematics (STEM) disciplines, in particular Biology, Chemistry, Physics, and Mathematics (BCPM).

The PSI project will recruit talented high school seniors, with a focus on underrepresented minority first-time full-time majors in BCMP including women and girls, and persons with disabilities, to participate in a six-week-long in-person program. During this PSI, students will engage in NASA-based authentic STEM learning activities and interact with STEM professionals on a weekly basis. The program will equip prospective college students with strong foundational skills in arithmetic, calculus, algebra, the scientific method, unit conversions, and good study habits: skills that promote persistence in college and are essential to student success in the STEM disciplines. The interventions specified within this proposal have the potential to increase the number of underrepresented minorities, especially females, that enroll in the BCMP STEM disciplines and eventually enter the STEM workforce or graduate school.