

HOWARD UNIVERSITY

College of Engineering, Architecture
and Computer Sciences
Office of the Dean

August 20, 2015

The Honorable Barack Obama
President of the United States
The White House
1600 Pennsylvania Avenue, N.W.
Washington, DC 20500


Dear President Obama:

We are excited to participate in **#uifresh (University Innovation Freshmen)**, an initiative spearheaded by the University Innovation Fellows program as a means to expand the participation and retention of incoming first-year STEM students. The initiative will help young students see problems as opportunities that should be approached with fresh eyes and an entrepreneurial mindset.

As part of the initiative, University Innovation Fellows and Pathways to Innovation Program teams will work to integrate entrepreneurship, design thinking, creativity and innovation into the freshman experience as part of orientation, a single class, or a series of classes that help students solve real-world problems and connect first-year students to peer communities of makers and innovators in STEM. At Howard, we are incorporating these themes into our Introduction to Engineering course, which all first-year engineering majors are required to complete.

The initiative was developed in response to findings published by the President's Council of Advisors on Science and Technology in a report titled "Engage to Excel: Producing One Million Additional College Graduates With Degrees in Science, Technology, Engineering and Mathematics." The report indicates that 60% of U.S. freshmen (in aggregate) who arrive to college intending to major in STEM change majors to non-STEM disciplines. The report also cites the importance of a student experience that is both intellectually and personally engaging and fosters "identification with a STEM field." This can be established by connecting freshmen with a community of STEM professionals, and fostering meaningful relationships with both peers and instructors. We believe that early exposure to entrepreneurship, innovation, creativity and design thinking are powerful tools to engage and retain STEM students and we are excited to work with the University Innovation Fellows and Pathways to Innovation Program, initiatives of the NSF-funded National Center for Engineering Pathways to Innovation (Epicenter), to enhance STEM attraction and retention to ultimately meet U.S. workforce needs and strengthen our national competitiveness.

Sincerely,


Lorraine N. Fleming, Ph.D., PE
Interim Dean

