



**STEVENS**  
INSTITUTE of TECHNOLOGY  
THE INNOVATION UNIVERSITY

### **Innovation and Entrepreneurship Now Thriving at Castle Point** *The Stevens Indicator, Fall 2016*

The modern, technology-based university plays a significant role as an engine of economic growth. Research and development, partnerships with industry, commercialization of intellectual property, and facilitation of entrepreneurial activity by faculty and students are direct efforts by today's technology-focused universities to spur technological innovation, an essential component of continued economic progress.

The landmark 2005 report of the National Academies, *Rising Above the Gathering Storm*, cites statistics attributing approximately 85% of economic growth per capita to technological innovation, largely the product of technology-focused R&D. A 2012 study by a Harvard University researcher analyzed the impact of universities on economic growth. It found that long-term employment and per capita payroll rose more rapidly in industries related to universities' core innovative strengths. The study also found that new ventures, created through university-generated intellectual property, along with new divisions of existing companies, comprised the majority of this growth.

Technological innovation and entrepreneurship are thriving at Stevens. A few examples, including those in the healthcare industry, are highlighted in this issue of *The Stevens Indicator*, from the research and development of new materials, devices, and treatments for a range of patient conditions to opportunities to leverage big data to improve healthcare, and many more.

Our partnerships with industry are another essential ingredient for technological innovation. Through these collaborations, companies gain access to faculty expertise, cutting-edge research facilities, and technical talent, and faculty can apply their research to real-world industry challenges. Through co-operative education, internships, and corporate-sponsored senior design projects, students gain valuable industry experience and an advantage in the job market. Through corporate philanthropy, Stevens benefits from resources for faculty support, student scholarships, and investment in instructional and research facilities. The result of these various industry partnerships is a mutually-beneficial exchange of knowledge, technology, talent, and resources that advances faculty research and the distinctive education we provide for our students, perpetuating a cycle of technological innovation.

This fall, for example, we will celebrate two significant collaborations with corporate partners: the location of our U.S. Department of Energy Solar Decathlon winning entry, the SU+RE House to its permanent home at the Liberty Science Center in Jersey City, New Jersey, made possible through significant corporate support and a leadership gift by PSEG, and the ribbon cutting of the ABS Engineering Center, made possible by a \$3 million gift from the American Bureau of Shipping. These corporate partnerships are making a substantial and tangible impact on the university, on the resources and facilities available to advance our faculty's research, and on the distinctive education we will provide for our students for many years to come.

Stevens is also doing its part to create an environment to spawn new companies based on the work of our students and faculty. To bolster the curricular initiatives and incentives for students and faculty to be entrepreneurial, Stevens launched the Stevens Venture Center earlier this year, with the goal of fostering, facilitating, and accelerating the entrepreneurial activities of Stevens students and faculty. With programs and resources ranging from "Entrepreneurs-in-Residence," hackathons and start-up weekends, to 3D printing, legal and technical advice, mentoring and networking opportunities and more, the SVC is envisioned as a "one-stop shop" for Stevens entrepreneurs. Resident companies today include a medical

device company, a company built around an innovative tool to facilitate patent searches, and “smart” clothing that generates user data to improve personal health, among others.

In its 146-year history, Stevens has undoubtedly made tremendous contributions to economic growth through the leadership of our graduates in numerous industry sectors across the globe, through the successful companies launched by alumni, and through innovations developed in our research labs, by senior design teams, and in partnership with industry. As technological innovation continues to flourish at Stevens and beyond, the next 146 years look even brighter, with promising implications for the future of the economy and, most definitely, for our graduates.

Per aspera ad astra,

A handwritten signature in black ink, appearing to read "N. Farvardin". The signature is fluid and cursive, with a large initial "N" and a long, sweeping underline.

Nariman Farvardin

President, Stevens Institute of Technology