ALUMNI MAGAZINE | SPRING 2021

# NEW YORK INSTITUTE OF TECHNOLOGY

R

The Legacy of New York Tech's Computer Graphics Lab

Supporting First-Gen Students

# Restoring Trust in Science

Overcoming public skepticism

# FIRST BYTE



#### Dear Friends,

While we are still uncertain of the final outcomes of the COVID-19 pandemic, we've certainly learned a lot as an institution and grown a lot as a community over the past year. The challenges we've faced and the changes we've needed to make in the face of COVID-19 have undoubtedly transformed us into a stronger, more resilient, and more flexible university. We're extremely proud of the new

virtual and physical environments we've created for our students to thrive in. While the pandemic necessitated fewer people on campus and new protocols forced upgrades to the HVAC system and safety features in our buildings, we were also able to make enhancements in technology, student study and lounge spaces, outdoor parklets, dining facilities, and labs. On the Long Island campus, we were even able to develop nature walks for students led by a certified nature therapist! I hope that in the not-too-distant future, we will be able to welcome our alumni back to campus to see and experience some of these improvements.

In this issue, you'll be able to read more about our longer-term planning process, and how we're solidifying our goal of positioning New York Tech among the best universities in our region. We'll achieve that by focusing on our legacy and strengths and developing new strategies to evolve and reinvent our future. In another article, we take a look back at one of our proudest legacies, the Computer Graphics Lab, where the founders of Pixar gave birth to some of the first advanced animation techniques. Indeed, our roots in science and technology are key differentiators New York Tech can "own" when compared with many of our competitors. As exemplified in the third feature article, it is critical that we share our thought leadership in these areas—especially at a time when we need to rely on science to solve the pressing issues of our time, ranging from the current pandemic to climate change and more.

I hope you enjoy reading these articles and catching up on the achievements of your fellow alumni, as I do here, in media coverage, and the many letters I receive. I wish you all continued success!

Home Folu

Hank Foley, Ph.D. President, New York Institute of Technology

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**Cover Illustration** BY PETE RYAN

# CAMPUS BUZZ

\$1.8 Million NIH Grant Supports Heart Disease Research

According to the Centers for Disease Control and Prevention, more than 30 million adults in the United States have been diagnosed with heart disease, which causes one in every four deaths. Scientists believe that atherosclerosis is a risk factor in predicting heart disease-related illness and death. The buildup of calcium salts in blood vessel tissue, known as vascular calcification, is considered to be a trademark of atherosclerosis, but scientists are unsure whether calcification causes atherosclerosis or is simply a by-product. If it is a risk factor for atherosclerosis, treatments targeting calcification may prevent millions of future heart disease cases and fatalities.

Olga V. Savinova, Ph.D., assistant professor of biomedical sciences at the College of Osteopathic Medicine (NYITCOM), has secured a five-year grant estimated at \$1.8 million from the National Institutes of Health (NIH) National Heart, Lung, and Blood Institute. The grant, which includes a first-year award of \$342,675, will support research to improve the understanding of



atherosclerosis (hardening of the arteries) and deliver a new treatment for heart disease.

A research team, led by Savinova, will use mouse and computer models to investigate whether vascular calcification contributes to the development of atherosclerosis and, if so, whether a decalcification treatment can correct and prevent it.

The team includes College of Engineering and

▲ Olga Savinova aims to improve the understanding of atherosclerosis and deliver a new treatment for heart disease.

Computing Sciences' Dorinamaria Carka, Ph.D., assistant professor of mechanical engineering, who will perform the computer simulations on blood flow dynamics, as well as NYITCOM's Brian Beatty, Ph.D., associate professor of anatomy, and Maria Plummer, M.D., pathologist and associate professor of clinical specialties. José Luis Millán, Ph.D., professor of human genetics at the Sanford Burnham Prebys Medical Discovery Institute, is also involved.

Savinova's team has collected data that suggests the enzyme phosphatase is responsible for vascular calcification. Their data shows that when a surplus of phosphatase exists in combination with high levels of lipids (fatlike substances in the blood), lipids are retained in the blood vessels, accelerating vessel hardening. Consequently, if the overactive gene responsible for the surplus can be "turned down," preventing its ability to cause calcification, atherosclerosis may also be treated.

"Our overarching goal is to gain a better understanding of how calcification impacts the onset, progression, and treatment of atherosclerosis," said Savinova, who also received a 2018 NIH grant to examine vascular calcification in chronic kidney disease. "We believe calcification is a risk factor for atherosclerosis and one that can be corrected. By inhibiting vascular calcification caused by overactive phosphatase, we may be able to provide a therapy for atherosclerosis."

# Understanding Cranial Birth Defects 🖡

Assistant Professor Akinobu "Aki" Watanabe, Ph.D., receives the first National Science Foundation CAREER Grant at New York Tech

Can studying brain and skull interaction in birds help clinicians to better understand and treat cranial birth defects in humans?

That is the goal of a new research project by Akinobu "Aki" Watanabe, Ph.D., assistant professor of anatomy at the College of Osteopathic Medicine (NYITCOM).

His project, "Evo-Developmental Interactions of Craniofacial and Brain Anatomy," funded by a prestigious Faculty Early Career Development Program (CAREER) award from the U.S. National Science Foundation (NSF), will examine how the brain and skull have interacted over millions of years to cause evolutionary structural changes, as well as the causes of brain-skull interaction in the days and weeks before birth. Combining traditional and advanced research techniques, the project is the most comprehensive of its kind to investigate brain-skull interaction over these two complementary timescales.

"The brain and skull are intimately

linked physically, developmentally, and functionally, and this interaction needs to be clarified to gain a holistic understanding of the forces that shape the development and evolution of these structures. I will study these interactions using birds as a model system, but this topic has clinical relevance to serious birth defects in humans," said Watanabe, who has also lent his expertise to several other NSF-funded studies.

Watanabe, a vertebrate paleontologist, is the first New York Tech faculty member to receive a CAREER award, which is one of the NSF's most competitive grants. Principal investigators can receive this award once in their career and may only submit a proposal three times. Watanabe's first submission was selected and is expected to receive a fiveyear award of \$710,855.

His research may help clinicians prevent and treat future neurological and cranial birth defects, which can cause developmental delays, physical disabilities, and even death. In particular, findings could further understanding of craniosynostosis, a condition where a newborn's skull joints close prematurely and prevent normal brain growth, and hydrocephalus, a condition where excess cerebrospinal fluid (the fluid that flows around the brain and spinal cord) expands brain tissue, leading to skull swelling.

CAREER program proposals must also include an educational component. In collaboration with NYITCOM's Center for Biomedical Innovation, Watanabe will create a virtual reality game reflecting the project's research themes, which will serve as an educational tool for students in middle school through college. In a second educational initiative, he will transform the scientific data into music, which will culminate with a public recital, allowing science education to reach wider, more inclusive communities, including the visually impaired and non-scientists.





# Sending Cards of Care

New York Tech-Vancouver partnered with the Good Samaritan Society of Canada for the Cards of Care initiative to deliver uplifting messages to select senior homes. On April 7 and 8, students and alumni stopped by the two Vancouver campus locations to write a short note of cheer. Participants were encouraged to reflect on their year and write something joyful to lift the spirits of seniors and their care workers. Many students expressed how much they could empathize with the seniors being isolated from their families during this time. New York Tech-Vancouver's student population is largely made up of international students, and many spoke about not being able to visit home or see their families for more than a year. They emphasized how important it has been to rely on their local community and were thrilled to send a small message of hope in return. 🕵

# Achieving a Zero-Carbon Footprint in Gowanus

The Gowanus neighborhood of Brooklyn, N.Y., is rapidly being transformed from an industrial area fraught with 19th- and 20th-century pollution issues into a 21st-century residential and commercial community.

While the revitalization of the neighborhood brings excitement, it also leads to important questions, namely: How will the scheduled rezoning of Gowanus likely impact resident quality of life, as well as urban heat stress adaptation, flood resilience, and greenhouse gas emission mitigation?

To help answer these questions, and to propose ideas for mitigation for similar projects in the future, the Urban Land Institute's (ULI) New York District Council and the ULI Urban Resilience Program invited students in the M.S. in Architecture, Urban, and Regional Design program to join an Urban Design Climate Workshop. The workshop members also included the Urban Climate Change Research Network, a global consortium of climate experts. This capacity-building exercise engaged the local community, real estate and land-use professionals, and government officials as they discussed ways to include climate projections in redevelopment initiatives.

Led by School of Architecture and Design Associate Professor Jeffrey Raven, FAIA, LEED BD+C, the graduate students who took part in the workshop sought to develop a case study to test different modeling approaches to achieve a zero-carbon footprint by 2050 that positively impacts the people within the community. "Working with these teams, we are prototyping a response to conditions in New York and elsewhere," Raven explained. "How can you design a district anticipated to become more crowded, hotter, and wetter and still have a wonderful quality of life? It was important to bring scientific urban planners and students to the table to study this."



## **The Future of Energy Efficiency**



A \$250,000 grant from the New York State Energy Research and Development Authority (NYSERDA) awarded to the Willdan Group in partnership with New York Institute of Technology will help support the university's efforts to develop research and training opportunities in the area of energy efficiency. Willdan provides engineering and energy solutions for public and private utilities and public agencies of government and commercial and industrial firms.

The activities at New York Tech will be led by Principal Investigator Ehsan Kamel, Ph.D., assistant professor in the College of Engineering and Computing Sciences, in collaboration with Amy Bravo, M.A., senior director of experiential education. New York Tech faculty and students will partner with the Willdan Group to enable researchers, students, and other organizations to find solutions to improve buildings' energy efficiency and provide training for the future workforce in this field.

In addition, the initiative further expands NYSERDA and the college's commitment to diversity and inclusion. The research and training offerings will be promoted to underrepresented communities, providing opportunities for as many as 150 students and professionals to gain new skill sets to answer the needs of energy efficiency industry and market trends, while creating a highly skilled, diverse workforce.

At the inaugural New York Tech Live on March 24, a panel of iconic New Yorkers discussed the monumental impact of *West Side Story* on their lives and work, set in the context of New York City and urban planning for the Upper West Side of Manhattan.

Panelists Mike Wallace, a Pulitzer Prize-winning historian; multiple Grammy nominee Bobby Sanabria; and writer Esmeralda Santiago joined New York Tech Faculty Fellow and English Professor Jonathan Goldman, Ph.D., at the virtual symposium "*West Side Story*: How It Speaks to Us Now." The event was the product of the university's first Faculty Fellowship, a program designed to support faculty projects in service to the community.

Sean Khorsandi, executive director of Landmark West! and instructor in the School of Architecture and Design, inter-

#### West Side Story: Then and Now



viewed Wallace, who discussed the setting of the film in the Upper West Side neighborhood known in the 1950s as San Juan Hill. And New York Tech English major **Quiana Dudley-Vegliante (B.A. '21)** interviewed Santiago, who talked about her experiences in New York in the 1960s.

Panelists addressed both stage and screen iterations of the story, a modern adaptation of William Shakespeare's *Romeo and Juliet* set among Anglo and Puerto Rican gang members in 1950s Manhattan. Its setting: just a short walk from New York Tech's New York City campus. Themes of racial tension and conflicts, equity and inclusion, urban renewal, Latinx culture, musicology, and more permeated the individual presentations and the panel discussion and Q&A that closed the 2.5hour event.



## **Caring for the Commons**

How can consumers be encouraged to take better care of public goods and resources? That's the question posed in a new research paper co-authored by Colleen P. Kirk, D.P.S., associate professor of marketing, in the *Journal of Marketing*.

"Caring for the Commons: Using Psychological Ownership to Enhance Stewardship Behavior for Public Goods" aims to help solve the "tragedy of the commons," the idea that when goods or resources are shared by many owners they are subject to abuse or neglect.

Kirk and the other researchers put their theory to the test by manipulating scenarios in public settings to encourage visitors to view the spaces as their own rather than as a shared commodity. In each scenario, the investigators found that increasing psychological ownership enhanced stewardship, causing participants to become more likely to take direct action.

In one scenario, the researchers asked a random group of kayak renters to think of and write down a nickname for the lake before renting their boats. Unbeknownst to them, the researchers had planted anchored floating trash in the lake to test whether naming the lake would create an increased feeling of ownership. Compared to the control group, kayakers who were not asked to name the lake, the "namers" were more likely to do their part in trying to pick up the trash, with 41 percent attempting to remove the planted litter.



Stay up-to-date on the latest New York Tech news. Check out *The Box* for alumni and student profiles, research updates, campus happenings, and more.

# Business Bootcamp

The School of Management's new virtual bootcamp prepares high school students for the business school experience. With collegelevel workshops taught by New York Tech's expert faculty, students will get critical training they can add to their résumés and incorporate into both their academic and professional lives as they seek entry to college and the business world.

Sessions include: The Art of Communicating for Success in an Organization, Leadership and Teambuilding Skillsets for the Manager of a Multicultural Workforce, and Personal Marketing Plans Using Social Media and Digital Tools.

The spring bootcamp began on April 7 and will run through June 16. Students may attend the workshops individually or attend all six sessions. The bootcamp will run again in July, September, and November 2021, as well as in 2022, for students who may have missed one or more workshops.



# **Alumni Leading the Way**

More than 60 students tuned in to the "Truths of Leadership" panel on April 6 to hear from three alumni who discussed their respective leadership journeys: VP Analyst **Soyeb Barot (M.S. '05)** with Gartner; **Andrea Klemes, Ph.D. (D.O. '87)**, chief medical officer at MDVIP (pictured at right); and **Tom Scerbo (B.Arch. '98)**, senior vice president and Metro New York executive at AECOM.

Lena Hegemann, who is working towards earning an M.B.A. as a member of the Class of 2022, moderated the panel. She kicked off the conversation by asking the panelists to speak about the leadership roles they held while in school. Klemes served as president of the student osteopathic organization, which she noted laid the groundwork for future leadership roles; Scerbo started a student club in New York City that "created a bridge" to the architectural industry; and Barot, who was an international student pursuing a master's degree in computer science, spent a summer as a teaching assistant in the Higher Education Opportunity Program (HEOP), enabling him to engage with both students and faculty.

The virtual event, part of the Student Leader Summit, was geared



toward students participating in the BEAR (Be Engaged And Roar) into Leadership program created by the Office of Student Life to offer opportunities to help students identify and develop their leadership skills.

# **Training an Army to Combat COVID-19**

Mass vaccination is the nation's most powerful weapon against COVID-19. Yet, as states receive vaccine supply, concerns about shortages may shift from vials to manpower. To win the war on COVID-19, the United States needs an army of skilled vaccinators.

The College of Osteopathic Medicine (NYITCOM) is training a corps and helping surrounding areas to meet the demand.

At the Long Island campus, training was held for both medical students and students from the Physician Assistant, M.S. program in the new Institute for Clinical Competence, with COVID-19 safety protocols in effect. In January, over eight days, groups of 12 students were trained by Timothy Devine, simulation technology specialist, and Chris Coletti, simulation technician.

After the eight days, a total of 542 students were trained. At the medical school's Arkansas location, students observed both video and in-person instruction, similar to their Long Island counterparts. Under the guidance of clinical medicine faculty members, they practiced administering injections using silicone pads. All first- and second-year students were trained in intermuscular injection by clinical medicine faculty and Academic Scholars on campus. Many thirdand fourth-year students were also trained at the hospitals and clinics where they are completing their clinical rotations.

In addition, students and faculty in the School of Health Professions received training and are vaccinating the public, and NYITCOM-Arkansas medical students and faculty administered vaccines through the Delta Care-A-Van, the school's mobile medical unit.



# At the Top of Their Game

The 2020 graduates of the physical therapy program (D.P.T.) achieved a 100 percent pass rate on their state board exams. New York Tech's pass rate exceeds the national average of 95.4 percent.

"Despite the challenges of their last year brought about by the pandemic, they worked so hard, with our clinical and academic faculty to complete their final clinical rotations, their research projects and final coursework, and graduate on time," said Cheryl Hall, M.B.A., D.H.Sc., chair and associate professor of physical therapy. "The Class of 2020 is an exceptional group, and we are so proud to welcome them to the profession. We know they will represent New York Tech well."



## From College to Successful Career n

According to the U.S. Bureau of Labor Statistics, women make up 50.4 percent of the United States workforce (excluding people who work on farms and the self-employed), yet according to a survey from consulting firm DDI, 63 percent of women have never had a formal mentor.

Perhaps not surprisingly, a study in the *Journal of Applied Psychology* found that employees with mentors are more likely to get promoted. This, combined with an intensely challenging labor market in which women accounted for almost 80 percent of those over age



▲ Shamla Naidoo (at right), managing partner at IBM, speaks with New York Tech computer science student Kassandra Acuna about "Exploring Careers in Cybersecurity."

20 who left the workforce in January and new rules for navigating careers in response to the global pandemic, has led to questions and frustrations for many young female professionals.

In February 2021, New York Institute of Technology's Women's Technology Council (WTC) established a mentoring program to support and guide the university's female students from college to career.

The program pairs New York Tech alumnae—successful professionals in technology-related fields with experience in mentoring and in breaking barriers and glass ceilings—with New York Tech female students across various academic disciplines who underwent The mentors and mentees will meet once every few months,

an intense selection process

for inclusion.

meet once every few months, allowing all participants, who represent different backgrounds, perspectives, and disciplines, to form new and lasting professional and personal relationships. Group activities will include lectures, guest speakers, and online movies, followed by debriefs and discussions.

On International Women's Day, on March 8, New York Tech debuted the first three videos in an exciting new series developed by the WTC to help guide New York

Tech students as they navigate their career path. The eight videos that comprise the series offer unique and insightful leadership, guidance, and practical, hands-on advice from prominent female professionals and members of the WTC's board.

"The insights, tips, and advice from our board members, who've broken barriers to entry in fields once exclusively the domain of men, are invaluable to young women seeking to follow similar paths," said Nada Anid, Ph.D., co-founder of the WTC and New York Tech vice president for strategic communications and external affairs.

# Driving Safely, Under the Influence of Trust

When driving, have you ever received a message through your car's navigation system that turned out to be false, such as warning of a traffic jam or detour ahead that never materializes?

These messages are intended to help people make informed decisions when driving, but how can drivers be sure the information is accurate and can be trusted? This very question is the basis for research conducted by Wenjia Li, Ph.D., associate professor of computer science, and computer science graduate student **Chenyue Zhang (M.S. '20)**, with a team of researchers.

According to the National Highway Traffic Safety Administration, vehicle-tovehicle communications technology is a promising way to combat vehicular deaths, ease traffic, and improve the environment by alerting drivers of potential hazards such as a crash. Today, most alerts that drivers receive are from a centralized source like the Department of Transportation and can largely be trusted.



In as few as five years, however, Li says that vehicles equipped with the appropriate hardware and software will receive alerts from other vehicles or roadside unit equipment installed at a traffic signal or toll plaza. The open nature of connected vehicular networks will increase the delivery and timeliness of the messages, but also increase the likelihood that the message may not be trustworthy or, worse, may be a security threat.

In a paper published in *IEEE Internet of Things Journal*, the researchers propose a novel solution to evaluate the trustworthiness of such messages through an artificial intelligence-enabled trust management system (AIT) using deep learning algorithms and blockchain technology, ultimately intended to enhance the safety, security, and efficiency of drivers' road trips and of the transportation system overall.

"It is novel to be applying AI, deep learning, and blockchain to secure vehicular networks and ensure the trustworthiness of messages in a way that needn't rely on encryption or authentication," Li said. Vehicles are moving fast, so authentication needs to happen fast, making blockchain technology to trace messages a strong solution to validate trustworthiness, he added.

## New York Tech Community Makes a Big Impact

On March 24 through 25, alumni, students, faculty, staff, and friends of the university virtually came together to support current and future students for New York Tech's third annual Big Give. In the end, this year's donations brought in 741 gifts from 686 donors, totaling \$340,277, exceeding last year's total by nearly \$40,000.

In commemoration of the institution's founding in 1955, the drive lasts only 1,955 minutes (about 33 hours) and shows that when the New York Tech community comes together its impact is great.

For example, alumnus and member of the New York Tech Board of Trustees **Daniel Ferrara (D.O. '86)** issued a \$25,000 challenge: He would match the first 25 gifts of \$1,000 or more to the College of Osteopathic Medicine. The college ended up maximizing Ferrara's pledge. Colleges and schools encouraged their donors with additional challenges totaling \$10,000.

Student donors sought areas where they could make the biggest difference. Among dozens of donations to the Student Emergency Fund, gifts from student-funded and student-run organizations provided a major boost. Leaders of the Student Government and Graduate Student Associations on both the Long Island and New York City campuses donated a total of \$88,500 from their operating budgets to the Student Emergency Fund, which seeks to assist students who have been impacted financially by unforeseen circumstances.

Financial support during difficult times helps bridge the gap between what students have and what they need.  $\Im_{\infty}$ 

# NEW YORK TECH

# New York Institute of Technology's 60th Commencement

On May 23, the New York Tech community, friends, and family virtually celebrated the Class of 2021 at the university's 60th commencement ceremony. President Hank Foley, Ph.D., conferred the degrees.

While graduates and their guests weren't able to gather together for the ceremony, they were recognized at "Stroll Across the Stage" in-person events on May 4 and 5 on the Long Island campus and May 6 on the New York City campus. Congratulations, Class of 2021!

FROM THE TOP: Niharika Nath, Ph.D. Professor of Biological and **Chemical Sciences Kevin Silva** New York Tech Board of **Trustees Chair** STUDENT SINGER: HNOL Shanakay Walker (M.A.T. '21) Major: Adolescence Education STUDENT ORATORS: Kathryn Vu (B.S. '21) Major: Electrical and **Computer Engineering** Nicholas Spano (B.Arch. '21) Major: Architecture Jessica M. Velez (D.P.T. '21) Major: Physical Therapy Mikayla Klemm (B.S. '21) Major: Business Administration—Accounting

# **3,000+** in the Class of 2021

**36** %

graduates earned undergraduate degrees 64 % received graduate,

doctoral, and advanced certification degrees

# **3.40** is the average undergraduate GPA

**3.65** is the average graduate GPA

**68** 

students are graduating with minors this year (top minor is math, 2nd is psychology).



**60** age of the oldest undergraduate student

# 19

age of the youngest undergraduate student

**65** age of the oldest graduate candidate

**21** age of the youngest graduate candidate



Graduates represent **37** states and **67** countries

#### Sciences student orator **Rozina Vavetsi, M.Sc**. Chair of Digital Art and Design

FROM THE LEFT: Hank Foley, Ph.D.

New York Tech President **Dominica Jamir (M.A. '21)** College of Arts and





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In the past, people believed it rained frogs, the earth was flat, and lambs could be grown on trees. We laugh at such absurd thoughts, but today, more than any other time in recent history, the general public distrusts science. Recently, the mistrust has grown exponentially. The interesting dichotomy: We live surrounded by technology made possible by scientific advancement. Communication devices that fit in our hands were science fiction a few decades ago. Science has enabled people to live healthier lives, and polio and HIV are no longer a death sentence.



How is it that we embrace some conclusions science offers but not others? The polio vaccine developed in the 1960s largely eradicated the disease, but today many hesitate to accept COVID-19 vaccines. Scientists have been studying the environment and the impact of human's activities for years, yet climate change remains controversial.

#### Should We Trust in Science?

"We should trust in the process of science," notes Navin Pokala, Ph.D., assistant professor of biological and chemical sciences. Science, by its very definition, is built upon evidence. Because of this, Pokala explains, science is self-correcting. "Science is a very adversarial and competitive field. Every theory put forth is subject to intense scrutiny and competition. For theories to survive, they must be repeatable and backed up with evidence."

If scientific theories only become fact when supported by evidence, why are so many people questioning that data?



#### **Reasons for Distrust**

"The contributing factors to the lack of trust in science, and data in general, can be attributed to the confrontation between politics and science, the compartmentalization of news and information sources, a lack of objectivity and critical thinking," says Babak Beheshti, Ph.D., dean of the College of Engineering and Computing Sciences.

When political leaders openly deny scientific findings, an erosion of public trust in science and data-driven conclusions occur, notes Beheshti. "Leading examples include the political divide on global warming, efficacy, and reliability of non-fossil fuel energy technologies (such as wind and solar), and COVID-19's impact on public health."

A 2019 Pew research study found that public confidence in scientists and how the public views the value and objectivity of scientists is divided along party lines.

In addition, the trend to source news information online, particularly with social media platforms, is triggering wide distribution of disinformation and causing negative psychological impacts for users, according to Melissa Huey, Ph.D., assistant professor of behavioral sciences. She is studying how the Internet, particularly social media, impacts the development of young adults.

"Surveys of my students reveal they are sourcing news primarily from Twitter and YouTube, leading to an increase in anxiety surrounding COVID-19 but not an increase in knowledge about the virus. More time spent online, reading and listening to non-vetted news sources, are resulting in emotional and peripheral processing of information, leading to emotional and opinion-based reactions," Huey says. "The lack of data and the prevalence of presenting one side of issues enables everyone to create their own reality."

According to a 2020 Pew study, 42 percent of Americans aged 18 to 29 source their news information from social media. Huey points out that "there is a detrimental physiological and psychological component, increased depression and decreased selfesteem, with extensive use of social media. Interestingly, extended use of these platforms mirrors an addiction due to a release of dopamine."

The vast amount of information available in today's technology age is circumventing the role of journalists, who traditionally are accountable and responsible for verifying information relayed to the public. "Everyone now has a wide-reaching platform to express their views. This democratization of information flow has many positive outcomes but also results in a two-pronged problem," states Beheshti. "There is an absence of accountability for distributing falsehoods, and individuals subscribe to information that aligns with their personal views, reinforcing almost a complete absence of exposure to opposite points of view."

During the 2009 H1N1 swine flu pandemic, when social media was in its infancy, public health information was disseminated primarily on radio, television, and in print by physicians and elected officials, notes **Humayun Chaudhry (D.O. '91)**, who was serving as health commissioner of New York's Suffolk County at the time. "Social media, while helpful at times, has also been the source of significant misinformation and disinformation related to COVID-19. Misinformation spreads quickly, competing against and sometimes drowning out the

# 42%

of Americans aged 18 to 29 source their news information from social media



"The lack of data and the prevalence of presenting one side of issues enables everyone to create their own reality."

-Melissa Huey, Ph.D., assistant professor of behavioral sciences



"The role of an architect is largely to put together puzzles. I look for ways to graphically represent problems and solve them through design. My goal is to create an architectural firm that has climate adaptability as the overarching influence in our design and planning services."

> –Daniel Horn, AIA (B. Arch. '13), architect

information shared by physicians and scientists," Chaudhry says.

Some of the lack of trust lies in individuals wanting absolute, black-and-white answers. Due to the scope and severity of COVID-19, scientists have an obligation to put forth current theories about protection and prevention, which will change over time. "Guidance changes as we learn. This is normal in public health," says Chaudhry, currently CEO of the Federation of State Medical Boards (FSMB). Because the COVID-19 infections had never been seen before, everyone was learning on the fly and very quickly. Typically, in science and medicine, changes in guidance happen at a slower pace with less dire circumstances, notes Chaudhry.

During the pandemic, the scientific process is playing out in front of the public rather than being debated among scientists. "It can be disconcerting to see the scientific process at work," Pokala points out.

#### Overcoming Distrust in Science

Not surprisingly, when scientific views on a subject do not seem to reveal identical conclusions, and government and community leaders express opposing views on the subject, the theory is often dismissed and data ignored. Climate change is one such subject that is often misunderstood and disbelieved.

Although science supports the fact that our climate is warming, people are skeptical, says Cecilia Dong, Ph.D., associate professor of electrical and computer engineering. Dong's research on the interactions between food, energy, and water brings forth these issues' interconnectedness, but this complexity makes the information challenging to digest. "Further exacerbated by climate change, the issues of water contamination and scarcity, soil degradation, and the lack of transparency in our food systems foreshadow a problem with producing sufficient food for a growing world population and an impeding security issue associated with competing for limited natural resources," she says.

Unless people experience impacts of climate change personally, such as higher energy and insurance bills and food insecurity, they tend to ignore the science, notes Dong. Living through Hurricane Sandy forever changed architect Daniel Horn, AIA (B. Arch. '13). Committed to bringing environmental awareness to the building sector that can overcome the impacts of climate change, Horn and his partner began Operation Resilient Living and Innovation (ORLI+), a resilient architecture design consultancy based in New York City that works at the intersection of community empowerment, advocacy, and resilience. They also focus on community-building workshops, helping professionals connect with and learn about the community's priorities. "The role of an architect is largely to put together puzzles. I look for ways to graphically represent problems and solve them through design. My goal is to create an architectural firm that has climate adaptability as the overarching influence in our design and planning services," Horn says.

#### Science's Challenge— Present Information Appropriately

The challenge of every scientist and scientifically proven theory is to present information that garners understanding and action.

Horn's experience assessing damage to homes impacted by Hurricane Sandy proves that language matters. "FEMA [Federal Emergency Management Agency] and insurance companies use terms like 'one in 100-year flood' giving individuals a false sense of security that they will not be subject to a similar weather-related event in the future." Horn and Dong agree that data does not adequately represent the impacts of climate change. Hence, the way information is presented needs to change.

"Visual presentation and storytelling enable facts to become personal, which are more likely to empower action," says Horn. Chaudhry concurs, saying, "The correct balance between alarm and apathy is critical in conveying information to the public."

#### **Restoring Trust**

How do we overcome political polarization, cultural biases, the tendency to believe news and information from questionable sources? Education is a large part of the answer.

Everyone who holds a health-related degree has a responsibility as a represen-

tative for the entire medical community, Chaudhry believes. This responsibility includes staying up-to-date on the latest information and practicing evidence-based medicine. The FSMB supports America's state medical boards in licensing, disciplining, and regulating licensed healthcare professionals with the goal of keeping patients safe. "The state medical boards worked with the FSMB to take a firm stance during the pandemic to ensure every licensed medical professional follows current health guidelines to ensure public safety."

In addition to reliable medical professionals, we need to teach people how to have conversations and to discern fact from fiction, says Huey. Without facts, all discussions become emotionally based and personal, which supports division. Educating individuals on the fundamental process of how research is conducted make them aware of the difference between opinions.

In November 2020, Nada Anid, Ph.D., vice president of strategic communications and external affairs, chaired AIChE's Public Affairs and Information Committee (PAIC) Town Hall meeting where the importance of data and facts sharing to gain public trust was discussed. She spoke with Allesandro Vespignani, Sternberg Family distinguished university professor of physics, computer science and health sciences at Northeastern University, who noted, "It's extremely important that policymakers really have a consistent and coherent message for the public. We should all have data and numerical literacy so that the public can acquire the information and make the best judgment based on that....It doesn't mean everyone has to be a scientist, [but the public needs] to have the best capacity to read the world around us."

#### Distinguishing Between Opinion and Fact

"There is a clear distinction in science between conjecture and conclusion. Any scientific conclusion must be based on experimental or analytical proof," says Beheshti. "Science by definition is objective, therefore far less susceptible to cultural nuances and interpretation. A capable individual can manipulate data and research to arrive at a desired conclusion. The more we build checks and balances in the scientific and research community to safeguard against such misconduct, the more we will build trust between the public and science."

Pokala, Dong, and Huey emphasize critical thinking skills in their curriculum, creating lessons that highlight the history behind scientific conclusions and teach how to interpret data. Classroom opportunities exist to design experiments, allowing students to produce explanations that prove or disprove theories.

"Basic knowledge gives you an available box of tools, but critical thinking skills enable you to approach and solve any problem in your career and life. Students will forget the details of genetics and biochemistry lessons. Teaching them the mechanics of how to approach and solve a problem is a skill they will use forever," believes Pokala.

#### <u>The Role of</u> <u>STEM and Higher</u> <u>Education</u>

Science has brought us into the 21st century with incredible advancements in energy, communication, technology, and health. Built into the scientific process are checks and balances that ensure the final results are trustworthy.

"The very essential principle of reliance on truth is the foundation of all science, technology, engineering, and mathematics (STEM) disciplines. STEM education can indoctrinate this inherent commitment to truth in the minds of the next generation," notes Beheshti.

The barrage of available information will no doubt continue and intensify, and individuals can easily sink into an Internet swirling with opinions and facts. The physiological and psychological impacts of social media and the Internet predispose us to bias and polarization, altering reality to a onesided view of issues and the world. Teaching critical thinking skills and exposing everyone to a transparent, repeatable scientific process are ways educators can support and help individuals rise above the torrent of conflicting information to separate falsehoods, conjecture, and opinion from the truth and restore the public's trust in science.



BY RENÉE GEARHART LEVY



AS A NEW TRANSFER STUDENT TO NEW YORK TECH'S MANHATTAN CAMPUS IN FALL 2019, **SHWETHA JAYARAJ (B.S.** '**21)** WAS HAPPILY SURPRISED TO LEARN ABOUT THE UNIVERSITY'S PARTICIPATION IN THE NATIONAL FIRST-GENERATION COLLEGE CELEBRATION DAY. "WHILE IT'S COMMON FOR COLLEGES TO SUPPORT THE CHALLENGES OF WOMEN, LGBTQ STUDENTS, OR STUDENTS OF COLOR, I APPRECIATED THAT THEY RECOGNIZED AND ACKNOWLEDGED THE STRUGGLES OF FIRST-GENERATION STUDENTS," SHE SAYS.

The oldest child of Indian immigrant parents, Jayaraj has grappled with her parents' strict expectations—including not wanting her to go away for school—while also appreciating their support and the work ethic they instilled.

Jayaraj shared her experiences as a panelist during <u>"I'm First! Sharing</u>. <u>First-Generation Experiences</u>," one of the first programs sponsored by New York Tech's First-Gen Taskforce. Created in summer 2019, the group provides programs and resources to support first-generation students in their success toward a college degree.

According to 24/7 Wall St., New York Tech has one of the most diverse student populations in the United States, with students representing 90 countries. A quarter of the university's students identify themselves as the first in their families to attend college. And New York Tech extends the definition of "first-gen" to include students who are the first generation in their family to become U.S. citizens or students whose parents immigrated to the United States, with or without college degrees.

That's where the need for extra support comes in. "A lot of our students don't come from homes where the parents know how to navigate the college ecosystem," says Francine Glazer, Ph.D., associate provost and founding director of the New York Tech <u>Center for Teaching</u> and <u>Learning</u>. These students may or may not be among the neediest in terms of academics or finances, but they almost universally tend to lack information about opportunities and processes.

#### **Anticipating Students' Needs**

At all of its campuses, New York Tech is galvanizing efforts to engage and support first-generation students, in essence, to help provide them with the information that they may not even be aware of.

Vasiliki Sgourdou (M.A. '17) came to New York Tech from Greece and spent her first year figuring out the higher ed system in America. Neither of her parents attended college, and although she earned an undergraduate degree from Ionian University in Corfu, the European educational system is completely different. "I asked for help wherever and whenever I had the chance," she recalls.

As a first-generation college student herself, Tiffani Blake, M.Ed., assistant provost for student engagement and development, understands the challenges of navigating the system. Since joining New York Tech, she has made support for first-gen students a priority. One of the first steps was the formation of the First-Gen Taskforce. "Our goal is to proactively engage this student population and connect them with resources and information rather than focus on interventions after students are having problems," she says.

In addition to linking up with the organization <u>I'm</u>. <u>First</u> to hold the National First-Generation College Celebration Day, the Taskforce established a <u>First-Gen</u> <u>web page</u>, a one-stop repository of links to student support services ranging from financial aid to resources for DACA and international students, along with practical tools such as a GPA calculator. Ongoing programming includes sessions focused on paying for college, academic resources, and making the most of the college experience.

"It is a collaborative effort because we realize it takes a holistic approach to support these students," Blake says.

#### **First Step: Admissions**

"This year, we really ramped up our efforts to support first-gen students by assigning designated points of contact in admissions, in financial aid, and in the bursar's office," says Karen Vahey, Ed.D., dean of admissions and financial aid and a member of the First-Gen Taskforce. "We're letting students know, 'If you're first-generation and you have questions, this is who you should talk to."

The university is also streamlining requirements to make the admissions and financial aid application processes as easy as possible for students who may be doing it on their own. That starts with waiving the application fee for first-generation students. The admissions office also allows students to self-report their SAT/ACT scores instead of requiring an official report. "Those cost money," says Vahey. "If the student is admitted and chooses to attend, then we'll need the official report, but we're no longer requiring them to spend that money before then."

The university has also moved to a test-optional policy. "We're really trying to remove all barriers to apply," she says.

To further assist the students, the Offices of Admissions and Financial Aid host virtual information sessions designed to walk students through the process of applying for admission and for completing the Free Application for Federal Student Aid (FAFSA). Vahey says they also work on an individual basis with students and their high school guidance counselors based on a student's circumstances.

For Vahey, the work is personal. Like Blake, she was a first-generation college student. "When I was in college,

I always felt like there was this hidden curriculum, stuff that my classmates knew that I just didn't," she says. "It was a source of anxiety. So, if I can, I want to provide resources to remove that anxiety for students or to let them know we can figure it out together."

#### **Supporting Student Success**

Once admitted, students benefit from a gamut of programs and support systems that, while designed for the general student body, can be specifically helpful to those students who aren't receiving college guidance at home.

One of those initiatives is <u>Achieving Collegiate</u> <u>Excellence (ACE)</u>. Piloted in 2019, the program was developed as a result of the Student Success Taskforce created by Junius Gonzales, M.D., M.B.A., provost and vice president of academic affairs. The goal of the program is to provide academic support for students struggling to meet the GPA requirements of their academic scholarships. And while not aimed specifically at first-generation students, some elements have been developed with those students in mind.

ACE includes three components: an academic coach typically from the student's major area of study, tutoring and academic skills development, and a self-guided online success course that includes both required and elective modules based on the student's needs.

One of the optional success course modules is a guide to academic requirements, essentially a primer on college basics. "It goes over a lot of terms that many of us take for granted but aren't common knowledge for everyone," says Kristen Smith, Ed.D., registrar and a member of the Student Success Taskforce who helped lead the program. "That includes explanations of what a GPA is, how it's calculated, and what credit hours are.

"The goal is for students to be successful, which means continuing to stay in school and graduating," says Smith. "Our data shows that students who complete ACE complete more credits and have a higher GPA."

#### **Developing Skills for the Workplace**

The Office of Experiential Education "works to get the New York Tech community civically, electorally, and politically engaged," says Senior Director Amy Bravo, M.A. "We help students identify the skills they need to be effective and then provide different types of opportunities for them to develop those skills."

There's a lot of one-on-one. "More important than our programs or services is our approach," says Bravo.



▲ The goal of the First-Gen Taskforce is to proactively engage with students and connect them with resources and information.

"We really take the time to get to know students as individuals and ask questions about their experience."

It's not uncommon, particularly among first-generation students, to find that they've chosen a major at the preference of their parents, thinking it will lead to a lucrative career. "But when the student may not even like the field, that creates a lot of pressure and stress," says Bravo. "By having that knowledge, we can work with students based on their individual situation."

#### **Calm and Connected**

Bravo and her staff freely give students their cell numbers. "I've had students text me that they can't come back to school because their family can't afford it. And because they reached out to me, I could point them to different types of opportunities that maybe they didn't know about."

Those personal touchpoints can make all the difference. Jayaraj spent three years living at home in Connecticut while commuting to her nearby state university. She was itching to spread her wings and began exploring schools in New York City.

She found the perfect fit with the interdisciplinary studies program. She met with an academic advisor and received the guidance she needed to complete the admissions application and FAFSA on her own.

Despite being resistant, Jayaraj's parents accompanied her to an accepted students' orientation program. Blake sat down with the family and talked them through their concerns. "It calmed them down and really made all the difference," she says.

Jayaraj received a bachelor's degree in interdisciplinary studies, with concentrations in computer science, social sciences, and technology in spring 2021. Even her parents came around. "Living at home again during the height of the pandemic, I think they could see how much I'd grown," she says. "I couldn't imagine doing this without their approval or support, and I thank New York Tech for that."

At the "I'm First: Sharing First-Generation Experiences" panel discussion, first-gen students Christopher Garzon and Shwetha Jayaraj, as well as Karen Vahey and Tiffani Blake, who led the talk, spoke about the challenges students encounter, including acclimating to college schedules and workloads and introducing the college student lifestyle to their families.





**BEFORE BUZZ AND WOODY**, before Sully and Mike, there was Alvy and Ed, two of the original members of the New York Institute of Technology Computer Graphics Laboratory (CGL). Alvy Ray Smith and Ed Catmull—whose pioneering techniques were born in Gerry House, the "pink building" on the Long Island campus—were among the young computer graphics geniuses who helped make animation what it is today. A long-standing point of pride for New York Tech, their CGL innovations eventually led to the creation of the Pixar powerhouse that forever changed animation.

Ed Emshwiller and Alvy Ray Smith at New York Tech circa 1979.





COURTESY OF ALVY RAY SMITH





## BY DIANE DIPIERO



IT ALL BEGAN in 1974 with an idea proposed by New York Tech founder Alexander Schure. His dream was to make the first computer-assisted animated movie using off-the-shelf, state-of-the-art minicomputers from Digital Equipment Corporation, known as PDP and VAX computers, which were designed for use in laboratories and research institutions.

Schure enlisted the help of Catmull, a recent graduate of the University of Utah's advanced computer graphics department. While still a graduate student there, he had discovered how to bring computer-generated graphics to life using texture mapping and bicubic patches and had invented algorithms for spatial anti-aliasing and refining subdivision services. Schure reached out to Catmull, who was working at Applicon in Boston at the time, and lured him to Long Island and the CGL.

Schure soon recruited other talent to join the CGL team. "I met Ed when I found my way to New York Tech. I had already talked my way in with Schure, and when Ed told me what he was doing, I said, 'You need help, don't you?' He said enthusiastically, 'Yes!'" recalls Smith, and they set forth on their goal to create a completely computer-generated film.

"Almost everything we touched at 'The Lab,' as we called it, was a first," Smith recalled in a 2003 interview with NYIT Magazine. Their breakthrough discoveries included:

#### **Breakthrough Discoveries**

- An RGB paint program, created by Smith, using the world's first RGB framebuffers
- Soft-edged fill, also a Smith creation
- Tween animation, which Catmull created
- Computer-controlled video editing
- TV commercial with raster graphics
- Pixel dissolve
- Networked computer system
- Hidden surface algorithm within a pixel, created by Catmull
- Mipmapping
- Scan-and-paint

"The CGL quickly attracted other technology experts and artists, including Christy Barton, Tom Duff, Lance Williams, Fred Parke, Garland Stern, Ralph Guggenheim, Ed Emshwiller, and many others. Throughout the 1970s, the people of the CGL thrived in a pioneering spirit, creating milestones in many areas of graphic software. Many of the firsts that happened at New York Tech were based on the development of the first RGB full-color (24bit) raster graphics.

"The atmosphere at the CGL was also very open, with many invited tours coming through the lab all year-round. Other universities like Cornell, and companies such as Quantel, were among those to visit and take notes about what was being developed. The personnel structure was virtually nonexistent, with never any heavyhanded management from Dr. Catmull. People did what they were best at and helped each other out whenever needed."

#### TO INFINITY AND BEYOND

As the team worked on projects and developed new techniques, they also hit a few bumps in the road, including the release of Schure's animated musical comedy, Tubby the Tuba, in 1975. Inspired by his desire to compete with Disney films, Schure wanted to make a movie using computers, but in the end, Tubby the Tuba was made at New York Tech using traditional animation. That actually pleased the CGL designers who sat through the finished film. "It was awful, it was terrible, half the audience fell asleep at the screening," Catmull once recalled. "We walked out of the room thinking, 'Thank God we didn't have anything to do with it, that computers were not used for anything in that movie!""

In 1979, Lance Williams presented another idea for a movie. The CGL group began work on The Works, which centered around a robot, Ipso Facto, and a young female pilot named T-Square. Throughout the development of the

"We were responsible for the first alpha channel—which means that we added transparency to the basic color pixel," Smith noted in the same interview. "The list goes on and on. Oh, and it was also the first concerted effort to have artists work with technologists."

#### A COLLABORATIVE SPIRIT

Soon they were joined by other tech-minded gurus hungry to do something novel. Together, the group charted new territory, paving the way for an increasing number of computer graphics and animation specialists.

In the computer graphics history book CG 101: A Computer Graphics Industry Reference, CGL alumni Paul Heckbert and Smith recalled the collaborative spirit of New York Tech:



film, new computer graphics breakthroughs just kept on coming, and the pink building buzzed with activity and excitement through the mid-1970s and into the early 1980s. In this incubator of innovation, computer graphics wizards honed their craft with the underlying goal of finishing *The Works*. However, "the roadblock was the technology available. Computers at the time were slow and simply didn't have the processing power required to create the number of images they needed for a 90-minute film," according to <u>Film Stories</u>. By the mid-1980s, the film was shelved. Had it been completed as scheduled, it would have been the first CGI movie ever made.

It was only a matter of time until the talent housed in the CGL was tapped to launch new dimensions in animation on a worldwide scale. Catmull and Smith were lured away from the CGL to Lucasfilm Ltd. to head its new computer graphics division. George Lucas, of *Star Wars* fame, had created the company to launch exciting new endeavors in film graphics. Some of their CGL colleagues left with them or soon afterward, and some joined them in later years.

And while the progress they made at the CGL helped launch their careers, it was just the start of computer animation as we know it today. Smith's first hand at directing at Lucasfilm was *The Adventures of André & Wally B*. The 1984 short film introduced filmgoers to computer animation using techniques gestated and born at the CGL. And it was unlike anything anyone had ever seen: motion blur in CG animation; complex 3-D backgrounds featuring lighting and colors using particle systems; manipulatable shapes that could stretch and contract, creating realistic visuals. And despite all this complexity, *The Adventures of André & Wally B* stunned viewers with its impressive and seamless effects. The founding members of the CGL may have left *The Works* behind on the cutting room floor, but what they began on the New York Tech campus became the seeds of the graphic animations we now take for granted.

When Pixar spun out of Lucasfilm in 1986, it had financial backing from Steve Jobs, and its co-founders were Catmull and Smith. At Pixar, animation was continuously designed, perfected, and reimagined, and in 1995, *Toy Story* was released. Bringing beloved toys to life, much like they would appear to a young child, the film delighted moviegoers. Audiences wanted more, and they got it. *A Bug's Life, Monsters, Inc., Finding Nemo, Cars, Up,* and *Inside Out* are among the films created and produced by Pixar by many former members of the CGL.

The developments inside the pink building on the Long Island campus have been featured in countless television shows and movies through the years. Reflection mapping, developed by CGL members Gene Miller, Lance Williams, and Michael Chou, was used to enhance shiny objects in the movies *Terminator* and *The Abyss*. Smith's 24-bit paint program influenced the paint system at Lucasfilm and was used by the artist LeRoy Nieman in 1978 for his interactive painting during Super Bowl XII. And even though *The Works* was never finished, the film is regarded as an important first in computer animation.

As Buzz says in *Toy Story*, it was "to infinity and beyond" for New York Tech's Computer Graphics Lab as the innovation born on the Long Island campus has inspired young and old and will be felt for generations to come.  LEFT TO RIGHT: The Lucasfilm group circa 1984; students in the 3-D motion capture studio on the Long Island campus; sample of a computer graphic rendering.

"We were responsible for the first alpha channel which means that we added transparency to the basic color pixel. The list goes on and on. Oh, and it was also the first concerted effort to have artists work with technologists."

-ALVY RAY SMITH



# REINVENTING OUR FUTURE

#### BY MICHAEL SCHIAVETTA (M.A. '07)



While COVID-19 slowed many of New York Tech's strategic plans in 2020, the university is picking up up the pace, developing its three-year strategic action plan. Investments have already been made in facilities and essential maintenance as well as the implementation of new learning management software systems and the creation of Academic Technology Services to ease into an online, remote, and hybrid teaching model. And this is only the beginning.

In a virtual conversation, President Hank Foley, Ph.D.; Chief Operating Officer and Executive Vice President Jerry Balentine, D.O.; and Provost and Vice President for Academic Affairs Junius Gonzales, M.D., M.B.A., discuss the impact of COVID-19, the university's response to the pandemic, and how alumni can play a critical role in the future of New York Tech.

#### How has the COVID-19 pandemic impacted New York Tech's mission and vision, as well as its strategic planning process?

Hank Foley (HF): Our mission remains the same: to provide career-oriented pro-

fessional education, provide all qualified students access to opportunity, and support research and scholarship that benefit the larger world. Our vision has not changed and includes being the very best polytechnic that we can be while adding more active research opportunities along with a more enhanced student experience. What has changed is the timing of our approach to strategic planning. The COVID-19 pandemic greatly impacted how fast we could progress. However, it will allow us to emerge from this crisis leaner, stronger, and better adapted to the future.

Jerry Balentine (JB): The mission and vision of an organization is its backbone. Though it can change over time—especially during a turbulent time—it is important to remember the mission and vision while you make decisions. Therefore, in many ways, it has strengthened our resolve to stay true to both.

Junius Gonzales (JG): We decided on a three-year strategic action plan. The response from a large number of participants across the steering committee, action teams, and other groups has been exceedingly positive.

#### Has COVID-19 accelerated any decisions regarding academics, campus investments, online learning, and other areas?

**JB:** Many plans look 10 or even 20 years ahead, but with the sudden impact of the pandemic and the changed landscape everywhere—coupled with the unpredictable nature of the next few years—we felt the strategic plan timing had to be shorter and the plan more goal oriented.

JG: The vision for New York Tech to enhance its reputation and recognition continues, especially with a focus on supporting talented faculty in their scholarship and research. In fact, there was a 38 percent increase in the number of proposals for external funding during the pandemic.

**HF:** It has made us more efficient. Our investments in facilities, particularly at the Long Island campus, are focused on essential maintenance and repairs to fast-track

the safety of our community. It has also confirmed that online, remote, and blended teaching (combining virtual and in-person learning) will be a strong component of higher education going forward.

#### What investments has New York Tech made in the past year to enhance the student experience?

**HF:** A healthy, cooperative partnership arose among our IT [information technology], facilities, and faculty that reinvented our classrooms into "broadcast" locations. We have invested in better learning management software systems and other technologies. We expect all of this to result in a transformative, state-of-the-art student experience with more courses that are better delivered and more resources for teaching and learning.

JB: It was important to re-examine how our buildings impact the student experience in areas such as health and safety and accessibility. We determined if we needed to upgrade airflow and ventilation systems. On the accessibility front, we needed to provide a different kind of space for our students to be able to access WiFi effortlessly to participate in classes, should they have difficulty doing so at home, as well as study spaces that prevent them from being interrupted.

JG: The pandemic necessitated investments in contemporary technologies. We partnered with Everspring to develop highquality blended versions of courses that offer engaging, interactive teaching tools. In addition, we formed a partnership with Zscaler through which alumni and students can earn certification in cybersecurity solutions. We are also offering a Python programming workshop tailored to women, single parents, and caregivers.

#### What role will our alumni play as New York Tech reinvents itself in the post-pandemic world?

JB: Our alumni are a great resource for our students. Making themselves available as mentors to discuss career choices, life experiences, and shared experiences is essential. This could range from a Zoom call to a long-term mentoring experience. But their role can go beyond that. When their company has a job opening, we hope New York Tech alumni let us know so we can help find an ideal candidate from their alma mater. Alumni are also among the best ambassadors for New York Tech, advocating for fellow graduates and students to help them succeed.

**HF**: We want to build a more connected alumni network that supports each other and our students through career networking and mentoring. Of course, we also encourage alumni to support New York Tech through philanthropic endeavors like the Big Give. All of this is critical to our future.

#### What will New York Tech's "footprint" look like in the coming years?

**HF**: We will still be in New York City and Old Westbury, but we may also have locations in White Plains and Suffolk County. New York Tech will continue the medical school program in Jonesboro, Ark., and grow our campus in Vancouver.

JB: We will expand our online presence significantly and, just as important, our hybrid offerings. I would imagine that nearly all classes that are not fully remote will have a combination of in-person and online components.

JG: New partnerships are also critical for example, working with organizations that develop content where we lack expertise. The pandemic has forced every institution of higher education to deliver digital learning; the challenge is how to make New York Tech's offerings stand out. We have a new working group on emergent technologies such as virtual and augmented reality to convene experts and galvanize our efforts in these areas.

The pandemic has taught us that flexibility and agility are key in responding to the needs of students. We will continue to increase resources for faculty to move beyond Zoom for remote instruction. Future expectations will be higher and different. Today's high school students have had the COVID-19 school experience. They will want things to be fresh and different when they enter college. New York Tech will lead that effort.



## Daisy Expósito-Ulla (B.F.A. '75)

When Daisy Expósito-Ulla realized there was very little communication—in Spanish—around the COVID-19 pandemic within Latino communities in the United States, she felt an urge to do something. Utilizing her advertising agency, d expósito & Partners, she created and funded a multichannel public service announcement campaign, Lucha vs. Virus, to reach the Hispanic community and raise awareness. It was inspired by the pomp of "lucha libre," or Mexican wrestling, and the sport's use of masks.

Arriving in the United States at the age of 10, Expósito-Ulla has always been in touch with her Cuban heritage. Over time, her connection to Latino culture broadened, stretching across all Hispanic subsegments. She also expanded her portfolio of successful ad campaigns targeted toward Hispanics, serving clients like Amica Mutual Insurance, AARP, McDonald's, the NBA, Tajín Mexican Seasoning, the U.S. Army, and many more.

Expósito-Ulla graduated magna cum laude from New York Tech's communication arts program, acquiring the tools she would need while studying at the New York City campus. "This nice girl from Queens made it to Manhattan," she says. "I loved the experience. It wasn't too big. It wasn't too small. It was just right."

Always fascinated with television, Expósito-Ulla would trek into Manhattan as a teen to watch live tapings of *The Dick Cavett Show* or grab tickets to *The Merv Griffin Show*. Post graduation, she became an associate producer at PBS, overseeing the network's first Latino series and profiling different communities around the United States. "That

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New York Tech graduates are going places. Every issue we look at alumni that are making an impact in their work, their communities, and beyond. Read on to find out the ways your fellow Bears are doing, making, innovating, and reinventing the future. experience awakened a sense of identity in me," she says. "I saw beyond the Cuban experience and gained a better understanding of how other Latinos were living in the U.S."

Later, Expósito-Ulla leveraged her PBS experience to pursue a career in advertising, working for WPP's Young & Rubicam/The Bravo Group for 24 years. Today, she is CEO of d expósito & Partners LLC, an award-winning, full-service multicultural communications firm.

Expósito-Ulla, a member of the Advertising Hall of Fame, is a recipient of the New York Women in Communications' Matrix Award and is on the board of the Association of National Advertisers' Educational Foundation.

Still thrilled by a "great campaign," Expósito-Ulla is fascinated by why people react to a certain message or need. When COVID-19 hit, she says, many of her priorities shifted. "I always did well because I was passionate about what I was doing versus being driven by personal, monetary gain. Years would go by, and I was doing what I loved and what I thought was the right thing to do. Now, we all have to become less focused on material things and place more emphasis on deeper, meaningful love and empathy."

## **Domenick Chieco**

#### (B.S.A.T. '89)

Born into a construction family in the Greenpoint section of Brooklyn, N.Y., Domenick Chieco's father, Tommaso, introduced him to the industry at a young age, and he spent many summers working with him on construction projects.

"I had a passion for creating and building all my life," says Chieco. "When I graduated from Xavier High School, architecture seemed like a natural path forward."

Chieco grew up in a close-knit Italian family. "When I look back at my life, going away to college was not an option, and I made the most of my opportunity," he says. Chieco landed at the School of Architecture and Design in nearby Long Island. As a student, he constantly challenged himself by working at a prominent architectural firm, making the Dean's List with honors, then taking on a full-time job at the firm Roth and Sons while finishing his studies.

After joining Milrose Consultants in 1989, he dedicated himself to building the company into a regional partner to many of New York City's leading businesses and institutions, and in 2019, he was promoted to CEO. For the past 15 years, he has served as chair of the FRIENDS of the School of Architecture and Design, something he says is very close to his heart. "I wanted to give back to the place that gave me the opportunity to be who I am today from a business perspective," says Chieco, who at Milrose has also hired several New York Tech graduates over the years. "Through the educational experience I gained in architecture and the collaborative nature of the design community, we have been able to mentor many young people and build for the future."

Chieco has remained active at his alma mater through the years. He is a founding member of the New York Tech President's Forum. In 2015, he created an endowed scholarship fund in honor of his parents. In 2021, the fund was redesignated to establish the Tommaso and Franca Chieco Dean's Atelier Studio, a program that engages world-renowned architectural professionals with high-achieving School of Architecture and Design students.

Continuing to be an ambassador for New York Tech, Chieco admits that he still loves what he does. "I love what I do and what Milrose does," he says. "It's an opportunity to create beautiful places for people to live, work, and play. Our organization participates in redefining the city skyline every day, and there's no better opportunity in the world."



# ALUMNI SPOTLIGHT \_\_\_\_

#### Jiawen (Mani) Huang

#### (M.S. '20)

When Jiawen (Mani) Huang graduated from the physician assistant studies (PA) program in 2020, she had already been offered a position at New York-Presbyterian—Queens Emergency Department. By the fall of 2020, Huang was thrust into emergency patient care amid the COVID-19 pandemic.

Today, she works with up to 12 patients per day, most of whom are in dire condition. "I started working in October, then the second wave came by December," says Huang. "The first month was very overwhelming. One day, I saw at least three patients getting intubated. They went into respiratory failure, and it broke my heart."

Having served in the U.S. Army, Huang gained firsthand experience in surgical procedures and first-line emergency care as a medical team leader stationed at



Fort Drum in upstate New York. "It was really lifechanging," says Huang, who initially graduated with a degree in chemistry before switching to healthcare. "I went into the army after college, and I just didn't know what I wanted to do. That experience prepared me for everything after."

Raised in mainland China, Huang and her family moved to the San Francisco Bay Area. After joining the army in 2013, she served on the East Coast and worked as a medic in a combat engineering unit. By 2017, she transitioned into the PA program at New York Tech. "I would have continued to serve if I did not get into PA school, but life took me to New York Tech," says Huang.

The school's Yellow Ribbon Program, which provides veterans with funding for education, attracted Huang to the university. When she first arrived in the United States, it was a culture shock. When she joined the army, she began to learn from others. "In the army, life is so simple," says Huang. "I learned so much about the culture, of interpersonal relationships, and how life works. This experience makes me feel PA school was not as stressful as it is for many people."

In 2019, she and her classmates took first place in an American Academy of Physician Assistants ultrasound competition. "It was an awesome experience and the best decision I ever made," says Huang. The skills she learned, including making quicker diagnosis and treatment plans, help her today at New York-Presbyterian.

"We did have to put in the extra effort—after school, studying and practicing ultrasound, then all the questions that could be asked in the competition, while preparing for our exams at the same time," says Huang. "It was hard, but together we were a cohesive team. We wanted to be the first, and we made it there."

Still working in the midst of the pandemic, Huang admits to feeling burned out from the coronavirus but insists she will always thrive in emergency care.

#### Kyriacos Athens Athanasiou

#### (B.S. '84)

When he graduated with a Bachelor of Science in Mechanical Engineering in 1984, Kyriacos Athens Athanasiou, Ph.D., was only beginning to dream of where his focus and field might take him. In the years since, he has become one of the world's foremost thinkers, inventors, and leaders in the world of biomedical engineering. In



October 2020, he was elected to the National Academy of Medicine (NAM), one of the highest distinctions awarded to professionals in the medical sciences, healthcare, and public health.

According to NAM, Athanasiou was inducted "for inventing, developing, and translating technologies, such as articular cartilage implants and methods for intraosseous infusion, that impact several biomedical fields, including orthopedics, maxillofacial surgery, tissue engineering, diabetes, and emergency care."

Athanasiou has a remarkable list of accomplishments. In addition to being a distinguished professor of biomedical engineering at the University of California, Irvine (UCI), he is the holder of the Henry Samueli Endowed Chair and the head of Driving Engineering & Life-science Translational Advances @ Irvine. He has served as the president of the Biomedical Engineering Society and is a fellow of the American Association for the Advancement of Science, the American Institute for Mechanical Engineers, and the American Institute for Medical and Biological Engineering. In 2014, he was inducted into the National Academy of Inventors.

"I am honored to have been elected a member of the National Academy of Medicine," said Athanasiou. "The recognition, which would not have been possible without the contributions of my students and colleagues at UCI and other institutions throughout my career, highlights the importance of developing a fundamental understanding of the key engineering principles that govern the human body, inventing new ways to treat acquired and congenital defects, and translating those innovations to help improve the human condition."

The goal of improving the human condition, combined with expertise and imagination, has led Athanasiou to develop technologies to address many medical issues. He is perhaps best known for inventing implants that help cartilage heal and repair itself. He and his team pioneered a revolutionary intraosseous infusion device allowing drugs and other vital substances to be delivered directly through bones. The technology is not only implemented by emergency response and ambulance teams around the world, but it has also captured the attention of pop culturists, having been featured on television shows including *ER* and *Grey's Anatomy*.

Passionate about sharing his discoveries and making his advancements accessible, he has published more than 360 peer-reviewed papers, which have been cited 34,000 times. And he has had 15 products approved by the Food and Drug Administration.

Athanasiou's main goal is to continue to use advancements in technology to help diminish pain and aid in quality of life. "We want to use tissue engineering to come up with solutions that eliminate pain and restore function," he said.

# Alumni Notes



# From New York Tech to the White House

**TWO NEW YORK TECH ALUMNI** joined President Joe Biden's administration earlier this year. As White House principal deputy press secretary, **Karine Jean-Pierre** (**B.S. '97**) is one of four women leading President Biden's senior communications team. Jean-Pierre is in familiar territory, having served in the Obama White House as regional political director for the White House Office of Political Affairs. She also worked on former President Barack Obama's 2008 and 2012 campaigns.

An alumna of Columbia's School of International and Public Affairs as well as New York Tech, she has held roles that include chief public affairs officer for the advocacy group MoveOn and political analyst for NBC and MSNBC, among other government and advocacy positions.

Jean-Pierre's path to politics began as a young adult. According to her website, she was drawn to politics after college. In her book *Moving Forward*, she talks about what inspired her to become civically engaged, how politics is accessible to everyone of all backgrounds, and why the need for people to get involved is crucial now more than ever.

"I am profoundly honored to be the principal deputy press secretary for [President] Joe Biden. I am especially thrilled to work alongside @jrpsaki [Jen Psaki], whose leadership and stellar instincts will ensure we are positioned to effectively communicate the Biden-Harris agenda to all Americans," she said in a tweet on November 29, 2020.

Jean-Pierre joins **Kevin O'Connor (D.O. '92)**, who was commissioned by President Biden to serve as his White House physician.

The role is not unfamiliar to the College of Osteopathic Medicine (NYITCOM) alumnus, who has been Biden's primary care physician since 2009 and previously served under two other White House administrations. O'Connor first came on board in 2006 during the Bush-Cheney administration. He expected to finish his three-year military assignment within a few months after President Barack Obama was sworn in, but then-Vice President Biden asked O'Connor to stay on.

"We are apolitical," O'Connor said to <u>*The Box*</u> blog in a past interview. "He's never asked me if I am a Republican or a Democrat, and I've never asked him," he added joking, "though I think he's a Democrat."

As noted by White House officials, their long history and personal relationship was the reason that President Biden asked O'Connor to return.

O'Connor enrolled in NYITCOM after attending college on an Army ROTC scholarship. While at New York Tech, he had a life-changing encounter with Army Maj. Gen. **Philip Volpe (D.O. '83)** that forever shaped O'Connor's aspirations and career path. After graduating from NYITCOM, he served 22 years with the U.S. Army.

Following the Obama administration, O'Connor retired from the military and served as the founding director of executive medicine at George Washington University, while also continuing to serve as Biden's personal doctor. While the role of White House physician is traditionally a military assignment, O'Connor will not rejoin the military, making him the first non-active-duty doctor to serve as physician to the president in nearly 30 years.



#### 1970s

After 47 years in broadcasting, Frank Brady (B.F.A. '69) is retiring from WVVA-TV, where he serves as vice president and general manager. He is a past board chair and current board member of the West Virginia Broadcasters Association, past chair of the Bluefield Chamber of Commerce and a board member of the West Virginia Chamber of Commerce. Brady also serves on the boards of the Community Foundation of the Two Virginias and the Bluefield State College Foundation and is the chairman of the Mercer County Economic Development Authority. In 2013, the West Virginia Broadcasters Association presented him with the Mel Burka Distinguished Broadcaster Award for lifetime achievement.

**Robert Shure (B.F.A. '70)** was featured in a profile on *Traditional Building*.

Currently a professor of graphic design at County College of Morris, **Stephen Longo (B.F.A. '71)** has won three awards in two international contests: An Award of Excellence in the 26th Annual Communicator Awards competition in the marketing/promotion category, and two Davey Awards. Longo has created brands and ads for companies such as Haagen-Dazs, Ronzoni, and StarKist tuna.

**Frank Muratore (B.S. '71)** worked as a broadcast engineer for ABC for 15 years designing sports trucks and then worked for NBC for 22 years doing studio design and videotape production. Muratore is now retired and recently purchased a lake house; he and his wife split their time between Long Island and upstate New York.

**Mario Giammarco (B.S. '72)** was featured in a profile in *Industry Magazine*. The article focused on his career and work with Staten Island University Hospital. After graduating from New York Tech, **Mark Hehl (B.S. '72)** earned a master's degree from the Polytechnic Institute of New York. As he enters into retirement, Hehl now mentors STEM students in college and volunteers with Engineers Without Borders. In 2017, he published the book Amusing Confessions of an International Consultant, which chronicles his experiences working with clients as a technology consultant. He is also the author of An Immigrant's Dilemma and Ameri-Sicula: Sicilian Culture. Hehl says he owes a great deal of his success to his New York Tech education.

As the vice president for logistics at LMI, a federal management consulting firm, **Pasquale Tamburrino (B.S.** '77) is responsible for driving the firm's efforts in supporting federal customers in the areas of supply chain risk, sustainment engineering, climate change, and infrastructure management.



#### **Soaring to New Heights**

Vertical farming company Kalera recently appointed Maria Sastre (B.S. '81, M.B.A. '83) to its board of directors. Sastre brings more than 25 years of executive experience to the company. Most recently, she served as president and chief operating officer for private aviation company Signature Flight Support. She began her career at Eastern Airlines, later taking on roles with Continental Airlines, United Airlines, and Royal Caribbean Cruises. In 2017, she was included in Fortune's "The 50 Most Powerful Latinas." In a 2018 interview with New York Institue of Technology Magazine, she noted that it takes hard work to be successful. "I don't like excuses or entitlement," she said. "I have a real problem with the idea that everything should come easy."

Herbert Mordkoff (B.S. '78) attended New York Institute of Technology under the Korean GI Bill. He then went on to complete his M.B.A. in government contracts law at Washington University. He recently celebrated his 60th wedding anniversary.

**Michael Pellegrino (B.Arch. '79) AIA**, is chief marketing officer for New England operations at JJ White, Inc., supporting the company's business needs in the areas of design build oversight. As a professional construction supervisor, he manages the Massachusetts building permit process. Pellegrino has been with the organization for more than five years and is a member of the board of directors.

#### 1980s

Gerard Luckman (B.S. '81), partner and chair of the Forchelli Deegan Terrana LLP Bankruptcy & Corporate Restructuring practice group, was appointed to the board of directors of the Long Island chapter of the Institute of Management Accountants.

**Denise Rohde (B.S. '81)** retired after more than 30 years with the Nassau County Probation Department.

**Howard M. Busch (D.O. '81)** was featured in *The Rheumatologist* in an article titled "Communication Is More Important Than Ever: A Q&A with Howard M. Busch, D.O." The piece is part of an ongoing series discussing the effects of the COVID-19 pandemic on rheumatology.

**Cathy Logier (B.S. '83)** is a realtor with Future Home Realty in Florida, specializing in helping buyers relocate to the state. Logier moved to St. Petersburg in 1997 with husband Rick and their children, Nicole and Ricky.

Jay Burton (D.O. '84) is a physician with Springfield Medical Associates in Enfield, Conn. A 10-year survivor of acute myeloid leukemia and a recipient of an allogeneic stem cell transplant, he is the founder of Survivor Journeys<sup>\*\*</sup>, a community-based 501(c)(3) nonprofit organization with a mission to help provide emotional, social, and educational support for cancer survivors, their families, and caregivers.

Nine years after graduating high school, **Norm Davis** (**B.Arch.** '85) enrolled in the architecture program at New York Tech. "It wasn't easy, but the delay gave me a will to get it done," recalls Davis. "New York Tech gave me the opportunity and support to do just that. I was also lucky to be involved in one of the earliest CAD training developments at New York Tech, led by Jean-Louis Schulman in 1983." After graduating, he worked for local architects in New York City before opening his private practice in 1994.





Dear Alumni & Friends,

It's hard to believe it has been more than one year since we have gathered together in person. Like you, I, too, miss the interactions with our Bears across the country and around the globe. We have become a more digital society that waves hello and goodbye over a computer screen instead of embracing in warm hugs. Just as we have navigated that change, we must find new ways to engage and keep our vibrant community of more than 110,000 alumni connected.

As we continue to move forward, we are reminded of our university's promise to provide a student experience that inspires critical creativity in professional programs infused with technology and empowers our graduates to change the world, solve 21st-century challenges, and reinvent the future. To support our doers, makers, healers, and innovators, the Office of Alumni Relations is excited to announce new volunteer opportunities for you to help us stay true to that promise:

- Mentorship program
- Admissions Ambassadors
- Diversity, Equity, and Inclusion Alumni Committee

In the coming weeks, you will begin receiving communications regarding these programs. We hope that you will pay it forward with your time and talent as a volunteer. As always, I welcome your ideas and hope to call upon your involvement in many areas and in many ways. You can contact me directly at spolidor@nyit.edu or 516.686.7504.

We look forward to partnering with you on these exciting and rewarding ventures.

Go Bears!

Sabrina Polidoro Director, Alumni Relations



#### Annual Big Gives Kicks Off with Big Laughs

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Alumni and friends virtually celebrated the first night of the Big Give, the university's annual day of giving, on March 24 with comedian Dwayne Perkins (B.S. '94). Perkins joked about his time at New York Tech, growing up in Brooklyn, life in Los Angeles, and much more throughout his 45-minute performance. His one-hour comedy special, Dwayne Perkins: Take Note, debuted in 2016 on Netflix to rave reviews and instantly became a fan favorite. The special was ranked as a top 50 Netflix comedy special only two months after its release. Perkins is also the author of the book Hot Chocolate for The Mind, a collection of humorous essays. He also co-wrote and starred in the feature suspense film Dying to Kill, now on Amazon. He plays a stand-up comic who has to get laughs or die trying. Learn more about Perkins's comedy at dwayneperkins.com.

Laura Steward (B.S. '85) is beginning the sixth season of her podcast, *It's All About the Questions*. "I love interviewing people from around the world to help people learn new questions to ask to shift perspectives on business and life," she says.

John Brooks (B.S. '86) ran unopposed for a third term as New York state senator for District 8.

**Bradley Feuer (D.O. '86)**, who serves as chief surgeon of the Florida Highway Patrol, had his article "First Responder Peer Support: An Evidence-Informed Approach" published in the *Journal of Police and Criminal Psychology*.

Safety and environmental engineer **Kevin Hyms (M.B.A. '86)** was elected president of the Ronkonkoma Chamber of Commerce.

David A. Barbutti (B.S.A.T. '87) has been sworn in as Yonkers Department of Housing and Buildings deputy commissioner. Among other things, Barbutti is now responsible for participating in inspections of buildings and other construction projects, as well as overseeing the collection of permit fees.

Yulhong Sung (A.A.S. '87) is dean of the Graduate School of Advertising and Public Relations at Hongik University in Korea.

Maria Di Natale (B. Arch. '88), senior architect at H2M Architects + Engineers, recently received the Educator Award at AIA Long Island's 56th Archi Awards. She is currently working in the real estate sector of the business.

Anthony Gioeli (B.S '88) is vice president of marketing at Superior Sensor Technology. He wrote an article for *Embedded Computing Design* on "How Semiconductor SoC Concepts Are Transforming Sensors."

Joe Mottola (B. Arch. '88), vice president and chief operating officer at H2M Architects + Engineers, earned the Community Service Award at AIA Long Island's 56th Archi Awards for his work with organizations such as the National Alliance on Mental Illness and the American Foundation for Suicide Prevention.

#### 1990s

**Claudia Coplein (B.S.' 87, D.O. '90)** assumed the newly created role of chief medical officer for Tyson Foods. Coplein previously worked in insurance, global manufacturing, healthcare, and technology fields. In her new role, she will be responsible for monitoring the safety and health of Tyson employees and factories.

Co-owner of Cavallo Fine Jewelry & Gifts, LLC **Connie Rovigo (B.F.A. '91)** specializes in creating custom jewelry and selling antique/vintage jewelry. "New York Tech gave me the artistic tools I use daily and formed my love of research," she says.

A field designer with ConEdison, **Vely Daleus (B.T. '92)** has retired after 47 years of service.

**Bonnie Habyan (M.A. '92)** was appointed chief marketing officer at DLP Real Estate Capital, a financial services and real estate investment firm.

After working in various global and national operations leadership positions, Leanne Peduzzi (B.S. '92) joined Fortna as senior vice president for lifestyle services. "I look forward to joining the team at Fortna to strengthen and reinforce their solid reputation for long-term support and transformative partnerships with their clients as they address ever-increasing digital demands for optimized order fulfillment," said Peduzzi in an article on supplychainquarterly.com.

As an architecture student at New York Tech, **Lou Trentadue (B.Arch. '92)** recalls building a wooden Murphy bed. It folded up to fit neatly into his closet at home so that he had more floor space for his drafting table, work table, and art supplies. Low on cash, Trentadue ended up using the wood from the bed's frame as the base for his final model in the thesis presentation. "Lucky me, I did not realize that I placed third in some sort of thesis student review out of about 200 students," he recalls. "I then went about six months without a bed frame, just sleeping on the mattress on my floor in my parents' house." With more than 20 years of executive leadership experience, **Stephan Roker** (**M.B.A. '93**) has been appointed to the board of directors at Greenbrook TMS. Roker currently serves as board chair for EducationWorks, a nonprofit that helps Philadelphia students and their families living in economically disadvantaged communities. He is also on the board of Devereux Advanced Behavioral Health, a nonprofit that assists children and adults with behavioral health challenges. He serves on the board of Brighter Horizon Foundation, a nonprofit that provides college scholarships to high school students.

#### Trish Bergin (B.F.A. '93, M.A. '05) has

announced her run for Suffolk County Legislature. Bergin also served as a board member for the Town of Islip. **Charlotte Hughes (M.S. '94)**, senior manager of talent development at ChenMed, has earned Certified Diversity Professional status from the National Diversity Council. Hughes is working to bring transformative healthcare to senior citizens.

Jeff Pavell (D.O. '94) is chief of rehabilitation medicine at Englewood Hospital in New Jersey and co-director of the Physical Medical and Rehabilitation Center in Englewood. He also teaches residents and students at Columbia University School of Medicine and interviews students for admittance to Hackensack Meridian Seton Hall School of Medicine.

Viren Shah (M.B.A. '94), chief digital officer of GE Appliances at Haier Company,

was featured on CIO Talk Network in a podcast titled "Using Inclusion to Drive Transformation."

**Chris Carr (M.B.A. '95)** was nominated to the 2021 REI board of directors. He has more than 35 years of experience in retail operations and supply chain and is currently the chief operating officer at the restaurant chain Sweetgreen.

**Arun Manansingh (B.S.A.T. '95)** was promoted to executive director for corporate services at the World Trade Centers Association.

Leroy Registe (B.S. '96) has recently published his book *What a Security Guard Needs to Know for Best Practices*. Registe worked as a security guard at Fordham University and New York Presbyterian

#### NYITCOM Alumnus Takes the Reins at Catholic Health

**College of Osteopathic Medicine** (NYITCOM) alumnus Patrick M. O'Shaughnessy (D.O. '99) was named chief executive officer and president of Catholic Health (formerly Catholic Health Services). In his new role, O'Shaughnessy will lead a healthcare system that employs approximately 17,000 professionals and operates six Long Island hospitals, along with a network of physician practices and a home nursing and hospice service. He has served more than 14 years in various leadership positions with Catholic Health. In 2018, O'Shaughnessy played a critical role in expanding the partnership between Catholic Health and NYITCOM, which increased the number of NYITCOM clinical rotations and graduate residencies at Catholic Health facilities. In turn, this also supported the growing healthcare system's demand for future physicians.



Hospital. He received his J.D. from Novus Law School in 2014.

#### Keesha Burke-Henderson (B.F.A.

'**96**, **M.A.** '**98**) was appointed Randoph College's chief diversity officer and director of the college's Office of Identity, Culture, and Inclusion.

*The New York Real Estate Journal*'s executive of the month **Tom Scerbo, AIA (B.Arch. '98)**, senior vice president and Metro New York executive at AECOM, sat down with the publication for a Q&A about his career and current projects.

#### 2000s

**David Bricca (B.S. '00)** was named a 2020 Long Island Top Techie by LISTnet and the *Long Island Press*. He has more than 20 years of experience in information technology and is currently the chief technology officer at United Network Associates.

Jeffrey Christensen (D.O. '01) has joined Finger Lakes Health, caring for patients at Soldiers and Sailors Health Center.

Joseph Leibowitz (A.O.S. '02) has been promoted from executive chef to executive director of food and beverage and culinary



#### Snacks + Startups

During Women's History Month in March, the Office of Alumni Relations hosted "Snacks + Startups," a series of virtual events that featured alumnae who shared their experiences as entrepreneurs. The discussions covered topics such as why they decided to start their own business, the process of becoming an entrepreneur, the lessons they learned, and more. **Liz Kracht (B.A. '08)**, above left, author, speaker, and literary agent, kicked off the series. She spoke about her time as a writer in Puerto Rico and how she transitioned from journalist to author. Also featured was communication arts alumna **Valeria Gonzalez (B.F.A. '15)**, above right, who, after working for *Time Out Magazine* and NBC New York, followed her passion for dance to found VALLETO, an organization that focuses on the empowerment of women through contemporary dance, performances, collaboration, community projects, education, and activism. She also started VALLETO Heal, an initiative that aims to inspire the world to dance and heal through movement and holistic approaches. operations for the entire property at Encore Boston Harbor. Previously, Leibowitz worked for 13 years in various culinary positions at Wynn and Encore Las Vegas.

*Continental Who's Who* recognized **Denise Guevara (D.O. '02)** as a top dermatologist in the field of medicine for her dedication and commitment to providing exceptional dermatologic care.

**Englebert Morales (B.S. '01, M.S. '08)** was promoted to FGP (faculty group practice) assistant site director for NYU Langone Health. He is responsible for overseeing a new outpatient ambulatory site, which combines seven separate specialties over six floors of space. He has been with NYU Langone Health for 10 years. Prior to that, he was with Northwell Health for 10 years.

#### Puneet (Hira) Singh (B.S. '01, D.O. '04),

board-certified neurologist and medical director at IOM Solutions Inc., was featured in *Long Island MD News* for her work with intraoperative neurophysiologic monitoring (IOM), which helps neurosurgeons, orthopedic spine surgeons, and other specialists safeguard the nervous system during rare and routine procedures.

Michael Ditillo (D.O. '02) is assistant professor of surgery at the University of Arizona College of Medicine-Tucson Department of Surgery, in the division of trauma, surgical critical care, burn, and acute care surgery. He is a practicing surgical intensivista and trauma and acute care surgeon. He is the director of geriatric trauma, critical care and acute care surgery, director of the surgery clerkship, and director of the surgical critical care and acute care surgery fellowship.

Jessica Craig (A.O.S. '04), a pastry chef specializing in chocolate at Almond Restaurant in Bridgehampton and New York City, was selected by TCHO, a craft chocolate maker in California, to be one of four inaugural TCHO pros. They sent her 25 pounds of chocolate and asked her to use it in a meaningful way. Craig makes chocolate goodies and delivers them to Astoria Fridge, a community refrigerator. Susan Milani (D.O. '04) is an associate professor and chair of the Department of Osteopathic Manipulative Medicine at Touro College of Osteopathic Medicine-Harlem. During the height of the pandemic in New York City, she created a patient care video *Osteopathic Exercises for Respiratory Health During COVID-19*, which incorporates lymphatic techniques to maintain health and help recover from COVID-19. Translated into Spanish, Mandarin, and Vietnamese, it is being used as a patient resource across the country.

When Hasan Bazerbashi (B.S. '05) began looking for a university to study computer science, a family friend recommended New York Tech. Originally from Syria, Bazerbashi met with the dean of the campus in Jordan. "At that time, when I was trying to apply to the university, they required certain grades or levels of education. The dean accepted me and said that if I did well, I could continue, and if not, then it would not work. He really gave me the chance to pursue my passion for technology and computers," says Bazerbashi, who is now a senior software developer for Canadian company Cineplex. "When I went back to Syria to find a job, it gave me the first push in my career, so I was able to find a good job."

The Dairy Alliance board of directors selected **Geri Berdak (M.B.A. '05)** as its new CEO. In this new role, Berdak seeks to improve people's lives through strategic growth in consumer-packaged goods businesses and ingredient companies in the wellness market.

Michael Coney (B.S. '05), senior vice president and general manager at Medallia, recently appeared on the *Inside Big Data* podcast to discuss how AI is assisting call centers during the COVID-19 pandemic. Coney has experience with managing a variety of companies, raising capital, and working with investors.

**Bill Franck (M.B.A. '05)** was recently hired as chief sales officer at Provation, a leading provider of clinical productivity software. Franck's 20-plus years of experience in technology-based sales, including his time at St. John's University and New York Tech, has prepared him for success in this field.

**Charles Matthews (M.S. '05)** is a financial advisor with Edward Jones and recently earned the Accredited Asset Management Specialist certification.

**Dan Savarino (D.O. '05)** was featured in an article in *Asbury Park Press* that talks about what led him to pursue a medical career and to open his practice Apex Center for Regenerative Medicine.

TreeHouse Foods named **Kevin G. Jackson** (**M.B.A. '06**) chief commercial officer. He will also retain his role as president of snacking and beverages. TreeHouse Foods is a multinational food-processing company specializing in private labels.

#### Thani bin Ahmed Al Zeyoudi (M.B.A.

'06), United Arab Emirates minister of state of International Trade, was one of the leading speakers at the Israel Dubai Summit.

#### Elyse Lovett (M.S. '06, M.B.A. '12)

has been appointed vice president of marketing at Nutrition21. Lovett has focused her work on dietary supplements, using her knowledge to enhance nutritional values of the products and overall health of consumers.

Since graduating from New York Tech, Hala Sabry (D.O. '07, M.B.A. '07) started Physician Moms Group, a virtual physician community, boasting 115,000 members. She has spent the last year formally consulting Fortune 500 companies in healthcare. Sabry is also chief community officer at Doctorpedia. She says she is extremely excited to have broken the glass ceiling as a woman executive in health technology and hopes to see thousands of NYITCOM alumni on the platform.

Patrick Lynch (M.B.A. '06), vice president of sales at Bell Laboratories, was featured on the webinar series *Increasing Profitability with iQ Rodent Control Technology* for Target Specialty Products. He spoke about the increasing profitability of iQ<sup>™</sup> rodent control technology and how iQ products will



#### **First for New York**

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Lester W. Young, Jr. (B.S. '70) was unanimously elected as chancellor of the New York State Board of Regents. He is the first African American to serve in this position. Young has been in public service for more than 50 years. He began his career with the New York City Department of Education and has held various positions, including teacher, guidance counselor, supervisor of special education, and principal.

In his new role, he will lead and serve as the presiding officer of the Board of Regents, which is responsible for the general supervision of all educational activities within the state, overseeing the University of the State of New York and the New York State Education Department. The board comprises 17 members elected by the state legislature for five-year terms.

"I look forward to working with my colleagues on the board, Commissioner Rosa, the entire Education Department team, all New York state educators, and in particular, all of our families as we work to build more equitable and empowering futures for all New York's students," said Young. change the way pest professionals do rodent control, for the better, by eliminating the repetitive and time-consuming aspects of a rodent account visit.

**Joseph Squitieri (D.O. '06)** was promoted to director of psychiatry at Community Healthcare Network, a federally qualified health center in New York City.

Arvind Naik (M.B.A. '07) presented "Meditation for Inner Peace During Turbulent Times" at the Avon Public Library in Connecticut.

Tidewater Inc. promoted **David E. Darling** (M.A. '08) to executive vice president and COO. He has more than 25 years of domestic and international human resources and operations leadership experience.

**Frederick Davis (D.O. '08)** was appointed associate chair of the Emergency Department at Long Island Jewish Medical Center.

United Health Services appointed **Mark Friedlander (M.B.A. '08)** as its CMO in the behavioral health division. He will be overseeing facilities, staff, leadership, and medical strategies, among other things, in this position.

**Priscilla Popov (M.B.A. '08)** has been appointed chief financial officer at technology company Cemtrex, Inc. Popov has 20 years of experience in accounting, finance, administration, and operations.

Latarshia (Tasha) Crawford-Jones

(M.B.A. '09) has been named vice president, Department of Justice (DoJ) at Steampunk. Her responsibilities include establishing and growing Steampunk's business with the DoJ by using her 20 years of experience in business and technology. Steampunk is a change agent in the federal contracting industry, bringing new thinking to clients in the Homeland, Federal Civilian, Health, and Department of Defense sectors.

Anthony V. Hayes (B.F.A '09), chief operating officer and general manager for New England Public Media, was elected to serve as a board member of America's Public Television Stations.

Since graduating from New York Tech, **Issa Mahmoud (B.S. '09)** moved from Amman, Jordan, to Ireland, got married, and became a father. Over the years, he has worked in retail as a shop manager, as well as in customer service and business development for VMware, Cylance, and BlackBerry. He was recently promoted to sales account manager for the Middle East region for BlackBerry. "I believe this success is because of all the knowledge I have learned and earned from New York Tech. I want to thank you," he said.

Neil Moore (M.B.A. '09) has been appointed as the new CEO of Queens Hospital in Jamaica, Queens. His main focus will be leading the hospital in its response to COVID-19 and addressing the public health challenges of the borough during the pandemic.

Lauren Schultz (D.O. '09, M.S. '09) has joined the New York Health Center for Urology, specializing in women's health and urological disorders. Schultz will be practicing in New York City.

#### 2010s

Marisa Caban (B.S.A.T. '10) has completed licensing requirements to become a registered architect in New York State. Caban works for Foit-Albert Associates, Architecture, Engineering and Surveying P.C. "I am happy to be joining the ranks of architects I have admired for a long time and to work alongside those who have helped me to grow and accomplish my goals," she said.

**Carlotta De Luca (B. Arch. '10)** launched a new footwear line with her latest brand, Maria Luca. The line will be manufactured and distributed under license by Onward Luxury Group's Milan-based OLG division.

In 2020, **Thomas Kenny, Ph.D. (M.A.** '11) published the textbook *New and Digital Media: Your Guide to Savvy Use of the Web.* He is an assistant professor at Molloy College and received his Ph.D. in information studies from Long Island University in 2020.

Mikhail Varshavski (B.S. '11, D.O. '14),

otherwise known as "Doctor Mike," has used his degree and mass social media following to help ease people's minds during the pandemic. Varshavski works as a family physician and has donated \$50,000 in masks to local hospitals, along with \$65,000 to the CDC Foundation. In April, he spoke at NYITCOM's Virtual Alumni Spotlight series about social media's role in medicine.

Since graduating from New York Tech, Osman Kose (CERT. '12, M.S. '13) moved back to Turkey and is now the operational manager at Eksim Investment Holding.

Former television news anchor and reporter Lenka Wright (M.A. '13) has been named the first chief communications officer for the city of Mountain View in California. She will oversee external and internal communications, including public information, media relations, marketing, branding, digital engagement, and the Multilingual Community Outreach Program.

Yuqing Geng (M.S. '14) received his Ph.D. in China and is a lecturer in the School of Business at Shanghai Dianji University. His article "Temporal-Spatial Measurement and Prediction Between Air Environment and Inbound Tourism: Case of China" was published in the *Journal of Cleaner Production*.

Zulekha Karim (D.O. '14) has joined Beebe Endocrinology. Karim is board certified in internal medicine and completed her endocrinology fellowship at Stony Brook University Hospital.

Mexican-American artist, dancer, artistic director, choreographer, and producer **Valeria Gonzalez (B.F.A. '15)** was interviewed by *Authority Magazine* on "5 Things You Need to Know to Successfully Run a Live Virtual Event." As project leader for the startup InMapz, **Dhruv Patel (B.S. '15)** plans future product releases and updates, works oneon-one with clients to meet their needs, and comes up with new products or services using the company's patented technology. InMapz is an inventory management system for facilities and construction management that helps with preventative maintenance, service records, and more.

**Catelyn Halusic-Smith (D.O. '16)** has joined Saratoga OB/GYN. She will be working to provide care to women from adolescence through postmenopausal years.

**Blessing Adesiyan (M.S. '17)** is the founder and CEO of Mother Honestly, a solution-driven platform that helps women navigate work, life, and motherhood.

Amrita Bhalla (M.B.A. '17) works in emergency management for British Columbia, Canada, and had the opportunity to work for the British Columbia Provincial Emergency Operations Centre activated for COVID-19 and Freshet 2020. "I felt honored to work as a finance chief and was responsible for the financial, administrative, and cost analysis aspects of the activation," Bhalla said.

#### Anthony Saldana's (M.A. '18)

documentary master's thesis, *Straight Off the Canvas*, won an Accolade Global Film Competition Award, Spotlight Documentary Film Award, Impact Doc Award, and an Indiefest Award. "This honor wouldn't be possible without the communication arts department at New York Tech," he says. Saldana worked on the project with fellow New York Tech alumnus Abuzakir Ahmedullah (B.F.A. '08), who was the graphic designer for the film.

#### Abdulaziz Abaalkhail (M.A. '18)

remembers his time at New York Tech fondly. "It was an enjoyable journey during my study period. I learned a lot and met many new friends," he says. "It was a unique experience living in New York."

Herkimer County Community College has appointed **Freddy J. Cicchetti (M.A. '18)** to the role of admissions assistant. He will serve as the school's New York City and Long Island representative. Prior to his position at Herkimer, Cicchetti was senior international admissions advisor at New York Tech.

Since joining the South Queens Women's March, **Amanda Deebrah (M.S. '20)** has taken the lead on a PSA and press release to help stop the spread and combat the high positivity rates of COVID-19 in South Queens neighborhoods. She was also the coordinator for a relief project to aid 10 families affected by a fire in Richmond Hill (Queens), N.Y. Additionally, she is part of a team, including Assemblywoman Jenifer Rajkumar, that will secure housing for these families.

Ashley Dent (B.F.A. '20) received a New York City Mayoral Service Recognition certificate for volunteering more than 100 hours in 2019. (Due to COVID-19, the awards were presented in 2021.)

#### MARRIAGES:

Nicole Saladino (B.S '10, D.P.T. '12) to John Veneziano

Samantha Ostrow (D.P.T. '18) to Zachary Cogen (D.P.T. '17)

Ashish Rajoba (M.B.A. '18) to Varsha Chougule

#### <u>BIRTHS:</u>

Frederick Davis (D.O. '08) and Danielle Turrin (M.S. '12, D.O. '12) welcomed Emerson Julia Davis.

#### PASSINGS:

Michael Kertyzak Jr. (B.S. '72) John Thomas Carson (B.S. '77) James H. Yagle (B.S. '77) Jackson Whitmore Riddle Sr., Ph.D., M.D., D.Sc. (HDR '83) Carmen Richard "Rick" Sorvillo (B.S. '78, M.S. '02) Nancy Ann Reid (B.S.A.T. '86) Eric Spinato (B.F.A. '90) Jane Fetterly (M.P.S. '97) Rachel Martineau (B.F.A. '05)





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