Project Summary

The future of the country depends on its ability to boost student performance in science, technology, engineering, and mathematics (STEM). In order to succeed in a global economy, the US needs STEM-literate college graduates who can drive innovation, lead scientific research and discoveries, and become engaged, informed citizens (changetheequation.org). This means students need a much stronger foundation in STEM subject areas beginning in middle and high school. Teachers, in fact, have the most significant impact on student learning among school-based factors; therefore, it is critical that mathematics and science teachers have a strong academic background in the subjects they teach (changetheequation.org). We propose establishing the STEM EduGators: UF Noyce Scholars Program (Phase I) to increase the quantity and quality of STEM majors who enter the teaching profession. We will award a total of 50 $10,000 scholarships for undergraduate students entering the final student teaching experience and 90 $4950 summer internships over the five-year project. The Program will expand opportunities for 10 undergraduates per year who need financial assistance as they continue their major in a mathematics or science discipline while acquiring a minor in education. The Noyce Summer Internship Program provides 18 STEM EduGators with job opportunities in informal science education settings.

Intellectual Merit

The STEM EduGators Program offers scholarships for STEM majors who enter teaching through an innovative teacher preparation that includes early and intensive field experiences in high-needs settings under the guidance of successful mentor teachers, a rigorous pre-service teacher education curriculum, and an unprecedented discipline-specific induction support system for new teachers. UF Teach is designed to recruit, train and retain the very best students to become middle and high school mathematics and science teachers. This mission is accomplished through new partnerships between the University of Florida’s College of Liberal Arts and Sciences and College of Education and the Alachua County school district. The project, using both formative and summative assessment as well as an external evaluator, will track the Noyce scholars to determine outcomes of bringing STEM majors into teaching. The project includes research on and support for Noyce Scholars as they enter the teaching profession.

Broader Impacts

The Noyce Teacher Scholarship Program will operate as a component of the University of Florida UF Teach program. Over the course of the five-year grant, 50 Noyce Teacher Scholarships based on performance and financial need will be awarded. During their first four years of full-time teaching, the Noyce Scholars will impact and enhance learning for approximately 18,000 students. The first cohorts of UF Teach students recruited from fall 2009 through spring 2011 indicate that the program will significantly increase the number and diversity of STEM majors going into teaching. In addition to the scholarships, over the five-year duration of the grant 90 informal science education internships will be awarded. Each intern will reach out to hundreds of school children and citizens during the course of their summer internship.