Boston University, College of Engineering

March 23, 2015

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

Dear Mr. President,

On behalf of the College of Engineering, we are delighted to contribute to the Grand Challenge Scholars Program (GCSP). The College of Engineering is focused on *Creating the Societal EngineerTM*. Societal Engineers have the passion and attributes to integrate people from all disciplines and lead organizations to address society's challenges and improve lives. In addition to their discipline strength, Societal Engineers' attributes include "broad" communication skills, systems thinking, global awareness, and a passion and understanding of the entrepreneurial process, the role public policy plays in technology innovation, and strong social consciousness. These attributes, echo those of the National Academies *Engineer of 2020*, are developed with the following courses and programs and will translate to our Grand Challenge Scholars.

- 1. Hands-on project or research experience related to Grand Challenges (GC):
 - a. Innovate and compute using our Imagineering Laboratory or EPIC, the 15,000 sq. ft. Engineering Product Innovation Center.
 - b. Complete our required "Introduction to Engineering Design" course in EPIC.
 - c. Engage in Senior Design or Summer Research in GC areas like Urban Function or Sustainability.
- 2. Interdisciplinary Curriculum:
 - a. Customize any major with concentrations in Energy Technologies or Nanotechnologies.
 - b. Complete the "Introduction to Engineering Design" with required interdisciplinary teams.
- 3. Entrepreneurship:
 - a. Enroll in electives such as "Putting Technology to Work" or "The Business of Technology Innovation", in the School of Management (SMG).
 - b. Concentrate in "Technology Innovation" to focus on new markets and the innovation process.
 - c. Compete in business contests in the Imagineering Laboratory, EPIC, or the SMG Buzz Lab.
- 4. Global Dimension:
 - a. Study Abroad (one of largest for an ENG school in country).
 - b. Deliver Global Health and Engineers Without Borders designs to low resource, global customers.
- 5. Service Learning:
 - a. Participate in our Global Apps Club creating apps to benefit community-based organizations.
 - b. Become an Inspiration Ambassadors, diverse engineers who annually inspire 4,000 K-12 diverse students nationwide and guide in the design of prototypes to solve a Grand Challenge area.

We commit to improve lives across the globe with our Societal Engineers and Grand Challenges Scholars.

Sincerely,

Kenneth R. Lutchen, Ph.D. Dean of College of Engineering

