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President Barack Obama The White House 1600 Pennsylvania Avenue NW Washington, DC 20500

December 15, 2015

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.

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.

University Innovation Fellows and Pathways to Innovation Program teams will work with their faculty, administrators and staff to implement fun and engaging experiential learning opportunities that expose 100% of the incoming freshmen class to the institution's community of makers and innovators, with the goal of collectively reducing the national percentage of STEM attrition by half in five years.

We believe that early exposure to entrepreneurship, innovation, creativity and design thinking are powerful tools to engage and retain not just STEM students, but innovative and entrepreneurial students from all majors. Rather than STEM alone, multidisciplinary collaborations and networks more accurately describes our ecosystem. Many arts, architecture and business students, faculty and staff

play proactive role in our entrepreneurial campus initiatives. 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 student attraction and retention to ultimately meet U.S. workforce needs and strengthen our national competitiveness.

Sincerely,

Mark A. Mone, Ph.D.

Chancellor

University of Wisconsin-Milwaukee

Brian D. Thompson

President, UWM Research Foundation, Inc.

Ilya V. Avdeev, Ph.D.

Director, I-CORPS Site/Student Startup Challenge Associate Professor of Mechanical Engineering College of Engineering & Applied Science University of Wisconsin-Milwaukee

Dr. Nathaniel Stern

Associate Professor of Art and Design Head of Digital Studio Practice Student Startup Challenge Co-Founder Global Studies and Engineering Lecturer University of Wisconsin-Milwaukee

Kim Beckmann, Associate Professor Design and Visual Communication Design Entrepreneur Showcase Co-Founder University of Wisconsin-Milwaukee

Peck School of the Arts, Department of Art & Design

James H. Hunter

Entrepreneur-in-Residence & Adjunct Assistant

Professor

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Alex Francis

PhD Student of Mechanical Engineering

University Innovation Fellow

Founder Isopoint Technologies

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Amin Mojtahedi PhD Candidate in Architecture University Innovation Fellow Co-Founder AIM

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