



March 23, 2015

President of the United States  
The White House  
1600 Pennsylvania Avenue NW  
Washington, DC 20500

Dear Mr. President,

This letter is to reaffirm Southern Methodist University's (SMU) commitment to address the **21<sup>st</sup> century's Grand Challenges for Engineering**. The implementation of this commitment, led by the Lyle School of Engineering, is well under way. Lyle Engineering is uniquely positioned to accomplish the Grand Challenges mission through programs and activities that already exist within the school's centers and institutes; these departments are charged with developing skillsets in young engineers to tackle society's most pressing problems. The Lyle School's Stephanie and Hunter Hunt Institute for Engineering & Humanity, Hart Center for Engineering Leadership, Deason Innovation Gym and the Master's Program in Design and Innovation provide opportunities for students to engage in research, service learning, innovation competitions, entrepreneurial endeavors, community engagement, internships, mentoring relationships, design challenges, local and global engineering projects, leadership experiences and other activities.

The Stephanie and Hunter Hunt Institute for Engineering and Humanity will provide leadership and oversight of the SMU Grand Challenges Initiative. In 2009 the SMU's Lyle School established the Stephanie and Hunter Hunt Institute for Engineering & Humanity. The Institute's focus is on supporting the development and scaling of sustainable and affordable technologies and solutions for the challenges facing disadvantaged communities both locally and globally to improve their standard of living. The Institute serves as a hub for relevant research and projects. The Institute's key target areas are access to clean water, hygiene and energy, food security and nutrition, affordable shelter and basic infrastructure. Thus the institute works closely with faculty from across different disciplines and has a strong emphasis on student involvement through groups like Engineers Without Borders.

The Lyle School's Hart Center for Engineering Leadership was established in 2010 to ensure that all Lyle students develop leadership skills. The Hart Center is responsible for integrating leadership curriculum into technical courses as well as overseeing various student led community engagement and service learning projects. Students also participate in real-world problem solving through internships, cooperative education jobs and research assignments.

The Deason Innovation Gym offers space, tools and programs that promote rapid, hands-on innovation. The signature program – the Immersion Design Experience (IDE) - involves small, focused groups of students working under tight schedules and small budgets to solve engineering challenges during the academic breaks. Students are given the opportunity to develop cutting edge technology and work with outside companies on real engineering challenges. The Deason Innovation Gym also organizes regular innovation competitions.

The Lyle School's new Master of Arts in Design and Innovation (MADI) will begin enrolling students in the fall of 2015. This multidisciplinary MA degree offers a core of courses in Human Centered Design – a process which seeks first to understand the people in the system being designed, then turns that understanding into technical design specifications. The need for this degree has emerged in response to a growing demand for flexible thinkers and creative problem-solvers across all sectors of our economy. The mission of the MADI program is to prepare mindful problem-solvers to take on systemic, meaningful challenges with creativity and confidence.

SMU is looking forward to joining with schools, government entities and non-profits to develop the next generation of engineers equipped to address 21<sup>st</sup> century challenges.

Sincerely,

Marc P. Christensen, Ph.D., P.E.,  
Dean and Bobby B. Lyle Endowed Professor of Engineering Innovation