# THE STEVENS INDICATOR

SPRING/SUMMER 2019 

THE MAGAZINE OF THE STEVENS ALUMNI ASSOCIATION

# THE STEVENS INC. CONTROL CO

# THE STEVENS IN COMPANY OF THE MAGAZINE OF THE STEVENS ALUMNI ASSOCIATION

# THE STEVENS IN COMPANY OF THE MAGAZINE OF THE STEVENS ALUMNI ASSOCIATION





### **DEPARTMENTS**

#### 2 PRESIDENT'S LETTER

3 LETTERS TO THE EDITOR / SOCIAL MEDIA

4-7 GRIST FROM THE MILL7 CALENDAR OF EVENTS40-41 SPORTS UPDATE

43-72 ALUMNI NEWS

44 SAA PRESIDENT'S LETTER

66 VITALS

### **FEATURES**

#### 8-11 GAME CHANGER

A dazzling new university center and residential towers will rise from Hoboken's waterfront skyline and bring Stevens' campus community together

#### 12-29 EVOLVING THE FACE OF STEM

Advancing women in STEM

#### 30-31 THE LEADERSHIP TRACK

Clarelle DeGraffe '84 keeps nearly 300,000 PATH riders moving across the Hudson every day

#### 32-33 DRIVEN TO BUILD

Katie Twomey '90 creates award-winning projects and a better community

#### 34 WORLDLY VIEW

Taylore Fowler '14 helps shape Netflix around the globe

#### 35 GRATITUDE AND GLAMOUR

Alumni and friends celebrate the 2019 Stevens Awards Gala

#### **36-37 BRIGHTER FUTURES**

Researcher Stephanie Lee designs materials for a greener future and mentors the next generations of engineers

#### 38-39 THE IMPORTANCE OF A PLAN

Legacy Society members leave an enduring mark

#### 42 STEVENS RESEARCHER TAKES NEW LOOK AT OVARIAN CANCER

Cancer biologist develops imaging methods that could speed earlier detection of the devastating disease

Cover Design: Simone Larson Design Campus Photo: Anna Wesolowska

ON THE COVER: For "Evolving The Face of STEM" we produced four different covers that feature Stevens undergraduate women who are making their mark and aspiring to increase the number of women in STEM.

Cover Photos: M. Cooper



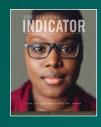
Melanie Caba '19, Biomedical Engineering



Sarah Hoogenboom '19, Civil Engineering



Madison Pasterchick '20, Quantitative Finance



Yanique Spigner '19, Biomedical Engineering

#### **PRESIDENT'S CORNER**

#### THE 21ST CENTURY ECONOMY DEPENDS ON A STRONG, DIVERSE AND EXPANDED STEM TALENT POOL

I write this message still exuberant from Stevens' sixth Awards Gala held on April 6 at the elegant Plaza Hotel in New York City. With nearly 450 alumni, friends, faculty, staff and students in attendance, this year's event again provided an occasion to celebrate the best of the Stevens community. The contributions and achievements of the honorees across a diverse range of domains and industries bring acclaim and distinction to Stevens, and we are so proud of them!

Fresh in my mind — and pertinent to the theme of this issue of The Indicator - are the awards bestowed on four of the honorees, all women graduates of Stevens.

Virginia Ruesterholz '83 Hon. D.Eng. '08, who had an extraordinary career at Ve-

rizon before leading our Board of Trustees as its first female chair, received the President's Leadership Award; Pam Cheng '92 M. Eng. '95, executive vice president for global operations and information technology at AstraZeneca, accepted the International Achievement Award; Leanne Metcalfe '00, executive director for research and strategy at Blue Cross Blue Shield, was recognized with the Young Alumni Achievement Award; and Lisa Mascolo '82, managing director, U.S. Public Service, IBM's Global Business Services, was honored with the Distinguished Alumni Award in Business and Finance. I congratulate these outstanding women, along with the other extraordinarily accomplished Gala honorees: Richard Frederick Harries '58, winner of the Stevens Honor Award; Philip P. Crowley '71, Outstanding Contribution Award winner; Richard S. Magee, '63 M.S. '64 Sc.D. '68, winner of the Lifetime Service Award; Emilio Fernandez, Friend of Stevens Award; and Robert J. Fiocco '58 M.S. '61 Sc.D. '64, Distinguished Alumni Award in Engineering.

Perhaps it is not so remarkable that in 2019 there are so many Stevens women in leadership roles and having a tremendously positive impact on business, in academe, in the public sector and throughout society. For many generations, a Stevens education has been excellent preparation for a successful career, regardless of gender, race or ethnicity.

But what is surprising is that after many decades of federal investments and employers' efforts to reduce the gender gap in



the workforce, we have made so little progress as a nation in reaching parity in the STEM fields. Nationwide in 2015-16. while women accounted for 57% of all bachelor's degrees awarded, they earned only 32% of the STEM degrees and currently make up less than a quarter of the STEM workforce. Because our nation faces a severe shortage of STEM talent nationally, the ratio of online job postings for STEM workers to unemployed STEM workers is about 17 to 1 — we must find new ways to engage and support all sectors of our society to meet the complex, growing and largely technology-related challenges of our era.

The role models at Stevens, including

our first female dean of the Schaefer School of Engineering and Science and the many talented and pioneering female faculty who are inspiring students through their teaching and mentorship and conducting ground-breaking research, are paving the way for new generations of students — both male and female — to succeed in a dynamic, highly diverse and technology-based global society.

I congratulate them and am grateful for all that they do.

Per aspera ad astra,

Nariman Farvardin President, Stevens Institute of Technology president@stevens.edu 201-216-5213

Note: Statistics on the percentages of women in undergraduate programs in STEM and in the workforce are derived from these sources:

Noonan, Ryan. Women in STEM: 2017 Update (U.S. Department of Commerce, Economics and Statistics Administration, Office of the Chief Economist, November 13, 2017).

Snyder, T.D., de Brey, C., and Dillow, S.A. (2019). Digest of Education Statistics 2017 (NCES 2018-070). National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education, Washington, DC.

#### SPRING/SUMMER 2019. VOL. 140, NO. 2

#### Editor

Beth Kissinger bkissing@stevens.edu

#### **Managing Editor**

Rebecca Markley rmarkley@stevens.edu

#### Contributors

Connor Durkin College of Arts & Letters

Frin Lewis

Stevens Division of Communications & Marketing

Paul Karr

Stevens Division of Communications & Marketing

Charles O'Brien Stevens Athletics

Alan Skontra Stevens Office of Development

Young Soo Yang Stevens Division of Communications & Marketing

#### Art Direction/Design

www.DanFlintDesign.com

#### Additional Art Direction/Design

Michael Hofmann Simone Larson Design

#### Published three times a year by

The Stevens Alumni Association, member of the Council for Advancement and Support of Education. © 2019 Stevens Alumni Association

#### **Indicator Correspondence**

The Stevens Indicator 1 Castle Point Terrace Hoboken, NJ 07030 Phone: (201) 216-5161

#### Letters to the Editor

editor@alumni.stevens.edu

#### **Class Log submissions**

alumni-log@stevens.edu

#### **General SAA inquiries**

Contact the Alumni Office Phone: (201) 216-5163 Fax: (201) 216-8247 alumni@stevens.edu



#### FINDING FUNKE

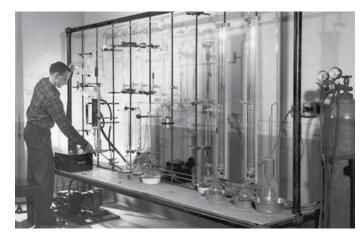
The photo (on page 43 of the Winter '19 issue) is a picture of Dr. Philip Funke M.S. '56 Ph.D. '62 when he was a graduate student at SIT. Phil built this apparatus to investigate the sintering of metals. Unfortunately, instead of sintering, the minute metal beads crystallized, so the project was abandoned.

Dr. Edmund Malinowski M.S. '56 Ph.D. '61, Emeritus Professor of Chemistry, Stevens Institute of Technology

#### **GREAT RESEARCH** ISSUE

I received The Stevens Indicator magazine (Winter 2019). Like always, such great information. I love to read all about new research; it is a great, well-done magazine! We had in 2016 a meeting with all alumni in this area (east coast Massachusetts) by the Marconi facility in Cape Cod. I'm just wondering if you will do it again any time. I love Stevens and it was a great experience.

Thank you. Alexandra Padilla M.S. '08



#### AI APPRECIATION FROM THE FIELD

Editor's Note: Alan Huntress '58 was so impressed with the Winter 2019 issue of The Indicator, that *he called and requested a copy be* sent to his son, Gary Huntress, who works with the software engineering branch of the Naval Undersea Warfare Center in Rhode Island. See Gary's response below.

I'd like to thank you for the copy of The Indicator that you sent me recently at the request of my dad. He thought I would be interested in the stories about AI and machine learning. This is definitely true, and I enjoyed the whole magazine.

I am an engineer for the U.S. Navy in Newport, Rhode Island. For the past three years, we have been implementing each of the technologies listed in those articles. The breakthroughs in the last few years have been tremendous and I applaud Stevens for recognizing this and founding the SIAI (Stevens Institute for Artificial Intelligence). My office foresees a great need for machine learning engineers, and I would encourage your graduates to apply at the Naval Undersea Warfare Center, or our Navy lab partners across the country!

Gary Huntress

#### **SOCIAL MEDIA**



Who brightens more days around campus than Stevens' own Nelly Vazguez? Beloved by alumni, faculty, staff and students, Nelly's spirit is infectious. "I love Stevens," she says. "It's a beautiful place and I feel like it's mine; I feel so lucky to work here!"

As a result of her impact on campus food service for the past 24 years, Nelly has started hosting a series of tea parties in Pierce Café. Pictured here at her party on Feb. 19, she was a hit on Stevens' social media channels. We're the lucky ones, Nelly!









Has anyone on campus made an impact on your day to day? Use #StevensFamily to show your appreciation to the people who make Stevens your home away from home!

#### **GRIST** FROM THE MILL

#### **FORBES MAKES CAMPUS APPEARANCE**

Investment guru and publishing icon Steve Forbes came to campus on Feb. 21 not only to give a talk, but also to listen to pitches. Forbes' first stop was in the Student Managed Investment Fund (SMIF) class in the School of Business, where he listened to a pitch for video game publisher Take-Two Interactive given by Joe Gargana and Jack Bodner, both Class of 2020. Impressed with the presentation, Forbes said, "I'll buy. I'm always ready for any hot tips." His next stop was the Bissinger Room where he delivered a lecture on capitalism and his free-market perspective on trade and tax policy at the invitation of the Stevens College Republicans Club. His talk also focused on how technology is creating new classes of job categories and opportunities at an incredible speed. Jonathan Kaufman, the professor who runs the SMIF class and moonlights as a wealth manager, says Forbes' interaction with students can't be understated. "Having an authority like Steve Forbes listen to, and interact with, the students giving the pitch is an incredible real-world experience for those interested in finance careers, especially in wealth management," Kaufman said. �





#### GATEHOUSE TO RETURN ONCE CONSTRUCTION IS COMPLETE

If you're on campus, you may notice that the gatehouse — the last remaining structure of the Stevens family estate and the traditional entryway to the university — is missing. But don't worry. Once the Student Housing and University Center project is completed in the 2021-2022 school year (read more about this project on page 8), it will be reassembled, stone-by-stone, with all the original architectural features in place. To preserve the gatehouse during construction, the university hired a historic preservation architecture firm, which conducted a survey and created a letter and number grid on the surface of the stones. Using that grid, the contractor, who specializes in historic preservation and restoration, numbered the stones and is removing, individually wrapping and storing each stone from different sections of the gatehouse in their respective crates off-site. For more details on the gatehouse project, visit stevens.edu/gatehouse. &

#### SPEAKER CHALLENGES AUDIENCE TO HELP DEVELOP BETTER ENERGY SOURCES

How to meet the growing energy demands of an expanding global population in an environmentally responsible way is the central question at ExxonMobil, said Bruce H. March, president of ExxonMobil Research and Engineering Company, in a talk he delivered April 10 at Stevens titled, "R&D Pathways for the Future Energy System." March's talk was the 13th installment of the President's Distinguished Lecture Series. March explained that ExxonMobil is making significant R&D investments in several promising next generation technologies to improve efficiencies and lower carbon emissions within the company's operations and facilities, and explained how next-generation biodiesel fuels



derived from sources like algae could be used for transportation. March then challenged the Stevens audience of students and faculty to apply their knowledge and expertise in joining the effort to find, produce and deliver reliable and affordable sources of energy that the world will need, all while producing significantly less emissions. "It will take significant collaboration between industry, academia and others with valuable knowledge and valuable capabilities to develop the technological solutions to the issues we face today. The education and experience that the students in the audience are fortunate to receive [at Stevens] is vitally important to my company, ExxonMobil, and to our entire industry and the world." 💠



For more information about the President's Distinguished Lecture Series, please visit stevens.edu/lecture

#### STEVENS EXPERT RANKED **AMONG TOP SCHOLARS**

Stevens computer science department chair and cybersecurity expert Giuseppe Ateniese has been ranked No. 7 in the world in AMiner's A-10 "Most Influential Security and Privacy Scholars" ranking. The A-10 metric, created in 2006 by Tsinghua University researchers in collaboration with IBM China and other government and industry partners, catalogues and tracks artificial intelligencerelated publications and conference presentations with very high impact over a tenyear period. Ateniese's security and privacy research was cited more than 16,000 times by fellow researchers during the decade spanning 2007 through 2017, AMiner noted. Researchers from private industry as well as from academic institutions are included in the global rankings. .

#### **SEEKING ALUMNI STORIES**

Voices from Castle Point, an oral history project of Stevens' Samuel C. Williams Library, was originally conceived to document the experiences of women at Stevens — a group underrepresented in the library's Archives and Special Collections. (Stevens first admitted undergraduate women in 1971.) In preparation for Stevens' 150th anniversary in 2020, the project has been expanded to encompass all interested Stevens alumni. "Each voice is important to the mission of providing a broader understanding of Stevens' history with unique, individual perspectives for future generations," according to a library statement. "Collecting and sharing these stories provides an invaluable glimpse into the past through the lens of human experience that serves to preserve the richness and diversity of our shared cultural heritage." To learn more about the project, or to inquire about participating, please contact Leah Loscutoff, head of archives and special collections, at lloscuto@stevens.edu. �



To hear the alumni interviews of Voices of Castle Point, visit stevens.edu/voices

#### **GRIST** FROM THE MILL

#### A HUMAN RIGHTS PIONEER

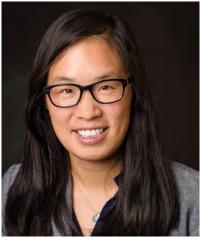
The first openly transgender person to speak at a U.S. presidential campaign convention shared her personal journey at Stevens this past March, and called for equality and compassion for the country's LBGTQ community. Sarah McBride was the keynote speaker at the Lore-El Trailblazers Speaker event, presented by the Lore-El Center for Women's Leadership, as part of its Women's History Month programming. McBride, who is the national press secretary of the Human Rights Campaign, the nation's largest national lesbian, gay, bisexual, transgender and queer civil rights organization, spoke at the 2016 Democratic National Convention. At her Stevens talk, she recalled the struggle — and ultimate support — of her father when she revealed her decision to transition, the discrimination she faced — and the loving acceptance. McBride expressed concern about recent proposed legislation and policies that negatively affect the LBGTQ community, from "bathroom bills" that mandate that individuals use public restrooms based on their gender at birth to the prohibition of transgender troops joining the military. She pleaded for compassion for transgender people, who have a higher risk of suicide and have faced violent attacks across the country, McBride said. People don't need to understand transgender people to treat them with humanity, she said, as she called for allies who will stand up against everyday indignities against transgender people that stoke an atmosphere of hate and intolerance. "You get to decide what's right and what's wrong in this moment," she said. "We all can bear witness to acts of common grace." ❖ — Beth Kissinger



#### TWO STEVENS FACULTY HONORED WITH **PROMINENT NSF AWARD**

This year the National Science Foundation (NSF) has recognized two Stevens professors with one of the Foundation's most prestigious honors. Assistant professors Stephanie Lee (see article on page 36) and Ramana Vinjamuri have both been named as 2019 winners of the NSF's CAREER Award as a result of their rigorous and innovative work. The CAREER Award recognizes early-career faculty who stand out as leaders and role models in education and research. Winners are provided \$500,000 over five years to pursue their research and develop their boundary-pushing ideas. Lee's efforts to make power sources portable, affordable and easy-to-manufacture caught the NSF's attention, while Vinjamuri is recognized for his work developing robotic exoskeletons that can mimic the movements of a human hand. .





#### **STEVENS AMONG 10 TEAMS TO COMPETE IN NASA CHALLENGE**

NASA and the National Institute of Aerospace (NIA) selected Stevens as one of the ten finalists to advance in the 2019 Special Edition: Moon to Mars Ice & Prospecting Challenge last November. "You have to essentially design and build a robot that is capable of drilling through a bunch of 'overburden,' such as stone, soil or clay, in order to get to the ice underneath. And once it reaches the ice, it would need to melt it, extract water from it, filter that water, and collect it into a bucket," explained Arjun Krishna '19. Krishna and the team — Jonathan Bobkov '19, Ann Collins '19, James Furrer '19, Dana Roe '19 and Nicholas Sorrentino '19 — have built the prototype DEIMOS (Drill-based Extraction of Ice-water and Martian Overburden System) with the \$10,000 stipend provided by NASA and nearly \$6,000 in sponsorship from Protolabs, the leading digital manufacturing source for rapid prototypes and on-demand production. The competition will culminate in June when teams demonstrate their prototypes in a simulated off-world test bed in front of a NASA panel of judges in Langley, Virginia. .



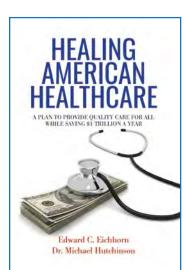
#### **CA' FOSCARI SIGNS AGREEMENT WITH STEVENS**

Ca' Foscari University of Venice recently signed an agreement with the School of Business at Stevens Institute of Technology that will allow students at the Italian university to enroll in the financial analytics master's program at Stevens. Ca' Foscari Rector Michele Bugliesi said the financial analytics program reflects his school's interest in improving education and research in areas where economics, finance, technology and analytics overlap. "Stevens is one of the leading institutions in these trends, and of course, it's located so close to New York city," Bugliesi said. "The ties to Wall Street and the job opportunities for students make us very excited about partnering with Stevens." Under the agreement, Ca' Foscari students will earn a master's degree in either economics and finance or management in Venice, then travel to the United States to complete the master's in financial analytics. Students earn two degrees in two years and, because the financial analytics degree is a STEM program, can work on Wall Street or elsewhere after graduation. &

#### A PLAN FOR HEALTHCARE

Ed Eichhorn '69 has co-authored, with Dr. Michael Hutchinson, Healing American Healthcare: A Plan to Provide Quality Care for All, While Saving \$1 Trillion a Year (2019), a book that makes the case for universal healthcare and introduces a plan that, the authors say, will

> reduce medical waste while improving quality and creating competition.



"This groundbreaking new book highlights how quality care can be made available to all Americans," according to a review in Healthcare Business Today, which describes the authors' plan that, Eichhorn and Hutchinson assert, can save corporations as much as \$173 billion annually, with total savings of \$1 trillion. Eichhorn is a veteran medical products and services developer and founder of Medilink Consulting Group LLC, where he advises medical societies and commercial clients on marketing and strategic planning projects. He is a former vice president of development at Stevens and a past president of the Stevens Alumni Association. Healing American Healthcare is available on Amazon and at other booksellers. .

#### **MAY 31-JUNE 2** FRIDAY-SUNDAY

Alumni Weekend 2019 stevens.edu/alumniweekend

**OnStage at Stevens presents** "An Evening of Mozart" with the New Jersey Symphony **Orchestra Chamber Players DeBaun Auditorium, Stevens campus** stevens.edu/onstage

The 5th Stevens Conference on **Bacteria-Material Interactions Stevens campus** 

17th Annual Stevens Athletics Golf **Outing at Arcola Country Club** Paramus, NJ

THURSDAY-SATURDAY **HF2019: 8th Annual Conference** on High-Frequency Finance and Analytics **Babbio Center, Stevens campus** 

## **Graduate Open House Babbio Center, Stevens campus**

For all events, visit stevens.edu/events



# GAME GHARGER



#### NEW UNIVERSITY CENTER, RESIDENTIAL TOWERS WILL BRING CAMPUS TOGETHER

Stevens Institute of Technology will soon embark on the most ambitious infrastructure project in its history when it begins the initial phase of construction of the Student Housing and University Center project on its hilltop campus overlooking the Hudson River.

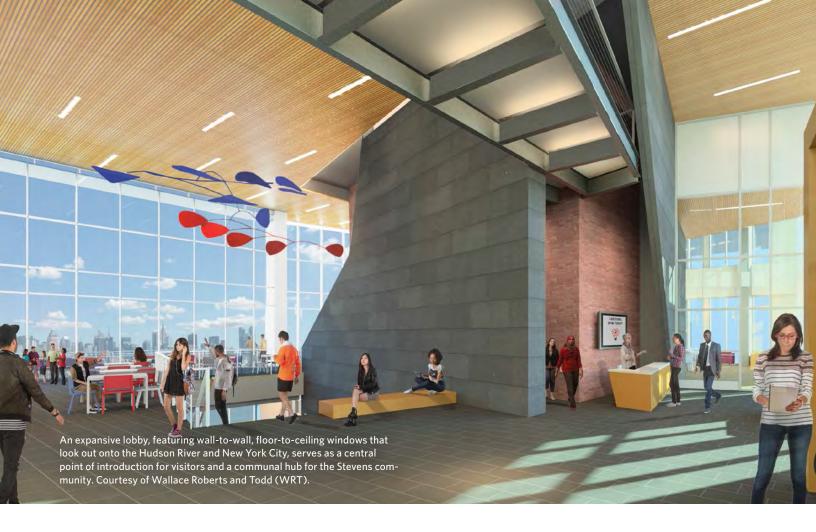
To be completed during the 2021-22 academic year, an extensive three-story university center building with two residential towers rising above will be built near the highest point of Hoboken, addressing the university's critical need for campus housing for its growing student population of nearly 3,500 undergraduate students.

The new building complex will give Stevens a true university center — the focal point on campus — that can accommodate various types of gatherings, facilitate social and recreational activities, provide additional dining and retail services, host lectures and talks, and much more.

The addition of new on-campus housing will also contribute to a greater sense of campus unity. The two residential towers will provide a unique living and learning environment for nearly 1,000 students, and relocate hundreds of students who live in university-leased housing throughout the "Mile-Square City" of Hoboken.

When completed, the Student Housing and University Center will help deliver on a strategic priority to create a vibrant campus — a key pillar of Stevens' ten-year strategic plan and its historic *Power of Stevens* capital campaign — to help Stevens grow in size and prestige.

"Premier universities are defined primarily in three ways: stellar students, exceptional faculty and first-rate facilities," said Stevens President Nariman Farvardin. "This project will be an iconic addition to the aggressive expansion, modernization and revitalization of our entire campus infrastructure that has been underway over the last few years."



### A MODERN UNIVERSITY CENTER AND ADDITIONAL HOUSING FOR STUDENTS

The three-story, 70,000-square-foot university center will become the heart of campus life, and will feature a diverse and versatile interior that includes a fitness center, game room, spaces for student groups, dining venues, convenience store, multipurpose space for conferences and university events, private dining room to host guests, flexible lounge area and more.

The two residential towers — one 16 stories and the other 18 stories rising above the three-story university center — will accommodate 994 students in single, double and suite-style apartments. The amenities will include kitchenettes in each unit, private en suite bathrooms, a refuse/recycling room on each level and a shared study lounge on the residential floors. The Student housing and University Center project will incorporate Stevens' emphasis on sustainable design and construction, and is intended to be a LEED Silver® project.

But the building's lasting imprint on the Stevens campus will extend far beyond its physical size.

The Student Housing and University Center project will shape campus culture for future generations of students, according to Marybeth Murphy, vice president for enrollment management and student affairs.

"With this building, Stevens will be able to offer students an unparalleled campus experience, one that will encourage students to have greater engagement with the Stevens community than they already do now, because the physical proximity will enable them to participate in more campus activities, take on leadership roles, develop relationships with students, faculty and staff, and have university resources and services readily available to them."

The return of so many students to on-campus living options and the addition of a hub for university life will allow for an even stronger sense of community at Stevens, said Sara Klein, assistant vice president for student affairs.

"Our students prefer living and spending their time on campus; the proximity allows for greater connections to each other and to Stevens, more interaction with faculty and administrators, and significantly more engagement in the campus community," Klein said.

### DESIGN THAT HONORS THE PAST WHILE LOOKING TOWARD THE FUTURE

To be built on the current site of Jacobus and Hayden halls and adjacent to the Wesley J. Howe Center, the buildings will be adjacent to Wittpenn Walk, the pedestrian path that connects the upper and lower areas of the campus. In designing the two residential towers perpendicular to Wittpenn Walk, the design team has created a dramatic change by opening the views to the Hudson River and beyond from campus. This will include a large outdoor plaza that will fully showcase Stevens' signa-

ture views of New York City.

In addition to framing the remarkable views, the design team — Design Collective and Wallace Roberts and Todd — has been mindful of respecting the scale of the nearly 150-year-old hilltop campus, said Richard Snyder, a senior project manager with the Division of Facilities and Campus Operations at Stevens.

The solid mass of the university center, which serves as the base of the building, will align in height and red brick exterior with adjacent buildings along Wittpenn Walk, including Walker Gym, Davis Hall and Schaefer Athletic Center. Snyder added that the use of glass to clad the two residential towers is intended to make the towers reflect the sky and appear lightweight.

"This project will be an iconic addition to the aggressive expansion, modernization and revitalization of our entire campus infrastructure that has been underway over the last few years." -Stevens President Nariman Farvardin

The first stage of the project will involve abatement, demolition and excavation of the existing site, starting with the demolition of Jacobus Hall, followed by Hayden Hall. Student club and activity spaces, formerly housed in Jacobus, are in temporary space until they can be relocated to the newly renovated Alexander House in summer 2019.

#### **CITY APPROVAL, MAJOR GIFTS AND A CAMPUS TRANSFORMED**

Building a modern university center with two residential towers would not have been possible without approval from the City of Hoboken. In August 2018, and with the support of the Mayor, the Hoboken City Council approved an ordinance creating a new University District zone which enables the construction of two residential towers atop a three-story

university center. Many members of the Stevens community contributed to this watershed achievement by expressing their support to Hoboken's elected officials.

Additionally, the Student Housing and University Center project was made possible in part through The Power of Stevens, the university's capi-

> tal campaign project to support student success, faculty excellence and development of a vibrant campus. A historic gift - the largest single bequest in Stevens' history — by alumnus Richard Harries '58 and his wife Carol, announced last year, will help support the new residence halls. The north residence building will be named the "Richard F. Harries Tower" in honor of Harries' generosity.

President Farvardin, who joined Ste-

vens in 2011 as its seventh president, has led the greatest period of transformation in the nearly 150-year history of Stevens in a broad campaign to modernize the university's infrastructure into a 21st century campus for teaching, research, learning and living.

During the past five years, the Stevens campus has added a host of new facilities, including the ABS Engineering Center, the Hanlon Financial Systems Center, the North Building, the Ruesterholz Admissions Center, the expansion of Babbio Garage, the new Student Wellness Center, and opening later this year, the Gateway Academic Center, a four-story, 89,000-square-foot pair of buildings that will feature 11 smart classrooms, 13 teaching and research labs, and 45 faculty offices, plus various spaces for students and professors to congregate and collaborate.

❖ — Young Soo Yang















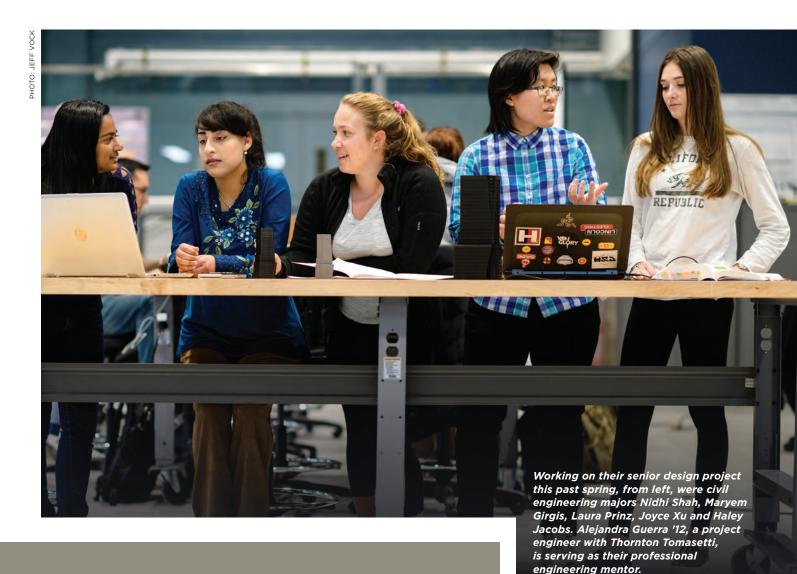
EVOLVING THE FACE OF

## STEM









Advancing Women in STEM

A long line of young women — and a few young men — stream outside the Bissinger Room one blustery March evening, waiting to share a meal, to network, and to receive some hard-won wisdom from professional women in STEM.

It is one of the largest networking events of its kind in recent memory for Stevens'

Society of Women Engineers (SWE), and SWE President Dhivya Shankar '19 looks excited, and determined.

The evening goes better than she could have imagined. Some 65 women, many of them alumnae, discuss their career paths and exchange advice and business cards with students who aren't afraid to pepper them with questions — or ask for a job. These engineers and scientists are so enthusiastic to help that they slightly outnumber the students.

Alejandra Guerra '12, a project engineer with Thornton Tomasetti, wished she'd had more opportunities like these to connect with professional women when she was a student. Now, she wants to be there for these Stevens women. She's mentoring a senior design team and returning to campus to speak of her journey.

"The industry is lacking in women, but it's getting better," she says. "Seeing me come back to Stevens, it will be more encouraging for them."

She longs to see more women leaders in her field, acknowledging gains but continuing challenges.

"It was hard going to construction fields and meetings and being the only woman and the youngest as well," she says.

#### A LOOK AT THE NUMBERS

Women make up the majority of college students in the United States, but when it comes to certain STEM fields, especially engineering and computer science, a stubborn gender gap persists both at the university level and in the work force. What is perplexing is that women are reaching parity in medical, law and business schools.

According to the 2017 Engineering By the Numbers, an annual report issued by the American Society for Engineering Education, women received 21.3% of U.S. engineering bachelor's degrees, 25.7% of U.S. engineering master's degrees and 23.5% of U.S. engineering doctoral degrees in 2017. Women also earned only about 19% of U.S. undergraduate computer science and information sciences degrees in 2016, according to the National Center for Women and Information Technology.

Meanwhile, the number of women working in engineering and computing fields has remained low, with women now making up 26% of computer scientists and 13% of engineers, according to SWE.

Overall for STEM fields, according to 2015-16 statistics from the National Center for Education Statistics, women accounted for 57% of all bachelor's degrees awarded but earned only 32% of the STEM degrees. Currently, women make up less than a

quarter of the STEM workforce, according to the U.S. Department of Commerce.

Stevens has seen its overall percentage of undergraduate women remain more or less flat over the past five years, hovering between 28% and 30%, currently at 29%. But the number of undergraduate women on campus has grown during this time, from 760 to 1,009, as overall enrollment has grown. Undergraduate women make up 28% of the School of Engineering and Science, 32% of the School of Systems and Enterprises, 32% of the School of Business and 42% of the College of Arts and Letters. Stevens women earned 29% of the engineering bachelor's degrees in 2017, above the national average of 21.3%.

Stevens shines in its percentage of women earning engineering doctoral degrees. In 2017, 35% of Stevens' engineering doctoral degrees went to women; 17 women, from a total of 48 students, earned Ph.D.s, well above the national average of 23.5%. (In 2018, this Stevens number increased to 49%.)

In light of these numbers, Stevens women are determined to connect with each other, to make a difference and to combat the STEM gender gap.

#### THE NATIONAL VIEW

Experts cite a variety of reasons for this gender gap, including gender bias through which women are discouraged from entering or staying in these fields; the need for



"I HAVE ENCOUNTERED MANY PROFESSORS, **ALL OF THEM IN DIFFERENT FIELDS AND** WITH DIFFERENT PASSIONS, AND ALL OF THEM HAVE ACTED LIKE A MENTOR TO ME."

- Sarah Hoogenboom '19, Civil Engineering



more women role models; the all-boys network of some STEM professions and a less welcoming workplace climate. Also, there is a lack of understanding among the public — parents, teachers, guidance counselors and students — about the wide diversity of careers available in STEM.

The gender gap, "is systemic, it's a national problem," says Deborah Vagins, senior vice president for public policy and research with the American Association of University Women. "Gender bias still persists in all areas of education," and is contributing to the STEM gender gap.

These biases can manifest themselves as teachers being less encouraging of female students in math and science classes. Even young women studying STEM subjects in graduate school or working in these fields can be discouraged if they face sexual harassment or a work environment that doesn't support families with children, Vagins says.

**PEOPLE WHO** THINK LIKE YOU."

- Dhivya Shankar '19, Mechanical Engineering

"There's no one solution. Obviously, more can be done to support and make it comfortable for students (and professors)," Vagins says, from more women role models in STEM, to gender bias awareness training and teaching all students that STEM skills are learned and not innate.

"Understanding how climate (academic or workplace environment) can push out women is really important," Vagins says.

Sometimes, just the way you talk to young women about STEM fields can make all the difference, says national SWE president Penny Wirsing.

"I talk about how engineering is solving problems and saving the world, to make it a better place. That's something that girls can get behind," Wirsing says.

"Making the world's water and air safer appeals to them."

Wirsing also emphasizes the need for STEM role models who are women, so young women see what is possible.

Despite many challenges, both Wirsing and Vagins see a reason for optimism. The STEM gender gap is more in the public consciousness, with more organizations focusing on the issue, Vagins says.

"I personally feel very positive," Wirsing says. "I also feel there's much work to be done."

#### A GRASSROOTS MOVEMENT

At Stevens, a variety of programs and activities across campus connect women to each other. Most remarkably, there's a grassroots movement among Stevens women - students and faculty alike — to inspire younger women to enter STEM fields.

This April, Stevens' SWE hosted its second Stevens "STARTS" event, which brought together 22 student organizations to do hands-on STEM activities with close to 100 local children. Last year, Stevens' SWE received an award from the national organization for its efforts.

For the past four years, Stevens mechanical engineering professor Maxine Fontaine has visited the Joseph Brensinger Elementary School in Jersey City, New Jersey, for "Introduce a Girl to Engineering Day." Earlier this year, Fontaine, professor Leslie Brunell '86 M.Eng. '90 Ph.D. '96 and several students spoke with 200 fifth-through eighth-grade girls about various careers in engineering as well as their own personal journeys.

Computer science professor Adriana Compagnoni, a longtime advocate for women at Stevens, teaches "Coding for Moms and Other Grown-ups" at the Maplewood Memorial Library in New Jersey.

Chemical engineering professor Stephanie Lee, a well-known Stevens mentor, has visited a local school, mentored special needs children and brought a local Girl Scout troop to campus to spark young girls' interest in STEM fields. (See story on page 36.)

Meanwhile, this past spring, some 250 high school girls converged on Castle Point to learn about business and STEM careers, meet Stevens students and professional women and compete in team-building

exercises, during an event co-sponsored by Stevens' School of Business and Junior Achievement of New Jersey. Women from Eli Lilly and Company, Sanofi, Deloitte & Touche and Stevens spoke openly about their challenges and triumphs in STEM and the business world.

This event, in its fourth year, is part of the business school's strategy to increase its number of women and underserved students, says professor Ann Murphy, one of the day's organizers. But it was much more than that.

"First and foremost, it was our interest in educating young women and helping them develop confidence and feel that they have a number of career options," Murphy says. "It's a chance to learn from others, from successful women."

Her hope for these young women? "That they feel optimistic about their future, and motivated to work hard in school."

#### **CREATING A COMMUNITY**

A number of Stevens women students interviewed say they would like to see more women in the university's faculty. Currently, women make up 25% of the full-time overall faculty body (tenured, tenure-track and non-tenure-track), a number that has grown over the past five years. Competition for outstanding women faculty in STEM is fierce, says Susan Metz, Stevens' executive director of diversity and inclusion, and it is a challenge shared by many universities.

With more women faculty, "it would give me more reassurance for what I am doing," says Kristy Chan, a Stevens junior majoring in chemical engineering. "It would be helpful to hear from the other side — what it's like to be in STEM."

(Continued on Page 19)

"AS A FIRST-GENERATION COLLEGE STUDENT, I WASN'T PREPARED FOR EVERYTHING THAT HAPPENED THESE PAST FIVE YEARS, BOTH PHYSICALLY AND MENTALLY, AND I HONESTLY **WOULD NOT HAVE MADE IT THIS FAR WITHOUT** THE SUPPORT OF MY COLLEAGUES, FRIENDS AND MENTORS." - Joyce Xu '19, Civil Engineering

## LEAN ON ME

For Stevens women, mentorship matters

Fattum Abbad — who's known as Febe — had not even completed her first year at Stevens but was already seeking and embracing the help of other women on campus, mentors who are guiding her on her journey.

Stevens' Society of Women Engineers group, which offers student-to-student mentors, has shown her how to conduct herself during job interviews and explained what business casual really means.

Then there's Professor Jennifer McBryan.
Abbad, a biomedical engineering major, had taken McBryan's Freshman Experience writing and humanities classes and needed help with an essay for a dental program

she's applying to for the summer. McBryan encouraged her to feel comfortable with really pushing her achievements in her essay, Abbad says. She has also helped resolve course scheduling conflicts.

"She was making sure that I was getting what I needed," Abbad says. "I feel comfortable talking with her about anything — writing or otherwise."

Women students at Stevens are forming these mentorship relationships with faculty and staff, and with each other. Women who experience these relationships reap the benefits: an increased ability to envision their career path; an expanded professional network; more confidence in their abilities; greater career satisfaction.

While some women students express the desire for more women faculty to connect with, mentor relationships are happening all across campus, from the work of chemical engineering professor Stephanie Lee (see page 36) to biomedical engineering

professor Vikki Hazelwood Ph.D. '07. (See her profile at stevens.edu/hazelwood.)

Melanie Caba '19 can immediately identify her mentor: biomedical engineering professor Carrie Perlman. Caba has done research with Perlman, and they've discussed her options post-graduation (Caba has chosen a master's degree from Stevens, then a job in product development, maybe a Ph.D. and teaching).

"Having a mentor is having another helpful individual solidify what you think is right," Caba says. "It really helps you have confidence in yourself."

Some mentorship relationships continue well beyond Castle Point.

Business and technology major Bianca (Caseiro) Costa '15 calls School of Business professor Ann Murphy a role model and a friend. Murphy was a constant sounding board for schoolwork and job recommendations in the finance industry, and Costa credits her guidance in helping her secure

internships every summer.

"I really trust her judgment," Costa says. "She helped pave the way for my career."

Costa, who now works with Oppenheimer Funds in New York, keeps in touch regularly with Murphy.

"Finding someone you look up to in so many ways is rare. She's also such a great mom and is so involved with her

Melanie Caba '19, far left, performed research with biomedical engineering professor and mentor Carrie Perlman, third from left, and her team over two summers.

"HAVING A MENTOR IS HAVING ANOTHER HELPFUL INDIVIDUAL SOLIDIFY WHAT YOU THINK IS RIGHT. IT REALLY HELPS YOU HAVE CONFIDENCE IN YOURSELF."

— Melanie Caba '19, Biomedical Engineering

children. A strong woman like her makes for a great mentor in life, not just school."

Like Murphy, civil engineering professor Leslie Brunell '86 M.Eng. '90 Ph.D. '96 has been a longtime mentor for students and junior faculty. This current SWE advisor has a particularly close bond with Lauren Tagliaferro '13 M.Eng. '16 and her husband Frank Belardo '13 M.Eng. '18.

Brunell advised their senior design teams and taught real-world lessons that Tagliaferro says she uses every day as a project engineer at Langan Engineering and Environmental Services.

"She has always kept in touch. She always lets you know that if there's anything that you need from her, she's there to help and she truly means it," Tagliaferro says.

"I try to prepare my students who are entering more male-dominated fields," says Brunell, who has had a long career as a consulting engineer. "It's not easy."

With a generation gap in civil engineering right now, some older men may come across as harsh in their critiques; she encourages her students to learn from the criticism and move on. She also urges them not to get pushed around.

And if a colleague is inappropriate, women must stand up for themselves, she tells her students.

"If someone hugs you and it's inappropriate, fight back. Make it known that it's not acceptable."

Brunell, Murphy and others are well known for their close ties with their students. They attend their students' weddings and, recently, Brunell went one step beyond.

A month before Tagliaferro's and Belardo's wedding last year, the priest scheduled to marry them was injured in a car accident. So they called upon Brunell, who is ordained to officiate weddings.

"She did an amazing job and made our wedding so personal," Tagliaferro said. "That just attests to the type of person she is." 💠 — Beth Kissinger



(Continued from Page 17)

Experts have pointed to the importance of women role models and mentorship for women in STEM, so the Stevens chapter of SWE offers a student-to-student mentoring program. Some women students have formed mentoring relationships with both male and female professors. For faculty, Stevens' School of Business operates a faculty mentoring program, and a university-wide faculty mentor pool was also created several years ago to help foster these important relationships between junior and more senior faculty. (See opposite page.)

"Women at Stevens are looking to build community with other women," says Sara Klein, Stevens' assistant vice president for student affairs.

"When they come to Stevens, they see that they are the minority and seek out other women to build a support system."

Women connect with one another in a

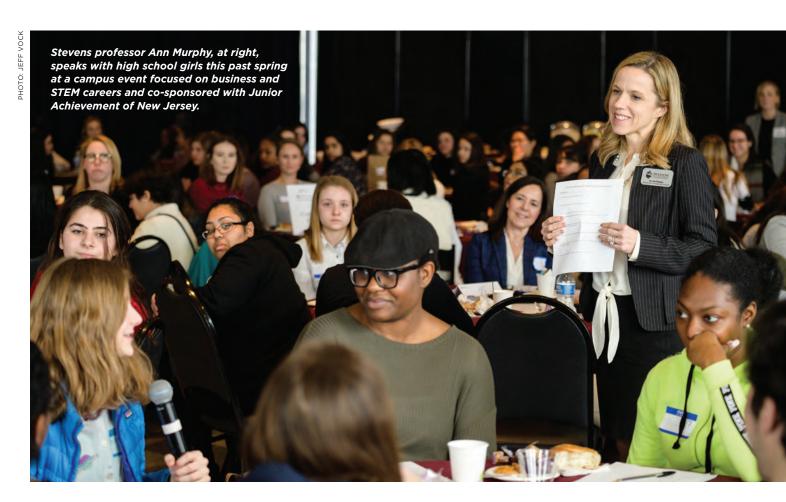
**CESSFUL IN MY EDUCATION, TO RISE TO THEIR** SUCCESS AND **BEYOND.**"

- Elena Malova '20, Applied **Mathematics** 

number of ways, from sororities, sports teams and women's professional societies to activities of the university's Lore-El Center for Women's Leadership, home to 14 upperclass women and a robust program of events focused on professional development, health and wellness, arts and culture and social outings.

"Women are very involved in campus life," Klein says. "They are confident, intelligent and ambitious. They always manage to achieve and succeed at Stevens."

With women making up 29% of the graduate program, Stevens' Office of Graduate Student Affairs offers programs throughout the year for graduate women, faculty and staff.



Events have ranged from a monthly "Lunch & Learn" series that focused on topics like health and finances; networking nights; and student sponsorship for the SkillPath professional development conference.

Experts also note the need for young women to see more women role models in STEM leadership roles, and this process is gradually happening at Stevens.

In 2017, Jean Zu became the first woman in Stevens history to lead the School of Engineering and Science. (*See a profile of Dean Zu on page 24*.) Professor Darinka Dentcheva recently became the first woman to chair Stevens' Department of Mathematical Sciences, and professor K.P. "Suba" Subbalakshmi leads the high-profile Stevens Institute for Artificial Intelligence, launched last year. Victoria Velasco '04 is president of the Stevens Alumni Association, the third woman to serve in this position.

The National Science Foundation has awarded its prestigious CAREER Awards to

a number of women faculty researchers, as well, including professors Samantha Kleinberg, Negar Tavassolian, Wendy Wang and Stephanie Lee.

Women ascending to academic leadership roles have not gone unnoticed by Stevens' women students.

"I've always admired her," says Elena Malova, a junior math major, when speaking about Dentcheva. "She's very inspiring to me."

On campus today — and across the country — more organizations devoted to young women in STEM have also been created in recent years.

At Stevens, affinity groups include Stevens Women in Computer Science, Stevens Women in Business, Women in Systems Engineering and, of course, the long-standing SWE.

#### STUDENT REFLECTIONS

Several women who live at Lore-El agreed that the experience has allowed them to better connect with women and advocate for each other. "For me, living at the Lore-El Center has allowed me to surround myself with strong, ambitious women who are not only dedicated to making Stevens a better place for their colleagues, but also to having open discussions about what it's like to be a woman on campus," says Shankar.

One of the most striking things about several of these women of Lore-El: They can all point toward someone who served as a role model when they were very young, someone who gave them the confidence that they could succeed in STEM fields — their parents, a cousin who was an engineer, a high school physics teacher.

Jennifer Searing, a sophomore quantitative finance major, is the daughter of two mechanical engineers who was always urged to pursue her love of math. In school, she learned about great women scientists and researchers like Rachel Carson and Jane Goodall. But she would like to see more women in her classes, where she is

one of eight women in her class of 50. Occasionally, she feels like she has to do more to be seen on the level of her male peers in class, she says.

"Sometimes, I feel that I have to participate extra, on behalf of women," she says.

Shankar, a mechanical engineering major, also has mostly male classmates and recalls one class when she was the only woman. With no one to study with, she didn't do as well. When she had a class with more women, she did exceedingly better.

#### SUCCESS ON CAMPUS -AND BEYOND

One fact is unmistakable: Once they're here, Stevens women achieve remarkable success during their college careers and after graduation. Indeed, recent statistics that measure the success of undergraduate students are stellar for Stevens' women graduates.

Among Stevens' undergraduate women, according to the university's Fall 2018 Census, there is a 96% retention rate after freshman year. The six-year graduation rate for the 2012 entering cohort of undergraduate women was 89%. And, for the Class of 2018, 97% of undergraduate women secured their career plans (employment or graduate school) within six months of Commencement.

Indeed, undergraduate women at Stevens have slightly outshined Stevens men in the above categories. Last year, research published in Forbes discovered that Stevens women ranked No. 2 in the nation for most equitable gender gap in pay among recent women and men graduates. In fact, Stevens women slightly out-earned the men post-graduation.



HOTO: M. COOPER



Stevens women do so well for many of the same reasons that male graduates do, says Lynn Insley, the longtime executive director of the Stevens Career Center: their talent and work ethic: the broad-based technical education they receive; the senior design experience; the greater chance to take on activities and leadership roles on the small campus; co-op and internship experiences.

But with many Stevens women, there's also a shared bond that propels them, Insley adds.

"Stevens women are loyal to each other," Insley says. "Most importantly, it's the women themselves, supporting each other, and proud of each other's accomplishments."

#### IMPROVING THE ENVIRONMENT **FOR WOMEN**

If you walk around the Stevens campus today, you will see more women, as overall undergraduate enrollment (and the number of women enrolled) has increased over the past five years, as part of Stevens' strategic plan. But the proportion of women has remained the same.

Competition across the country for talented women in STEM is simply fierce, says Jacqueline Williams, Stevens' dean of undergraduate admissions.

"It's a small pool of women overall, and they have many, many options," says Susan Gross, assistant vice president for financial aid and undergraduate admissions.

During campus tours with prospective students, the Admissions Office places an emphasis on the Lore-El Center and the success of women in STEM at Stevens. Many undergraduate women serve as tour guides, meet with students, serve on panels and answer questions, Williams and Gross say.

Stevens' strategic plan sets a goal of 35% undergraduate women by 2022. One

"STEVENS' FOCUS IS INTERDISCIPLINARY, AND ALLOWED ME TO EXPLORE HOW ASPECTS OF ELECTRICAL ENGINEERING, **COMPUTER PROGRAMMING AND LAW TIE** INTO BEING A BIOMEDICAL ENGINEER."

- Yanique Spigner '19, Biomedical Engineering

initiative planned to help reach that goal is more outreach with organizations that focus on women in STEM, both bringing them to campus and meeting with them during recruiting efforts across the country.

Meanwhile, the university is taking a number of steps to try to increase the number of women faculty, to reduce gender bias through professional development and to improve the academic climate for women on campus. Stevens' ADVANCE grant from the National Science Foundation has been helping to support some of these efforts.

It is challenging to hire women STEM faculty, and traditional recruitment practices are typically unsuccessful, Metz says.

"Recruiting women faculty takes commitment and persistence. It's important to take a long-term view and build relationships with potential candidates over time—similar to strategies that coaches use to recruit top athletes," Metz says.

Kim Barletta, director of Stevens' Center for Faculty Engagement and Advancement, shares "Tips of the Week" with faculty on topics ranging from unconscious bias to creating inclusive classrooms and integrating diverse examples in their teaching. Undergraduate students met with Stevens President Nariman Farvardin last year to press the need for inclusive classroom training for faculty. Now, online seminars on the subject are offered for all faculty and teaching assistants.

Bringing in a more diverse faculty is especially important to increasing the number of students in computer science who are women, says professor Giuseppe Ateniese, chair of Stevens' Department of Computer Science. In his department, where only five of 25 faculty are women, he has been working to recruit more female faculty, though competition to hire these women can be intense among universities.

"The role model approach is something that works," he says, emphatically. "If you hire top women faculty, this is incredibly beneficial. When students see faculty that look like them doing research and teaching, they get inspired and are more likely to succeed. They see it as feasible and possible."

Undergraduate applications from women wanting to study computer science were up this spring, and Ateniese says that he's hopeful that Stevens will enroll more young women in the major this fall.

#### WHY DIVERSITY MATTERS

"There is a rigorous body of research supporting the value of diversity in creating a more innovative, stimulating and thought-provoking educational experience," says Metz. "Education and research is enriched by diversity defined in the broadest sense — people with different perspectives, disciplinary expertise, and demographic backgrounds enhance the experience."

"We know that diversity of ideas leads to better solutions," adds Wirsing of SWE, who wonders why we'd discourage half the population from coming up with solutions to urgent societal problems. "It's critical that we succeed. If you have all people who think alike sitting around the table, you will get one set of solutions."

AAUW's Vagins agrees. "It's the right thing to do — not eliminating a talented pool of candidates. It's better for the economy, it's better for America."

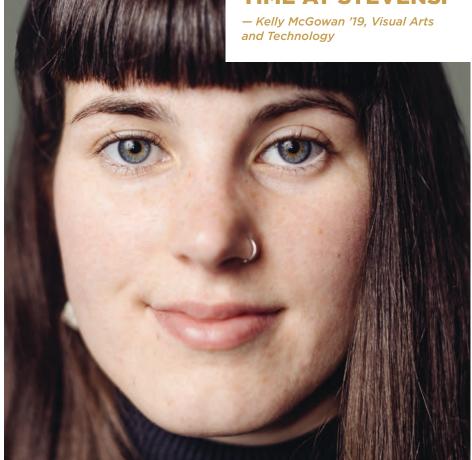
Women students see more women on campus as a way of not only building a greater sense of belonging but also offering a richer college experience for everyone.

"You don't grow by talking to people who think like you," Shankar says.

Shankar will join BASF this fall, working with its Engineering Professional Development Program for promising leaders. And she will continue to be involved with SWE — to lift up other young women in STEM. ❖

— Beth Kissinger

"I MADE A LOT
OF REALLY GOOD
FRIENDS THROUGH
SIGMA DELTA TAU
AND IT'S BEEN
A BIG SUPPORT
SYSTEM THAT HAS
KEPT ME GROUNDED
THROUGHOUT MY
TIME AT STEVENS."



OTO: M. COOPER

# STILLON TOP OF THE MODEL OF THE

Dean uses setbacks and challenges as motivation to achieve her goals



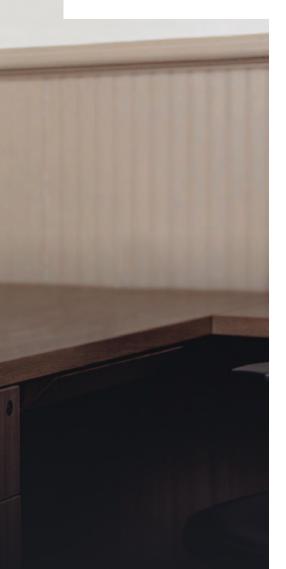
Jean Zu never set out to be the first anything, or to break any barriers. But she would follow her own path — one that included conflicting messages and unexpected hurdles along the way — and do just that, becoming the first woman dean of Stevens' School of Engineering and Science (SES) when she accepted the position two years ago. It's a recent entry in a long line of firsts for Zu, who has spent much of her life living up to her father's standards. And, to a lesser degree, her mother's.

[teaching at Tsinghua] for about two years and I really treated it as a transition. I just wanted to practice English and find somewhere to study for my Ph.D."

She did both, landing alone in Canada at the University of Manitoba, with \$40 in her pocket, leaving behind her new husband.

"When I started dating my future husband, on his first meeting with my father, my father told him that I was going to study abroad and asked him if he would

### **ZU ENTERED THE PRESTIGIOUS TSINGHUA UNIVERSITY** IN BEIJING AS ONE OF NINE FEMALE STUDENTS IN A CLASS OF 35. IT WAS A CHALLENGING ENVIRONMENT, BUT SHE POWERED THROUGH, EARNING BOTH HER BACHELOR'S AND MASTER'S DEGREES IN ENGINEERING MECHANICS.



"My mother always tried to train me to do housework, as a girl," she says. "So, to this day, I cook and I clean."

While "being feminine" was important for her parents, so was academic success.

"I was an obedient child. My father was a high achiever and he expected the same from his children, especially with no sons."

Zu and her sister, a physicist based in Shanghai, would not disappoint. They prioritized their studies, which were somewhat limited.

"When I entered school, it was right after China's Cultural Revolution. People suffered persecution; my father was persecuted and because of this, he didn't want me to study arts because it was dangerous. I wasn't any good at it anyway," she jokes, explaining that she was good at math, so it was a natural course to follow.

Zu entered the prestigious Tsinghua University in Beijing as one of nine female students in a class of 35. It was a challenging environment, but she powered through, earning both her bachelor's and master's degrees in engineering mechanics. She then began teaching at Tsinghua as one of a handful of female faculty.

It was a short stint, though, because Zu had her sights set on a more ambitious adventure: studying in the West. "I was

support it." She laughs. "So, when the time came, it wasn't an issue."

Though the decision to go to Canada may not have been an issue, Zu would soon find herself facing new and life-changing challenges. Her focus was to live up to her adviser's expectations: make all As and get published within six months.

The bar was high, but Zu had never met a challenge she couldn't overtake. Having been tasked with finding a finite element analysis code, Zu threw herself into the assignment but couldn't get her program to work. For the first time in her academic career, she got stuck.

Devastated at the thought that she wouldn't be able to publish, and driven by her upbringing to perform and meet expectations, Zu was in uncharted waters; the prospect of failure was foreign to her. Compounded by social factors — as one of few female Ph.D. students, very far from home, with little family support (at the time, it cost roughly \$3 per minute to call China), and only enough money to fund basic essentials — Zu was left with anxiety she'd never felt before.

"Basically, I woke up around 5 a.m. every day and my heartbeat would speed up out of nerves." She pauses, then continues, explaining that she questioned her own

existence. "Every morning I would think about it. It was a very painful experience."

She is unashamed and unapologetic, telling the story now with candor and confidence.

But the experience left Zu herself heartbroken. She recalls that even five years removed, she would cry the moment she mentioned it.

"It's hard to believe, right? Because now I am so positive. But I believe behind every successful person there is some struggle. Otherwise, we wouldn't be so strong. So many people deal with this but nobody likes to say it. I'm very open-minded — I don't mind exposing myself and my weaknesses."

"I thought of giving up," Zu recalls. She went so far as to book a ticket back to China — but her parents found out and demanded she rip it up, concerned that if she returned, she may not be able to leave again. A few months later, her husband joined her in Canada, which helped a great deal.

"Gradually, I came out of that low point. And once you come out of it, you are very strong — because you're motivated not to put yourself in that position anymore." Her resolve paid off. "One year later, I was so clear and determined to pursue an academic career, I wouldn't allow myself to go back. I'd been through the worst; I was on top of the mountain."

Zu carried on and two years into her Ph.D. program, she became pregnant with her first child (a daughter who graduated from Harvard with a psychology degree and now works in Shanghai). At the same time, she was offered a coveted teaching position, with one caveat: She would only be allowed two weeks' maternity leave. (At the time, in the early '90s, standard maternity leave in Canada was four months; however, there were no maternity benefits for students.) She took the job and began teaching dynamics while eight months pregnant.

"Pursuing an academic career was the goal I'd set, so I was willing to do anything," she says.

Then, another challenge: Zu experienced a complication during childbirth that left her with a painful torn muscle and kept her hospitalized for 12 days. Unable to sleep and worried about her return to the classroom, she was finally connected with a specialist from her homeland who offered her some relief.

"I was obligated to return after two weeks — I had to keep my promise."

So, two days after her release from the hospital and exactly two weeks after giving birth, she was back in the classroom, walker in tow. But she already knew she could, and would, handle it.

"After my nervous breakdown, even challenging experiences weren't that challenging, because I was so determined for happiness and to not let myself down. Pursuing an academic career was the goal, and I was willing to make every effort to achieve the goal."

And she did. Her perseverance paid off — she was offered a tenure-track assistant professor position in the Department of Mechanical & Industrial Engineering at the University of Toronto. Even there, though, she would face maternity-related issues when she became pregnant with her second child (a son who is studying business and technology at Stevens). She was the first faculty member in her department ever to go on maternity leave — and there wasn't a policy to allow for it. She was asked to make up a semester on her tenure-track clock and, in line with her obedient nature, she agreed to do so.

"I was only the second female faculty in the engineering department — the first had only come a year and a half before me — so they had to learn. But after me, there were many more and it was no longer an issue."

But not all issues would result from her pregnancies. Some would stem from the ignorance of her colleagues. In 2009, Zu was selected as the first female chair of her department at University of Toronto, and while it was an exciting time in her life, not everyone was happy for her.

For example, the chair's assistant took a two-week vacation at the start of Zu's tenure. "When she returned, she said 'I had a good vacation until last night because I had a nightmare thinking about coming back to work for you," Zu recalls, still somewhat appalled when she hears herself tell the story. But Zu, ever the professional, kept her on.

(At mater more benderal and more the any control of the any control of

"IT IS REALLY INSPIRING TO HAVE A WOMAN AS OUR DEAN BECAUSE CURRENTLY THERE IS A LACK OF REPRESENTATION OF WOMEN IN STEM FIELDS." – Alyssa Appleby '22, Mechanical Engineering



Jean Zu, dean of the School of Engineering and Science, speaking at her welcome reception in July 2017.

"It was a department that had the same style of operation for a very long time, but she's a nice person and was capable in her job," Zu says. "She resisted change and I understood that it was difficult for her to change to a different boss with a different work style. But I had to modernize and after half a year, I proved to her that I was qualified." The assistant stayed with Zu for three years, before retiring.

"I think some of it was because I am a woman and some because I am Chinese. But you have to be stronger."

And now, the only woman among Stevens' senior academic leadership, Zu continues to prove herself both a strong and empathetic leader. She considers recruiting female faculty as one of the important aspects in building a strong school, noting that diversity helps everyone in her

school and across the campus at large.

"For women to gain confidence in a male dominated field, they need someone they can relate to, so that they can be positively influenced. But it's also important for the advancement of science and engineering. No matter how smart you are, another angle always adds more," she says. "The team is important; one plus one is greater than two."

Which is why she tells her female students to have patience and urges them not to give up.

"There can be so much self-doubt and insecurity. So my best message to female students is to stay the course. Go step by step and be patient — your time will come."

She's lived her own advice, finding her own confidence from persisting and persevering in the career she wanted to pursue.

She chalks up many of her professional accomplishments — more than 340 journal and conference papers, serving as president of the Canadian Society of Mechanical Engineering from 2006 to 2008 and the Engineering Institute of Canada from 2012 to 2014 — to learning how to prioritize her life.

"After becoming a faculty member in Toronto, I realized that it's impossible to do everything, so I learned to prioritize. First is family, second is health and third is work."

She continues to nurture all three, enjoying her children, fostering her own confidence and self-acceptance, and continuing to push SES into new and exciting territory.

"Nothing's perfect but I'm grateful for everything. Overall, I'm very blessed." ❖

— Rebecca Markley



## SISTERS FOR LIFE

Sororities offer sense of community at Castle Point and beyond

With roughly 40% percent of undergraduate women belonging to a sorority, it's no secret why they're so popular at Castle Point: "I want girlfriends on campus," Nadia Hoellrigl '19, a founding member of Alpha Phi, says bluntly. "I have so many guy friends, which isn't a bad thing, but I wanted someone to relate to more, to share in our female empowerment."

Hoellrigl is not alone in her reasoning. Glen Abellana '19, a member of the cultural

Members of Delta Phi Epsilon proudly display their letters during Alumni Weekend 2017.

sorority Omega Phi Beta, says the interpersonal relationships she's built through her sorority have greatly enhanced her Stevens experience.

"In most of my classes, I'm one of three girls and it can be intimidating, but talking to other women with similar experiences just makes it better," she says.

And it's been that way since sororities made their first appearance on campus, not long after undergraduate women were admitted in 1971. Dean of Students Ken Nilsen explains that in the early years, the fraternities on campus had "little sister" groups to partner with for social and service activities, but those groups were never sanctioned and the women were never given membership. Because of that, he says, the women felt they deserved more. These groups fell by the way-side and developed into sororities.

"Phi Sigma Sigma was the first sorority founded at Stevens in 1982, and it started as a local interest group before partnering with a national group," he says. Elizabeth Wrzesien '82 M.S. '87 was a member of the local interest group, Zeta Omega, before helping bring Phi Sigma Sigma to campus during her senior year. She says that while the camaraderie of Stevens women students continued, the national affiliation helped in other ways.

"It was more structured, and the national affiliation brought us greater recognition," she says. "Also, having a relationship with the greater entity allowed us to have a connection with women from other schools, which is also nice."

That connection with the greater national organization has long been part of the draw to sororities, too. Mary Schurgot '06 M.Eng. '08 Ph.D. '12, a member of Phi Sigma Sigma who has served in various leadership and volunteer capacities for the national and international levels of the organization, says that the practical benefits of membership last far beyond the time spent together on campus.

"When you join a sorority, you instantly gain a network for life. I've personally gained so many mentors from the connections that I've made."

Another active alumna, Emily Smith '03 M.Eng. '03, who's president of the National Development Corporation for Delta Phi Epsilon, says that while she gained a long-term professional network, she also was "inspired and empowered for a lifetime of leadership and service."

"Opportunities for leadership are significant within your sorority life on campus. Through opportunities to lead within the chapter, you develop leadership skills and learn your own leadership style so that you are confident in yourself and able to say 'yes' to future opportunities," she says. "After college, that experience translated to me having the faith in myself to accept the challenges laid before me at work and to take on leadership opportunities within my firm. The time I spent working in a team

and leading in college gave me a head start on my peers when entering the work force."

Service is another major driving force of Stevens' sororities, at a campus and national level, with every sorority having a philanthropic cause. For example, members of Theta Phi Alpha work with The House that Theta Phi Alpha Built to help improve the plight of the homeless, while Sigma Delta Tau hosts "Eat Your Way Through Hoboken" to raise money to prevent child abuse.

Abellana says that Omega Phi Beta hosts events on campus, such as a special education workshop in conjunction with the Office of Diversity and Inclusion, and participates in the national Ray of Hope Walk to End Violence Against Women, held on the first weekend of October. "It's so important to engage in service to the community. These events also create opportunities to bring all the Greek organizations together."

As the number of women students on campus has increased, so has the need for more sororities. In the past five years alone Stevens saw its number of sororities more than double and, with the addition of Sigma Psi Zeta this spring, it now totals seven. Nilsen explains that the three original groups on campus — Phi Sigma Sigma, Delta Phi Epsilon and Theta Phi Alpha — were at capacity.

"We needed more options, so there was a deliberate extension program to accommodate those who want to join," he says. "It's important for Stevens, too, because these ties connect them to this institution and allow them to continue to support Stevens going forward."

More important than anything, though, are the friendships with other women sharing a similar experience. Smith is part of a group of 15 that regularly communicate and try to get together annually, and Schurgot says all of the bridesmaids in her wedding were her Stevens sorority sisters. And while Hoellrigl knows she's made lifelong friends through Alpha Phi, the everyday support can't be overstated.

"I've met such wonderful people, who I never would've met without the sorority. There's the benefit of 'older sister' wisdom and hearing different perspectives, but there's also comfort in something so small as borrowing a dress," she says. "It's a safe space to talk about anything. And when you need your sisters, they're always there." \*

— Rebecca Markley



"[THE SORORITY IS] A SAFE SPACE TO TALK ABOUT ANYTHING. AND WHEN YOU NEED YOUR SISTERS, THEY'RE ALWAYS THERE."

- Nadia Hoellrigl '19, Mechanical Engineering



#### Alumna keeps nearly 300,000 PATH riders moving across the Hudson every day

ow do you get the top job with one of the nation's busiest transit systems? For Clarelle DeGraffe '84, newly promoted director of rail transit and general manager of Port Authority Trans-Hudson (PATH), the journey started at Stevens. A campus job fair introduced her to the many opportunities available with the Port Authority of New York & New Jersey. Amazed by the organization's extensive network of bridges, tunnels, rail systems, airports, marine terminals and bus stations, she made sure to seek out their table at every networking event she could. Before long, she was on a firstname basis with agency representatives and laying the foundation for a lifelong career.

Born in Haiti, DeGraffe immigrated to the United States at 5 years old, settling in Brooklyn. As a self-described "B-student" at Brooklyn

Technical High School, she was skeptical when her guidance counselor urged her to apply to Stevens. Following an entrance interview, she was conditionally accepted to Stevens, provided that she complete the Bridge program over the summer. By the fall, she began her freshman year as a full-fledged Duck, pursuing a degree in civil engineering.

DeGraffe was involved in many activities and student groups, but she found a family on campus through STEP (Stevens Technical Enrichment Program). She credits the staff there with providing her invaluable support both academically and personally, even helping her find tuition funding through scholarship applications and student loans each semester. "I'm realizing now that [support] makes such a huge difference," she says.

DeGraffe hit a wall in her junior year when the stress of rigorous academics took hold. "I was exhausted, I felt like my brain was fried!"



she recalls. When telling her mother of her decision to drop out, she expected a stern reaction. Instead, her mother issued a challenge: "Just give me one more semester and you can quit." One semester became two, and DeGraffe became reenergized by the thought of her impending graduation. "That was very wise of her, almost like 'Take baby steps," she reflects. "She saw that I was tired, but she really pushed me to complete my goal." It was a lesson that would endure.

Her transition from student to working professional was smoother than expected as a construction inspector at John F. Kennedy International Airport: "I walked into an office with all white men — all older white men — and it was the most amazing experience! They just took me in like I was their little sister." DeGraffe learned a lot at JFK, from how to drink coffee to spotting new opportunities for growth. "After about two years of working in [construction inspection], I started thinking 'I need more than this," she recalls.

A colleague inspired her to look into project management positions — it was a lightbulb moment for DeGraffe. "[As a project manager] you really become a decision-maker, you're not just being handed a set of charts and being told 'Ok, build it.' You really have input on what goes into the design."

By 1998, she was a newlywed and deputy program director on the construction of the Northeast Corridor station, part of the Newark Liberty International Airport Monorail extension. In 2001, DeGraffe was seven months pregnant and the station was weeks away from opening when the Sept. 11 terrorist attacks occurred. She lost 13 colleagues that day.

After taking time off to raise her son, she returned to a Port Authority fundamentally changed by 9/11. Working on the new World Trade Center station had real gravity - it was challenging to navigate political interests, tight deadlines, public expectations and, of course, the memory of the victims. "That project changed my world in a positive way," she says. "It challenged me technically, professionally — this was a project where either you grew or you got out." With passion and grit, DeGraffe managed the redevelopment of the World Trade Center Transportation Hub and the World Trade Center Vehicle Security Center. The station opened to the public in 2015.

Taking on leadership roles in the male-dominated construction industry wasn't always easy. She recalls asking a contractor to move a piece of machinery during a major project. He refused. Minutes later, when a male coworker asked him to do the same task, the contractor quickly obliged. While many would perceive this as a slight, DeGraffe sees it differently.

"I could have gone back and argued — 'You acted this way because I'm a woman! Or African American!' but the most important thing is that he moved that truck. That was my idea, and I got it done." Her patience is the result of maintaining perspective on what is truly important. "There are some times where you need to voice an injustice," she advises, "but you need to know when it's going to be for the greater good rather than just your ego. If it is for the greater good, you can set a tone to let people know when they've crossed the line."

Her poise, self-awareness and talent for breaking down complex projects into manageable pieces (baby steps, just like her mother had taught) add up to a unique leadership style. With nearly 30 years of experience in a male-dominated industry, she's witnessed the power of female perspectives.

"There's more collaboration, more communication, and you end up with a better product because you have that diverse input coming into the team." She cites mentoring as one of her passions, and is particularly committed to helping women feel more confident in the workforce. "As a young woman, I just didn't have a voice. I wanted so much but I wasn't sure of myself. That only comes in time as you gain small victories, but the most important thing is that you keep pushing and not to believe the lies that even sometimes you tell yourself."

As she continues to push forward in her new role of director and general manager, DeGraffe envisions much more for the PATH: more women in management positions, more train and station improvements and greater rider satisfaction. To her, the most important part of her job will always be the people she serves.

"I have a responsibility to them, and I own that responsibility. It has become my project — a never-ending project." ❖ — Erin Lewis



### ALUMNA CREATES AWARD-WINNING PROJECTS AND A BETTER COMMUNITY

hen Katie Twomey '90 told her high school guidance counselor she wanted to become an engineer, she was told that "females can't be engineers," and that she should consider becoming a nurse.

Undeterred, Twomey immediately convinced her young female high school math teacher to teach a calculus class after school (her small Catholic school in Brooklyn didn't offer it), petitioned the school to make it happen and took her first steps toward becoming an engineer.

This year marks Twomey's 30th year with nationally recognized Clark Construction Group, LLC, where she serves as a senior vice president. Throughout her career, she has led the design and construction of hospitals, convention centers, data centers, an auto manufacturing plant and other facilities across the country, totaling more than \$3 billion. As committed as she is to excellence in her profession, she is equally driven to serve the people in the communities in which she builds, through a wide variety of volunteer work.

"It's part of what we do — we do the right thing," she says.

Twomey's sense of duty also extends to the next generation of engineers. She is driven to help other women and underserved students develop their talents and build fulfilling and successful careers in the construction industry.

She never really thought much about being a woman in a male-dominated profession, she says.

"If I did, I didn't acknowledge it. I was always driving ahead," she notes. Twomey's success is due, in part, to great role models — from her parents, who encouraged her in math and science, to that high school math teacher, to her first manager at Clark, who was a woman. The other factor is her incredible drive; she has never been afraid to seize opportunities.

"Part of it was being an advocate for myself...you have to look out for yourself; you have to be your own advocate," she adds. "I've never shied away from anything."

Buoyed by people who believed in her, by her Stevens education and, mostly, by her own talent and determination, Twomey is now at the top of her profession.

Since 2016, Twomey has lived in Seattle with her family, where she is leading one of the largest and most complex construction projects in the city's history. The \$1 billion Washington State Convention Center Addition (WSCCA) will add 1.4 million square feet to the existing convention facility and includes a ballroom, flex space with an outdoor terrace, a 150,000-square-foot exhibit hall and a parking garage.

The project, slated for completion in 2021, has many challenging components, including moving site utilities, demolishing and replacing a bus terminal, and relocating a major downtown roadway, which ran through a portion of the project site. Structural steel work will commence on the project this summer, she says.

The WSCCA project is one in a long line of impressive projects that Twomey has delivered across the country. Other important highlights of

her long career include a \$430 million project for the Alameda County Highland Hospital in Oakland, California, a LEED Gold® project; a LEED Platinum® data center and office building headquarters for California ISO, Folsom, California, which earned the Design-Build Institute of America's 2012 National Best Overall Project award; a replacement hospital and garage at Camp Pendleton in California, another LEED Gold® project which earned the Alliant Build America Award; General Motors' 2 million square-foot Vehicle Engineering Center in Warren, Michigan; and an \$880 million McCormick Place West Convention Center expansion in Chicago, among others.

So many of her projects have been rewarding, giving her a chance to learn about a variety of industries, she says. Her work with hospitals has made a lasting impression on her. "Hospitals are so personal," she says. "These are the rooms where mothers have their babies. This is the neonatal unit where they're going to save babies."

Traveling the country and seeing her work is especially gratifying.

"You can imagine what a wonderful feeling it is to go back to a city and show your kids a building and say 'I built that,'" she says.

Straightforward and frank, Twomey becomes especially thoughtful when she recalls how the Stevens Technical Enrichment Program became an early ladder to her success.

Before Twomey entered Stevens, she was required to take a computer science boot camp through STEP to help give her the skills that her high school hadn't provided. She was active with STEP throughout her Stevens career and worked in the program's office. Twomey says that she found much support at Stevens, from a scholarship that covered her room and board to the STEP program.

"That was hugely important," she said of her time with STEP. "The school took the time, and that helped to start my career path."

This senior engineer and married mother of two still, somehow, finds time to give back to her community. She mentors women and men coming up in the engineering field, and even women outside of engineering who need career guidance. Her company's philosophy of giving back to the community has been long-lasting so, over the years, wherever in the country she was working, she and her team have participated in food drives, volunteered at soup kitchens and rebuilt homes for local people in need. She has also mentored students from underrepresented communities through various programs, including the company's A. James Clark Scholars Program, which is offered at a number of universities across the country, including Stevens. The program gives financial support and enhanced learning opportunities to exceptional undergraduate students who are underrepresented in the engineering field.

A. James Clark, the company's late owner, always instilled a sense of community pride in his employees, and a sense of duty, Twomey says. It is a philosophy that she has taken to heart.

"In any community that you work in, you are part of that community and have a duty to reach out to that community," Twomey says. . - Beth Kissinger



# STEVENS AWARDS Gala

# GRATITUDEntGLAMOUR

In a night filled with recognition and gratitude, glamour and humor, one thing was abundantly clear: Stevens Institute of Technology alumni and friends are successful and generous beyond compare. And on April 6, inside New York's historic Plaza Hotel, they received well-deserved accolades for their impact at Stevens and on the world at the 2019 Stevens Awards Gala.



For the full story, visit stevens.edu/gala2019
For more information, including the full photo gallery, visit stevens.edu/awardsgala



The 2019 Stevens Awards Gala honorees. Front row, from left, are: Pam P. Cheng '92 M.Eng. '95, Virginia Ruesterholz '83 Hon. D.Eng. '08, Richard F. Harries '58, Leanne N. Metcalfe '00 and Lisa M. Mascolo '82. Back row, from left, are: Emilio Fernandez, Philip P. Crowley '71, Stevens President Nariman Farvardin, Richard S. Magee '63 M.S. '64 Sc.D. '68 and Robert J. Fiocco '58 M.S. '61 Sc.D. '64. PHOTOS:









### RESEARCHER PROFIL

### Award-winning researcher stephanie lee designs MATERIALS FOR A GREENER FUTURE — AND MENTORS THE NEXT GENERATIONS OF ENGINEERS

Stevens professor Stephanie Lee wants to make the future brighter. In more ways than one.

Growing up in Morris County, New Jersey, and inspired by her parents, Lee was always an exceptional student. She attended science fairs and science camps as a child.

"I originally planned to become a doctor, or maybe a biomedical engineer," she recalls. "I always knew I wanted to use science and technology to help people."

Eventually, Lee focused on sustainable-energy research as her contribution to global solutions.

"At MIT, I did research during all four of my undergraduate years," she recalls. "There is an entire formal program dedicated to that. So I knew I could do research. But for a long time I didn't see myself as a professor. Maybe it was subconscious: Nearly all my professors were men, were older, and were clearly geniuses. I just didn't see myself as one of their colleagues."

After completing a Ph.D. at Princeton, Lee did a stint as a postdoctoral researcher at New York University. During that time, she was required to teach a class.

And that experience, it turned out, made all the difference.

"It was so gratifying," Lee says of her first class full of students. "For the first time, I saw the excitement when students 'get' something. I saw how a teacher can make an impact, can positively shape students' experiences and choices."

Ever since, she has made time to guide others.

#### A MENTOR AT ALL LEVELS

A fixture in Stevens' Chemical Engineering & Materials Science department since 2014, Lee has repeatedly reached out to Stevens undergraduate and graduate students, including significant numbers of women. She has also brought New Jersey elementary school- and middle school-aged girls into her world.

In 2017, for instance, Lee attended the Introduce a Girl to Engineering Day as part of the annual Stevens contingent that visits a Jersey City elementary school. The program exposes urban students to STEM educational and career options at a young age.

For several years — until recently becoming the mother of two young children — she also served as a mentor with the Center for All Abilities program for children of special needs and abilities in New York City's Chinatown district. That relationship included campus visits, where she demonstrated the university's imaging equipment on coins, electronic circuits and other objects for the students.

"One of my former mentees, whom I met when she was in second grade and is now in high school, will be coming to Stevens this summer to work in my lab," notes Lee. "I'm so excited about this!"

And in the spring of 2019 she brought a Hoboken Girl Scout troop to McLean Hall to learn about crystal-engineering science.

"I think it's so important to engage students in STEM while they are young and everything is still 'cool," she says. "It's so exciting to see the passion for science come out early."

Lee's own Stevens students also say she has been an invaluable mentor on matters both inside the classroom and out.

From the travails of academia and lab work to job markets, graduate schools and the tricky balancing act between parenthood and career many students will eventually face, she has served as both research collaborator and advisor.

"She's an amazing mentor," says Kate Moyer '16, a Ph.D. student and National Science Foundation Graduate Fellow in Vanderbilt Universi-



ty's interdisciplinary materials science program who researches batteries and other energy-storage technologies. "Her teaching method was different: She didn't use textbooks, but rather had us read high-impact journal papers to teach us new principles.

"To this day, I remember more from her class than any other I took at Stevens."

When it came time to apply to and ultimately choose a graduate school, Moyer again went to Lee.

"She has been through this journey. Her feedback on my application and her advice about choosing a school, a lab and your future colleagues made a world of difference for me personally," says Moyer, who was accepted to all four graduate schools to which she applied. "I made the right choice because of the advice she gave. And despite her busy schedule, she continues to keep in touch.

"I am forever thankful for her guidance and friendship, she is a role model for me and so many others."

"She really just wants the best for her students," echoes Alexandra Samper '19, a chemical engineering major from Houston who performed research in Lee's lab for six months and planned to work in R&D with Estée Lauder after graduation in May. "She wants to know, 'What can I do to help you learn best?' And it's harder for professors to do that, because it takes more time."

Samper, who attended a conference with Lee and co-authored journal papers with her lab team, says Lee also helped her choose her career path.

"She's the reason I got my internship," notes Samper. "She helps you

get to know your different options and find out what you really want to do, whatever that may be."

#### LIGHTER, PORTABLE, INEXPENSIVE SOLAR CELLS

Inside the lab, Lee remains as formidable as ever. In February she was selected for a prestigious NSF CAREER Award, supporting ongoing work to develop improved, more flexible materials for solar panels.

The proprietary process her team has developed utilizes carbonbased plastics formed with crystal arrays, and can be performed at normal temperatures and conditions. That represents a significant upgrade over existing silicon-based solar-panel materials, which are heavy, brittle and must be manufactured at high temperatures.

The potential upside is big: cost-effective, portable, easy-to-manufacture solar technology for communities worldwide.

"Imagine a world in which installing solar panels is as easy as painting them on your roof," she says. "Imagine printing your own solar panel from an inkjet printer. Or a panel of clothing or a window or device screen that generates energy."

NSF's support for the research will last five years. Lee's mentorship of Stevens' young minds, one hopes, will continue far longer.

"Looking back," she concludes, "not having women professors probably made a difference to me. It took me longer to get into teaching; I had convinced myself I couldn't cut it. But now I love mentoring students and seeing them grow. Hopefully I can positively influence those who are considering academia and research." ❖ − Paul Karr



# Importance of a

## Stevens Legacy Society members leave an enduring mark

Stevens, seemingly everything happens because of a plan. Students learn how effective planning maximizes outcomes. A bold strategic plan is elevating the university, which was founded through a planned gift in 1870. And some 150 years later, through The Power of Stevens campaign, generous alumni and friends are planning philanthropy for the university's future, and for many, their own future as well.

#### A VOTE OF CONFIDENCE AND AN **INVESTMENT IN PERPETUITY**

More than 175 alumni and friends are members of the Stevens Legacy Society, which honors donors for making charitable commitments to Stevens through their financial and/or estate plans.

The Stevens Legacy Society was founded in 1994. A record 20 people joined last year, including ten from the Class of 1958 celebrating their 60th reunion. Members span generations, from the oldest, Ed Egan '40 (a former trustee who turned 100 in April), to the youngest, Dianne Smith Szipsky '90. They share gratitude for the timeless education they received, and a commitment to perpetuating the Stevens mission.

"Stevens has a wonderful record in training engineers, and it now has a sophisticated strategic plan with excellent goals," said Al Filskov '61, a retired manufacturing executive. "I want to be part of the effort to reach those goals and ensure a quality education for deserving young people."

Paul Coughlan '89 is challenging his class-

mates to join him in the Stevens Legacy Society as they celebrate their 30th reunion by pledging an additional donation to the class scholarship for every new member. "Stevens equipped me well," said Coughlan, who works as a business consultant. "I believe in its direction, so my wife and I included a commitment in our estate plans. No, we are not too young to have estate plans!"

Since a Stevens education can impact lives beyond alumni, often surviving spouses, relatives and friends become members of the Stevens Legacy Society.

"Stevens meant a lot to my sister and me because it meant a great deal to our father," said Joan Gilson, daughter of Harry Gilson from specific priorities associated with student success, faculty excellence or a vibrant campus.

Through a charitable gift annuity, John LoPorto '46, a former trustee who passed away in 2016, established a graduate fellowship that enabled Mark Mirtchouk '17 M.S. '17 to research the diets of diabetes patients.

"The coding and analysis I did will lead to a better classification of food types," said Mirtchouk, who expects to earn his Ph.D. from Stevens in computer science in 2020. "This will help us create a device that assists patients in predicting how much insulin they need to take."

Harold Kruger '52, who designed military equipment, bequeathed an endowed schol-

## **"**It is my intention that the institution hereby directed and created shall be perpetual."

— Edwin A. Stevens, April 15, 1867

the Class of 1906 (her late sister, Shirley, was also a member). "He used to return to campus for the Old Guard luncheons, we saw red and gray ribbons around, and my father had photos of the Mandolin Club hanging in our den, so Stevens was a part of our lives as children. We both felt we would not be where we are - in a position to give back — had our father not received a Stevens education."

#### **PLANNING WITH A PURPOSE**

Stevens Legacy Society members have the satisfaction of knowing that their philanthropy will have an enduring impact, whether their planned gifts are unrestricted or designated for

arship when he passed away in 2016. "The Kruger scholarship has given me the ability to attend a school that I love," said mechanical engineering major Kierstyn Elliott '22. "At Stevens, I have learned from great professors, and I am surrounded by both kind and hardworking students who push me to be the best I can be."

Joanne Beattie Compton '79, a chemical engineer, designated a trust in honor of the scholarship she received. "I am still grateful for the start that Stevens gave me 40 years ago," Compton said. "I put Stevens in my estate plan with the hope that future students will have the same opportunities I had."

Friends of the university are also having an impact. Elbert Brinning, Jr., who graduated from Syracuse in 1942, knew about Stevens from working as a doctor in nearby Essex County, New Jersey. After Brinning died in 2012, proceeds from his estate endowed a faculty chair through a specific bequest, and ultimately, a scholarship fund through a residuary bequest. With the Viola Ward Brinning and Elbert Calhoun Brinning Chair, named for Brinning's parents, Stevens will be able to recruit a top professor of biology, chemistry or related discipline.

"Dr. Brinning knew that the study of science, math and engineering is important to society," said his nephew, David Brinning. "He believed in Stevens and wanted to help it grow."

#### A PLAN AND A PATH WORTH FOLLOWING

Throughout the years, many individuals who embrace the university's enduring mission and share its enterprising vision have found planned giving to be the means by which they can benefit Stevens, and depending on the asset given and gift arrangement selected, also help fulfill their own financial planning goals. These thoughtful benefactors are following in the historic footsteps of Edwin A. Stevens, whose will provided for the establishment of the university bearing his family's name, and they are now creating their own proud legacies.

For more information on the characteristics and benefits of charitable gift planning, and on becoming a member of the Stevens Legacy Society, please contact Michael Governor, in the Division of Development and Alumni Engagement, at 201.216.8967 or michael.governor@ stevens.edu. ❖ – Alan Skontra



1 Joanne Beattie Compton '79, and her husband, Charles Compton. 2 Joan Gilson, daughter of the late Harry Gilson, Class of 1906, receives a Legacy Society recognition from Stevens President Nariman Farvardin in 2012. 3 Al Filskov '61, with Milu McNay, visits with Jean Zu, center, dean of Stevens' School of Engineering and Science. 4 The late Harold Kruger '52, left, has bequeathed an endowed scholarship to Stevens. Here, he is shown at a ceremony at Picatinny Arsenal, where he was a mechanical engineer.







#### **SPORTS** UPDATE

#### AN ATHLETE FOR THE AGES **VOLLKOMMER-LYNCH MARKS 45TH** YEAR AT CASTLE POINT

ome women are considered pioneers in women's sports. Babe Didrikson Zaharias, Billie Jean King, Wilma Rudolph and Althea Gibson, to name a few. Women who helped pave the way for other women to create lasting legacies in the sporting landscape.

There's another pioneer you may be familiar with, by name or personally: Linda Vollkommer-Lynch Hon. M.Eng. '04, who just completed her 45th season as the head coach of Stevens' decorated women's fencing team.

"[Back then] I had worked part-time for two years as a women's fencing coach and they said that they needed female faculty," the likeable Vollkommer-Lynch began. "There were two other women on campus in the humanities department, who were full-time. [Physical Education] counted in the grade-point average, so anyone that taught PE had to be a member of the faculty."

Leaving her job as a teacher at North Bergen High School for what was originally supposed to be just one year, Vollkommer-Lynch became a full-time employee in 1976 and was the first woman faculty member to receive tenure at Stevens. She immediately wore many hats, from teaching 14 PE classes a semester to serving as senior woman administrator, while attempting to start many varsity programs, including softball and women's volleyball. But despite the variety of positions held by the Hoboken native, her first love at Stevens was, and continues to be, coaching fencing — although that wasn't the case at the start of Vollkommer-Lynch's athletic career.

"When I was in high school, I was all-state in basketball. Back then, there weren't really women's sports per se, but the Catholic all-girls high schools all had basketball teams, so they were ahead of their time," she joked. "So I ended up playing basketball."

Arriving at what was then Jersey City State College, (now New Jersey City University), Vollkommer-Lynch found that the intercollegiate offerings for women were lacking, so she took up fencing simply because "they happened to have a fencing team."

During her time there, Vollkommer-Lynch began the women's basketball program, while also competing in swimming. But once she stepped onto the strips, she was immediately hooked.

"I liked it right away because it was different and it was fun, and the history of the program was unbelievable," she said. "I mean, in the 1976 Olympics, two members of the team were graduates of Jersey City State."

After arriving at Stevens in 1974, Vollkommer-Lynch jumped right into her duties and immediately found herself in a position to be a role model to women students, as Stevens had only begun admitting undergraduate women three years before.



"Because [women students] saw so few women during the week, it was nice that I then had them once a week," she reflected. "It was just nice for them to have a woman to talk to, to relate to, to connect with."

Mixing a group of athletes that included members of the pre-existing team with first-year fencers who competed in other sports in high school, the fencing program posted its first winning season in 1977-78 and reached 16 wins in its sixth year as a program. To date, the program has competed in nearly 900 meets and has made two trips to the NCAA Team Championship.

One of her favorite stories involves Krista (Sticco) Carr '12, wife of Stevens Athletics Hall of Famer Zach Carr '11 M.Eng. '13.

"Krista joined the team because she watched the Olympics and [the U.S.] won a bronze medal in fencing and it inspired her," Vollkommer-Lynch shared. "She was a walk-on, and was a starter right away because we [had injuries]. We went to our first match at Temple, and she's about to fence her very first match of her career and everyone is watching, all these Duke fans, and she asks, 'Linda, why is everyone watching me?' I said to her that it was because Duke is a popular school. But [in reality] she was facing the Olympic bronze medalist who was her idol and she didn't even realize it. She loses 5-1 and afterwards, I have a picture of her



fencing and I said, 'That was the Olympic bronze medalist.' So then, four years later, we're out at Northwestern and we're fencing Duke again, and she goes 5-4.

"Situations like that — getting someone in who's never fenced before, teaching them what it's like to be an athlete - stick with me. Remember, [the early teams] had to learn to be athletes and I treated them like athletes."

Looking fondly at a picture hanging on the athletic communications office wall, Vollkommer-Lynch recalls countless details about that first varsity fencing team and remembers the names and stories of every member of that team.

"It was like women's fencing started the women's revolution here," Vollkommer-Lynch said. "It wasn't basketball. For most schools, basketball was first, but at Stevens, it was fencing."

Despite being first, Vollkommer-Lynch didn't feel that either she, or the women's fencing program, faced any of the discrimination one would associate with breaking the gender barrier.

"Everyone thinks we had these hurdles to jump or that it was difficult for us," she reflected. "But women's fencing was treated fabulously. In fact, I've never been in a situation where I have been treated badly as a

woman.

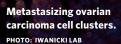
"I guess I am one of the lucky people, really."

Now approaching 600 career victories, and battling to this day with her good friend, men's volleyball head coach Patrick Dorywalski, over who has the most career wins at Stevens ("He includes [his victories as both] a women's and men's volleyball coach, and that's totally unfair!"), all while serving as a mentor to countless student-athletes, Vollkommer-Lynch speaks fondly of her teams and her generations of student-athletes. She is known for her annual alumnae fencing matches, attracting generations of players, and for her many photo albums - lovingly collected snapshots of her teams, over many seasons.

She reveals that her greatest accomplishment as a coach is the team's participation in the first NCAA Championship in 1982. But she believes that her lasting legacy is serving as the "fun fencing coach that was still very successful."

"We won and we had fun," she remarked. "You can win and still enjoy yourself. I'm proud of each of my teams and of their accomplishments. We are athletes."

Just like their coach. ❖ — Charles O'Brien, with additional reporting by Drew Cottrell '19



# Stevens Researcher Takes New Look At Ovarian Cancer

varian cancer and other gynecological malignancies are diagnosed in 300,000 women each year worldwide, according to the World Cancer Research Fund. The five-year survival rate of a diagnosed patient is less than 50%, much lower if not caught early.

But detection is often too late to arrest the cancer's spread. Spotting the disease in its infant stage is difficult, because the ovaries and fallopian tubes aren't accessible by reliable tests such as the Pap smear. Physicians are left to symptoms, ultrasounds and blood tests, meaning that most cases still evade detection before they have advanced.

Now Stevens researcher Marcin Iwanicki — a leading expert on the biology of ovarian cancer who joined the university from Harvard Medical School in 2018 — hopes to improve those odds by helping contribute to better early-detection methods.

"There is currently not a highly reliable test for early-identifying ovarian cancers, as there is for cervical cancer," he says. "The Pap smear is a fantastic test and has significantly lowered the number of deaths from cervical cancer. We want to find a better way. We want to develop detection for ovarian cancer."

#### **INSPECTING FALLOPIAN CELLS, PROTEINS**

A native of Poland, Iwanicki first came to the U.S. to obtain his doctorate from the University of Virginia, subsequently joining Harvard in 2008. He would spend nearly a decade at HMS researching mutations in the fallopian tube walls that develop into tumors, providing answers about cancers that had long been thought of as strictly ovarian in origin.

"Around 2007, the nomenclature shifted, and cancer researchers began to recognize that what we still call 'ovarian' cancer is really a combination of ovarian, fallopian tube and peritoneal cancers," he explains.

After nine years as a postdoctoral research fellow in cell biology at Harvard, he took on a role at Stevens in order to take his research to the next level with regional medical centers and cancer patients.

"It was time," he says.

At Stevens, Iwanicki works to create better methods of imaging and detecting nascent tumors. One key to early identification, he believes, may be the subtle cellular changes that take place on the surfaces of fallopian tube cells.

Tiny, pre-cancerous lesions begin forming in a fallopian tube as a consequence of genetic alterations in a tumor-suppressing gene called TP53; that TP53 mutation is considered a signal that ovarian cancer progression has begun. Iwanicki's work has implicated how TP53 mutations profoundly alter the composition of molecules present on the surfaces of fallopian tube cells, creating new opportunities for early detection.

"Screening for cell surface proteins, either visually or through tests, may provide a key early-warning flag that a cancer is developing," he notes. "You want to know that in time to begin treatments."

In his Stevens lab, Iwanicki's team cultivates fallopian tube cells and patient-derived ovarian cancer cells, working with medical institutions nationwide in an effort to ascertain whether molecules present on the cell surface of malignant fallopian tube cells may indeed be a key biomarker — and how that marker might be leveraged for improved detection methods. Collaborators include the University of Pennsylvania's medical school, the University of Michigan and a new relationship with the University of Arizona.

Undergraduates contribute substantially to his research, Iwanicki says.

"My undergraduates are top-notch," he says. "I work with dedicated students who are willing to stay in the lab until 9 or 10 p.m. at night, when needed,

to carry out their research. The caliber of undergrads is fantastic at Stevens; I consider them to be my colleagues."

#### JOINING FORCES WITH DOCTORS, ENGINEERS

The next step? Once he gains a better understanding of cell mutations and the possible role of cell surface proteins, Iwanicki would like to see new types of photoreactive probes developed that target surfaces of malignant cells. Those probes would need to be delivered to inaccessible cancer sites in order to collect or identify cells that have begun to mutate and are on the way to becoming cancerous.

Iwanicki is particularly excited about the pool of Stevens faculty talent on campus, and has already begun collaborations.

"A big part of this development of better earlydetection tests will involve the creation of new thin devices or materials that can, for example, bring a probe to the wall of the uterus or the fallopian tube and then recover it later for analysis," he explains. "We biologists absolutely rely on good bioengineers and materials and optics scientists to help us in this effort, and this expertise is already right here at Stevens."

He's also eager to tackle the task of forging new ties with New Jersey's medical centers and cancer research centers.

"I was very fortunate at Harvard to establish relationships with clinicians and cancer patients at Harvard Medical School and the Dana Farber Cancer Institute," Iwanicki concludes. "It's very important to listen to clinicians. They're smart, they're close to the problem, they're close to the patients. And the biologists in the lab can also supply a number of answers to the ovarian cancer puzzle. But we have not really been working together much, historically.

"We hope to change that here in New Jersey." � — Paul Karr

# alumninews

#### WHAT IS SHE DOING?

Selma Rossen M.Eng. '68 is snapped in the field in this photo dated the summer of 1976. Can you identify the machine she is working on? If so, email editor@alumni.stevens.edu.

## SAA President's Letter

### Alumnae provide powerful role models for future generations

Dear Fellow Alumni,

As we celebrated the accomplishments and contributions of the nine distinguished recipients at this year's Stevens Awards Gala, I was once again moved and inspired by our honorees. This year, we honored eight outstanding alumni and a very special friend of the university. (See Gala coverage on page 35.) In keeping with this issue's theme of women in STEM, I recognize four of these honorees: Lisa M. Mascolo '82, Virginia Ruesterholz '83 Hon. D.Eng. '08, Pam P. Cheng '92 M.Eng.'95, and Leanne N. Metcalfe '00. Individually and collectively, these women have

truly wonderful stories to share — each one an example of what a Stevens education represents to current and future alumni alike helping to break the stereotypes of working in a STEM field, while demonstrating the range of career opportunities increasingly available to women in these fields. Together, with their fellow honorees, they are changing the lives of those in their communities and around the world by accepting the call "to do more, and to be more," as Lisa Mascolo implored us, and reminding all of our alumni, as Virginia Ruesterholz did in her acceptance speech, to make full use of the "master key" afforded to them through their Stevens education.

Their stories are compelling and stirring. And yet, they are just a snapshot of the narratives of the many women who have graduated from Stevens since 1974. (The university welcomed its first class of undergraduate women to campus in 1971.) These women at Stevens have been motivated by different reasons, rallied together and created communities — whether through the Lore-El Center for Women's Leadership, sororities, sports teams or clubs — not just to survive and excel at Stevens, but to thrive in the world beyond Castle Point. Now, they are coming back to speak about their experiences and to offer life lessons and reflections to those students sitting in the desks they once occupied.

Our own alumni association leadership has evolved throughout the years to reflect the increasing diversity of our Stevens alumni community. In 1974, women numbered only 19 in total at Stevens. Today, they represent 29% of the undergraduate student population. I consider it an honor to serve as the current president of the Stevens Alumni Association (SAA) — only the third woman in the history of the SAA to hold this position, following Maureen



Weatherall '78 MMS '78 and Mary Doddy '80. I do so enthusiastically alongside other alumnae volunteer leaders now serving as SAA directors: Leslie Brunell '86 M.Eng. '90 Ph.D. '96, Suzanne D'Addio '07, Elizabeth Pallone '88, Olivia Schreiber '18 and Martha (Patty) Torres '01. The dedication of all of our SAA directors to the fulfillment of the mission of the SAA and Stevens is a source of continuous motivation. They are clearly powerful role models for our current and future generations of Stevens graduates.

As we wrap up our first full term under the new governance structure in the SAA, and welcome new faces to the Division of Development

and Alumni Engagement, I encourage all of our alumni to continue to stay informed regarding the bold aspirations and accomplishments of our alma mater, engaged through the opportunities offered by our alumni association and connected with one another and with our Stevens community. Finally, I urge you to vote, through June 1, in the 2019 SAA Elections! For more information, visit connect.stevens.edu/saavote.

Per aspera ad astra,

Victoria Velasco '04

President, Stevens Alumni Association

SAAPresident@alumni.stevens.edu

P.S. I look forward to seeing you at the 2019 Alumni Weekend — May 31 to June 2! During the weekend, on June 1 at 10:30 a.m., please join me for the first SAA Annual Meeting; see the Alumni Weekend schedule at stevens.edu/alumniweekend for more details.

P.P.S. And don't forget, with the end of the fiscal year fast approaching on June 30, to make your annual gift to Stevens.

# Class Logs

February 2019 — In the absence of any inputs from our fellow alumni, I offer this brief note:

Bill Caldwell and I continue to correspond regularly by phone. Bill and his wife, Alice, continue to experience their first winter living in their new facility in Maine. Both he and I continue to enjoy good health. In Orinda, California, where I have lived continuously since 1951, my residence is now at peak condition for my healthy living. I continue to enjoy this fine home and again request fellow alumni to visit, phone or email me. Particulars as follows:

HOME: 20 VALLEY DRIVE, ORINDA, CA 94563 PHONE: 925-254-3789

E-MAIL: rmandyandersen@comcast.net Thank you all for your continued help. — Roland M. Andersen, 20 Valley Drive, Orinda, CA 94563-3534; (925) 254-3789; rmandyandersen@ comcast.net

#### Walter E. Taverna

Walter E. Taverna, 95, passed away peacefully on Oct. 26, 2017. Taverna, a retired mechanical engineer, was born on March 7, 1922, in Jersey City, New Jersey. He graduated from Dickinson High School before heading to Stevens Institute of Technology, where he earned varsity letters in baseball (captain during his senior year), basketball (co-captain his senior year) and soccer, and voted "Best Athlete" of his class.

Taverna was at the movies with his father when the Pearl Harbor attack was reported and he enlisted in the Navy the next day, opting for the Submarine Service because it would earn him a few additional dollars pay each month. He was deferred while at Stevens, which allowed him to meet Genevieve McLaughlin, his wife of 71 years. Upon graduation, he attended the Midshipman School at the US Naval Academy and received his commission as an ensign in the US Navy.

Taverna and Genevieve were married with a military ceremony in September 1943 and immediately following their honeymoon, he departed for the Fleet Sonar School at Key West, Florida, serving on the USS R-2. His training continued at the Submarine School at New London, Connecticut, before he was assigned to the USS Blackfin (SS-322), which was under construction in New London, where he served as the Communications Officer. A "plank owner" of the Blackfin, launched on March 12, 1944, Taverna was a qualified officer in submarines while aboard and completed five war patrols for which he received the Submarine Combat pin (1 star). Even 70 years after the war, he could still recall the clicking sound that preceded a depth charge. He was also awarded the Asiatic-Pacific Campaign Medal (1 star), the Philippine Liberation Medal (2 bronze stars), and the Victory Medal. At the conclusion of the conflict with Japan, the BLACKFIN was assigned as one of the subs to guard the approaches to Japan while Gen. MacArthur and the Japanese prime minister signed the surrender papers on the USS Missouri. Taverna was a member of the North Carolina Chapter of the US Submarine Veterans of WWII and the Lehigh Valley Base of the US Submarines Veterans, Inc., where he was the oldest member.

Professionally, he was a licensed mechanical engineer in 18 states. After discharge from the US Navy as a Lieutenant Junior Grade, he lived in the New York/New Jersey area and worked in engineering, design and construction of fossil fuel fired electric power generating plants as a project manager, both in the US and overseas, until he retired from Burns and Roe Enterprises in 1985. He and Genevieve then moved to Seven Lakes, North Carolina, where they enjoyed playing golf and bridge with their many friends. Taverna was frequently sighted raising the American flag in the center of Seven Lakes, where he took it upon himself to lower the community flag to half-staff on the anniversary of the loss of every submarine. Residents were left guessing whose deaths were being commemorated until the local TV station got on to the story and contacted him, ultimately raising public awareness of the sacrifices made by submarine servicemen. In 2008.

he and Genevieve moved to the Heath Village retirement community in Washington Township, New Jersey, where he was a member of a winning bocce ball team and continued his bridge playing.

Taverna is survived by his sons, James (Tina) and John (Laura); his daughters, Mary Taverna Ali (Abid), Kate Taverna (Alan Adelson), Helen Taverna (Mark Reagan), Nancy McCartin (Michael) and Joan Pinaire (Jim); his grandchildren, Justin, Kristin, Jessica, Julie, Christopher,

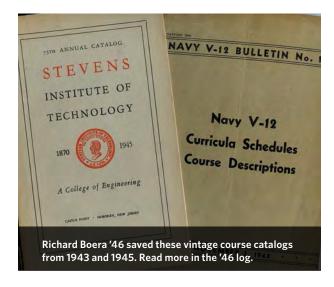
Robert, Matthew, Timothy, Michael, Megan, Katherine and Kaitlin; 15 great-grandchildren; and his cousin, Marie Villavecchia. He is also survived by Kerry Adelson; David, Paley and Oden Grodberg; and many nieces and nephews. He was predeceased by his wife, Genevieve (Jeanne), and grandson, Jaime Pinaire.

#### Alumni Weekend reunion, 5/31/19 - 6/2/19

Yes, I'm a squirrel; I save everything — including these vintage publications. FYI, the rosters of the Classes of 1945 through 1948 are included in this annual catalog along with the faculty members. Exactly 200 names comprised the '46 listing, 118 of them Navy V-12ers. Tuition was \$275 per semester for those not enrolled in V-12, and the application fee was \$5.

Early in February I sent out the following message to those ten '46-ers who are the only ones among the 31\* living classmates whose email addresses are on file at the Stevens Alumni

"While news of your recent activities and photos of your great-grandchildren are a constant on our 'want list,' let me make the request of this message even simpler: PLEASE respond to this email with just two words - "I'm alive!" If I don't receive those words by February 15, we'll have to assume that you've 'bought the farm' and will advise the Alumni Office of your likely demise. (Of course, any additional words will be welcome, but not required for this issue.) Dick Easterlin is excused from complying with this request since he was the sole respondent to our previous 'exhortation,' and we have now learned (almost) all



we needed to know about the Easterlin Paradox. Thanks, Dick!"

Fred Schneider was paying close attention and promptly responded "I'm alive!" Fred Peeples and John Misteli also let me know by the mid-February Class Log deadline — with wordier replies — that blood was still coursing through their veins. Sadly, I must now assume that the other seven classmates have passed away and we can expect the obit notices to be relayed from the Alumni Office.

While we won't resort to begging just yet, we must admit that exhortations, threats and bribes don't seem to be very effective so we'll just have to assume that guilty consciences will kick in from the other 21 classmates who may not have email capability, but might still be moved to affix a \$0.55 stamp to a snail mail message assuring us that they're still with us and have some happy news to share.

At any rate, John Peeples writes "Thanks for your efforts on our behalf. I am one of the '47 survivors, but I am unable to open or download. (Actually, I don't recall sending out any "list." — Ed.) Please give my best wishes to them. My wife and I will turn 94 this year, with some medical problems, but still able to sit up and take a little nourishment." Because John's note referred to the Class of '47, I asked him for clarification since one of my earlier Class Logs referred to '46 as the bastard class, comprising a mix of '45, '46 and '47 grads. This was his response: "A quick answer to your question. I and many others entered Stevens as a freshman in July 1, 1943. They called us the class of 1947 but because of the accelerated program we graduated in early 1946 with a BS degree and we were still in the Navy as officers. (Yes, there was no Middie School for us.) We went on a training cruise along the East Coast with a side trip to Quebec, Canada, then discharged in early July."

When I mentioned to John Misteli, my surprise over the fact that a group of V-12ers had received commissions without the "fun" of sweating through Midshipmen's School at Columbia University, he confirmed that "I graduated Stevens in October '45 and was given a commission without Middie School. I served on two LST's in the Pacific from Seattle to San Diego."

Talk about learning something new every day, I'm still in shock over this "discovery" — nearly 75 years after-the-fact. I had never considered the fact that our unique group of '46ers, who had entered Stevens in July 1943 after one year completed at other eastern colleges (for which we received credit for just one semester), were part of the last class — the 26th — through the USNR Midshipmen's School and hadn't thought much about what had happened to those who were still at Stevens after we had received our commissions from Navy Secretary Forrestal in November 1945. We had to return to Stevens for one semester to receive our degrees at later dates since the Navy allowed us a total of four years of college including any time spent pre-V12.

A further update from John Misteli advises that "I am still around. As you know, my wife Star died over six years ago, and I now have a close relationship with a retired nurse who was also a professor at the University of Maryland, I keep busy volunteering at a VA hospital and with the Military Officers Association. Still living in house but plan to move once I dispose of a lot of stuff. Thankfully, no major health problems."

\*Our class log for the winter issue of the Indicator referred to 32 living classmates. Alas, the same issue tells us the sad news (on page 66) that Herb Tanneberger passed away last year. Here is the (belated) obituary: "Herbert E. Tanneberger, age 92, formerly of Fair Lawn, New Jersey, went peacefully to his eternal resting place on July 2, 2018. Beloved husband of Norma Marion James for over 67 years, loving father to Barbara Lauritano, Herbert 'Chip' Tanneberger, and Peggy Wolfe (son-in-law Randy); he was devoted to his four grandchildren and three great-grandchildren. Herb worked for Western Union for 37 years before retiring in 1984. He was a volunteer fireman for Undine Company in Maywood, New Jersey. Having served in the U.S. Navy, where he received his degree in mechanical engineering from Stevens Institute of Technology through the V-12 program, he was stationed on Guam immediately after WWII and received the rank of Lieutenant(jg). He liked to putter around in the garden, fish and swim, especially while on vacation in Noyack, Long Island, and Sanibel, Florida. His love for Big Band music and dancing has been passed on to his loved ones, along with his love for baseball."

- A. Richard Boera, 90 Allen Road Apt. 16, South Burlington, VT 05403; (802) 495-5815; arbjlb@comcast.net

Don't see your class log listed? Send an update to alumni-log@stevens.edu or call 201-216-5161. February 2019 — News from our Class '48. Our ranks are surely thinning, but those of us left are great!

I have not been able to connect with Eddie Cassinis, and hope that he is OK! Please give me any word you might receive about Eddie (his phone, 973-586-6268).

Had a great phone call with Howard Heydon. Howard will be 96 on February 23. He has been active with the Memorial Air Museum at Hartford, Connecticut. During the War Years, 1943-1945, Howard became a radar operator on B29 Bombers, flying over the hump from India to bomb the Chinese Communists he flew with the 58th Air Wing, one of the early units to fly the B29s in the war. (Howard is going to send me a detailed description, which I will forward when received.)

Great talk with John Koziol, living in Minnesota near St. Paul. John has lived there for the past 50 years — and loves the snow and cold weather. We both agreed that life is great (one day at a time), and have our sights set on being here 40 years from now.

Miles Kuchar suffered a problem that we all have — loss of balance. Miles lost his balance getting out of his wheel chair about midnight, and took a fall. He is now in rehab, and doing well. We'll have news next issue.

Had to leave a message for Francis Murray, could not make contact. Hope he is OK. Please pass along any info about Francis.

John Nelson's phone has been disconnected, which does not sound good. Please pass along any info about John.

Had an enjoyable conversation with Curt Van Valkenburgh. Curt always seems to have a "heads up attitude." He has been living on Long Island since 1957.

Was not able to make contact with Jim Ware, and left a message. Talking with Jim is always a pleasure. I always remember Jim's magic trick in the Dutch Room, throwing the deck of cards against the wall, with my chosen card left thumb tacked to the wall.

And me, Lou Shook. Like many of our remaining Class of '48, I fear I've reached the stage of "boring old fart." It gets harder each year to remain active and productive. Fortunately, I am involved as an author writing books, and have a great publisher supporting me. Thus far I have six books published: SERIES ONE, History of Earth's Western World; "Book 1, Struggle of Titans," "Book 2, Death of an Empire," and "Book

3, Republic in Discord." SERIES TWO, Humans Destiny on Earth; "Who and Why are We," "Our Human Destiny," and "Our Future as Humans." For our Class of '48 report, we heard from a total of nine (Eddie Cassinis, Howard Heydon, John Koziol, Miles Kuchar, Francis Murray, John Nelson, me (Lou Shook), Curt Van Valkenburgh, and Jim Ware) of our remaining 15 members of Class '48.

The six remaining members are Peter Ash, Robert Bruce, Martin Graham, Dan Haagens, John Hayes, and Peter Hannan (who prefers to be ignored) — of whom we had news four months ago. More about them next time. - Louis L. Shook, 220 Bay Colony Drive, Virginia Beach, VA 23451: (919) 619-3955: loushook@cox.net

#### Alumni Weekend reunion, 5/31/19 - 6/2/19

Kasimer A. Traynelis The Alumni Office has learned that Kasimer A. Traynelis of Sun Center City, a World War II veteran and POW who went on to become an aerospace engineer, died on Jan. 1, 2018. He was 94.

Traynelis worked as an aerospace engineer with Walter Kidde Co.'s Aerospace Division and Valcor Engineering Aerospace Division. His work focused on attitude control rocket engines for orbiting satellites.

He served his country during World War II and was a B-17 pilot. Mr. Traynelis was held as a prisoner of war from Jan. 1, 1945 to May 1945.

His family remembered him as a loving husband and father and a talented wood craftsman.

Surviving are his wife, Gladys; a daughter, Sandra; a son, Richard; three grandchildren; and four great grandchildren. His son, Robert, predeceased him.

February 2019 — Called John Provetea, 91, who lives on a coastal canal in North Carolina and was recovering from Hurricane Florence. He was evacuated for five days and had trouble returning home. Had \$7,000 in tree work and lost gutters and part of his roof but the house stood. His wife is 78 and still working. He did income tax returns under the AARP program and advanced to Senior District Coordinator but has backed off to just tax support.

Bill Lewis, 93, lives in Minnesota with wife Nancy and is moving to a senior center closer to his daughter and four kids and four grandkids nearby. He moved from working at Kearfott in New Jersey to Honeywell to work on accelerometers (I also worked at Kearfott on accelerometers). He retired about ten years ago.

John Downey, 90, lost his wife about ten years ago and says he is too old for a woman. He lives a quiet life attending church and walking two miles each day, was a Senior Section Head at Sperry Gyro, then Unisis, moving to D.C. He earned a master's in electrical engineering and got a buyout offer at age 61. He has six kids, seven grandkids and eight great-grandkids.

Bill Clarke, 92, lives just 14 miles away from our winter home in Florida. We are having lunch next week. His wife died 18 months ago and he is in a senior living facility. Started work for Island Steel but then made a very interesting switch to working for the OSS (predecessor to the CIA) for NATA to limit sensitive equipment to the Russians. Then he was in China for several years working on teaching American companies how to trade with China. He is in a group of about 100 out of 13,000 left from the OSS. He was honored as a representative for a government medal presented by former Speaker of the House Paul Ryan. Back to a house in Florida to care for his mother who lived to 105. He volunteers at the hospital and wrote 11 plays and is writing a book.

As for me, Walt Carow, I am heading back to Tennessee for the summer. — Walter M. Carow, 790 Emory Valley Rd. Apt 803, Oak Ridge, TN 37830; (865) 803-6134; wcarow4@hotmail.com

February 2019 — Since I submitted *The Stevens Indicator* log for the winter of 2019, on October 31, 2018. I have received feedback from a number of class members and also a widow of one of our class members. I am including this information in this Spring/Summer Log for 2019.

The most recent feedback came in an email from our classmate, Harold B. Wylie Jr. Brad's message was, "I just read our last class log in The Indicator and have always appreciated being kept updated with current information from our class. It sorrows me to learn about the passing of many of our classmates; however, we are all getting up there, so I guess it's to be expected. You might be interested in knowing that the other week, while inventorying some old papers my mother saved years ago, I found several issues of The Transit Newspaper that we published at Johnsonburg summer surveying camp." Brad was a member of cabin No. 8 along with class members including:

"Sleepy" Simpson, "Very Tired" Vesey, "Paul Bunyan" Wilcox and "Rafa" Grau and others. The Transit was a newspaper that was published at the summer camp, where it was typed and mimeographed.

Brad had enlisted in the Navy during his senior year and actually missed the graduation service while he served the last half of his senior year with the Navy. He worked for Pratt & Whitney and General Electric after graduating from Stevens. He indicated that he and his wife, Carol, are currently living in West Hartford, Connecticut, where they watched snowflakes in the winter and he played some golf in the summer. They have two children, a son Paul '82, who is married and lives in California, and daughter Susan, who lives here in Bloomfield, Connecticut. He reports that he has had his share of ills including prostate cancer, heart attack and bad knees. He does appreciate reading the log and says "hello" to former classmates.

During the month of January, I received a very welcome thoughtful card and letter from Betsy Pehrson, the widow of Art Pehrson. Art passed away September 3, 2017, at the Preston Health Center, Hilton Head Island. Art and Betsy have been living at 111 Birdsong Way Apt E109, Hilton Head, SC 29926, as their choice for their retirement home of many years. Betsy confirms that Hilton Head Island has been and continues to be an excellent location to live and enjoy life with each other, family and friends. She continues to sing the praises of living there and sends her love and best wishes to members of the Stevens Class of 1952.

I also received a letter from Judy and Ed Kraft. They have moved from their home in Ridgewood. New Jersey, to a continuing-care retirement community called Riderwood Village, Silver Spring, Maryland (about 10 miles from Judy's daughter, Jennifer). Ed likes the fact that his doctors are just a five-minute walk down the hall from their apartment. Judy writes that Ed has opted for quality of life over quantity in terms of his remaining days, and now has hospice personnel visiting on a regular basis.

In a phone call with Carl Birkevaag I learned that he is now living with his son, David, and David's family in Massachusetts (14 Spaulding Ave, Scituate, MA 02066-3540). Carl sold his home in New Jersey when his wife, Dorothy, required a constant care facility and the location is close to the home in Scituate. Carl tells me that Scituate is a town that is located along the Atlantic Ocean just south of Boston. In addition to being 1952 classmates at Stevens, Carl and I both served in the United States Army in the Corps Engineers and were assigned as engineers after being drafted in 1953. We kept in contact with each other over the years.

In reading the last Indicator, I learned that our classmate, Claude L. Mount, passed away peacefully at home on June 10, 2018, in Lansdale, Pennsylvania. His wife, Ruth (Wells) Mount, died in 1996 after 44 years of marriage.

#### In memory of Claude Mount - 04/25/27 to 06/10/18

Born 04/25/27 in Manasquan, New Jersey. Served in US Navy during WWII, attaining the rank of 1st Lieutenant in the US Air Force after graduation from Stevens. Claude Mount was an honor student at Stevens achieving the engineering honor society membership of Tau Beta Pi. His most satisfying professional achievement with Philadelphia Power & Light was putting in place the famed DuPont Industrial Safety Program in the seven generating stations under his jurisdiction and the subsequent decline in employee on-the-job accidents.

His most cherished joy in personal life was the joy of sharing his life with his wife Ruth and the lives of their three sons and six grandchildren. It was an honor for us in the class of 1952 to have been able to share part of our lives with him. - Robert F. Wolf, 3740 Broadview Road, West Lafayette, IN 47906-8608; (765) 497-3853;

My last column (weekly) was for the defunct Long Branch Daily Record newspaper (NJ),

and appeared every Thursday. My letters to the

bobw3740@gmail.com

editor had a similar popular response, attributed to my always colorful prose about Monmouth County and other outrageous human interest stories. Here's a memory.

If you have ever been to the northern part of the Jersey Shore (Sandy Hook, Sea Bright), you would have noticed the high brick walls that the federal government built to protect the land between the beach and the Shrewsbury River. The beach was public — the wall was paid for by the government — yet the people with their large homes on the road side of the wall would try to keep people from walking over the wall to get to the public beach, treating the wall and beach in front of their house as private property. So I wrote a column that their arrogant attitude was outrageous and concerned citizens should meet on a Saturday with picks and shovels to tear down the wall. Over 2,000 people showed up at the Monmouth Beach wall, many with picks but most with thermoses of Bloody Marys. Nearby beach towns had to provide about 25 policemen to protect the wall from the crowd — and the cops joined in the celebration and shared the Bloody Marys with the demonstrators. The party lasted all day and slowed traffic to a standstill for most of the time. I was issued a fine for planning a demonstration without a permit for \$35; the newspaper owner paid the fine and gave me a \$50 gift certificate for a dinner in a fine restaurant. That bonus was equal to 10 columns. The day proved so successful that I held one each year till I took a job with one of the largest engineering firms in the city that was founded by a Stevens alumnus and former Board of Trustees member. My proposed Stevens Memoir—or Castle Point Memories — column would probably increase donations from the old and rich alumni and probably stimulate younger class secretaries to write a log. It will also inform the younger alumni that Stevens was different than any other engineering school in the nation.

More Stevens updates: I got a story yesterday from a 1965 alumnus who, after moving out of his house six years ago, now lives with his wife for the whole year in a hotel, for a third of the cost of an assisted living facility. They also get the little free tubes of shampoo and towels every day, clean sheets regularly and room service, and they can move to another hotel once in a while and stay there for a few months to be near their grandchildren. Next year, they plan on a nine-month cruise at about \$200 per day for both; that's still half the cost of assisted living. They average \$60 a day in most hotels, plus \$5 in tips. They have their own microwave, the hotel supplies the refrigerator, and they get free breakfast and newspaper, pool, exercise room and sometimes free 6 p.m. cocktail parties. - Charles Schnabolk, 7000 JFK Blvd East, Apt. 42A, Guttenberg, New Jersey 07093; (917) 957-8492; ricochas@aol.com

#### Alumni Weekend reunion, 5/31/19 - 6/2/19

February 2019 — Editor's Note: Jack Sanborn, the dedicated longtime class secretary, will no longer be writing the class log due to health reasons. The Indicator staff and, of course, all of his classmates thank Jack for his many years of devotion to his classmates and to his alma mater, for his wonderful class logs over the years, and for his great kindness. We wish him and his family the best, always.

Class President George Hromnak would be interested in receiving your class updates and will continue in Jack's footsteps. —George Hromnak,

Jim Spady '55 is retiring as class secretary after 50 years of service. The Indicator staff is deeply grateful to him for his great dedication to his classmates, to the SAA and to Stevens. Some highlights of his extraordinary career, from left: Spady with his students at the University of Pennsylvania, with a letter from a grateful student; Spady and his wife, June, with his portrait that hangs at Penn; and Spady, far left, with future New York City Mayor Ed Koch, second from right; Spady worked for Koch when he was in Congress. Far right photo: Spady, right, with former New Jersey Governor Richard Hughes. Spady headed the NJ Law **Enforcement Planning Agency.** 





45 Glenridge Blvd. Homosassa, FL 34446-4460; 352-382-7445; ghromnak@embarqmail. com

February 27, 2019 — This is, after 50 years as Class Secretary, my final '55 class column. Before taking over the column in 1969, I had spent the prior ten years in the broad range of alumni service roles, on two separate simultaneous paths: (1) from a class of '55 "fund agent" up through National Fund Chairman (1968), as well as (2) up through administrative tasks/committees to Alumni President (1970-71). In addition, Harold Fee '20, then Alumni Secretary, used me for a still-broader range of contributions, especially for career counseling of Stevens seniors, both one-on-one and in Harold's annual group ("Careers") round-table for seniors. My counseling was both general and for legal careers; the latter led to several graduates who ultimately became prominent intellectual property law practitioners, one of whom is now a Stevens Trustee. These three sets of Stevens volunteer activities on my part led to my receiving the 1968 Alumni Award, and also led to my pursuit of an academic/policy career.

As implied above, these volunteer activities (and others beyond Stevens: e.g., nationally, I was Secretary of the American Bar Association's Committee on Civil Rights and locally I was a member of Bergen County's Planning Board) overlapped and mutually interacted with my professional roles during those total 60 active Stevens alumni years. An explanatory sketch

Don't see your class log listed? Send an update to alumni-log@stevens.edu or call 201-216-5161. follows.

I entered Columbia Law School in 1957 after two years of aerospace engineering at Kearfott. After 1960 law school graduation, I practiced intellectual property law in NYC with the nation's second most prominent such firm, but "outside" volunteer political work in 1966 and 1967 as a volunteer Congressional and then a State Assembly campaign manager in Bergen County, New Jersey, brought me offers "I couldn't refuse," to paraphrase the Godfather. Ed Koch, then still a NYC Councilman, invited me to share an office in his Wall Street law firm so I could enter NYC politics more broadly as his part-time legislative assistant, while in parallel Matty Feldman, then the New Jersey Senate Majority leader, invited (another part-time piece of) me to be his legislative counsel on the New Jersey side of the Hudson where my residence was. One of the things I opened up for Koch, which he credits as a key early step toward his later NYC mayoralty, was my staffing of his leadership (once he entered Congress in 1969) in federal mass transit legislation (see earlier photo of Koch/Feldman joint press conference at the mass transit-relevant George Washington Bridge connecting their two states when Koch was still an NYC Councilman).

My work with Majority Leader Feldman, and news items in The New York Times and in northern New Jersey newspapers about all of the above caused the Governor of New Jersey (Richard J. Hughes), who was looking for new staff leadership, to offer me the position (January 1968). Urban riots and Lyndon Johnson's "Great Society" anti-poverty program dominated those days, so that by my third month the Governor asked me to create and then lead (cabinet-rank) a "NJ State Law Enforcement

Planning Agency" to implement the new federal criminal justice largesse. The U.S. Justice Department convened all 50 state directors in South Bend, Indiana (Notre Dame campus), and I was elected by the 50 as president of their new association to represent our collective state critiques to the Justice Department so the federal program would continue to learn from such "feedback" and evolve.

Harvard had in 1966 (aftermath of JFK's 1963 assassination) renamed its "Graduate School of Public Administration" as the "Kennedy School of Government" with a new kind of educational approach, to be called "public policy." By 1969 they were admitting students. From the 1930s they had awarded full scholarship residencies called Littauer Fellowships (awarded for "State Leadership"). A Hughes administration cabinet member colleague of mine in New Jersey, Dr. Paul Ylvisaker, who was a prominent national scholar of poverty, had in the 1940s been a Littauer Fellow for his work in Minnesota. Paul nominated me to Harvard for the 1970 Littauer Fellowship, so that as the Hughes administration ended (because of the two-term gubernatorial limit in New Jersey), I left for the Littauer residency at the Kennedy School of Government. (Paul joined me there a year later, as the new Dean of Harvard's Education School, which was also going through a shift to "policy orientation.")

I quickly was noticed by two nationally prominent Harvard professors (pictured), Ed Banfield and Sam Beer. They "drafted" me from "Littauer residency" into the Ph.D. program, and I did my Ph.D. thesis on an aspect of urban policy while also being (for needed family income) a visiting scholar at RAND Corporation's NYC office working on NYC and federal criminal justice policy. My Ph.D. thesis and degree weren't complete until 1976 because from 1972, in order to support both my family and then-wife Frieda's medical school/internship/ residency path, I had to be employed in multiple positions providing maximal combination of income yet progress on my newly chosen academic teaching/research path.

Thus, I next joined University of Iowa from 1972 - 76 as legal counsel to the president, followed by Chairman of its graduate program in Urban and Regional Planning. In 1976, Ph.D. now in hand, I spent my final 21 years (back in the "Ivy League") at the University of Pennsylvania ("Penn") — from 1976-97 — in a variety





of dual faculty/administrative roles until 1997 retirement: assistant dean, then vice dean, Penn's School of Public and Urban Policy (1977-82); next (on-leave from faculty) as Penn's vice president-director of the Office of the President (1980-82); then back to the faculty (1982-97) to be Penn's director of the Fels Institute of Government (founded 1937) and Chairman of its graduate program in Government Administration until my 1997 retirement.

The graduates of the Fels Institute's Master of Government Administration (MGA) program that I redesigned, directed, and taught in were an immediate success in government leadership roles (picture and table), including a graduate who became a congressman, several state legislators (two Speakers), state cabinet members and major city policy leaders (both inside and outside government).

In 1996, at the announcement of my forthcoming 1997 retirement from the Penn faculty and the Fels directorship, the New Jersey Assembly passed a resolution commending my 30 years of contributions to good government in the tri-state (New York, New Jersey, Pennsylvania) region. In addition, my 600 graduates created an endowment for "Spady Scholarships" at Fels, and also commissioned a Spady portrait which now hangs over the fireplace (picture) in a "Spady Seminar" classroom. — James A. Spady, 200 Locust Street 8D, Philadelphia, PA 19106-3917; (215) 922-1606; (215) 880-3989; kinneyj@ wharton.upenn.edu; Richard S. Muller, Dept. of EECS, BSAC Director, University of California, Berkely, CA 194720-1770 muller@berkely.edu

March 5, 2019 — News from Barbara and Bob Lauten-

"I am happy to write that Barbara and I celebrated our 60th wedding anniversary on December 20, 2018, at Mass in our church. Then we celebrated our joyous occasion with our family and friends at a local restaurant and had our vows renewed. It is truly a blessing to have been together all these years. We still live in Ocean City, New Jersey — have been there since 1970. This means that since we are at The Shore, we get many family visits on weekends and more (especially in the summer) — three children, seven grandchildren and two great-grandchildren. Lots of enjoyable times.

"Our grandson, Peyton Ouano, will graduate from Stevens May 22 and we are looking forward to the day."

Ib Berg, who was longtime research scientist with the Department of Army and the Department of Defense, shared a letter that he wrote to President Trump earlier this year. Ib, who studied variations in solar radiation, tells the president that in his studies, he could not find "any evidence that the presence of carbon dioxide in our atmosphere changes the amount of radiant energy we get from the sun, or that it could cause climate change (global warming/cooling). "He then briefly explains global temperature trends over thousands of years caused by what he says were naturally occurring events. To illustrate his point, he also included a graph that illustrates the work of several scientists, titled "Global Temperature Trends Since 2500 B.C."

Dave Haid wrote in to update us all on his and Blanche's recent move to Florida: "It was a difficult move. Downsizing from a six-bedroom home to a two-bedroom apartment is not easy but here we are - new Florida residents. We now live in a retirement community divided into three separate sectors: Independent Living, Assisted Living and Mental Health. We are in Independent Living, hopefully for a good long time. We come and go as we please in our 2002 Ford Taurus, but can enlist the community's free chauffeuring service to certain malls, physicians, markets, churches, etc., within boundaries. Our new phone numbers and email are: (561) 355-0862 (land phone), (203) 223-3315 (cell phone), blancheanddave@aol.com.

"We will miss our meetings and time spent with the Class of '57 Reunion Committee members and our Westport, Connecticut, friends. Our son Dan and his family live in nearby North Palm Beach, and we are already taking advantage of their help and companionship. Other family members are expected to visit with Dan and us over the course of the year. Except for the administrative and service staff, everybody here in the community is our age plus or minus 20 years. All we have met are very friendly and welcoming. In time, we expect to initiate contacts with the Stevens club in the region. Best of 2019 to all. Best regards, Dave." — S.J. "Chuck" Filippone, 84 Paul Place, Fairfield, CT 06824-5836; (203) 254-3197; sfilippone@aol.com

Don't see your class log listed? Send an update to alumni-log@stevens.edu or call 201-216-5161.

February 25, 2019 — Well we've passed the halfway point of winter at the bleak Jersev Shore, which seems a bit longer this year since we are not traveling as we usually do. Two reasons: my wife Pat now has some trouble walking (she was somewhat daunted on our recent Rhine cruise, when the European guide said to her in typical Teutonic fashion "You should not be on this trip"), and the second reason is that we've wanted to do some much-needed renovations on our 100+-year-old summer bungalow type house. Anyway, being a gardener it's nice to start getting the spring catalogs again and see that pitchers and catchers have reported for spring training.

As usual only a couple of contacts with classmates during this last quarter. The first was an email sent to me from Bob Walker. He informed me sadly that Fred St. John, an ex-'58er passed away recently. Fred was with our class for the first two years, and then continued on as class of '59. You may remember Fred as being quite tall, and obviously an important member of the basketball team, as well as the Delta house. Both Bob and Bill Pepper learned of Fred's passing when they exchanged Christmas cards with the family. On behalf of the class of '58, we offer our condolences to Fred's family.

The second contact was a letter from **Stan** Nisenson, who was still telling us how much he enjoyed our 60th reunion. You may remember Stan moved to the West Coast right after graduation and essentially never looked back. Stan tells a funny story. He and his wife Bev were checking into a hotel in Las Vegas and got talking to another couple also checking in. They exchanged the usual: "Where you from?" "New Jersey." "So are we originally, where in New Jersey?""Bayonne/ Jersey City." "So are we!" The stranger said his father owned a Chevy dealership in Bayonne — Stan says "I know which one — I bought a car from him!" — it was Stuart Chevrolet! Stan says "In fact, I even went to college with his son." You know where this is going. It turns out the "stranger" was Neil Stuart '58. So they wound up having a mini-reunion in the Las Vegas hotel lobby! (It reminds me of a story I've shared in this column: Two middle-aged men wearing raincoats skulking around Piccadilly Circus around 11 on a rainy night — one was Bob Fiocco and the other was me, Mike Bonner. We hadn't seen each other in 20 years or so, both of us on business trips had layovers in London before heading back to



Barbara and Bob Lautenschlager '57 celebrated their 60th wedding anniversary last December. Read more from Bob in the '57 log.

the US. I had never seen Piccadilly. Another nice reunion, but now what we were really doing at that hour of the night is another story! Back to Stan. He said he was sorry he missed catching up with the other remaining Bayonne-ite, John Boyle (who came only for the Saturday luncheon), but promised he would be back for our next reunion. I have to admit, with their California suntans both Stan and Bev looked very healthy. If you are out that way look them up in Granada Hills.

My third contact was with Roger Paquin (Roger — I spelled it right this time). Roger and Ethel had moved into an independent condo community in New London, New Hampshire, about two years ago. It sounds like they have the best of both worlds, lots of activities, but not a medical support facility. Unfortunately, they both have limited mobility because of hip and spinal issues, and regretted missing our 60th. Roger, who was one of the older members of our class, mentioned that he just turned 87 and they celebrated their 61st wedding anniversary. Pat and I just made it to 53, so 61st may be the tops for our class — any challengers with more than 61??? Just let me know. Roger has fully retired from consulting, but keeps his hand in reviewing papers for materials science journals, while tracking children and grandchildren.

Your reunion committee has two ongoing campaigns. The first is about the Stevens Awards Gala held annually in April at The Plaza Hotel in New York City. What is unique this year is that two members of the same class are being honored: Rich Harries '58 and Bob Fiocco '58. It will have happened by the time you read this, but we were hoping we can fill a couple of tables with '58ers! The second effort being headed by Barry

Ficken is to encourage participation in the Legacy Society by remembering Stevens in your estate planning. I think we are up to 13 or 14 members and hoping for more, so we continue to be the top class. One other task that we haven't done much on is to scrub our class lists. I think we are showing about 99 living (out of about 155 graduates), but I think we've lost contact with seven or eight since our 50th so the numbers are a little fuzzy. (Any of you reading this who we haven't contacted, please text me and I will tell all you are alive and well...enough!)

That's it for now. As always, send me some news of what you are up to, healthy or otherwise. — Michael F. Bonner, 329 Sylvania Ave., Avon by the Sea, NJ 07717-1242; mfbonner@optonline.net

Alumni Weekend reunion, 5/31/19 - 6/2/19

February 2019 — By now you should all be aware that Alumni Weekend is coming up on May 31-June 1 and it is a special event for the Class of '59 — 60 years! If you have been at any of the previous events you will remember what the word "reunion" means: Some of the fellows are fatter, some are thinner, most have gray hair and some have none, but those great personalities bubble right out. You can reminisce about those wild things you shared and hear what your old friends have been doing over the years. It is really worth the effort to attend!

Leo Collins sent a short letter about the Class of '59 scholarship fund and the weekend, which follows.

"Dear Classmate: June of 2019 is the 60th anniversary of our graduation from Stevens. I am certain the date will mark an important part of your life and recognition of the professional and personal accomplishments, many of which we owe to our education at Stevens.

"The date marks another accomplishment of which we can be very proud — and that is the achievement of our scholarship fund for '59 reaching a level where support to deserving students can be provided. The Class of '59 fund has grown to over \$187,000 from the start of our campaign ten years ago, and each of you who have contributed deserve thanks and congratulations. Particularly gratifying was to see the award of two scholarships this year. The awardees, Justin Stowe and Matthew Rice, sent letters of thanks and described how the scholarship funds have made a difference in supporting their

education goals.

"The plans for Alumni Day Weekend are now being finalized. Our class dinner is on Friday, where as guests of Stevens, we will kick off our anniversary. The venue will be The Williams Library and President Farvardin will be joining us and bringing us current on the wonderful progress our school has made under his leadership.

"On Saturday, we will join the alumni at a luncheon in the gym. The Alumni Gala on Saturday evening will have special tables for our class.

"We are expecting a good turnout and look forward to seeing you all again on campus.

"Regards, Leo F. Collins" — George C. Pezold, 120 Main St., Huntington, NY 11743; (631) 271-8817; george.pezold@transportlaw.com

March 20, 2019 — Thanks to John Dalton for keeping us all up-to-date via his emails blasts. If you are not receiving them, please email John at jjdalton1@verizon.net and he will put you on the list. If you do not have an email, ask any of your grandchildren and they can help you.

Received a note from Joe Kaminski. He said, "Hi guys, some sad news — I mentioned in an email that Paul and Marge Hausmann had moved to the Philadelphia area and I was looking forward to hooking us all up. Sadly, I learned that Paul was unexpectedly taken ill and passed away. Very sad, they just moved to the area from Illinois be closer to family. Joe"

Received an email blast from John Dalton that indicated the Class of 1960 Endowed Scholarship has "surpassed the \$500,000" mark in cumulative gifts and has an ending fund balance of \$612.259 as of June 30, 2018. We are making good progress. John Dalton's last email blast provided profiles of our two current 1960 scholars. They are senior Andrew Chrepta, a music and technology major, and junior Ethan Guerra, a chemical engineering major. Andrew's profile will give you an idea of how much the curriculum has expanded since the 1950s. I hope that you'll agree that our gifts to the scholarship fund are being well invested.

I had hoped that we could have fund in perpetuity for a 1960 scholarship student. I am not sure we will get there, but it is a worthwhile goal. More on this topic later, as I put together my estate planning. — Donald N. Merino; dmerino@stevens.edu



Mike Delevante '63, seen with his wife, Barbara, has sent an update on his life since graduation. See the '63 log.

February 2019 — It's late February and today we have what looks like a blizzard outside: heavy snow and high winds up to 40 miles per hour swirling the snow all around the house. How do I know the winds are that high, you ask? We have a weather station mounted on the roof that records everything you can imagine, with the readout on a console in the kitchen. Sure enough, the maximum gusts have hit 41 mph! Here in New Hampshire, we can expect winter to last another month or two, and then there's mud season followed by black fly season. Hey, given how climate change to date has adversely affected the weather in other parts of the country, we still enjoy living here and have no plans to leave. Having said that, the snow shoeing, snowmobiling and cross country skiing has been awesome this year, although I am beginning to get the itch to begin prepping our boat for the upcoming sailing season! Our classmates are spread all over the states, so now's your chance to let others know how you feel about where you live. Send me a note and let's compare notes!

Recently, Lou Capuano sent me an update as follows: "Hi Phil, we are looking forward to a European trip in June. We had asked our grandson where he wanted to travel when he graduated from high school, and thinking that he would say Ireland since his dad is Irish and they have not been there, he surprised us by saying Greece! In answer to why, he said it was because that's where democracy started. We told him we were making a land trip, but he said he was hoping to

visit some of the islands. As we have not been to any of the Greek islands either, we thought it would be fun to add a cruise to a number of the islands. Lou"

I've had an opportunity to travel to Greece a dozen times where I visited numerous meticulously preserved historic sites, viewed unearthed antiquities and learned about the culture of this advanced civilization in the ancient world. As part of my work as executive director of the Society of Naval Architects and Marine Engineers, I periodically represented the society at our Greek Section and exhibited at Posidonia, the bi-yearly, international maritime expositions in Athens. The people are friendly and engaging, the food is very diverse and delicious and the entertainment is unparalleled. On one early trip. we charted a yacht for the day and sailed to the island of Aegina, where we enjoyed a meal of fresh fish outside on a hillside with a beautiful panoramic view of the surrounding Aegean Sea. Most memorable for me was being "keelhauled" on the way from Athens to the island! Believe me, once was enough! I'm sure your grandson will be impressed with Greece and all it has to offer.

Many thanks to Lou for providing his update. Now it's time for others of you to please take a few moments to send me an email with an update of your activities, projects, hobbies, family trips, etc., that would be of interest to our classmates. Also, high resolution photos are most welcome for inclusion in future class logs. - Philip B. Kimball; pbkim25@gmail.com

February 2019 - Hi, guys, I should start with saying "Thank you" to the Alumni Office for letting me slip past the deadline by a couple of days. We were roughing it last week in Sun Valley and had a great time that included sitting down for a midday break with Bruce Boylan and a couple of other Stevens grads. Unfortunately, I'd left my notes on the computer at home and didn't get this in on schedule, and they answered my plea for an additional few days.

The email replies started with Jim Caratozzolo writing "Joined Lockheed in Sunnyvale, California, in 1964 after leaving Stevens with a BSEE and an MSEE. Peter Marta and Ed Henderson joined at the same time. Spent a full career in the Space Systems division. It was a wonderful time, with many interesting classified and unclassified projects. Retired in 1999 from Lockheed, and worked a few more years in the commercial sector, with a year in Amsterdam. Married in 1969 to my wife Gail who moved to California from Minnesota. We have spent every summer vacation in Minnesota, and have a cabin on Lake Belle Taine, which we spend full summers at since retirement. Gail and I have a married daughter and married son who live in the Bay Area and between them there are six grandkids. Our lives are very full, and my current hobbies are grandparenting, golf, billiards and oil painting. Some European travel fills out the dance card."

Then Chris Coccio wrote, "We are looking forward to going to the Stevens Awards Gala this April to celebrate with classmate Dick Magee and the other award recipients and, hopefully, we will see others from our class there, too. We were also at the 55<sup>th</sup> reunion this past summer. after some excellent convincing by Bruce Boylan, and enjoyed seeing you and others that weekend. Bruce came up to New Paltz, New York, and he and I did a mountain bike ride at Minnewaska State Park — not bad for a pair of septuagenarians. I am continuing as chairman and part-time CEO at Sono-Tek, and Charlie Perruzzi and Tom Moschello joined us in August for our annual shareholders meeting, along with Charlie's grandson. I think the plan was to encourage Charlie III to consider a technical education and career when he gets out of high school, and I hope it helped. In any event, it was great to have them join us. We have a schedule that allows a lot of travel for Laurie and me, which still provides more enjoyment than stress, including two visits to Italy last year and multiple trips this year."

Next, Don Frerichs said, "In March of last year, Susan and I moved from the far east side of Cleveland to the far west side. Anyone who has lived in Cleveland knows the serious social ramifications of such a move. So not only am I dealing with the inconvenience of moving (new doctors, dentists, barber, etc.), I now have to deal with 'west siders.' The move was an even bigger deal because while the square footage remained about the same, I now have no attic or basement for storage. Three truckloads of 'stuff' went off to Goodwill or the junkyard. We continue to square dance regularly and take vacations involving square dancing events around the country, this year Atlanta. It is great physical and mental exercise, and you make friends from locations all over the U.S.A. I signed up for automatic monthly donations to Stevens. It is painless."

And Pete Nowak chimed in with: "After eight years in the 'big house' Charlene and I have downsized to an apartment in downtown Sarasota, in walking distance to just about everything. Sarasota is a great place to retire to and anyone thinking about it should give me a call. Our daughter, Tanya, and grandkids live in Flemington, New Jersey, and our son, Jason, resides in Encinitas, California. We look forward to a 'relocation' cruise to Barcelona and a few weeks in Europe. Otherwise, we are enjoying our retirement, now in its 22nd year."

John Zajac said, "Since you're not asking for money, I'll reply. Nice hearing from you. Ellen and I are doing well on Maryland's Eastern Shore, behind Assateague Island National Seashore. Anyone visiting this area are very welcome to call. Had a very enjoyable weekend before Christmas with Bruce Boylan and Ritchie Stomber. We road tripped to northwestern Pennsylvania to visit Roger Steiner who, as you know, suffers with Parkinson's. Still very alert, he remembered a lot more of the old days than we did. A good time was had by all. Roger says HELLO to all his classmates. We'll be driving to Florida soon to check in on a few ailing relatives. Stay well."

Bruce also chimed in about their road trip to see their fraternity brother, Roger. "Considering (Roger's health issues), his outlook and sense of humor are quite upbeat. In the picture, who has the most hair? It was great getting together. Rich and I had a five-hour hour drive each way and John had an eight-hour drive. Hats off to him."

"Hi, Neville. No need to use the following or the picture (my wife, Barbara, of 50 years) but granting your request for an update on my life. After graduation, I worked for about 14 years in Jamaica making mostly rum and wine products for a major liquor company. In 1977 I emigrated to Canada and worked for 13 years at a large whisky distillery. The company was then sold, so I returned to Jamaica for two years to my former employer. In 1992, I returned to Canada to start my consulting career. I am still working as a consultant to design distilleries, mostly for craft distillers, to make various alcoholic beverages. I have worked in several countries with large and smaller distilleries and helped quite a few to start operations in the USA, Canada, Cayman, Nassau and England. In Austin, I recently designed a still for making bourbon and spirit for making gin and

liqueurs. I also develop various beverages, my latest being a coffee liqueur for my Austin client.

"My early experience came from an engineer in New Jersey who taught me about distillation. I so remember the packed column we used in the chemical engineering lab at Stevens that meant nothing to me at that time. In spite of the temptation, I do not sample my products. I have written two books on the industry and one is supposed to be in the Stevens library. Unfortunately, I have never attended any reunion but I did visit Stevens some years back with my family and again about six years ago. Was surprised to see that the institute is co-ed; I may never have graduated if that had been the case back in our time.

"I am the happy grandfather of four boys, two from my son and two from my daughter. My son, also an engineer, works for a large U.S. company with four plants in Canada. My daughter is a physiotherapist at a large local hospital. Thankfully, we all live within 12 minutes of each other. So glad that life has been generous to you and your wife. The world has certainly changed since the seemingly carefree days of the early '60s. Technology is crazy and stressful; I am proud to say that I do not own a cell phone. Cheers, Mike Delevante."

We've had a good winter with some very enjoyable ski trips, but I'm looking forward to getting the bikes and kayaks out and working in the garden. I'm also looking forward to the Old Guard Luncheon but, unfortunately, will miss the Gala at The Plaza.

- Neville W. Sachs; nevsachseng@gmail.com

#### Alumni Weekend reunion, 5/31/19 - 6/2/19

February 2019 — Dear Class of '64: With this article, I welcome you all to the 55<sup>th</sup> reunion of our class on this Alumni Day 2019 issue. Your reunion committee has gone through many machinations this past year to provide you with the best in activities and events to commemorate your experience. We have tried to keep you abreast of all of the doings and information regarding your attendance. We hope you will enjoy the festivities we have planned. As you have noticed, the campus is going through big renovations with the replacement of Jacobus and Hayden halls and other construction projects. Do not let this deter you from enjoying yourselves.

Every five-year anniversary class presents a class gift. At our 50th reunion, we "stretched" our



Bruce Boylan '63, John Zajac '63 and Rich Stomber '63 traveled to Pennsylvania to visit Roger Steiner '63, their Delt fraternity brother. Read more from John and Bruce in the '63 log.

goal; our scholarship is now over \$900,000. Consequently, our class gift endowment income now supports three Stevens students to pursue their academic goals, with scholarships at an average of about \$12,000 per year. The current recipients are: Beata Mirtchouk, a freshman majoring in accounting and analytics; Brenan O'Connell, a freshman majoring in computer science; and Nicole Dominguez, a freshman majoring in biomedical engineering.

The Planning Committee's goal this year was to raise our donor participation from 30 percent to 55 percent. At 30 percent, this is well over our historic donor support, which put our class in the top 5 giving classes. But for our 55th we wanted to do even better (55 percent for the 55<sup>th</sup>). National institutions are rated on alumni support, and we know our class can strive to reach this goal. The committee wants to thank all of you who donated to the Class of '64 gift either outright or through a legacy gift to make our goal come true.

The reunion committee deserves a big round of applause for their efforts to make our 55th reunion a rousing success. The members are: Peter Astor, class president; Joe Weber, class vice president; Fred Horowitz, fund captain; Pat Colletti, Rich Cundari, Ken Kempner, Ron Marold, Roger Nagel, Al Propper, Paul Robinson, Fred Zierold, Bob Salfi, August Ruggerio, Fred Chaslow, Terry Tranen; and Harley Graime, class secretary. — Harley G. Graime; hgraime@att.net

Feb. 26, 2019 — I write this on a COLD day in Massachusetts when I know some of you are in warmer climates. High, gusty winds and well below freezing, but no snow until late tomorrow. The skiers have been happy this season and the amount of actual snow in the Boston area has been limited, so far. If you read The Indicator and other mailed documents from Stevens, you will be aware that major changes have taken place in the past five years. The curriculum has been broadened but the basic science, engineering, mathematics and computing are still stressed in the first year to retain a solid technological base for all students. The range of options is much greater than we could have imagined but the sound technological base is very useful in most fields in today's world. Specialization in later years at Stevens can only be understood by looking through the Stevens website.

The range of student activities, organizations

and individual opportunities for students are very large. The support for student in their development is also much improved with additional staff, monitoring and counseling where needed. The campus is expanding to provide a good but still demanding environment.

Alumni who have learned about and understand about the revitalized atmosphere at Stevens will, I think, be surprised and possibly envious when compared to the early 1960s.

Stevens recently started a program to assist alumni classes to be more organized and effective than they may have been. This may be difficult for some classes, including ours, where a limited number of alumni are active in between five-year reunions that are held during Alumni Weekends. There is a desire to promote better leadership in the alumni classes. You will have received a notice about nominations for the election of class officers, and there are administrative staff that are available to assist all classes. This has been a goal for all classes and has been specifically requested by some of the more recent classes. It may be more difficult to activate members of more senior classes like ours, but we should try.

There will be a mailing from Frank Semcer about this nomination and election process. We also want to start preparations for the anticipated 55th reunion of the Class of '65 in June 2020, and we are looking for at least five or 10 volunteers to help prepare for the event. We want to make it as successful as the 30th reunion in 1995, with as many attending in 2020 as possible to help kick off the celebration of 150 years of Stevens and the progress that has been and is still being made.

Recently, I received an email from Gerard Stocker regarding the death of classmate Roger Lovrin on July 3, 2018. Roger's wife, Susan, had informed Stevens of Roger's passing, but the information was not included in The Vitals listing in the 2018 Winter Indicator or the class log. I spoke with Jerry and Susan and include some appropriate information. Roger and Susan have four sons and four grandchildren: Jake, Olivia, Madison and Makenzie. Jake is the eldest and is currently a junior at Stevens. Jerry will participate in Jake's graduation ceremony in 2020 as a member of the "Old Guard" in memory of Roger.

Roger was president of Alpha Sigma Phi, served on the Honor Board and the Interfraternity Council as well as participating in interclass and interfraternity sports and varsity basketball.

On a lighter note, in the Class of 1965 booklet celebrating our 40th anniversary, Roger included a passage about his favorite professor: "Ainsley H. Diamond. Ingrained in my memory is the day our class got back the results for the first Saturday freshman calculus 'quiz.' Has anyone ever figured out how full-period, tough tests got to be called a quiz? My score was 23 out of 100. I thought this was not only an F, but an F-. professor Diamond then proceeded to graph the grades on the board and my 23 turned out to be a C. There were negative scores like -17. Only a Stevens math professor could explain, mathematically, how you could get a negative score. Professor Diamond liked to take groups of students to New York City for art exhibits and a possible stop in Greenwich Village. Ainsley H. turned out to be a really good guy and a good professor."

You will also see a full obituary for our classmate Ken Blahut at the end of this log. Ken passed away last September, and we noted his passing in the winter issue. We extend our deepest sympathy to his family; Ken was the brother of Dennis '62 and Rudy '69.

I look forward to hearing from other classmates and visiting with those classmates who plan to attend Alumni Weekend in 2019 or have already attended (depending on when this issue of The Indicator arrives at your home). — George Greene; gwgreene43@hotmail.com

#### Kenneth T. Blahut

Kenneth T. Blahut of Kent, Washington, passed away peacefully at the age of 75 on Sept. 14, 2018. Joyce, his wife of 51 years, and his immediate family were at his side.

Born and raised in Irvington, Mountainside and Millville, in New Jersey, Ken lived in Kent, Washington, a suburb of Seattle, for the past 52 years.

Ken taught high school mathematics for the first year after graduation. In 1966, Boeing Aircraft hired him as a development engineer in Seattle, and Ken worked for Boeing for the next 13 years, during which time he attended Seattle University and earned an M.B.A. in Finance. In the late 1970s, Ken decided to follow his true career aspiration — to raise, train and race horses. Ken left Boeing and, to support the startup expense of raising and racing horses, also began a distributor business.

During the 1980s and 1990s, Ken owned and bred horses and raced his horses at racetracks in Washington and Oregon. He earned certification as a horse trainer, and his family has been left with a number of "winners circle" official photographs of the races won by Ken's stable.

Ken often served as a coach, referee or umpire for his five children's youth teams when they were growing up. Even after leaving his engineering career, he remained deeply interested in science and engineering and is the inventor of an educational card game based on knowledge of prime numbers.

At home, Ken was the ultimate do-it-yourself husband and father, his family said, variously working on repairing automobiles, home appliances, lawn and yard equipment and utility systems.

He was a devoted family man and a loyal and generous friend. Ken is survived by his wife, Joyce; his daughters Emily, Jeanne, Ann and Elizabeth; his son, Joey; eight grandchildren; and one great-grandchild. He is very much missed by two of his best boyhood pals, brothers Dennis '62 and Rudy '69.

February 2019 — I received emails from Len Calone and John Dalessio containing photographs of them, their wives, and Dick Ackerson and his wife.(Does Dick not write?)

Len Calone writes, "We have been busy celebrating our 50th anniversary. In May 2018, we re-visited Bermuda, a favorite of ours for 50 years. Later that month, our children hosted an anniversary celebration on Long Island. In July we, our children and six grandchildren spent a week between Walt Disney World and a Disney cruise. There were lots of happy times for all. In August, we visited Colorado for a wedding, then traveled to see Arches, the Grand Tetons and Yellowstone. We enjoy our National Parks!

"Prompted by the re-kindling of friendships at our 50th reunion, several of my Sigma Phi Epsilon brothers have remained in touch. In addition to supporting one another through email and phone calls, several of us have had the opportunity to meet a few times. On Feb. 28, John Dalessio, Dick Ackerson and I enjoyed lunch in Deer Park, Long Island. John was in town doing work for his civil engineering company, Dalessio Engineering. We also gathered together at Patty and my 50th wedding anniversary celebration on May 26. Both couples were with us on our wedding day!!

John Dalessio writes, "For Kathie and myself, things have been busy. Still working. The projects



Patty and Len Calone '67, center front and back, welcomed Stevens friends to their 50th wedding anniversary celebration in May 2018. From left, Kathie and John Dalessio '67, Patty and Len Calone, and Mary and Dick Ackerson '67.

on Long Island involve the structural component of remediation after heating oil spills. Our son, Matthew, and his wife, Claire, share the business with me. Matt is a Rutgers graduate and Claire is from Lehigh. In my work, it is very rare to meet a structural, mechanical, electrical or civil engineer who has graduated from Stevens. Have we forgotten the basic engineering skills for the glamour? All of this will be for naught if there were no building to enclose it, with HVAC to condition it and a switch to turn on the lights. Our projects range from small buildings to the structures for sewer treatment plants. Some projects have fame, such as a structural component for a building called the Shed at the Hudson Yards Project in New York City. Another is the removal and reconstruction of the cupola for the train station at Liberty State Park, across from Ellis Island.

"At Christmas, we went to Arizona to visit our daughter and her family. Thought it would be warmer than New Jersey. Wrong. We had two days of light snow and frost almost every morning. Visited Tombstone to see a bit of the old West. Even tried horseback riding. The horse knew what he was doing, and I did not fall off.

"I pass through Hoboken and Jersey City at least once a week on my way to the PATH station to travel to New York on business. Sometimes the business is in Hoboken. Maybe I will stop by the campus one day for old time's sake."

I continue to receive emails from Peter Gollobin, always saying "Wish you were here!" And with each email is a photograph of Peter smiling from some exotic location. Never, however, does it come with an address or a plane ticket. I have slowly concluded that he is not being sincere.

On a yearly basis, Don Daume sends me information on the Class of '67 Scholarship recipients. I thought it would be interesting to contact some of these young students. I reached out and asked Samantha Nicolich, a recent recipient, "What have you learned during your time at Stevens that has added uniquely to your life? "Samantha responded, "Thank you for your well wishes. I am honored to have received the scholarship and would like to extend a special thank you to you and the entire class of 1967. In regards to your question, I wanted to really ponder after adequate reflection — so here is my take on what I have learned during my time at Stevens that has added uniquely to my life: The rigor and depth of the academic curriculum at Stevens differentiates its students post-graduation. A bachelor of engineering degree provides a diverse framework for analytical thinking that enables its graduates to be leaders at the forefront of societal and technological change in any industry."

I went a step further, writing Gilian Brannan, director of Stewardship within the Division of Development and Alumni Engagement at Stevens. She responded, "In following up to your request about how many of the Class of 1967 Scholars have given back to Stevens, I am happy to say that out of 12 students, six have made a gift to Stevens. Information available to me went as far back as 2001. A number of these students

received an award over many years. Of the six who have not made a gift, two students are still attending Stevens."

Be well, enjoy! — Jeffrey I. Seeman; jiseeman@yahoo.com

February 2019 — As promised, if I didn't receive any new messages from anyone, I would continue highlighting one of our classmates who contributed to the Reunion Logbook. This log features Bill Barker.

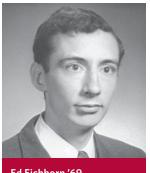
Bill was an engineering major from Pompton Plains, New Jersey. He, along with Larry Leach, John Moskalski and Art Schmidt, entered Stevens from Pequannock Township High School, and all survived the infamous "look at the man on your left, look at the man on your right" speech at orientation and managed to graduate in June of 1968.

Bill has led an interesting life, to say the least. He has managed to re-invent himself several times over the last 50 years. He started out working for Johnson & Johnson out of Stevens, but soon realized the draft board was after him. With fears of slogging through swamps and jungles carrying a rifle, he enlisted in the U.S.

Air Force pilot training program. He graduated as a "90-day wonder" out of San Antonio, Texas, and was sent to Selma, Alabama, where he met his first wife. They married shortly before he was shipped off to Vietnam as a HC-130 pilot, flying rescue operations. After a year service in country, he was reassigned to the

rescue squadron in the Philippines. At that time, Washington started sending troops home early from Vietnam, anticipating successful peace talks. When the talks went sour and the war heated up again, Bill began flying rescue missions to Vietnam from the Philippines. This added another eight hours to a normal eight-hour day, thus making for a very long day.

The only bright spot to this assignment was that it was an "accompanied" tour, meaning his wife could join him. His first son was born in the Philippines. After his Air Force service was done, he and his family moved back to New Jersey



Ed Eichhorn '69

where he planned to land a job with one of the airlines. At this time, the Arabs embargoed the oil, and the airlines were laying off pilots rather than hiring them!

He then found employment with the Navy doing development and testing of their aircraft jet engines. This led to a specialization in high temperature materials, which led him to pursue graduate school at the University of Pennsylvania, where he completed all the

coursework, passed the qualifying exams, performed the research but never completed his dissertation for a Ph.D. in materials science and engineering. The Navy granted a year off to complete the Penn residency requirements, but he was the sole breadwinner, and he and his wife had two more sons and a daughter during this

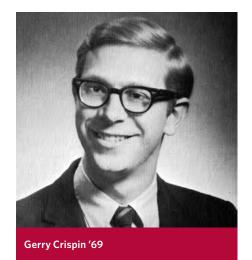
He did attract the interest of the Defense Advanced Research Agency (DARPA) and moved to Washington, D.C., area to become a project manager for DARPA. Unfortunately, the incessant travel and job pressures took their toll on his



marriage and he and his wife divorced. While still at DARPA, he married his current wife, Lee, who is a physicist. She brought a daughter into the marriage, and they had another daughter, for a total of six children. He then took early retirement from the government and went into consulting, which proved to be very lucrative, but personally not very satisfying. After consulting for a few years in the D.C. area, he joined a small photovoltaics R&D company in Colorado as president, and after the owner returned, started a high-temperature fuel cell division. After the owner turned down offered venture capital funding for the fuel cells, he left to join another high-temperature fuel cell company.

Although he and Lee loved Colorado and the mountains, both their families were scattered up and down the East Coast, so they decided to relocate back to the East Coast. In western North Carolina, in Tryon. They bought a small farm. Lee has always been fond of goats, so they bought two pregnant dairy goats 11 years ago. The herd now stands at nine, and Bill had been kept very busy building fences and shelters for the goats. He also enjoys gardening and the peacefulness of ponds and waterfall. He has built a small-scale commercial aquaponics system in a 35-by-96foot greenhouse, and grows organic veggies which he sells, along with goat milk and cheese, to restaurants and at the local markets. He says that at the age of 72, the commercial farming has gotten to be too much, and he is preparing for the next transition in his life. Bill, if anyone knows how to do transition, it is you!

P.S. Don't forget to join our Facebook private page. Stay safe and healthy! — Allen A. Foytlin foytlin01@gmail.com



#### Alumni Weekend reunion, 5/31/19 - 6/2/19

February 2019 — This 'Just-intime' copy of The Indicator (and now that you are reading the class log) is the perfect reminder to double check where you put your tickets, hotel reservations and that list of clothes and memorabilia you wanted to pack, so you won't be late for our 50th reunion.

And, if you forgot how long ago you graduated, it is never too late to call and register. Last minute was always our class forte.... and you won't want to miss the festivities.

When you arrive and check in, we promise you will find a picture like the one below waiting for you to wear on campus.

No, no, not this one, but, another one that resembles what YOU might have looked like 50 years ago. (It's so we can meet in passing and yet somehow trigger a connection from the deep recesses of our collective memory.)

There have been major changes to the Stevens campus over the last 50 years, and we believe you will enjoy seeing the many improvements in both the facilities and the curriculum that are available and preparing today's students for the needs of industry and our economy.

When you get back to campus, it is likely that the Jacobus Building will have been taken down as a part of the plan to build a new student center and a twin tower dorm to support today's undergraduates. You can visit the Babbio Center that was built on the site of the structural ghost of the old Navy building where we spent so much time during our undergraduate years. If you go to see the Babbio building, be sure to visit the Hanlon Lab that trains quantitative analysis majors for analytical jobs on Wall Street. Or check out the great view from a new patio built on top of a new parking garage.

The new Gianforte building should be nearing completion when we arrive on campus. It is a 75,000-square-foot facility that includes two buildings on the corners of 6th and Hudson with a sky bridge connecting them that stretches across 6th Street.

If you take a look at any of the old classrooms where we spent time — the Kidde or Morton buildings — you will see that they have all been updated to meet the needs of today's students.

There is a weekend full of activities for our 50th. We are looking forward to catching up with you. Safe travels! — Ed Eichhorn; ed.eichhorn@ medilinkgroup.com; Gerry Crispin; gcrispin@ careerxroads.com

February 2019 - We are now just over a year from our 50th anniversary celebration. Some thoughts are included in this log.

We received a message from Rich Stack. He and his wife Pat have another granddaughter as of last November by their daughter, Jillian. Major Jillian and Ryan Peralta transferred from Fort Knox, KY, to South Korea in January and this will probably be her last deployment after 18-plus years of service. Their second daughter, Meagan, married last August, and she and her husband work for Chevron in Perth, Australia.

Rich and Pat moved into a new house in Sugar Land last year, have two rescue dogs and a rescue kitten, and extended an invitation to come and visit them. Rich can be reached at rhstackjr@ hotmail.com.

Father Gabe Costa let us know that West Point changed their email addresses and his new one is: Gabriel.costa@westpoint.edu.

Doug Sulzer suggested, "Since next year is our 50th graduation anniversary, I thought it might be a good idea for you to collect recent pics of our classmates, and share them with our fellow alums. It would help build excitement about whom we might be seeing at a reunion. It also might eliminate some embarrassing moments calling someone Bob instead of Steve! Here's one of me. What do you think of the idea?"

I think it is a great idea and have included Doug's picture with this log. Please send me any current pictures you would like to share with our classmates. We will try to send them out to the class via the SIT Class of 1970 webpage on a scheduled basis, maybe monthly.

We also heard from Carl Kaminski, "Mary and I are enjoying retirement. I retired from Lockheed Martin in November 2013, and Mary retired from South Suburban Parks & Recreation in January 2017. Our daughter Cyndi teaches fifth grade nearby in the Douglas County School System. Our son Carl and his wife Erynn have transplanted back to California (his birth state), living in the Modesto area. They stay busy breeding and training whippets. Carl and Mary live in Castle Rock, CO and can be reached at carlcolo@ centurylink.net.

Tony Barrese let us know that he is currently a Stevens faculty member and serves as interim vice provost for Academics. As he is on campus, he offered his assistance with our upcoming 50th anniversary. Tony will also represent our class on the committee to celebrate the Institute's 150th



anniversary. Tony can be reached at abarrese@ stevens.edu.

On yet another sad note, **Bill Stengle '71** sent us information that **Steve Balashek** died Jan. 30, 2018 at his North Las Vegas winter home.

Stephen C. Balashek came to Stevens from Millington, New Jersey. He majored in mechanical engineering, and his interests included reading and motorcycles. He was in Sigma Nu fraternity and in AFROTC. After Stevens, he earned an M.B.A. from Webster University and an associate's degree in webpage design from Laramie County Community College. He retired as a captain after serving 20 years in the USAF as a missile launch officer and civil engineer. He continued to work as an environmental engineer for another five years and was then on the restoration advisory board to oversee the hazardous materials cleanup at FE Warren AFB.

Throughout his life, he participated in walks and runs for charity. He leaves behind his wife Billie, daughter Jamie and her husband Andrew O'Donohue, daughter Stephanie and her husband Gregg Galbreath, two step-grandchildren and two grandchildren, a sister Lois, and several cousins. His family requested donations could be made to Mended Hearts Chapter 132, Cheyenne, Wyoming, and to Cheyenne Little Players Theatre. Although belated, we extend our deepest sympathies to his family and are thankful to have known him during our years at Stevens.

Send me pictures so we all can see what we look like now before attending Alumni Weekend 2020. Good health and wishes to all. — Eugene A.J. Golebiowski; eagolebiowski@att.net

February 2019 — Phil Crowley was honored with the Stevens Outstanding Contribution

Award at the annual Stevens Gala in April. Somehow Phil finds plenty of time to contribute to Stevens despite still working his job and managing several of his chalets around the country (New

Jersey, Florida, Utah). It must be due largely to

Diane's assistance.

John Schroeder writes that he is still staying very busy. Carol and he moved to Delaware to escape New Jersey taxes, and are now living in an over-55 community with lots of social activities. They currently have 15 grandkids. They maintain a condo in South Bend at Notre Dame. and John even has an office in the IDEA center on the campus for when they are in South Bend (especially during football season). After leading Marmon's Water business for the last five years, his boss asked him to move to run a different business as executive vice president of Food and Beverage Technologies at Berkshire Hathaway. The company manufactures equipment for the food and beverage industries (e.g. soda dispensers for Coke and Pepsi, toasters for McDonald's). The job necessitates having an office in Glendale Heights, outside of Chicago, which is great for him during baseball season. He caught up with Ralph Cohen last year, who stayed at his Delaware place for a couple of days. He also keeps in touch with a number of Class of '72 Alpha Sigma Phi brothers.

**Jim Morris** has been given a clean bill of health after a few tough years of surgery and radiation treatments. Rumors that he may return to Met Life are unfounded. Unfortunately, his daughter Christine is struggling with complications from diabetes. There was a great family get together at Wildwood Crest, New Jersey, for the summer, with his three kids, two spouses and four grandkids. Even the New Jersey shore weather cooperated.

Sharon and Dan Bagnell took their major trip to Arizona in March — but the Southwest proved to have more wind, cold and snow than warmth. The trip included their fifth trip to the Grand Canyon plus the Petrified Forest, Canyon de Chelly, Four Corners, the Lowell Observatory in Flagstaff and, finally, to warm Sedona and the Hopi cliff dwellings. Mid-year trips included biking the Virginia Creeper Trail (all downhill), Biltmore estates, Charleston, Myrtle Beach (leaving early due to Hurricane Florence), and Philadelphia. They added an end of the year visit to Memphis (Graceland, of course) and Hot Springs, Arkansas, which raised their total of National Park visits to 47 out of 60. Much of their time is spent spoiling grandkids Abigail (10) and Henry (2). Dan still plays construction manager for church renovations and is in the praise band, both serve as church deacons, and Sharon gardens and teaches Sunday school. Sharon's father died last year, joining her mother at "home." They had a great celebration of his life, and he was buried with military honors. They moved Dan's mother to assisted living and sold her house.

Paul Gaffney finally retired from all work, eschewing the glory (and agita) of consulting gigs. Now there is more time for seeing the grandkids, golf and touring with Da Bus. This year, Paul and Ginny stayed East, heading to Florida, the Outer Banks, upstate New York and Georgia's Golden Isles. All of their kids are now in Charleston, so visits there are frequent to see the kids and grandkids.

Bob Munczinski finally retired, leaving a void in the banking world after 45 years. Now more time is available for visits to daughter Anneliese, Jon and grandkids Hunter (5) and Charlotte (3). Unfortunately, Bob had a heart attack in October, but nurse Nancy brought him back to health and 35 pounds lighter.

Stevens has announced plans to build two high-rise dormitory towers overlooking the Hudson River where the current Jacobus Hall and Hayden Dorm are located. The towers would have about 1,000 total beds, plus a number of amenities. President Farvardin is touring Stevens alumni club meetings around the country to

announce the project, and maybe drum up a little financial support. Joe Moaba attended one meeting in Florida and was very impressed.

Happy 70th birthday to most of us. Impossible that we are that old. I still remember some really great times at Stevens and Sigma Nu from 50 years ago. Since our 50th reunion (June 4-6, 2021) is now less than two years away, now is the time to let me know what you are doing and send me some of your best anecdotes from your years at Castle Point. - William F. Stengle; wfs20h-Im@aol.com

(Written collaboratively by your class officers) January/February 2019

- Fellow classmates: As I sit here in my office writing the log, the temperature outside is in the low single digits and the wind is whistling. I have an all-weather clock and thermometer outside on my deck whose hands have frozen. Not wishing to keep time standing still, I brought it in and, once it thawed, it began keeping time again. I guess it is not "all weather." So here's hoping that Feb. 2 is a cloudy day so that Punxsutawney Phil does not get scared by his shadow, and we have an early spring.

Last October Mary and I took a river cruise along the Danube River. What a wonderful experience. We saw so many cities. Budapest is a jewel! The Strauss concert in Vienna was memorable. Sailing along the Danube is so peaceful. I strongly recommend it. Now, since I don't trust that rodent in Pennsylvania, I decided to take matters into my own hands. In mid-February, we



Attending the Stevens Technical Enrichment Program's 50th anniversary celebration, from left, were Thea Arturi, Thomas Wool '71, Charlie Perruzzi '63 and Clive Dawson '71.

head to Australia for a 23-day cruise of Australia and New Zealand. It's summer down under! I'll tell you more about it in the next log.

From Steve Bistak's (Alpha Sigma Phi bistak@ verizon.com) Christmas letter, I can tell you that he is sporting a brand new knee. He is doing very well. Steve and Paula sold their house in Toms River, New Jersey, last July and moved into their new home in North Cape May in November. We wish you both good luck in your new home. May you start forming many wonderful memories and enjoy life as you cut back to part-time in your daily work duties in 2019.

One last item before I hand you over to George. I just saw in the upcoming alumni events email from Stevens that my favorite Mechanical Engineering professor, Dick Magee '63 (rsmagee@rcn.com) is being honored with the Lifetime Service Award at the Stevens Award Gala on April 6, 2019. Well deserved! Thank you, Professor Magee.

Thank you. Enrique! Well, the groundhog has "spoken." Six more weeks of winter. So I, too, am writing as a snow and ice storm covers North Jersey. Enrique, it looks like you made the right decision about taking the cruise to sunny Australia.

And yes, speaking of Dick Magee... for the last 50 plus years, Dick has been a familiar face at Stevens. Professor, recipient of the SAA Outstanding Teacher Award (twice), SAA president, member of the Stevens Board of Trustees, SAA Trustee, recipient of Stevens Honor Award, member of Edwin A. Stevens Society, established the Richard S. and Janet A. Magee Scholarship and, let's not forget, chair of the "most excellent" SAA Fishing Committee. Hoping to see you all at the Gala to celebrate with Dick!

Speaking of scholarships, our Class of '72 Scholarship is doing quite nicely — with over \$230,000. And our fund captain, Bill Landau (wlandau@optonline.net), wrote to update us regarding this year's recipient - Alexander Galli '20, who is a second cousin of classmate Ed May (Sigma Phi Epsilon edwin10105@gmail.com).

"Alexander is currently completing his junior year, majoring in quantitative finance, and his graduation date is in May 2020. Besides achieving the Dean's list along with exceeding a 3.5 GPA in all semesters, Alexander still manages to engage in an impressive array of extracurricular and even philanthropic fundraising activities. He is a player for Stevens Club Soccer Team and serves as its e-board treasurer. Alexander has

demonstrated a passion for community service which has included volunteer activities with Habitat for Humanity, food drives, soup kitchens and other local events in Hoboken. He is also a member of Kappa Sigma, the newest fraternity on the Stevens campus as well as the largest college fraternity in the world. That very same Kappa Sigma also awarded its prestigious 2017-2018 Intramural Excellence Award to our scholar. I might add this is just a partial list of Alexander's many interests and accomplishments outside of the classroom!

"Alexander's rigorous academic training at Stevens has been greatly enriched throughout the past three years with both summer and winter internships in the banking industry, where he plans to focus his career path. Future plans also include graduate degrees and applicable professional certifications. While he hails from Wayne, New Jersey, Alexander is already calling Hoboken his home. Alexander says: 'It is important to stay close to the school that has given me so much and, hopefully one day, I return the favor."

Congratulations to Alexander, and thanks, Bill, for keeping us informed.

Folks, we need your help in writing the log. We continue to welcome you sending information and photos about your interests and accomplishments. Just do it! Thanks in advance.

February 2019 — The following update comes from Class President Frank Vastano.

You probably have heard from one of your class officers recently, as we make great progress on the fundraising for the Class of 1973 Endowed Scholarship and our planning for our 50th class reunion. One of the benefits of that outreach is that we have received updates from a number of our classmates.

Class of '73 Endowed Scholarship News: By the time you read this it might be old news, but starting on Feb. 1 and ending on June 30, an anonymous donor will provide up to a total of \$10,000 to match donations to the Class of '73 Endowed Scholarship Fund. Up to \$500 of your donation will be matched on a 1 for 1 basis. And, if you haven't donated since 2010, your contribution of up to \$500 will be matched 2 for 1! Donations from your family and friends will also be matched 1 for 1 up to \$500. Don't miss this fantastic opportunity to have your donation doubled or even tripled! On a related note, we are proud to announce that Justin Westley '20,





Gathering for the Houston Club's happy hour in March, from left, are Frank Roberto '76, Walter Mooney '74, John Dearborn '79, Barry Morgenroth '75 and Dave Kamrath '71. 2 Reuniting in Arizona last year, from left, were '75ers Martha Connolly, Debbie (Naas) O'Rourke and Pat (Manning) LaSalle, who made history as part of the first class of women to be admitted to Stevens. 3 Pat (Manning) LaSalle, Debbie (Naas) O'Rourke and Martha Connolly enjoy the Arizona Renaissance Festival 4 Debbie (Naas) O'Rourke, with brush in hand at the easel. She has become a well-known artist in the Tucson area, painting the desert Southwest.





a computer engineering major who received a class scholarship from our class in 2017-18, said: "Without the Class of 1973 scholarship, I would not be able to attend Stevens and receive such a superb education. I very rarely have free time, and without this scholarship, I would have to find employment and give up a great deal of both my involvement and my study time." As of the writing of this class log in February, the Stevens Class of '73 Endowed Scholarship has raised over \$537,000 to date, and our class participation is on track to exceed last year's exceptional 23 percent rate!

Here are some classmate updates. Frank Grapkowski: Retired early at age 55 after a 25year career with Colgate-Palmolive Company. He still lives in New Jersey in a downsized adult community so they can travel extensively, usually four to five months of travel a year. They recently returned from a 60-day cruise of the Asia-Pacific Rim countries, and also spend a lot of time on Aruba when not cruising.

Bill Miller: I'm retired now, and still living in Dothan, Alabama. I spend much of my time beekeeping. My wife, Mary, and I also go on many road trips.

George Shaffer: "I retired in 2014 after 40 years in project management, primarily in the food manufacturing arena. In 2017, we moved from Pennsylvania to Charleston, South Carolina, to be closer to our two grandsons and a warm beach. The grandsons are 19 and 14 years old. Retirement years have been great so far! We were out of the country for our class' 45th reunion but are already making plans to attend the 50th. Actually, that year will be our 50th wedding anniversary, too. See you all in 2023."

On a sad note, we received news of Arnold DeMonte's passing from his wife Davida. A write-up follows.

Arnold Mark DeMonte, 67, of the Matawan section of Old Bridge, New Jersey, and of Deerfield Beach, Florida, died on Aug. 13, 2018. Arnold was born on July 21, 1951 in the Bronx, New York. Arnold was valedictorian at Raritan High School in New Jersey for his graduating class of 1969. He was also a member of the National Honor Society. He earned his B.S. in Physics from Stevens, where he was also a member of the Delta Tau Delta fraternity. He then pursued graduate studies in theoretical physics at Cornell University. He went on to work as an actuary for Buck Consultants for 39 years before retiring in 2005.

Arnold loved to listen to classical music, opera and music from the 1950s and 1960s. He enjoyed going to the Metropolitan Opera in New York City and Broadway plays with his wife, as well as playing Pinnacle with his family. He was an avid collector of CDs, records, movies, and books on physics, mathematics and economics. He also

was a fan of the New York Yankees and New York Giants. Frank. — Frank Anthony Callendrello, acallendrello@comcast.net; Frank Vastano, fvastano@comcast.net

Alumni Weekend reunion, 5/31/19 - 6/2/19

February 2019 — Recollections from Greg Gemgnani on the 40th reunion (June 2014);

"The good, the bad and the ugly. It was wonderful to see the physical improvements on campus and also get a sense of the positive trajectory of Stevens under the leadership of the then-new President Nariman Farvardin. Both continue to this day. And it was very emotional to see the newly constructed World Trade Center in the same location of the original World Trade Center that was completed during our years at Stevens. To no one's fault but my own, not everyone who attended the reunion connected with one another. This year's committee is working hard to make sure that all who attend have the opportunity to meet and reconnect. And the ugly; don't park on Hoboken streets without a permit...the new parking garage will hold all of us."

#### Recollections from September 1970

What did we have to say in *The Link* about Freshman Orientation?

"The freshmen want to unleash their frustra-

tions! Norby leads us in song and tells us how...

Where flows the Hudson River, Out to the mighty sea; On Castle Point so proudly, Stands there in majesty; Stevens our Alma Mater, Homage to thee we pay, With loyal hearts and voices, True to the Red and Gray.

...and we win cage ball!! A "tug-o-war," Sophs win (with a little help from their friends). And then, a cane rush...FROSH... FROSH... FROSH!!"

Finally, we meet the enemy. Our professors! And our reaction...Studying...Sleeping...Speeding...Leaving!!"Then the next four years...what wisdom from our professors!

"Year in and year out, this equals that, this equals that..."

"PV=ma...what a schmuck!!"

"No...I wasn't drunk when I was marking that exam,"

"Rolf's the name, chemistry's the game!" "Why is there energy flowing through my

"Nobody?...nobody signed up for my course?!!" "You think this will work, huh?..."

"Someone needs to invent a good pair of \$10 shoes."

"The yearbook staff dedicates the 1974 Link to those people who made our dream a reality... COL. JOHN'S."

Now 45 years later, it is time to create new memories of Stevens to mix with, or supplant, those from September 1970. The memory of meeting our roommates for the first time, walking toward the Center for freshman orientation, the freshman-sophomore games, first navigating the Ho Chi Minh trail. For many, attending Stevens was our first and maybe most important major life choice. Others followed. You chose to stay and forever become a Stevens Alumnus. You chose to make close friends who you keep in touch with yet today. You chose to remain involved and continue support for the Stevens community in so many ways: alumni volunteering, contributing to the class logs, providing monetary support...

Your only choice now should be how many of your family to bring along with you on May 31 to June 2, 2019, for our 45th class reunion. Gather together again to share with longtime friends, get re-acquainted for the day with someone from long ago, show your family the place that helped you become the amazing person they know. Please, let's encourage every class member you know to share in re-connecting.

Last log's trivia:

#1 - The "Sound of Silence" was #1 in 1966 on the Billboard music chart, what Simon & Garfunkel song was #1 in 1970? #1 Song in 1970, Simon & Garfunkel, "Bridge over Troubled Waters."

#2 - What song was #1 on the Billboard music chart the day we started at SIT? Sept. 1, 1970, Edwin Starr, "War."

#3 - Who received an Honorary Doctor of Engineering degree and spoke at our Commencement? Millicent Fenwick.

#4 - Number of fraternities on campus as of 1970? 10 social fraternities.

#5 - Number of '74 class graduates? 263.

#6 - Year the SS Stevens was sold? Year acquired? Prior names and commissioning dates for "The Ship"? The SS Stevens was commissioned in 1944 as the USS Dauphin; in 1948 renamed the SS Exochorde; in 1967 renamed the SS Stevens; then in 1975 decommissioned.

#7 - Some "then" pictures of some of us guess who? The pictures are Alex Dellipaoli, Vincent Rubino, Greg Gemgnani, Bob Thoelen, Frank Donaldson, with one picture of Robert Tom and Joe DeVito. — Gary A. Jung; Classof1974@alumni.stevens.edu

February 2019 — Dear Classmates, I am very happy to report I have recently unplugged from corporate America after a great career in the medical device industry. Since then, I find

Don't see your class log listed? Send an update to alumni-log@stevens.edu or call 201-216-5161.

myself humbled with the luxury of time to pursue those things I love, which have been on the back burner for many, many years. My wife, Barbara, and I are finding enjoyment in "rewiring" our lives and how we now choose to spend our time. Working hard and saving all those years has paid off. Along with the blessing of good health, this time in our lives is incredibly enjoyable! Our two sons continue to learn and grow as they make their way in the world and pursue their passions. Our grandchildren are just a blast, and we can't get enough time with them. Looking back, it all started when I met Barbara at a Delt party 1973. As a nursing student at Beth Israel Medical Center in New York City, her girlfriends told her about a great party at Stevens. Well, Barbara was more interested in going to a party at Columbia law school to meet a future attorney instead of a "nerd" engineer. She couldn't convince her friends to join her uptown, so instead of going alone to Harlem she ended up very reluctantly dragging along with them to Hoboken. Long story short... her friends had an awful time at the parties on Castle Point Terrace. However, Barbara and I (a nerd) found each other, and well, the rest is history. We were later married in the Stevens library in 1978. I don't think this story could have been written any better! It has taken me some time to come to this realization, but it's abundantly clear that nerds do rule.

Now that I have more time to devote to The Indicator I also hope you all can take the time to share your stories with the class. It would really be great to hear from you all! Please write!— From Harry MacArthur





It was a nice surprise to hear from Martha Connolly about her travels. Martha wrote: "Three Stevens ladies from the Class of 1975 had a wonderful time in Arizona last February visiting Debbie (Naas) O'Rourke's new home. Debbie (Naas) O'Rourke, Pat (Manning) LaSalle and Martha Connolly had a lovely reunion while seeing some of the nicest sites in and around Tucson, Arizona. Debbie showed us her new community, a lovely 400-home over-50 community. She treated us to "The Lone Stranger," a comedy cowboy show in a saloon atmosphere. We hiked in the desert, visited an old mission, saw an art gallery and shopped in Tubac, Arizona. One evening, we watched Debbie paint one of her desert southwest paintings. Debbie has become a well-known regional artist and has shown some of her paintings at juried art shows in the Tucson area. She took Pat and me to our first rodeo (now I can rightfully say "It's not my first rodeo!"). We stopped at a pecan farm and a spice shop to round out the culinary experiences in addition to Debbie's great cooking. The last day, we ventured to just outside Phoenix, where we visited the Arizona Renaissance Festival. All in all, it was great getting together and almost like being back at Stevens!"

Also, news from Karl Young and his endeavors, "I've been focusing on energy storage the past 10 years and received a patent on a new generation of supercapacitor design using graphene. In my spare time, I like to help the younger generation in learning new technologies. Working with college

students to teach them about energy storage and electric vehicles is one of them. I've worked with Ohio State University's electric motorcycle team "Buckeye Current," Embrey-Riddle's electric airplane team and provided workshops at University of Washington on EV propulsion and energy storage. Many of the earlier generation EVs using old battery technologies have failing battery packs now. So, I think I'll supply replacement packs using new battery technologies to keep their EVs going. Unlike ICEs (Internal Combustion Engines), electric motors have 2-3X the life of ICEs. It's just the battery packs that need looking after. Anyone in the class who's good in electronic control systems, please call me; a little short-handed in that area (ytiusaky@hotmail.com). Our 45th anniversary is coming up, so please put it on your calendar to be at Stevens for Alumni Weekend in June 2020. Looking forward to your ideas on a Class of '75 event."

And lastly from Joe Krieger, a summary from Stevens of the FY2018 Financial Report for our Class of 1975 Scholarship Funds. The results for the Class of 1975 Endowed Account follow: Cumulative Gift Total on 6/30/2017:....\$40,955; Balance as of 7/01/2017: .....\$44,086; FY2018 New Gifts Received: ......\$8,775; FY2018 Return on Investment: ......\$2,346; FY2018 Funds Distributed:.....\$0; and Balance as of 6/30/2018: .....\$55,207.

And for the Class of 1975 Term Account: Balance as of 7/01/2017: .....\$375;

FY2018 New Gifts Received:	\$0;
FY2018 Other Income Received:	\$0;
FY2018 Funds Distributed:	(\$0); and
Balance as of 6/30/2018:	\$375.

With a cumulative gifts total of \$49,730, we are closing in on the \$75,000 amount needed to start disbursing class' endowed funds to scholarship gifts, then we can enjoy reading about the worthy student recipients in future class logs. When you make your donations to Stevens, please consider the Class of 1975 Endowed Scholarship Fund. — Harold J. MacArthur, Jr., harrymac@comcast.net; Joseph Krieger, Joe.Krieger75@gmail.com

#### Alumni Weekend reunion, 5/31/19 - 6/2/19

February 2019 — I have a couple of updates this issue. I received a cryptic message from Class President Mike McGuire in late December. It read as follows: "We are in Algeria today. Our

buses will have a police escort. Just a two-hour tour. We hope you are all well." I suspected I had received the message in error but sent a message back to Mike. Turns out he did not intend to send me the original message, but sent the following: "Mike and Mary McGuire enjoyed a Viking cruise over the Christmas holiday on the Viking Sky Liner. The trip started in Roma with coach trips around the city and a visit to the Vatican. Next was two days in Napoli, where we got to see the ancient ruins of Pompeii. A planned visit to Sicily had to be scratched due to high winds, which made docking impossible (and for an uncomfortable night's sleep). Sardinia proved to be a beautiful city which boasted of many cultures throughout the centuries and millennia. Algiers was a city which is just coming out of a long period of fighting, and they are proud of their martyrs. Valencia was the most beautiful city we had ever seen, with a combination of spectacular modern and ancient architecture. Overall, a wonderful trip. Next time I hope to run into some Stevens alumni. Mike also sent a photo of the family at Christmas; it appears with this log.

I also received this update from Greg Kovacs: "After nearly 38 years, I retired from USG on 12/31/18. I'm finding the adjustment to retirement easier than I thought, as there's been plenty of things to catch up on in these first few months. Lu also closed down her LLC (Crazy Lu's Cheesecake) last year, so we're both enjoying our newfound freedom. We built a cabin in the North Georgia mountains last year, and we're looking forward to splitting time between our beach house in Atlantic Beach, Florida, and the Blue Ridge Mountains of north Georgia. Our oldest son, Adam, his wife Barb and our first grandson, Gregory, are nearby in Neptune Beach. So we get to spend a lot of time with them and our youngest son Frank, who also lives nearby at the beach. Molly and her husband Tyler are not all that far away in Oviedo, Florida, where she is a veterinarian. Scott, our second son, lives in Brooklyn, New York, where he teaches eighth grade writing. We're very fortunate that all are healthy and doing well. Lu and I both enjoyed seeing old friends at our 40th reunion last June, and look forward to our 45th down the road."

Good to hear from both Greg and Mike, and I encourage all members of our class to let me know of any news you'd like to share. — John T. Jarboe; jjarboe1@comcast.net

February 2019 — Since updates for these articles are not always easy to come by, I've resorted to contacting classmates directly via email, Facebook or phone. Thanks so much to those who have responded (and maybe those who have not will reconsider next time ... ?)!

Denise Kratsios Pucciani has been working at BAE Systems for nearly 18 years as a Program Manager. BAE Systems is a defense contractor who specializes in navigation/communication and electronic warfare systems. "My husband Pasquale Pucciani '77 has been working for a generic drug company for over 20 years as the liaison between IT and manufacturing. We both can't wait to retire to spend more time with each other! We have two terrific 'kids.' Kim is married to a wonderful guy and works as a nurse in the NICU; her husband Tyler owns his own business and is doing very well. Tommy just got engaged to Diane, who we all adore. Tommy works for William Morris as an agent for stand-up comedians and is doing great. Diane is a nurse as well.

"I think about my time at Stevens often full of very fond memories, especially of my great, longtime friends Kathy Burkholder McCarthy, Lee Bahr Brock, Sue Marshall Torre and Lori Reinholdt Rolwood."

Mary Doddy is currently working for GM in Detroit doing Operational Excellence (Six Sigma, LEAN, etc.) and transformation work, "I sold my condo in Jersey City and moved to Detroit in late 2016. I still have my home in Charlottesville, Virginia..."

Henry Carnevale "but you can call me Rocco because that is my real first name" was recently at the Stevens fraternity "pledge" event at the Walker Gym in February, celebrating the induction of new members to the local chapters at Stevens. Henry has been the Alumni Association and Housing Corporation President representing the interest of the Brothers of the Mu Chapter of the Chi Phi Fraternity at Stevens since 1991 and was first elected as Secretary in 1986. Henry is currently the XΦ North East Regional Councilor and has served as the Grand Alpha ( $X\Phi$  National President, 2006-2009) and continues to support and participate in programming and events traveling around the country in his spare time. Over the years he has helped shape the entire fraternity to become a values-based organization.

Henry writes that he "especially loves coming back to 801 Hudson Street gatherings with the

undergraduate members and alumni. Most recently there was a reunion where over 115 alumni returned to Stevens with Robert Dabkowski. Alexander Marra, Michael Nugent and William Wilson from our Class of 1980. This is the third in a series of 'random events' that get alumni from all over the world to reconnect in record number. I hope with growth and the addition of new infrastructure at Stevens that more alumni will get excited to come back and be part of the new Stevens. Alumni Day needs to be focused on everyone and not just the Old Guard folks who graduated 50 years ago, as much as I love and respect that program. Wait a minute...we will be there in ten years or so!

"I have been at every Alumni Day at Stevens since I can remember and all I can say is that all the classes can and should do better. Some years I run across a few, maybe five to ten of our classmates during our 'anniversary' celebrations (every five years). Last year I was the only Class of 1980 alum in attendance! Folks, let's do better next year and shoot for something really special for the weekend of June 5-7, 2020, and have a real blast while we can truly enjoy it! Most of us will be close to retirement or retired with no young kids. So, no excuses, you all have been given plenty of notice — mark your calendars now!"

As for me, our oldest daughter Megan was married this past September. She is an acutecare nurse practitioner, and our boys, Ryan (who lives in Hoboken) and Kevin have both graduated and are working as an accountant and chemical engineer (at least one of the four is an engineer!) respectively. Our youngest, Kaitlin, is a sophomore at Boston College. Sounds cliché, I know, but I don't know where the years have gone...

As Henry mentioned above, mark your calendars now for Alumni Weekend 2020! Our 40th reunion will coincide with the 150th Anniversary of Stevens and the 100th Annual Stevens Alumni Weekend...no doubt a celebration not to be missed!

My next Indicator submission will most likely be due around the end of June. Please consider sending me a line or two (or responding to me if I happen to track you down). High resolution photos are also welcome! Take care everyone, and keep in touch! - Kathy M. Burkholder McCarthy, kathybmccarthy@hotmail.com

February 2019 — My apologies for having lapsed in my duties as class secretary over the



Reuniting recently at the Chi Phi house, from left, were Class of '80ers John Marra, Rocco Carnevale and Bill Wilson. Hear more from Rocco in the '80 log.



Good friends from the Class of '83 met at the Stevens Alumni **Association** holiday party last December. From left are Bill McGrath, Lou **Nunez and Kevin** McKiernan.

past year; this is my first column in quite a long time. Please consider sending me something anything — to write about. Otherwise I'll need to make up some fake news/alternative facts about you! Until then, I'll share my own news with you now.

By the time you read this, I will have taken an early retirement. Since joining the former Baby Bell Ameritech in 1996 after leaving the military, it has been the longest stretch of time that I have stayed in one place, including my formative and college years in New Jersey. Just last week I observed my 23<sup>rd</sup> anniversary with Ameritech/ SBC/AT&T. With the separation package they are offering, it was simply too good to pass up this opportunity — even though it was not in our original plan, which was to stay until my silver service anniversary in early 2021. My last days on payroll will occur at the end of March, but as my good wife has told me, I can retire — but I still need to keep working, even in some small capacity. We are very fortunate to get just about all of the retirement benefits available, and our financial planners have given us a thumbs-up to proceed. It's a testament to the power of dollar-cost averaging; we highly recommend it over the long haul. So now you'll find me dusting off my resume, networking and working through Indeed, LinkedIN, Glassdoor, etc.

Last week I reached out to Hayden Dorm roommate and mutual best man Gary Jeger; he'll be retiring as well this year after a long career with Palmetto Electric Cooperative Inc. in South Carolina. He and his wife are already planning a number of interesting trips and family visits. We are hoping that our paths will cross somewhere along the Gulf Coast toward the end of summer

— stay posted, we'll see if we can get a group picture in the next column or two!

And speaking of the year 2021, since I will have a bit more time on my hands for long-range planning, I certainly hope that many of us will be able to make it back to Hoboken for our 40th anniversary. Now, ladies and gentlemen, I have to ask you: Just how did that happen so quickly?

We would like to hear your stories before then, so please share your retirement or continued work plans, or how much you are enjoying traveling and grandchildren with all of us. We'll even accept [egad] Facebook postings! Please note my updated email of texritter58@gmail.com — yes, I'm still performing in volunteer community theatre. Keep singing/humming and send us your news! — David L. Ritter, texritter58@gmail.com

#### Alumni Weekend reunion, 5/31/19 - 6/2/19

February 2019 — Well it has been 35 years since we walked down the aisle and we received our degrees. We were the 112th commencement and there were about 15 Bachelor of Science, Systems Planning and Management graduates, 25 Bachelor of Science and the rest were Bachelor of Engineering. There were less than ten graduates receiving bachelor's and master's degrees. The two that come to mind are Roy John who gave the address as first in class and Alberto Soto Garcia who came from Spain to Hawthorne High School our senior year and then to Stevens. How many individuals can say their careers and lives have turned out as expected? Did Stevens give you the building blocks to tackle life's adversities that we have faced? This Alumni Weekend (May

31-June 2), with our empty nests, would be a great time to catch up with everyone.

Thirty-five years ago, we had the Ronald Reagan as President, a gallon of gas or milk was about \$1. A movie ticket was about \$2.50. The New York Mets had Keith Hernandez, Darryl Strawberry and Dwight Gooden. Dwight would be rookie of the year (should have won the National League Cy Young as he had more strikeouts, a lower ERA and more wins in NL than the winner). The summer Olympics were in Los Angeles and the Soviet Union boycotted because the US boycotted Moscow Olympics in 1980.

I wonder which of us became the first grandparents? Who was the first to have two grandchildren? How many of us had twins (fraternal, identical or Irish) or triplets? How many of us were lucky (or insane) to have five or more children? As for spouses, who has had at least three? How many of us have a unibrow like Bert from Sesame Street? How many of us have more hair on their back than hair on our heads?

Back to Alumni Weekend. Our fearless leader, Bill Accardi is organizing a dinner on Thursday in Hoboken for the few that come from afar and early. Contact Bill for details. I think Bill won the 1966 Memorial Award at graduation, while the best athlete awards went to Frank Hodgson and Mary Paglione. I narrowly lost the Book award to Fred Gobillot (I would have won if I actually read a book...I found out my favorites "Hop on Pop" and "Green Eggs and Ham" did not count). Bill is also working on the dunk-the-clown booth for Saturday with the school presidents (past and present) and faculty. Do we remember Ken Rogers was the school president 35 years ago? Which past school president will raise the most money with the clown booth?

Catching up with me, what have I been doing the past 35 years? Married Susan, my first (and only) wife, 30 years ago, and have three daughters. The youngest is a senior in college studying acting in New York City and the other two have graduated and are working. In addition to the kids, we have a Bichon Frise that has trained us well. Professionally, I worked creating lottery software for various online games (Power Ball, Mega Millions, Pick 3, Pick 4) for about 15 years. They moved to Georgia and for the last 15 years have kept on trying to find a stable place. My last three jobs (and current one) ended up with the firm going belly up and I back on unemployment. Being over 50 makes it difficult to get a job. I keep my hair cut close to hide the gray. Take off

a few years on the social media stuff and drop a place of work from my resume. Hoping I can pass for a 50-year-old.

There were a lot of questions, submit your answers to me and the first-prize winner will receive two tickets to a Mets game, second prize will receive four tickets to a New York Yankees game. Here is a bonus question: Which MLB Hall of Famer retired from baseball and was not elected to the Hall of Fame, then unretired, played for the Mets and was elected to the MLB Hall of Fame? Hint: This Mets player earned the most World Series rings in New York. — Robert P. Confrancisco, rconfrancisco@gmail.com

March 2019 — A wonderful thank you to Ellen for authoring our most recent class notes. In fact, she has kindly offered to take on the role of Class Secretary going forward while I focus on activities closer to home. I will still be helping out in a different capacity, especially with the reunion coming up and I look forward to seeing you there. Anyhow, change is good! — and with Ellen at the helm, I expect we'll see more fun and informative articles in the issues ahead.

Liz (Lam) Urbano updated us with news of the latest family vacation to Bermuda on the Norwegian Escape. She and her family reside in Stow, Massachusetts, with John working at MIT Lincoln Lab. Matthew, her younger son, is interested in STEM and a sophomore in high school; Michael is now a freshman nursing student at Fairfield University. Thank you for the update, Liz!

With so much change in life, how great it must be to be at the other end of the spectrum with more constancy and stability. Richard Szwerc writes that he is still in the same town and with the same organization as when he graduated in

1985 — and I'm sure that Gaithersburg, Maryland, and the Navy have reaped the benefits of his years there. Richard does cool and exciting work in the design of submarines. In addition to that, he is in his 13th year of teaching physics and acoustics at Montgomery College.

With his youngest of three boys graduating college this year, Richard is going to seek out new hobbies in addition to running. After 15 marathons and four ultra-marathons, it's probably time to get new sneakers, too!

Richard's wife Wendy went back to Scotland recently to visit family, living near to Crieff, the town I passed through last summer to attend highland games. I can vouch for how beautiful the countryside is in that part of Scotland.

Annette Williams Gustin writes: "I have grown up and reached 5'8". I attribute it to all the vitamin D from this awesome Florida sunshine. I love Florida and love being in the pool business for over 14 years now. Enjoy working alongside my husband Greg and son Colton. Colton and I are very competitive with each other in our designs and we laugh daily. My dad, Don Williams '64, has lived down here with me for over three years now. Just recently, his alum and my godfather, Randy Wojcik '64, joined Norman Stolzenberg '64 and visited Don and me for a long weekend. The laughs and stories...they claim to be the class that started painting the boy parts of the horse red just before alumni weekend, but doesn't every class? Keep in touch with Michelle Blanchfield (no surprise) and we manage to see each other at least once a year. She has a boy in college and high school — I will let her brag about them. (Editor's Note: Sadly, Don Williams passed away shortly before the Indicator was printed. His obituary will appear in a future issue.)

Please do continue to submit more as Ellen

takes on the role. All of the class officers have been supportive of the Class of '85 and each other, and I for one am grateful. Cheers, everyone!

- Ellen Cronan, ecronana@yahoo.com; Phyllis A. Doig, phyllis299@comcast.net

Alumni Weekend reunion, 5/31/19 - 6/2/19

February 2019 — This update begins with a lovely tribute from Maurice del Prado to our dear classmate Ramon Guerrero, who died suddenly last year:

"On Nov. 10, 2018, a boy lost his father, a wife lost her husband, a mother and father lost their son, brothers lost their big brother, and many, many, people lost a friend. Including me.

"Ramon Guerrero, Stevens Class of 1986, went to heaven that day.

"I met Ramon in high school. We'd gone to different elementary schools in the same town of West New York, New Jersey. Our love of music (and shenanigans) drew us together.

"Ramon was that quiet type, who, once you got to know, would surprise you with his humor, mischievousness, and passions: Passions for reading, Dungeons & Dragons, football, baseball, his parents, his brothers and his friends.

"Ramon had many friends.

"I remember writing in Ramon's senior yearbook that I was excited we were going to continue to be friends, get to know each other and share adventures when we learned we were both going to attend Stevens.

"Turned out, Ramon and I were commute buddies. My parents bought me a 1972 Toyota Corona and that fabulous red compact took us between West New York and Hoboken many, many times.







Ramon Guerrero '86 passed away last November, and his good friend Maurice del Prado '86 has written a moving tribute for their class log. Here are photos of Ramon over the years, including his Link yearbook photo, and with his son, Marcos.

## Vitals

#### **Marriages**

Natalie Ramos '15 and Ryan Williams '14 on Feb. 24, 2018.

Tiffany Caroselli '15 and Todd Siegel on Oct. 27, 2018.

#### **Obituaries**

W.E. Taverna '42 10/26/17 K.A. Traynelis '49 1/1/18 R. Fairchild '51 4/17/18 C.L. Mount '52 6/10/18 C.E. Kastner, Jr. '53 1/15/19 J. Galella '53 2/8/19 J.T. Polyniak '63 3/28/19 K.T. Blahut '65 9/14/18 R. Lovrin '65 7/3/18 T.N. Taylor '68 Unknown S. Balashek '70 1/30/18 A.M. DeMonte '73 8/13/18 R.Guerrero, Jr. '86 11/10/18

#### Graduate

P.E. Kummer M.S. '51 1/27/19 W.M. Wenner M.S. '70 9/14/18

Don't see your class log listed? Send an update to alumni-log@stevens.edu or call 201-216-5161.

"I remember Ramon could not read or study while driving because it gave him motion sickness. So he usually slept. But other times, we cranked out awesome '80s music or talked about physics class or made plans to go to Tower Records on the weekend.

"Ramon's study habits and class-attendance habits were...different from mine. I had to attend every lecture and lab and had to study like mad to barely scrape by, especially my first two years. Ramon, on the other hand, aced exams and was very nonchalant about it. He spent way too much time, usually sleeping, in the Commuter Lounge.

"He loved being with his friends and he loved his time at Stevens.

"After not being in touch after graduation for at least two decades, we reconnected via text and Facebook Messenger over the last few years. Ramon, Gil (another high school band friend) and I chatted throughout the day about world events, our families, and old memories. We talked about getting together in person, but alas...

"Ramon worked for 33 years at his first employer — Hazeltine back then (on Long Island) and now BAE Systems. He was a respected, valued and brilliant engineer.

"But most importantly, Ramon's son was his world. Sixteen-year-old Marcos is a mini-Ramon. Quiet, super bright, an excellent musician. My pain at losing Ramon is most deep when I think about how his son won't have a father in his life. And Ramon was a great, great father.

"Life is so precious. Life is not guaranteed. Make the time to see your dearest family and friends. And take care of your health.

"Love you, Ramon, brother. Miss you. See you in heaven where we'll play D&D and listen to '80s music. Forever."

Well said, Maurice. Thank you for your kind words. Now, on the lighter side...

Pedro Chopite sends greetings from Venezuela: "Despite the political and economic conflict down here, it is still possible to make a living. I get in touch every now and then with fellow alum Jose Mora '82 M.S. '84 to reminisce about the good old days at Castle Point. Regards to all!"

Judi Jakubowski writes: "I've been married for 23 years to my husband Jeff. We have three beautiful girls. My daughter Melissa is a junior at the University of New England where she plays softball and is on the swim team. She is studying to be a biology teacher. I have identical twins that are freshman. Alexandra goes to Salisbury University. She is studying to be a nurse and is on the track team. Shea goes to Hood College and she is a political science major with the goal of law school and eventually a US Senator. She is on the track and soccer teams. I have been with Verizon for 33 years and hopefully will retire from Verizon. We live in Danbury, Connecticut."

George Cray shares: "I'm doing well, living with my wife Susan, and three kids in Long Valley, New Jersey, since 1999 and currently working for iconectiv in Bridgewater, New Jersey, as SVP - Products & Services. My oldest two are in engineering at Virginia Tech. Amanda is a junior and on the dance team and George is a freshman. Our youngest, Matthew, is a sophomore in high school. I have no trouble keeping busy between travel for work, visiting Virginia Tech for football and basketball games and owning a string of thoroughbred racehorses. There are a few Stevens alumni I see regularly — Jerry Wahl M.S. '98, Mike Perna and Jeff Silvestri M.S. '96 and I can attest they are all doing well."

Mary Anne Cannon tells us she recently traveled to Germany for a river cruise with her husband. The cruise was to celebrate her brother Tom's honeymoon. He married his longterm partner Joseph last October. Mary Anne has taken up weightlifting and competed for the first time (non-judged) and set a personal record of 253 lbs. for the dead lift.

Bill Cave says: "Hi! I haven't made The Indicator since graduation when they announced senior award winners. I've been in Bethesda, Maryland, since graduation and started my own company in 2013 focused on data analytics for national security customers. Carol and I have two



Liz (Lam) Urbano '85 and her family aboard the Norwegian Escape in Bermuda. From left, Michael, John and Matthew.

sons. Billy graduates from Belmont University this spring with a music business degree, and Andrew is a freshman at Dartmouth College where he is a member of the lacrosse team. Enjoyed connecting with John Action and his wife Fran this past summer for the MLB All Star Game and Home Run Derby at Nationals Park."

Stephen Guh update: "I started a new IT job working for Hearst in Connecticut. I am healthy with normal aches and pains that come with aging. My children are grown with youngest in last year of college. Staying busy with work and my only vice — ballroom dancing. Will try to keep New Year's resolution alive — 'get with the gang from Stevens more often this year!"

I have received a record number of replies. Thank you for your understanding as I get them in The Indicator as soon as I can. — Debi Motler, Dmot419@gmail.com

#### Alumni Weekend reunion, 5/31/19 - 6/2/19

February 28, 2019 — You may be reading this after our reunion and if that's the case, I hope you were there and we got a chance to catch up. It's been so much fun preparing for the reunion, recalling our college years and all the fun we had. However, if you are reading this prior to May 31, get yourself to the Babbio Center by 6 p.m. on Saturday, June 1!

I'll do a full recap of our reunion in the next issue of The Indicator but for now I'd like to highlight the stellar 2018 our alma mater has had. It makes me so proud to be a Stevens graduate! Undergraduate statistics quoted below are for Fall 2018:

#### Undergrad enrollment: 3,431 (29 percent women!) Applicants: ......9,265 Acceptance rate:.....41 percent New students enrolling: ......1,009 SAT range\*:.....1330-1480, combined math/reading (\*middle 50 percentile) Average high school GPA: ......3.86 Freshman retention up to 95 percent Placement rates for 2018 graduates: ..... 96 percent Starting salary for 2018 graduates: .......... \$71,400 Graduate school enrollment (Fall 2018): ..... 3,498 Externally sponsored research grants:.....\$45.5M (record high) Launched Stevens Inst. for Artificial Intelligence pledges and gifts: .....\$47.6M Alumni participation rate:.....18 percent

(highest to date)



Enjoying a happy hour this past March with the Houston Club, from left, were Michelle Alvarado, Andreas Pallikaras '16, Jerome Massicot Class of 2021, Parker Petroff-Rims Class of 2020, Brooks Lehle '17 and a guest.

Construction of Gianforte Family Academic Center targeted to finish in 2019 Men's and women's soccer and women's tennis:.....Championship Empire 8

30 new faculty members hailing from leading research institutions including Harvard and MIT

Stevens awarded American Council on Education Award for Institutional Transformation

Amazing accomplishments! I may have missed something as I was taking hand-written notes on President Farvardin's video detailing end-of-year news. I'm sure most of you will agree that Stevens has come a long way, baby, since 1989. I'm not sure I would be accepted if I were to apply today. That's quite humbling.

At the risk of waxing philosophical, I was speaking with a friend recently about the perfect timing of being in college in the late '80s and graduating with an engineering/technical degree. We both agreed that I was very lucky (lucky or crazy smart — haha! Who am I kidding? I had no idea what I was doing) to have received the kind of education I did. Graduating in '89 put us at the cusp of the technology boom; we were poised perfectly to be in the fray of major technological advancements that were hitting the market one right after the other well into the '90s. You know the old saying, "Being in the right place at the right time." I can say with surety that for many, if not most of us, Stevens pushed us harder and taught us more than we ever thought possible.

Don't misunderstand — I think it's still an amazing time to get an engineering degree! Look at the statistics above and let that be your proof!

I'm so thankful to still be connected with so

many of you and to have shared small parts of our lives albeit through Facebook! In 30 years, life is bound and determined to throw you some curve balls. The question I continue to hear (and wrestle with myself) is how do you teach perseverance, motivation and determination to a new generation? Well, as we all know, engineering school is one solution!

Many of you have either sent or are currently sending your children to Stevens for their education. I don't think there can be a higher compliment to your alma mater. I look forward to hearing tales of the next generation of Ducks!

As many of you are aware, our 30th reunion committee decided to continue to contribute

> Being part of the SAA gives me the opportunity to know where Stevens is heading in the future and how to bridge the gap between us as alumni and the school. We are 40,000 strong alumni, and we should be leveraging each other for support in career advice, family advice or just life in general advice.

— Martha Patty Torres '01, SAA Director-at-Large





1 A group of Stevens alumni showed up for the annual Winnipesaukee Pond Hockey Tournament in New Hampshire. From left to right are Brandon Hart '15, AJ Bruce '16, Eric Heinowitz '17 and Michael Ferris '17. 2 Where Shadows Slumber is Frank DiCola '14 and Jack Kelly's '13 video game, recently released on the App Store. Caroline Amaba '12 helped with web design. 3 Nathalie Ramos '15 and Ryan Williams '14 celebrated their first wedding anniversary on Feb. 24, 2019. Pictured is a photo from their wedding.



to the Class of '89 Term Scholarship to help deserving students fund their costly Stevens educations. Thank you to all those that have already given!! We have been working hard to hit our goals of \$50,000 and a 30 percent participation rate BEFORE June 30. If you have not yet contributed, know that every dollar really does count! Any amount donated counts toward our participation goal, so please consider it. The online gift link is: https://connect.stevens.edu/ makeagift/reunion4-9. You can also email me and I would be happy to forward it electronically.

"Per Aspera ad Astra" — Through Adversity to the Stars!! — Dawn M. Madak, dawnmadak@ me.com

February 2019 — Danielle DeFeo is still living her dream working as a mechanical engineer at Disney, now at Magic Kingdom. With the help of some fellow alumni, she is hoping to get a Central Florida alumni group together, so be on the lookout for future events!

#### From Samuel Thomas:

"After finishing at Stevens, I was accepted into the Woodrow Wilson Teaching Fellowship. I completed my master's in education at William Paterson University. I am in my third year of teaching biomedical science at Hoboken High School. I have been working with Stevens, specifically the Biomedical Engineering Society, on field trips, and collaboration for my high school students! It's been awesome to connect both

worlds and I am hoping to do more for Hoboken High as a Stevens alum."

Nathalie Ramos married Ryan Williams '14 on Feb. 24, 2018. "We are coming up on our one-year anniversary. We are both mechanical engineering majors."

Frank DiCola '14 released a video game on the App Store with fellow Stevens alumnus Jack Kelly '13 (and web design help from alumna Caroline Amaba '12). It was featured by Apple as the Game of the Day on Dec. 10, 2018! It's called Where Shadows Slumber (http://www.whereshadowsslumber.com/).

"We'd been working on it since I graduated in '15 with my master's in software engineering, so it's nice having it out in the open world!"

#### From Ben Yurcisin:

"I've recently taken over the Jersey City Tech Meetup, which as of last week is now an official LLC. The JC Tech Meetup hosts monthly meetings throughout Jersey City featuring amazing speakers on various topics in tech to engage a community like no other. All members of the technology, innovation and entrepreneurial community and ecosystem here and around Jersey City are welcome to join and participate!

"Our goal is to bring the diverse and creative minds of this city together to create a hub for innovation. Check us out at jctechmeetup.com. We have some big plans for 2019 and would love to have fellow Stevens alumni join this growing community!"

Tiffany Siegel (previously Caroselli) got married in 2018, and then she and her husband moved to London this year for work. She is cur-



rently a project engineer with ExxonMobil.

Andrew Cupo will graduate from RPI with a Ph.D. in theoretical condensed matter physics this May.

Michael Gendreau, class of 2009 and 2015, recently moved to Charlotte, North Carolina, accepting a new role as Manager, Prognostics & Data Analytics for Collins Aerospace. He will be leading the IATA II activities for Ascentia(TM), Collins Aerospace's advanced prognostics and health management solution. - Mark L. Scalzo, mscalzo11@gmail.com; Danielle M. DeFeo, ddefeo@alumni.stevens.edu

Don't see your class log listed? Send an update to alumni-log@stevens.edu or call 201-216-5161.

Beyond the satisfaction that comes from connecting with fellow alumni, I've developed skills in the process of identifying and recruiting alumni leaders that relate to the strategic elements of talent assessment, development and retention, which are immediately applicable to my career. — Suzanne D'Addio '07, SAA Director-at-Large

Everard Martin M.Eng. '95 is president of the New York-based Broadway Construction Group, which he joined in 2015 and began serving as president last year. He is a 25-year veteran of the New York construction industry, having previously worked with Plaza Construction for two decades. His construction projects have ranged from office towers to high-end condos and rental buildings. Martin was profiled for Real Estate Weekly last year.

Kevin Edwards M.Eng. '97, global manager of diversity and inclusion at Bechtel, received the Golden Torch Award from the National Society of Black Engineers (NSBE) at the NSBE's annual convention this past spring in Detroit. Edwards was recognized for his leadership of his company's efforts to strengthen its hiring, retention and advancement of minorities and women. He delivered the keynote address at the convention's general session before an audience of about 15,000 people. "Kevin has been a wonderful partner and consummate advocate for diversity for over a decade," said NSBE executive director Karl Reid. "He's been named a 'Champion of Champion' multiple times over the course of a decade, which speaks to his advocacy for facilitating a progressively deepening strategic partnership between Bechtel and NSBE."

Kahina Lasfer M.Eng. '01 Ph.D. '12, a manager at MTA New York City

Transit, spoke at "Celebrating Our History: Inventing Your Future," a round table discussion with women engineers held in March on the Stevens campus, as part of the Lore-El Center for Women in Leadership's Women's Herstory Month. Lasfer leads systems communications engineering projects through design and construction phases at the

MTA and has more than 15 years of experience working as a software engineer, research engineer and manager for systems communications engineering in the railroad industry. She also holds a Professional Engineer (P.E.) certification. Lasfer spoke to Stevens students about how her experience as a minority female in the engineering workplace, and how her education and later exposure to diverse and challenging projects, provided the opportunity to work with highly expert and supportive professional men, including professors, thesis advisors, managers, mentors and co-workers, and helped her to advance in her career. �









1 Stevens professor Kate Abel '91 M.S. '93 Ph.D. '01, center, was named an American Society for Engineering Management (ASEM) fellow last fall for her work and contributions in the engineering management field. She is an industry associate professor and program lead for the engineering management undergraduate program. With her are ASEM president Heather Nachtmann, left, and ASEM executive director Paul Kauffmann. Read more at stevens.edu/ abel. 2 Enjoying the Stevens Technical Enrichment Program's 50th anniversary last fall were Luis Rodriguez '00, left, and Walter Edgar '93. 3 The Houston Club hosted a happy hour in March, with attendees including, from left, Michele Dearborn and husband John Dearborn '79; with guests. 4 Reuniting at STEP's 50th anniversary, from left, were an unidentified guest, Joshua DeGraffe, Clarelle DeGraffe '84, Tonya Rice '86 and Earle Derry '84. 5 Students and young alumni pause for a selfie during the STEP anniversary.



## Clubs





The Houston Club gathered for a happy hour in March that attracted, as always, generations of alumni as well as some Stevens students who were on co-op assignments with ExxonMobil.

# HOUSTON VS. SOUTHERN CAL

The Houston and Southern California alumni clubs are participating for a second year in a challenge to see which club can achieve the highest increase in its annual giving participation rate by June 30. Houston won the first challenge last year. Thank you to our participants!



The Stevens Southern California Alumni Club gathered on January 12, 2019 at Hotel Erwin for a holiday party. This enthusiastic group enjoyed celebrating the new year and discussed the 2019 regional giving participation challenge. 💠

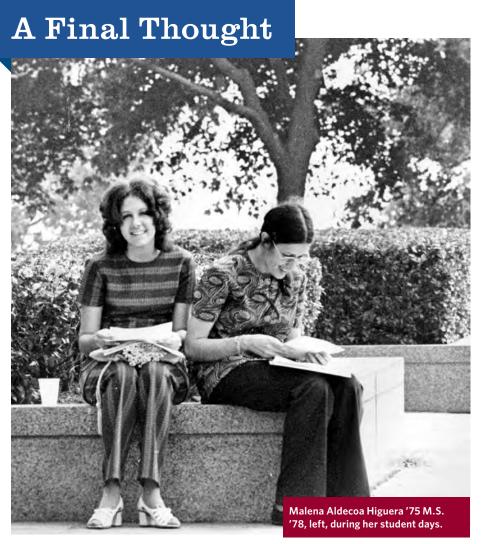






The Stevens Metropolitan Club continued a time-honored tradition — its annual holiday luncheon — this past December at the Knickerbocker Country Club in Tenafly, New Jersey. Club members are grateful to their generous host Bob Bosse '50.

Top left: Mike Danon '60, left, offered his traditional toast; at right is Bill Landau '72; At left: Landau with, from left, SMC president John Stevens '72 and Mary and Enrique Blanco '72; and, above from left, Elaine Danon, with Norma Romero and Fred Paulson '59\*



# What I Really Learned At Stevens

Editor's Note: Malena Aldecoa Higuera '75 M.S. '78, a longtime engineering and cosmetics industry executive and currently a consultant, shared more of her story with "Voices from Castle Point," an oral history project of the S.C. Williams Library at Stevens. To hear her story, visit stevens.edu/voices.

ack in the spring of 1971, I was applying to college. My first choice: Pratt Institute. My dream: To be an architect. There may have been other careers, but my English was not that good. I had arrived in the USA three years before, in 1968, a memorable year. I had no money, just a political refugee looking for freedom and the American dream.

My mother — who wanted me to stay home — kept telling me to apply to the school "up there." Yes, up there was Castle Point, and I lived in Hoboken. One day, sitting in my homeroom at Hoboken High, the news came: Stevens is accepting women.

I did get accepted into Pratt but something told me that I was not ready to head out into New York City no matter how strong my artistic inclination (with a very good math background) was. A part of me wanted to be near home in a secure, comfortable and disciplined place.

After my application to SIT, I was interviewed by our dear Mr. Bob Seavy M.S. '48, who accepted me, with English remediation, in the summer

Was I sure I wanted to go to Stevens? Did I know how hard it was? And what about my English? Those were the questions of my principal at Hoboken High, Mr. Thomas Gaynor, a 1932 graduate of Stevens. I said yes, but I was very scared.

First women class, first Latin American woman and first woman from Hoboken High. Did I realize then what that meant? No, not really; it took me many years.

So what did I learn? Oh yes, there were the two curriculums and the beginning of the "third curriculum," that covered life. We were 19 women, all from good high schools, smart and who could actually speak English properly!

I knew I had to work hard, and I knew my math courses at Hoboken High were not at the level that I needed. I knew that I had a completely different culture than my classmates, but I was going to work hard, really hard. And so it began...

There were four years of hard work, discipline, building up strength, doing things on time, managing multiple tasks, adapting to a new world and a new culture, all within the boundaries of Castle Point and 11th Street in Hoboken, our place.

I was protected by my female classmates because they saw in me someone who did not fit in, someone trying to adapt, trying to do better. I was fed by the Spanish workers in the cafeteria, supported by a scholarship from our dean in financial aid and by my part-time work with Mr. Seavy in Admissions. It was the team around me that helped me to succeed, and our head of financial aid, Bill James, who found me crying many times as I hid in the corners of the campus.

But I did learn. I learned to be disciplined, to be strong, to work as an engineer in a world where I was the only woman in chemical plants, corporate jets, meetings. Years later, I was to become the only female director of a \$14 billion Japanese company. I learned to take advantage of opportunities, with my brain from engineering, to the creative field of cosmetics, to raise kids as a single mom. After all, I made it at Stevens there was nothing I could not do.

I learned that women could do it all, and that 40-plus years after graduation, I will reunite with "the girls" and find out that we were so much alike; that as different as I was then, after all these years, we are still strong and smart women — the first class of Stevens women! \*

— Malena Aldecoa Higuera '75 M.S. '78



# Further Your Stevens Education, Online

StevensOnline offers a wide range of degree and certificate programs in high-demand, high-impact fields, including 19 master's degrees available entirely online.

#### **School of Engineering & Science**

Applied Artificial Intelligence Computer Engineering Computer Science Construction Management Electrical Engineering Machine Learning Pharmaceutical Manufacturing

#### **School of Systems & Enterprises**

Engineering Management Software Engineering Space Systems Engineering Systems Engineering

#### **School of Business**

Business Administration (MBA)
Business Intelligence & Analytics
Enterprise Project Management
Financial Analytics
Financial Engineering
Information Systems
Management
Network & Communication
Management & Services

The Same Stevens Programs. The Same Stevens Faculty.
Whenever and Wherever You Want.

stevens.edu/stevensonline/alumnidiscount (877) 376-9534 online@stevens.edu



# S

#### THE STEVENS INDICATOR

STEVENS ALUMNI ASSOCIATION STEVENS INSTITUTE OF TECHNOLOGY 1 CASTLE POINT TERRACE HOBOKEN, NJ 07030

**CHANGE SERVICE REQUESTED** 

Non Profit Org. U.S. Postage Paid Stevens Institute of Technology



# Katie Van Orden '20 dreams of creating better prosthetics — and has already begun creating them, thanks to scholarship support.

Supported by a Pinnacle Scholarship — a program created to reward top Stevens students with travel, study and research opportunities — Katie Van Orden spent the summer following her freshman year in Professor Ramana Vinjamuri's lab, prototyping a human-hand exoskeleton with three-dimensional printers. We empower students to do their very best through both need-based and merit-based support. Scholarships help us recruit exceptional students like Katie, and enable them to discover new opportunities to grow both personally and intellectually.

# STUDENT SUCCESS. THAT'S THE POWER OF STEVENS.

