



Resilience and Sustainability through Innovative Research, Education and Practice

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At the time of this writing in late April 2020, “resilience” characterizes our university in ways previously unimaginable. Stevens has reacted quickly and with great agility to the sudden and very significant impact of the coronavirus pandemic: students are studying remotely; faculty are teaching online; academic and student life colleagues are supporting students through Zoom and reaching out directly by phone and email; and those responsible for conducting the business of the university have found creative ways to continue our core business operations in this altered state. I am immensely impressed and truly grateful for the tremendous effort and resilience of the entire university community. We will continue to draw upon these critically important capabilities as we plan for the Fall 2020 semester.

This issue of The Indicator focuses on resiliency in the environmental sense — and highlights Stevens’ education and research programs in this area. I am pleased to report that last year, I had the honor of attending a forum for thought leaders that brought together an impressive group of researchers, government officials, corporate CEOs and state and national dignitaries to discuss an issue that is of existential importance: climate resilience. I was immensely proud to share examples of Stevens’ sustainability research that are advancing the frontiers of this field. Stevens is developing new technologies that have the potential to reduce our dependence on fossil fuels; to predict and mitigate the effects of climate change, particularly in urban areas; and to remediate and improve environmental systems.

Not only do our faculty pioneer many “green” initiatives, but they also engage both undergraduate and graduate students, who are passionate about the environment and sustainability. In fact, there are many related degree paths for students to pursue at Stevens: engineering undergraduate students can earn a minor in green engineering; graduate students can obtain a master’s degree in environmental engineering, sustainability management or ocean engineering; and doctoral students can pursue degrees in environmental engineering or ocean engineering. Stevens also offers a host of graduate certificate programs in related fields of study. Additionally, each year, dozens of our senior design projects focus on developing solutions to environmental and sustainability issues.

Alumni and friends may recall one particular Stevens sustainability project of which I am extremely proud, the SU+RE House, which stands for SUstainable and REsilient. Inspired by the challenges New Jersey faced in the aftermath of Hurricane Sandy, this structure was designed and built by an interdisciplinary team of 30 students and faculty as a net-zero energy home that was resilient enough to withstand hurricane-force winds and flooding. In 2015, the SU+RE House won first place in the prestigious U.S. Department of Energy’s Solar Decathlon and is

now located at Liberty Science Center in Jersey City, New Jersey, serving as a powerful educational tool for more than 750,000 visitors each year.

Stevens is not only “talking the talk” but also “walking the walk.” We have implemented a transportation demand management program to incentivize our community to reduce vehicle trips to campus; we participate in the Association for the Advancement of Sustainability in Higher Education STARS program and the RecycleMania program; and we have initiated a number of other energy conservation and resiliency activities on our campus and in partnership with the City of Hoboken.

I am especially proud that Stevens’ talented graduates are leading initiatives that companies and local, state and federal agencies will depend on to advance their sustainability priorities in the next decade and beyond. Our planet and future generations are depending on these bright Stevens minds.

Per aspera ad astra,



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