PRESIDENT'S CORNER
MARK B. ROSENBERG

In November, I had the honor of making a presentation before the President's Council of Advisors on Science and Technology (PCAST) on how FIU is shaping the future of science, technology, engineering and mathematics education (STEM), particularly among underrepresented minorities. Just as geography is destiny, demographics are destiny. We at FIU are the shape of things to come for higher education in the United States. We have the distinction of being the university that graduates more Hispanics in STEM fields than any other university, and we are one of the top universities in graduating all minorities with STEM degrees. But our success goes beyond size. Our strategies hold great potential for addressing STEM challenges nationwide. In September we opened the STEM Transformation Institute, which brings together faculty from across the disciplines to build a nationally recognized STEM education research group to develop effective instructional techniques for the classroom.

FIU's innovations in STEM education are in line with recommendations made by PCAST. We established the Mastery Math Lab, a key component of FIU's five-year Title V project, "Opening the Gateways," a high-tech, high-touch approach to improving student performance. Our faculty members have led the way in peer-based learning. By recruiting students as learning assistants to work with their peers, we are creating a dynamic that is conducive to student success and modeling the kind of collaboration our future scientists, mathematicians, engineers and educators will engage in when they launch their careers.

We also are proud of our successful partnership with Miami-Dade County Public Schools. Through this innovative collaboration we provide professional development in STEM education techniques to more than 120 K-12 teachers, thereby impacting more than 20,000 high school students.

Our students are at the heart of our STEM success. One terrific example is Idayakis Rodriguez, a Ph.D. student pursuing physics education research. Soon after coming to FIU as an undergraduate, Idayakis met Professor Laird Kramer, founding director of the STEM Transformation Institute, where Idayakis began participating in research projects. That experience led to an invitation—one of only 550 extended to students around the world—to attend the Lindau Nobel Laureate meetings in Germany. Once she earns her Ph.D., she hopes to help others discover their passion for science.

Our country needs to keep graduating more STEM students like Idayakis. To do so, we need to create a nationwide network of STEM transformation institutes like ours at FIU; provide GI bill-like support for STEM teachers; and enlist the private sector in new and innovative ways. We need to support our students from pre-school through Ph.D. if we are to succeed in educating tomorrow's diverse workforce.

Go Panthers! Go FIU!