

Per Aspera Ad Astra The Stevens Indicator, Spring/Summer 2018

The Stevens motto, *Per Aspera Ad Astra*, literally, "through adversity to the stars," is being realized before our very eyes.

The 2017 "Best Colleges" edition of *U.S. News and World Report* ranked Stevens #69, up 19 places since 2011, making Stevens the second-fastest rising university among the top 100 in the nation. *Forbes* magazine named Stevens "The Turnaround University" in a September 2017 article. And, in March 2018, the American Council on Education (ACE) recognized Stevens with the 2018 ACE/Fidelity Institutional Transformation Award for its exceptional progress since 2011.

Over the last six years, Stevens has made transformational advances on the national stage as a university on the rise. Yet, the university's transformation has only just begun. As Stevens vigorously pursues the goals articulated in our 10-year Strategic Plan (2012-2022), we acknowledge that transformation requires a constant commitment to excellence through 2022 and well beyond.

This issue of *The Indicator* features the tremendous contributions of Stevens and its alumni in the era of space exploration. Consider the transformation of science and technology since the 1950s, when the world entered the Space Age. Stevens innovators and entrepreneurs have played an integral role in advancing space exploration, while others have forged new paths at the frontiers of emerging fields that will transform science and technology in the next century.

Today, in critical domains such as biomedical engineering, machine learning, robotics, sustainability, sensor technologies and more, teams of Stevens researchers have unleashed the future. They are applying mechanical engineering principles to cell biology, enabling the printing of cells which could eventually lead to 3D-printing of bones, tissue and organs. Others are using machine learning to analyze speech and writing to develop algorithms that can detect early signs of Alzheimer's disease and dementia in patients. In collaboration with the Department of Defense, one interdisciplinary team is helping to make military operations safer and more environmentally friendly through the use of treated wastewater to cultivate microalgae that can produce fuel to power manufacturing processes. Another team is training underwater robots to navigate and map harsh underwater environments, which could one day lead to safer ships, ports and harbors.

At Stevens, students, faculty, staff and alumni peer into the unknown, seeking solutions to the most challenging problems of our time in bourgeoning fields of science, technology, engineering, business and the humanities.

In the next decade and beyond, *Ad Astra* will define the university's meteoric rise as a premier, student-centric, technological research university. With the active engagement of alumni, friends, faculty, staff and students, we will be reaching for the stars.

Per aspera ad astra,

Nariman Farvardin

President, Stevens Institute of Technology