



# Washington University in St. Louis

## SCHOOL OF ENGINEERING & APPLIED SCIENCE

March 23, 2015

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

Dear Mr. President,

Our School joins the national program “Educating Engineers to Meet the Grand Challenges” with strength and opportunity to build locally and engage nationally. Over the past several years our students, faculty, staff, and administration have developed leading, cutting-edge programs that broaden student experience, worldview, and impact.

Our students have achieved great entrepreneurial success: building products and founding companies; regional, national, and global championships and impacts in fields including cyber security, energy and sustainability, and medicine and health; and building their own enterprise, to invest in the next generation of worldly, engaged, leading engineers.

Our faculty and staff have organized challenging, cross-cutting, authentic experiences within the School; partnered with our Schools of Arts & Sciences, Business, and Medicine; and integrated local and global opportunity for all of our students to develop and deliver on their passions throughout their undergraduate careers.

Our administration has led convergence across fields, schools, and external communities. This leadership is consistent and persistent: highlights include recent symposia on “The Role of Research Universities in Addressing Global Challenges,” founding and sustaining centers and programs integrating active, authentic experience in science and engineering education; and deep investment in fostering a diverse, inclusive academic community.

Our new work, answering the call toward meeting grand challenges, will integrate authentic experience with traditional curriculum; provide undergraduates mentored process to reflect on their holistic values, achievements, and goals; promote our successes to help our city, region, nation, and world face our grandest challenges, profoundly and sustainably improving the human condition.

I have appointed Dr. Kurt Thoroughman to lead our Grand Challenge efforts. In this first academic year (2014-2015) he will convene regional experts, campus stakeholders, and student leaders to plan a cohesive program, cutting across majors and cohorts, and fostering a truly diverse community; develop interventions that provide essential real-world and personal meaning during foundational coursework that tends to isolate and disillusion students; build a new class formalism that centrally values each individual’s authentic, outside-class impact, and provides scaffold to blend real-world and curricular experience into holistic expertise; engage our peer institutions, and leaders nationwide, to found and build an exchange of resources, ideas, and goals so together we can best address the nation’s needs.

We are very grateful for this opportunity to work with our academic, governmental, and stakeholder communities. At Washington University, we look forward to fulfilling the essential responsibility to train engineers to understand the technical and the worldly, driven by passion, defined by the greatest needs, and delivering real solutions to the grandest of challenges.

Sincerely,

Ralph S. Quatrano, PhD  
Spencer T. Olin Professor and Dean