Adding value to curricula, programs and infrastructure (continued)

USC Michelson Center for Convergent Bioscience

Opened in 2017, it is one of just a few facilities in the world dedicated to the convergence of research in engineering, physical and life sciences.

23 New Internal Research Centers

- The Center for Advanced Manufacturing (CAM)
- USC Michelson Center for Convergent Bioscience
- Center for Advanced Research in Environmental Technologies (CARTe)
- Center for Climate and Water Research (CCWR)
- Center for Peptide and Protein Engineering (CPPSE)
- Nexus Center
- Sleep Health Using Neuroengineering (SLEEPneuro)
- Center for Intelligent Environments (CITE)
- Center for Knowledge-Powered Interdisciplinary Data Science (K-PIDaS)
- Center for Systems and Controls
- The Center for Human-Applied Reasoning and the Internet of Things (CHARIT)
- Center on Machine Learning (MaL)
- Communication and Computing Center (C3)
- Center on Behavioral and Mental Health
- Center of Data, Algebra, and Systems for Health (C-DASH)
- Center for AI in Society (C4S)
- Center for Cyber-Physical Systems and the Internet of Things (CPS-IoT)
- Center for Quantum Information Science and Technology
- Decisions and Ethics Center for Interdisciplinary Decision and Ethics (DECODE)
- TCC Institute for Economic Development in Marine Stewarship (TCC)
- USC-Chinese Center for Interactive Software and Intelligent Systems (CISIS)
- USC- Lockheed Martin Quantum Computing Center

Generating Solutions to Global Challenges

600

John D. O’Brien Nanofabrication Lab

A world-class facility for nanotechnology, including all of the tools needed to fabricate and characterize structures and devices, of similar size to DNA and viruses, from a wide range of materials giving students and faculty the ability to develop novel biomedical diagnostics and implantable devices.

Advanced Personalized Learning

The newly created K-12 STEM Center inspires, informs, and impacts underserved K-12 students. In 2018-19 alone, over 18,900 students have been served through programs, research and strategic partnerships involving the Viterbi faculty. Since 2008, Viterbi Ph.D. students and hundreds of Viterbi undergraduates representing over 20,000 hours of community volunteering.

Driving Innovation, Diversity and Entrepreneurship

More student diversity: 30% of the 2019 entering freshmen are women compared to 80% in 2015. 34% of our students come from underrepresented groups.

Fostering innovation and entrepreneurship in Silicon Beach and beyond!• Viterbi Student Innovation Institute (VSII)
• Viterbi Startup Garage (VSG)
• Student Entrepreneurs’ Prize Competition (MEPC)
• Mir Family Engineering Social Entrepreneurship Challenge
• USC Games, No. 1 ranked game program in the nation
• USC Stevens Center for Innovation

over

30 successful student and faculty start-up launched and supported since 2010

Impact Campaign

Starting Sum of Total Donations

Total Sum Raised

$500,511,575

Donor Type

- Corporations
- Other Individuals
- Board of Councilors
- Foundations
- Other Organizations

Subtotal

$231,325,308
$150,320,565
$30,300,626
$70,624,962

% of Total

27.2%
30.03%
12.24%
6.06%
8.94%
Fulfilling the Unlimited Potential of Engineering Through the Excellence of Our People

Endowed scholarships established

The only school in the world with a large-scale quantum computer

Endowed Chairs & Professors:
- Kenneth C. Dahlberg Early Career Chair
- Steven & Kathryn Sample Chair in Engineering
- Chun Shing-Ching Chair
- Stephen Schruding-Early Career Chair in Civil and Environmental Engineering
- William E. Landshurd Professor in Engineering
- Andrew & Eris Viterbi Early Career Chair I
- Andrew & Eris Viterbi Early Career Chair II
- Andrew & Eris Viterbi Early Career Chair III
- Andrew & Eris Viterbi Early Career Chair IV
- Andrew & Eris Viterbi Early Career Chair V
- Robert Young Chair in Chemical Engineering and Material Sciences
- The Louise L. Dunn Endowed Professorship of Engineering
- A.C. "Bul" Balakrishnan Endowed Chair
- Dr. Tak Po Yau Early Career Chair
- Nikko and Mas Niihara Chair in Engineering
- David M. Wilson Endowed Chair
- Dr. Karl Jacob, Jr. and Karen Jacob-III Early Career Chair
- Shelly and Ober Nemirovsky Chair in Convergent Biosciences
- Dr. Sheryl-Pan and Ken Yen Early Career Chair in Civil and Environmental Engineering
- Kelimer Family Early Career Chair
- The Michael and Linda Keaton Endowment for Executive Directorship of Information Sciences Institute

Academy of Technical Achievement

MIT TR 25 since 2010 (13 total)

Academy of Technical Achievement

19 Members of the National Academy of Inventors

9 full time and/or affiliated faculty members of one or more National Academies (NAE, NAS, NAM)

9 new corporate fellowships created

9 new corporate fellowships created:
- Amazon Alexa Fellowship
- Facebook Fellowship
- Harris Foster Fellowship
- Microsoft Research Ph. D. Fellowship
- Xinhua Institute for Mathematical Sciences Fellowship
- "Chao" Xinhua Institute for Mathematical Sciences Fellowship
- AT&T Foundation Fellowship
- iPodia Alliance - Classrooms Without Borders

162 new fulltime faculty hires since 2010

Yannis C. Yortos
Dean, USC Viterbi School of Engineering

Adding Value to Curricula, Programs and Infrastructure

USC Viterbi’s Grand Challenges Scholars program gives undergraduate students the unique opportunity to drive their educational experiences towards discovering, exploring, and potentially solving one of the NAE’s 14 Grand Challenges.

N&E Grand Challenges Scholars

More than any engineering school in the nation

46 students graduated as Grand Challenges Scholars in May, 2019

The philanthropic support of education, and notably higher education in private schools, is absolutely necessary for them to fulfill their mission, in our exponentially changing world. In 2010, as part of the university of Southern California’s campaign For Reptra, the USC Viterbi School of Engineering launched its fundraising initiative with the goal of generating gifts and pledges for USC Viterbi to advance its mission.

The school’s mission of Engineering - is encapsulated in the following pillars: which is the global attraction of talent, faculty, students and staff in engineering education and research while providing an inclusive environment and culture in which to flourish. We must lead and innovate in new programs (curricula and infrastructure) that add new value for all our constituencies. We are committed to developing solutions to world challenges, by providing global thought leadership, from energy and sustainability to security and infrastructure, to health and medicine, and to scientific and technological discovery. We are the catalyst for technological innovation, best practices for engineering education and research, and outreach to all our constituencies, including K-12, thus fueling the economic growth of Los Angeles, Southern California, the United States, and the world.

However, our ability to educate engineering students regardless of their financial means; to attract K-12 students to engineering, regardless of their demographics; to retain talented faculty and staff, despite fierce competition from high paying corporations in the private sector; and to advance human-centric technology solutions to increasingly demanding challenges and the unintended consequences, requires constant and undated sources of philanthropic support.

Even as we have given freely to those in need in our community and beyond, the USC Viterbi School of Engineering has been fortunate to be sustained by the affection and philanthropy of thousands of individual donors and entities, from alumni to friends, to foundations and to corporations. Such selfless contributions and faith in the school’s mission have helped our school thrive in times of change and become a leader in engineering education and research. We are immensely grateful to them. And we ask them to continue being a close, giving and faithful partner; as we look to a future where change is not just the only constant, but also a future in which change can be driven for the benefit of society, and to engineering a better world for all humanity.

Yannis C. Yortos
Dean, USC Viterbi School of Engineering

46 students graduated as Grand Challenges Scholars in May, 2019