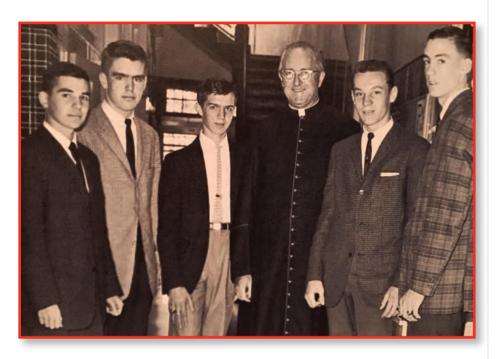
## **MAL & FRIENDS**

NJIT Magazine invites new correspondents to join Mal Simon in sharing news about class members and alumni organizations. Professor emeritus of physical education and athletics, Mal was director of physical education and athletics, and men's soccer coach, for 30 years. In 1993, he received the Cullimore Medal for his service to the university.

If you would like to be a regular correspondent, don't hesitate to send an email to the editor of NJIT Magazine: crovetto@njit.edu

First, the latest news from Mal -



## John Walsh: A Man for All Seasons

England had its Sir Thomas More, NCE had its John Walsh '66. It is befitting to use this epithet in describing John, as his accomplishments are many and widely ranging, from scholar to athlete to businessperson to family/community member. I am dedicating this column in tribute to John upon his passing on Sept. 18, 2019, from complications of cardiac amyloidosis.

John graduated from Seton Hall Preparatory School in 1962, as one of the tops in his class academically and a star baseball player, and then came to NCE. In 1966, John graduated magna cum laude with a Bachelor of Science in electrical engineering and as a member of Tau Beta Pi, the national engineering honor society. At NCE, John, while earning good grades across the board, was remembered as that rare student who was good at, and actually enjoyed, all courses in the Department of English and Humanities and was always quick to help a classmate with their vocabulary or grammar, even when not asked. John blamed his Catholic prep school background for this annoying quality. Engineering graphics was the exact opposite for John — "not good at it and don't like it" — he would say, "If this is engineering, I'm in the wrong place." Fortunately, John was in the right place. From NCE, he went to graduate school at Rutgers and a part-time job at Sarnoff Labs in Princeton, secured with the help of older brother Tom, a Ph.D. working at Sarnoff. At Sarnoff, John was involved in cutting-edge research which could have facilitated a Ph.D. pursuit at Rutgers, but he opted for a master's degree in electrical engineering and a job at IBM.

I recruited John in his junior year at NCE to play soccer goalie when my goalie, Manuel Garrido '65, had a season-ending

injury during a preseason game at West Point. I was walking through the

LEFT: John Walsh at Seton Hall Prep. He is standing second from right. RIGHT: John Walsh's 1966 yearbook photo.



## ALUMNI CIRCUIT



game when I saw John shooting baskets. I figured he would fit the bill perfectly because he had played JV basketball for me in his freshman year so I knew he was fast and could jump, played baseball which meant he could catch, and lived in Kearny, a hotbed of soccer, which meant he had to know the game. I didn't sugarcoat my need and said, "John, Manny had his ribs broken in the West Point scrimmage and is out for the year, so I need a goalie, how about you?" God bless him because he said yes and ended up being our goalie for two seasons, setting a school record with six shutouts in his first season, and being elected co-captain as a senior. Paul Tubbs '66, a senior teammate, wrote that "John was a memorable mentor to me and, most likely, to others who knew him athletically and academically. It was wonderful to see him step into the goalie position when

gym the Monday after the West Point

I had the pleasure of meeting John again, about five years ago, when he and his wife passed through Tennessee, en route to Georgia. His sad passing

Manny was injured. John quickly learned and managed this position, becoming a significant contributor to the soccer team.

The 1966 baseball team. John Walsh is pictured in the front row next to Coach Paul Hauser. has happened far too soon. May God bless John's soul and grant peace and understanding to all those who knew and loved him."

John also played four years on the varsity basketball team for Coach Joe Fitzgerald. He was a starter on the 1965 team that won national honors as the top defensive team in the National Association of Intercollegiate Athletics. As a senior, John was voted team co-captain, was the leading scorer and was selected by the New Jersey college basketball coaches to the New Jersey College All-State First Team. Due to John's offensive ability and the effort it entailed, Coach Fitzgerald

The 1966 basketball team. John Walsh is #15 in the front row.

would always make sure that John guarded the weakest offensive threat on the opposition. This would typically allow John to come up with a couple of easy steals or interceptions during a game. John loved when, in the presence of teammates, a classmate who had seen the game would compliment John on his "great defense" because of those steals or interceptions. His teammates could only roll their eyes as John smiled and said thanks while the actual defensive standouts went unmentioned. Skip Wilkins '64, one of his teammates, told me of a humorous incident that took place during a game with Upsala College: "During the last couple of minutes, I was dribbling down the side of the court, passing by John and intending to go all the way when somehow John had the ball and I was left with a defender. John probably thought he had a better plan ... a clean steal from your own teammate. We laughed a lot about it afterwards. John was a fun guy, up for anything, but always had a way of keeping things in the right perspective."

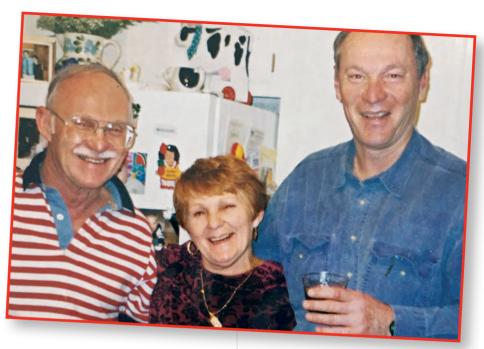
John also played four years of baseball for Paul Hauser as an outfielder. In his senior year, he was voted team co-captain



by the team. In 1966, with outstanding performances in three sports, John was selected as NCE Senior Athlete of the Year. Hank Dobbelaar '66 put it succinctly when he said, "John was a three-sport athlete as well as an honor student when it was unheard of at NCE where the engineering curriculum was a test to even the best academics. I consider it an honor to have played alongside John for all four years on the baseball team. He was a true leader, motivated scholar, dynamic athlete and most of all a wonderful teammate." To cap all of this, John was one of the initial inductees into the NJIT Athletic Hall of Fame in 1986.

After graduating from Rutgers, John began work at IBM. Later, he was recruited by AT&T and eventually went on to work for several high-tech startups. Inevitably, the references and referrals from this work translated into select, discretionary consulting engagements. John had a successful and rewarding business career and through the years was diligent in maintaining relationships with an ever-growing number of friends from his business past.

Despite his scholarship, athletic and business pursuits, John's priority was still family. He grew up in Kearny with an older sister, Pat, and older brother, Tom, in a multifamily house with aunts, uncles and cousins, which was the center of his family life through college. As his professional life came to require residence on the West Coast, John was adamant about making frequent trips east to join in family events with the ever-growing family, including nieces and nephews. He was always close to Pat, providing critical support — "whatever was needed, my 'goto guy" — especially during trying times. She credits John with saving her life. "UJ" as they called him, was a positive father figure for Pat's three daughters growing up. John would joke that he commanded significant fealty and deference from the next generations in the family because



John Walsh (far right) with his brother Tom and sister Pat.

behind his back he was known as "rich Uncle John," while nothing was further from the truth.

At IBM, John met Dick Keelty and Jeff Szem, who would become lifelong friends. Initially, they played in some local recreational basketball leagues, bringing Dick's older brother, George, into the mix. But it would be golf that provided the vehicle for this enduring friendship. In 1972, the four took their first weeklong golf trip together. This annual golf trip became a permanent addition to the calendars of all four with the trip evolving into the full-blown, golfing, drinking, card-playing, wagering, cigar-smoking bash that they all loved. Their last trip took place in 2019. In 1980, the four added a second annual golf week to their calendars, played in New Jersey and centered around an annual June fundraising memorial golf tournament established by the Keeltys. John would always pack his week with visits to family and friends around the golf activities. In 2013, John added another regular event to that week, related to his days at Seton Hall Prep.

In 2012, John attended his Seton Hall Prep 50th reunion and reunited with an old friend, Gary Gumbrecht. They had been friends in high school and had started at NCE together. At the reunion in 2012, Gary and John met friends they had been close with in high school but had lost track of. In 2013, this group of eight decided to get together again and Gary hosted them for a dinner at his New York City apartment. That event convinced them all to make it an annual event, hosted by Gary and timed to coincide with John's New Jersey golf trip in June. Their last dinner was in 2019.

In 2002, I started a golf event for soccer players that I had coached at NCE/NJIT. John was visiting from California, and since he was staying with Rich Schroeder, asked if he could bring him. I took some good-natured ribbing about allowing a basketball player to defile their soccer event and it was a fun day for all, but it also gave me the idea to include basketball alumni of the same vintage as my soccer players in the event for a little additional competition. And so, thanks to John's invitation, was born the annual "Mal Simon Hands & Feet Golf Tournament" played in alternate years at the Lake Mohawk golf course of Roy Knutsen '62 and the Newton course of Bob Welgos '62. It was a fun event for many alumni, especially John who, being one of the better golfers, delighted in asking for bids for his participation as a soccer or basketball team member.

## ALUMNI CIRCUIT

With all his successes, John would tell you that his most significant accomplishment was convincing his best friend, Judith Walsh, to marry him. (See NJIT Magazine, Fall 2005, page 23.) They were married May 12, 2005 in Napa, Calif. Following a California celebration with West Coast friends and Judith's family, they traveled to New Jersey where they celebrated with East Coast friends and John's family at the home of Rich and Lynne Schroeder in Montclair, N.J. John and Judith resided in a home they had custom-built in the hills overlooking the town of Sonoma, Calif. As usual, John was active within his local community. A neighbor, Barry Reder, recalled "John invested hundreds of hours in his role as president of the Diamond A Neighborhood Association while Judith put in countless hours working

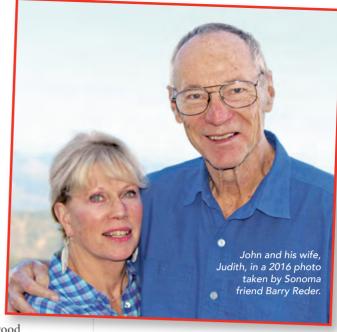
with multiple Sonoma nonprofits in various roles while also helping to make Diamond A the welcoming community it is. We were so fortunate to have them as such active members of our community up here on the hill. Speaking very personally. I will miss his

personally, I will miss his good humor, wisdom and old-fashioned common sense."

John was also an active NJIT alumnus. He attended the 50th reunion celebration for his graduating class during Alumni Weekend in 2016 and the Wellness and Events Center opening in 2017. He was a host and regular participant in West Coast alumni events, a regular donor and an attendee for alumni basketball events

when his travels allowed. John and Judith had a busy, active life in California but always had the time for friends from John's NCE days. My wife, Diane, and I visited with them twice during our trips to California. On one trip we stayed at their beautiful mountainside home in Portola Valley and, on another trip, John gave us an all-day tour of San Francisco

Friends for Life: John Walsh and his lifelong friends, George Keelty, Jeff Szem and Dick Keelty.



and its surroundings. John and Judith hosted NJIT alumni events that included Joel Bloom, NJIT president, and his wife, Diane, at their home in Sonoma. President Bloom stated that "John was a great friend to the university and would always make time to visit NJIT when he was in the area, keeping himself up to date on what was happening at his alma mater. Indeed, he was a model NCE alumnus — organizing and hosting events for alumni in Northern California. He and his loving wife generously supported our students, especially our hardworking and high-achieving scholar-athletes. The NJIT community mourns John's passing and extends its deepest sympathy to his wife and family. He will be missed."

Finally, I want to acknowledge and thank the many friends and family members whose contributions allowed me to write this column. For me, it may be the volume, emotion and humor of this outpouring of friends and family that provided the most fitting tribute to John

— a man for all seasons.

While meandering through my early NCE records, I came upon the program that 99 of the 494 members of the 1960 NCE graduating class will remember. It was June 5, 1960, when the popular PHT (Pushed Him Through) degrees were awarded to 99 wives in a packed Weston Hall Auditorium. I was adviser to this class, which was led by class president Michael Cafone. Mike, Phil Bloom and George Tikijian organized the affair. Dr. Edward Molina (affectionately called General) was guest speaker and Bernard Finver gave a tribute titled, "What Is a College Wife." I would love to hear from any in the 1960 class (or other years) whose wives received this degree. You can contact me at mal.simon@njit.edu.

# A TOP 100 National University

- U.S. News & World Report

## ALUMNI CIRCUIT

## That Time When an NJIT Graduate Designed the Most Beautiful Buildings in Washington, DC



Turkish Ambassador's Residence, Washington, DC

ell, no, not quite. He — they were all "he" then — technically graduated from Newark Technical School. But it counts.

His name was Maj. George Oakley Totten, Jr. He was born in New York City on Dec. 5, 1866, to George Oakley and Mary Elizabeth (Styles) Totten. George's family had a long history in New York; his ancestors fought in the American Revolution and his great-grandfather founded Tottenville in Staten Island. George's father ("senior" to his "junior") was a New York-based businessman who became a chief real estate investor in Newark.

George was born by coincidence in the same year as Newark's bicentennial. Founded in 1666 by conservative Puritans, the city was undergoing an enormous expansion. Trade boards, hospitals, schools and group homes were constructed at extraordinary speed as the population grew exponentially. As Allan Cullimore, NCE's President from 1920 to 1949, wrote in his history of the

college, "[Newark] was the home of what was, in the middle of the last century, probably the most highly-industrialized center in the United States. She recognized that to retain her position of eminence she must have ways and means of developing men who would carry on what might be called the 'industrial tradition.'" To educate the citizens who would carry on this work, especially the engineers and architects, the city chartered in 1881 the Newark Technical School.

Although the exact dates are murky, George enrolled at NTS sometime between 1882 and 1883, and graduated between 1884 and 1886, after which he graduated from Columbia University with a Ph.B in 1891 and an A.M. in 1892. He was awarded a prestigious fellowship, and for the next two years studied in France at the Ecole des Beaux Arts and Atelier Daumet-Esquie.

Upon his return to the United States and in 1896, he was appointed chief designer in the Office of the Supervising

Architect, Department of the Treasury, which inspired him to establish his own firm, Totten & Rogers, founded with his college roommate.

By 1908, George had designed the American chancery in Turkey, and a private residence for Prime Minister Issez Pasha. The Turkish Sultan, Abdul Hamid, admired George's work so much that he asked him to serve as his private architect, which he apparently accepted. Before he took the position, the Sultan was overthrown.

George's interest in diplomatic residences was piqued, and he found the sponsorship of Mary Foote Henderson, a wealthy Washington socialite and suffragette who sought to develop the Meridian Hill area into a center for the city's elite ambassador corps. With her backing, George built more than a dozen residences in the area, including the residences of Turkish, Polish, Belgian, Norwegian, Spanish, Swedish and Danish legations, and the former French embassy.

Between 1897 and 1939, George served as delegate to the International Architects in Brussels, and during World War I, he served as a major in the Army Engineers Corps — keeping "Maj." as a prefix for the rest of his life.

George was a distinguished contributor to his field throughout his life. He was secretary and vice president of the American section of the permanent committee of the International Congress of Architects and president of the Washington Architectural Club and the Washington Chapter of the American Institute of Architects.

This is just a short summary of the many distinguished works and efforts that George proposed or accomplished in his life.

Author: Michael Smullen is executive director of Alumni Relations at NJIT.



Among George's most notable contributions was his design and construction of the Newark Courthouse and Post Office, now known as the Frank R. Lautenberg Newark Post Office and Courthouse.

## Architecture Alumnus Named AIA Fellow: ROBERT COZZARELLI '79

obert Cozzarelli '79 has spent nearly 30 years as a professional, award-winning architect and planner specializing in health care, educational, recreational, institutional and residential design for federal, state, municipal, international and private-sector clients. His extensive expertise with new and renovated projects has earned him recognition in the health care industry. He has served as the 2004 American Institute of Architects (AIA)-NJ President and in 2009 received the honor of AIA-NJ Architect of the Year.

On Feb. 15, 2019, The American Institute of Architects Board of Directors and College of Fellows notified Cozzarelli that his notable contributions to the advancement of the profession of architecture had resulted in his elevation to The College of Fellows of The American Institute of Architects. Cozzarelli received his Fellowship medal during the Investiture of Fellows Ceremony at the AIA Conference on Architecture 2019 in Las Vegas, Nev.

A principal of both Nutley-based Cozzarelli-Cirminiello Architects and Bertone Cozzarelli Healthcare Architects, the latter of which specializes in designing long-term care facilities, such as hospitals and nursing homes, he also was recently appointed to serve on the New Jersey State Board of Architects for a term ending in 2020.

Over the course of his decades-long AIA-NJ membership, Cozzarelli has earned many accolades, including his award as AIA-NJ Architect of the Year in 2009 and his 2005 Distinguished Service honor. Other awards include the UNICO Millie Grazie Award for his pro-bono services throughout the state, and his recognition as Columbus Day & Celebration Italian-American Manof-the-Year. In 2008, he received an Honor Roll medallion from the NJIT Alumni Association for exemplifying leadership in architecture, planning and design.

Cozzarelli is a member and past president of AIA-Newark and Suburban Architects (N&S), one of AIA-NJ's six local sections, and founded AIA-N&S's popular CANstruction event, the charitable design competition arranged by the organization each fall. He earned his Bachelor of Architecture degree from the J. Robert and Barbara A. Hillier College of Architecture and Design, is a licensed architect in four states and has served the industry for most of his professional life.

## What are your thoughts about being named a Fellow of The American Institute of Architects?

After graduation, I realized that NJIT provided an excellent platform for me to attain my goal of becoming a registered architect, but I also realized that I needed to be part of my professional organization, the AIA, which would enhance my professional life and I would be able to network with other young aspiring architects, as well as practicing registered architects. When I joined the AIA, it began a career lifelong involvement for me in my professional organization, from AIA-New Jersey rising through the offices of the section, chapter, region and to the AIA National level. Needless to say, I absolutely loved participating in and representing the AIA membership in every committee, task force and office that I held. I felt it was extremely important to be involved and to promote architects, architecture and the profession. But, as a young professional, I began to hear about The College of Fellows of The AIA. When I realized who they were and their mission, I reveled in their accomplishments of what they achieved throughout their career, asking myself if I could ever be elevated to such a prestigious honor.

As my career progressed, I learned to have tremendous respect for The AIA Fellows and started to wonder if I had

what it takes to be elevated to Fellow. It was something that I always had in the back of my mind, but I knew I would have to work hard and dedicate myself to my profession first before even considering Fellowship. As time went on throughout my career and involvement in the AIA, I began to realize that my curriculum vitae showed my leadership abilities within The AIA, as well as within my community. This led me to start investigating the qualification for Fellowship and it was also the encouragement of many of my architect colleagues and AIA Fellows, who inspired me to apply for Fellowship in Object 3 -Led the Institute. Their confidence in me provided the inspiration for my application.

I dedicated myself to the process and on Feb. 15, 2019, I received a letter of congratulations from the AIA notifying me that I had been elevated to The College of Fellows of The American Institute of Architects. My first reaction, I cried happy tears, and I immediately called my wife Susan (who I met at NJIT), and thanked her for always believing in me and supporting me throughout my career. I then called my mother and my children, Robert Jr. and Rebecca. I also said a prayer, thanked God and offered my thoughts to my father, who inspired me to become an architect; and may I mention that my father, Frank Cozzarelli Jr. '49, '51, also attended NJIT (NCE) and was a Fellow of The American Institute of Chemical Engineers. He was my hero, friend and greatest inspiration, who I miss dearly.

As you can tell, my thoughts are many and they are about caring and working hard throughout your career in order to achieve this honor and privilege of being elevated to The College of Fellows of the AIA. But, I must also say that, "I'm not done yet!"

Author: Christina Crovetto is editor of NJIT Magazine.



Leslie Marchio M.S. '06 competes in baking competitions around the world.

## **A Sweet Career**

hese weren't your ordinary cookies served at the Hillier College of Architecture and Design alumni event last week.

About a dozen alumni turned out to share their career stories with students, each other, faculty and staff. Some stood out — such as architects who found their callings in building inspections, historical consulting, marketing, airport design and youth mentoring — but the crowd was most transfixed on Leslie Marchio M.S. '06, who's on her way to stardom as a cookie artist.

Marchio was a designer at Warren, N.J.based Beer & Coleman which specializes in custom luxury homes. She earned her graduate degree at NJIT while pregnant with her first child. She soon had three more children, became a dog owner along the way and searched for an artistic outlet during her time away from work. That led to her company name, Four Peas and a Dog, plus unintentional minor celebrity status when she began appearing in cookie competitions on television. She now makes a living teaching cookie art and continues competing around the world.

Marchio said alumni interactions with students are valuable on multiple levels. "I feel that these events are valuable not only for the students, but also the alumni. Alumni can provide the students with the realities of business restrictions — timing, politics, cost and demand — as well as show just how far the branches of architecture and design can reach," she observed.

"Students bring us a fresh outlook on creative and free thinking. That sometimes

is lost when we're in the daily business grind," she added. "Overall, these events are wonderful for networking and exposure for everyone."

Marchio demonstrated her craft. She brought a simple sugar cookie and traced the NJIT logo onto it using a digital projector, edible red paint and a scribe tool to tweak the fine details. Most of her designs are more complicated, such as clever couple's designs for Valentine's Day.

Architecture skills such as listening to clients, planning the design, using the right tools and fine attention to detail all serve her well.

Maya Gervits, director of Hillier's Littman Library of Architecture, Art and Design, organizes the event every semester. This session focused on architecture, so she is hoping to hold another event focusing on the art and design side. Regardless of the specific focus of each such event, she said, "I still hope to illustrate a variety of paths that our students can choose and demonstrate that it is up to them to be entrepreneurial, creative and active in building their professional careers."

Sydne Nance, a third-year student working toward her B.Arch. degree, said the events are helpful. "I have attended three of the Tea with Alumni events during my time here at NJIT. Every time I am thoroughly impressed with the variety of career paths our alumni take from their degrees, one of the most unique being the cookie decorator from Four Peas and a Dog," she said.

"This group of alumni really honed in on the idea that as HCAD students we receive exposure that is hard to come by in other majors or at other institutions," Nance added. "Overall, the skill sets we are learning at HCAD are going to prepare us for any passions we may have, even if these passions end up being outside of a Bachelor of Architecture degree."

Author: Evan Koblentz is an NJIT Magazine contributing writer.



## "Young Engineer of the Year" for 2019: VATSAL SHAH '08H, '09, '14

atsal Shah '08H, M.S. '09, Ph.D. '14, a civil engineer with Mott MacDonald who oversees the design and construction of foundations — for wind and solar farms, wastewater treatment plants, tunnels and bridges, among others — in starkly diverse landscapes from the East Coast to Texas, is the National Society of Professional Engineers (NSPE) "Young Engineer of the Year" for 2019.

The award recognizes "outstanding contributions" to both the profession and the community. Shah's swift rise in the field is fueled by a distinctive energy mix: a scholar's interest in rethinking problems, the pursuit of new and emerging engineering projects and the drive to put in 18-hour days when needed.

At the age of 23, he became one of the youngest licensed professional engineers in the state, and by 29 was president of NSPE's New Jersey chapter. Before turning 30, he established a geotechnical practice in Mott MacDonald's environmental division, and now manages all of its projects in the Northeastern and Central U.S. Since earning his Ph.D. five years ago, Shah has taught at NJIT and now also teaches at NYU's Tandon School of Engineering. He dedicates his NJIT salary to two scholarships he's endowed in his parents' name, one to the civil engineering department and another to the Albert Dorman Honors College, of which he is an alumnus. Shah is an officer of the NJIT Alumni Association.

At Mott MacDonald, Shah continues to build the firm's soils and foundations portfolio: from traditional infrastructure such as water treatment facilities, flood walls, and roadways, to an array of energy infrastructure for the oil and gas industry, as well as renewables. He started in energy in 2009 during the natural gas boom in the Marcellus Shale in Western Pennsylvania.

"Pumps and wells need foundation design work. I commuted four and a half hours each way every day to Pittsburgh to oversee excavations and do the necessary engineering analysis for big well pads," he recounted. "Imagine designing water wells and treatment systems for upwards of 700 gallons per minute in remote Pennsylvania on a hillside prone to landslides."

The rise of large-scale renewable energy installations has changed the landscape considerably over the past decade, and his portfolio has changed with it. Shah now is overseeing preliminary planning and design for the proposed Roaring Brook Wind Power Project in Martinsburg, N.Y., a 39-turbine, nearly 80-megawatt (MW), 5,000-acre facility with five more miles of buried electrical wire and three overhead.

A 101 MW solar installation near Nevada's Battle Mountain, part of the largest clean energy project in the state's history, presents an entirely different set of engineering challenges. "We need to make sure that there's sufficient support from the soil in the drier, hotter areas of the country," Shah said. "We need to make sure the panels won't lift up like giant sails when it's windy, or worse, crack and stop producing power."

There is yet another element to Shah's success. He's unflappable.

On his first day at then-Hatch Mott MacDonald, he learned to his disappointment that the firm no longer had a foundations sub-practice — so he threw himself into the next best thing: landfill engineering. He took a multipronged approach to the field from the outset.

While working and earning a Ph.D. in geotechnical engineering, he spent evenings in a self-funded laboratory in a rented suburban garage studying how landfills settle as their waste decomposes and the rate at which they emit methane.

During his early career, Shah followed trash trucks on their routes to count the number of cans they collected and evaluate what was in them. "We would go to the landfill and sort through 500-pound samples," he recounted. "We used that information to create a new recycling facility."

Four years later, he proposed adding a foundations sub-practice to Nick DeNichilo '73, M.S. '78, president and CEO of Mott MacDonald North America. The response was: "Go get it."

That same year, the American Society of Civil Engineers named Shah the 2013 "New Face of Civil Engineering" for his professional work and humanitarian efforts in solving water treatment problems in Haiti after the 2010 earthquakes.

Shah incorporates his experiences on the ground in his classes to help students understand the practical applications of their course work. Indeed, he credits much of his professional success to NJIT's engineering curriculum, which embraced this philosophy.

"Many of my professors were industry practitioners who taught us not just 'theory,' but how to think like an engineer," he noted.

Author: Tracey L. Regan is an NJIT Magazine contributing writer.

## Honors Team Taps Inventive Skills to Help Handi-Capable Dancer



he call was put out to NJIT's Albert Dorman Honors College (ADHC) this past spring and nine Dorman Scholars answered it. Their charge was to design and construct a tap-dance board for a handi-capable wheelchair user — a patient at Mount Sinai Health System in Manhattan who would be participating along with able-bodied dancers in the inaugural performance of the nonprofit, all-abilities dance troupe, Tap: On Tap, held at the hospital Oct. 25 in observance of World Stroke Day and National Disability Employment Awareness Month.

The show incorporated the Tap Dancing Hands Down® system, where an individual wears gloves outfitted with taps and executes the tap steps with his/her hands on a kitchen cutting board. Mary Six Rupert, a professor of tap at Wagner College and former Rockette, created the unique tap-board solution more than a decade ago initially for her mother, a tap instructor whose mobility was significantly curtailed by a stroke, and has since used the system in her work with stroke and spinal-cord-injury patients at Mount Sinai (she is behind the formation

of Tap: On Tap as well). But because the performance required a board that could be attached to a wheelchair and move freely instead of sitting stationary on the dancer's legs — or on a table as is done traditionally with Tap Dancing Hands Down® — some modifications were necessary.

That's when Tomlee

Lahayil Abraham '99, '00, an Honors College science, technology and society, and management alumnus, who today is vice chair of administration and health system administrator of the Kimberly and Eric J. Waldman Department of Dermatology at the Icahn School of Medicine at Mount Sinai, experienced a light bulb moment.

"It was just clear as day to me. We needed a solution and NJIT is all about innovation," said Abraham, also a student of Rupert's and a dancer in Tap: On Tap. "I knew how NJIT prepared everyone to think in very practical, real-world types of ways. ... An NJIT student knows how to get things done."

Led by Lauren Hutnik, now at Rutgers New Jersey Medical School, the ADHC team included Birju Dhahuk, Thinuri Fernando, Joshua Gaughan, Zean Go, Ryan Madden, Sandra Raju, Tyler Rodriguez and Sophia Tran. The group conducted site visits and interfaced with Abraham, Rupert and the handi-capable wheelchair user, Stephanie (pictured above with the students and Rupert), to develop the project plan and then create and test the tap-dance board.

With a budget of \$125 and a tight turnaround — just two months from the first project meeting to delivery in April before rehearsals started in May — the students began by brainstorming design ideas. They kept in regular touch via the messaging app GroupMe and convened regularly to analyze proposals and decide their final direction. Next, they ordered pipes, clamps and other materials and met at NJIT's Makerspace to assemble their solution. They also visited the hospital to measure Stephanie's wheelchair and ensure the built device fit properly on it.

The challenges, said Hutnik, were "finding a flexible joint that would allow the user to move the device away or closer in the x-direction without having to take the item off and reassemble," as well as designing "a device that was sturdy and would not move around too much while the user was tapping/dancing on it."

Also important was the ability to remove the device quickly and easily, added Gaughan '22, a mechanical engineering major.

The team needed to ensure the user's comfort, too. "Stephanie has a unique wheelchair and we had to find a good place on the chair to attach the device ... [so it] would not get in the way of her normal movements," Hutnik pointed out.

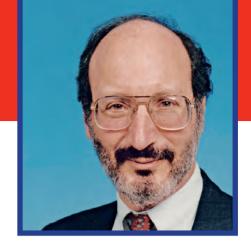
Abraham and Rupert are thrilled with the result, which they note stays firmly in place while enabling the handi-capable dancer to freely tap with her fellow performers. And with rehearsals and the performance having gone well, and feedback from Stephanie nothing short of glowing, the project has been a win-win for all involved.

"How often is it you come up with something and nail it?" said Abraham.

"It's one of the first real-world projects I've done for someone else," said Gaughan. "This project was very rewarding, because we got to see firsthand how our work had a great impact."

Author: Julie Jacobs is an NJIT Magazine contributing writer.

## Businessman, Entrepreneur and Agile Thought Leader: **DONALD J. REIFER '69**



onald J. Reifer '69 is recognized as an agile thought leader and a leading figure in the fields of software engineering and management. He has more than 40 years of management experience in industry, academia and government. He is skilled in program/project/product management, development, metrics, measurement and change management. He has led major agile enterprisewide initiatives, headed process improvement efforts, built businesses, managed major programs and changed the way organizations did their business. Additionally, he has acted as an adviser to senior management in several Fortune 500 companies, sat on boards of directors, led government panels, served on the board of trustees of Prescott College and served as a visitor at the University of Southern California's (USC) Center for Software Engineering.

From 1993 to 1995, Reifer managed the Department of Defense Software Initiatives Office. In this position, he led several major enterprisewide initiatives as a senior executive service official (Lt. Gen. equivalent). Previously, while with TRW, Reifer managed their Global Positioning Satellite efforts. While with the Aerospace Corporation, Reifer led all the software efforts related to the Space Transportation System (Shuttle). Currently, as a trusted adviser, he helps executives in Fortune 500 firms transform organizations using technologies emphasizing agile and agile-at-scale methods. He is known for his business, technical, team-building and practical problem-solving skills. Among his key accomplishments, he has built a management consulting firm from scratch; helped start up businesses such as Ashton-Tate and grow others; as a Hitachi

consultant, helped develop engineering workstations that were credited with saving millions in cost; as a Nokia consultant, devised an R&D/acquisition strategy that led to new product sales; and as a deputy program manager, led the on-time and budget delivery of software for a large satellite program.

Reifer received his B.S. in electrical engineering from NJIT, his M.S. in operations research from USC and the Certificate in Business Management for Technical Personnel from UCLA. He has published 11 technical books and over 200 software engineering and management papers. Reifer's many awards include the U.S. Secretary of Defense's Medal for Outstanding Public Service, the NASA Exceptional Service Medal, the AIAA Software Engineering Award and the ICEAA Freiman Award. He is a member of Eta Kappa Nu, Omicron Delta Kappa and Who's Who in the West.

Although he currently is semi-retired, Reifer said that he loves his work and continues to assist clients in change management as a consultant in the software field. His current focus is on introducing ways to improve software workforce productivity. He approaches this scientifically via benchmarking. This allows him to win arguments using the numbers which are hard to dispute.

Reifer did not envisage becoming a "software guru" when he was a student at NJIT. "My emphasis in school was on digital design and my love was mathematics and the scientific method," he said. "My software career was a happenstance. My first job after graduation was in software. Because I liked the work so much, I never pursued anything else. My growth was

a function of my inner drive. Many of the opportunities that I took advantage of while progressing was a function of luck, not skill. However, I was smart enough to recognize and jump on them."

During his first year at NJIT, Reifer lived in a cold-water flat in Newark in the Alpha Sigma Mu fraternity house (veteran's frat). "I got lucky the next year," he said. "NJIT had just opened its new Alumni Center and was looking for someone to be its resident manager. The job was perfect for me because it provided me both management experience and free room and board in return for my duties. This was a big deal because in the 1960s, NJIT had no student housing. In addition, as part of my duties, I also got to work with the Alumni board and administration. This helped me realize that I wanted to pursue a career in technical management."

NJIT (NCE) will always have a special place in Reifer's heart because the institution gave him a chance.

"My grades were average and SATs marginal," he recalled. "But, NJIT admitted me because I had potential and was a veteran. The faculty and administration were supportive and I was provided with access to the resources I needed to ease my burden. My veteran's frat provided me the mentoring that I needed to make the transition and, of course, the GI bill helped with my financial burdens."

Author: Christina Crovetto is editor of NJIT Magazine.

'78 General (Ret.) ELLEN

PAWLIKOWSKI (Chemical Engineering, HON '13) was appointed an independent member of Intelsat's board of directors. Pawlikowski, who also serves on the board of directors of the Raytheon Company, is a Fellow of the American Institute of Aeronautics and Astronautics and a member of the National Academy of Engineers.

'80 JEFF MILANAIK (Mechanical Engineering) will be honored as an outstanding industry leader by The March of Dimes Greater NY/NJ Market's 2020 Real Estate Awards in June. Milanaik is Northeast region partner at Bridge Development Partners. He has been with the company since 2014 when he opened

Bridge's New Jersey office.

'81 FRANK GIANNELLI (Industrial Engineering, M.S. in Engineering Management '90) joined the American Society of Mechanical Engineers as managing director of information technology. Previously, he served as senior director of information and digital technology solutions at the United States Golf Association.

**'82 JAMIL HERMES** (M.S. in Computer Science) joined Cognosante as chief growth officer. Hermes has over 20 years of professional experience in business development, technology leadership and program management and most recently served as senior vice president and chief growth officer at OptumServe.

'83 H. EDDIE CRAIG (Electronic Engineering Technology) retired as a special agent with the Federal Bureau of Investigation after more than 31 years. Craig attended NJIT at night while working as an electronics technician for the FBI. Before attending NJIT, Craig

served as an aviation electronic technician and air crewman for four years in the United States Coast Guard. Craig currently is president of Craig Specialized Investigations, a private investigation company.

### '89 ERIC BOSCHEN (Civil

Engineering) was named by the American Society of Civil Engineers North Jersey branch as Civil Engineer of the Year for 2019. Boschen, a professional engineer in Connecticut, New Jersey and New York, is currently senior associate at Dewberry.

## **'93 STEPHAN WILLIAMS**

(Architecture) was named director of business and project development for the New Jersey region at Wohlsen Construction Co. Williams has more than 30 years of experience in the construction industry and will be responsible for fostering client relations and new opportunities.

'95 DIANE ELLIOTT (M.S. in Environmental Science) joined Greater Good law firm as "of counsel." Elliott previously served nine years as executive director at New Bethany Ministries. The first 20 years of her professional career were spent as a criminal defense trial attorney.

### **'96 MICHAEL HANRAHAN**

(Architecture, M.S. in Management '96) was promoted to principal of Clarke Caton Hintz. Since joining the firm in 1996, he has served as lead designer and project manager. Hanrahan was also elected an AIA New Jersey regional representative to the AIA Strategic Council Assembly.

'98 BOB ELLIS (M.S. in Mechanical Engineering) was named chief engineer at the U.S. Department of Energy's Princeton Plasma Physics Laboratory (PPPL). Ellis has spent almost 40 years designing and overseeing construction of components

of some of the world's biggest fusion experiments, from PPPL's Tokamak Fusion Test Reactor and the National Spherical Torus Experiment-Upgrade, to the Joint European Torus in England and the Korean Superconducting Tokamak Advanced Research fusion reactor in South Korea.

'99 GINNY BARO (M.S. in Computer & Information Science, Ph.D. in Information Systems '09) was highlighted as one of five thought leaders of color by Color Magazine. Baro is a certified international executive coach, speaker and No. 1 bestselling author of Fearless Women at Work.

## **'99 ANDREW BLUMETTI**

(Architecture) joined Regions Affordable Housing's originations group as senior vice president and relationship manager serving the Northeast region. Previously, Blumetti was managing director at The Bank of New York Mellon. Before this role, Blumetti served as senior client manager and vice president within JP Morgan Chase's commercial real estate group.

## '01 ERIC HAUSLER (M.S. in

Casinos Inc.

Management) has been appointed CEO of Greenwood Racing, Inc. Hausler previously served as director of VICI Properties Inc. Before that, he held the position of CEO of Isle of Capri

'02 NATHAN DRAPKIN (M.S. in Management) joined EmpiRx Health as head of strategic partnerships. Drapkin most recently served as vice president of sales and client management at Cigna. Before his role at Cigna, he held sales leadership roles at Horizon BCBSNJ and Aetna.

## **'03 ALEXANDRA POLLOCK**

(Architecture), principal at FXCollaborative, was promoted to chief technology officer. Her previous position was director of design technology. Pollock has been with the firm since 2013.

### **'05 JONATHAN NINNIS**

(Architecture) was named a "40 Under 40 Class of 2019" by Building Design & Construction. Ninnis founded OC Development Management in 2015 and is on the Dean's Council at NJIT's J. Robert and Barbara A. Hillier College of Architecture and Design.

'05 MARJORIE A. PERRY (MBA in Management of Technology) was featured on the ROI-NJ list, "ROI Influencers Real Estate 2019: Power Players." Perry, CEO and president of MZM Construction & Management, also serves as chair of NJIT's Board of Overseers.

## IN MEMORIAM

Jules Lozowick '43 Alan Rubin '48, '52 **Donald Dougherty '50 Robert Strauss '50** Jack Papazian '52 Edgar Wolf '52 Neale Sweetman '59 John Ripak '60 Nicholas Grasso '65 John Walsh '66 Bernard Yorkanis '66 Gilbert Lotti '67 Robert Glick '68 William Hylicke '68, '73 **Edmund Skorynko '68** 

Gordon Sly '70 Joseph Moran '73 Kenneth Steigerwalt '73 **Thaddeus Niemiec '78** John Stensler '78 John Wiegand '82 Mark Dikovics '83 Philip Lebet '86 Robert Scheyhing '86 Ralph Koehler '93

Correction: John Parsons '70, '86 was incorrectly included in this section of the Fall 2019 issue. We sincerely apologize for the error.

THIS YEAR, WE CELEBRATE ANNIVERSARIES FOR CLASSES ENDING IN 5s AND 0s.

Join hundreds of alumni and friends to see the new changes on campus, reconnect with old friends and hear about the strides your alma mater has made since your last visit. Whether you graduated five years ago or 50, it's time to reconnect with NJIT at Alumni Weekend.



## ALBERT DORMAN HONORS COLLEGE

TWENTY-FIFTH ANNIVERSARY

2020 marks the 25th Anniversary of the Albert Dorman Honors College. When the Honors Program became a full College, it was named after our benefactor, Albert Dorman '45, Ph.D. '99 HON. We will be celebrating this milestone with a series of special alumni events throughout the year.

## HERE IS WHAT WE HAVE IN THE WORKS FOR 2020:

Passing the Torch Alumni and Student Networking Roundtable Colloquium and Alumni Reception

April 22, 2020 2:30 - 4 p.m. Colloquium 4:30 - 6:30 p.m. Cocktail Reception

Alumni Weekend Welcome: A Toast to the 25th Anniversary of the ADHC

May 29, 2020 6 - 8 p.m.

ADHC Alumni Gala Recognizing Dr. Joel Bloom and the 25th Anniversary of the ADHC

October 9, 2020 6 - 9 p.m.

We hope you'll help make the Albert Dorman Honors College's 25th Anniversary a success for all who have played a vital part in its great history — Albert Dorman, Dr. Bloom, Board of Visitors members, our hard-working students — and you, our distinguished alumni!

FOR MORE INFORMATION, CONTACT honors@njit.edu