

SPRING 2024

NJIT

MAGAZINE

NJIT



**The Greatest
Producer of Tech Talent
in New Jersey**



BUILDING THE INNOVATION ECONOMY

New Jersey Institute of Technology is the greatest producer of tech knowledge and talent in the State of New Jersey. That is the premise of the cover story for this issue of *NJIT Magazine*, and it's not hyperbole. It's fact.

Did you know that one-third of the engineers and scientists in our state are NJIT alumni? NJIT also is a top 20 producer nationally of African American and Hispanic engineers, and 62% of the African American and Hispanic engineers graduating from New Jersey public colleges earn their degree at NJIT. This issue's main feature will provide you with an exciting look at people and projects that have made and are making NJIT a cornerstone of New Jersey's innovation economy.

In the following pages, you also will take a visual tour of many creative and collaborative spaces that have been created on campus. Those of you who have not visited NJIT in some time will be astounded at the beautiful, welcoming and technologically advanced facilities in which our students and faculty are creating, understanding and sharing knowledge and experience.

This issue also contains a poignant in memoriam recalling the legacy of NJIT's Al Dorman '45, '99 HON for whom our esteemed honors college is proudly named. After serving the United States as a member of the U.S. Army Corps of Engineers, Al became the civil engineer of record for Disneyland before founding and building the international civil engineering firm AECOM, where he served as CEO. Al was an extraordinary man and supporter of NJIT. He was a model for all our alumni to try and emulate in many ways.

You also will be introduced to a newly emerging NJIT icon in this issue of *NJIT Magazine* — Jersey Girl! She is undoubtedly the most popular new face on campus, and one of our most loyal Highlanders.

I am sure you will enjoy reading this issue of *NJIT Magazine*, and I look forward to providing you some insights, in our next issue, regarding our new strategic plan. The 2030 plan will guide our university's evolution and establish us as a nexus of innovation — the physical and intellectual focal point for ideas, actions and people focused on innovation and entrepreneurship, including researchers, learners, entrepreneurs and partners from government, industry and the community. ■

Sincerely,

A handwritten signature in black ink that reads "Teik C. Lim". The signature is written in a cursive, flowing style.

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Teik C. Lim
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SCIENTISTS UNCOVER AURORA-LIKE DISPLAY

In a study published in *Nature Astronomy*, astronomers from NJIT’s Center for Solar-Terrestrial Research (NJIT-CSTR) detail radio observations of an extraordinary aurora-like display – occurring 40,000 km above a relatively dark and cold patch on the Sun, known as a sunspot.

The rare radio emission shares characteristics with the auroral radio emissions commonly seen in planetary magnetospheres such as those around Earth, Jupiter and Saturn, as well as certain low-mass stars, according to researchers.

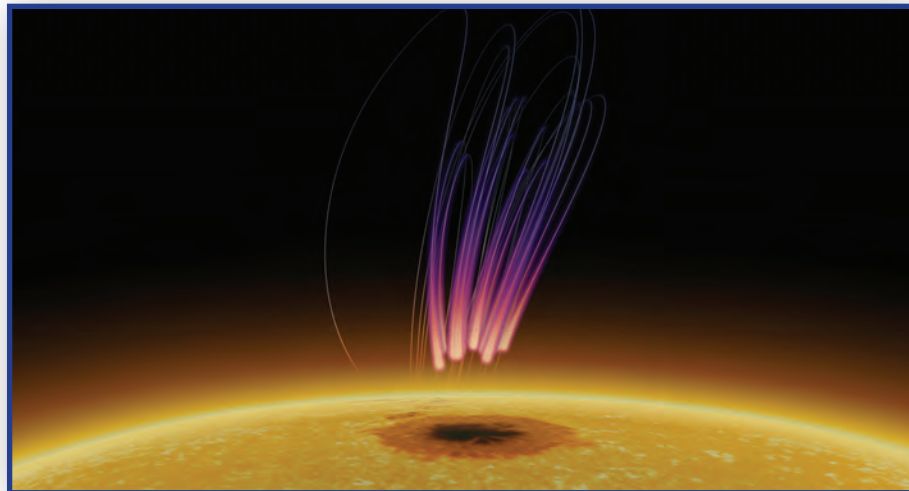


Photo: Sijie Yu

The discovery offers new insights into the origin of such intense solar radio bursts and potentially opens new avenues for understanding similar phenomena in distant stars with large star spots, according to the study’s lead author and NJIT-CSTR scientist, Sijie Yu.

“We’ve detected a peculiar

type of long-lasting polarized radio bursts emanating from a sunspot, persisting for over a week,” Yu said. “This is quite unlike the typical, transient solar radio bursts typically lasting minutes or hours. It’s an exciting discovery that has the potential to alter our comprehension of stellar magnetic processes.” ■



David E. Jones, far right, NJIT’s chief diversity officer with students and staff at the opening of Hispanic Heritage Month.

NJIT EARNS HISPANIC-SERVING STATUS FROM U.S. DEPT. OF EDUCATION

A year earlier than targeted, NJIT has earned the federal distinction of being a Hispanic-serving institution (HSI).

A goal outlined in NJIT’s 2025 strategic plan, the status is key to the university deepening its diversity and better serving its home city of Newark and the nation. Supporting the goal

was the launch of the university’s Hispanic and Latinx Leadership

Council, which seeks to fuel the enrollment of Hispanic students and deepen relationships with Hispanic and Latinx alumni, businesses and organizations.

These efforts helped NJIT grow its Hispanic undergrad population from 20% to 25% by the fall of 2022 and enabled the university to reach the eligibility threshold for HSI status. The Office of Postsecondary Education of the U.S. Department of Education confirmed the status in a letter to NJIT.

“This designation makes us eligible

for federal grants that can expand educational opportunities for Hispanic and Latinx students and improve their outcomes,” President Teik C. Lim said. “It also reaffirms our commitment to diversify our student body and deliver a holistic education that creates economic opportunity for all of our graduates, particularly first-generation students.”

The HSI achievement came five months after the university welcomed its largest and most diverse class ever — with historically underrepresented students comprising half the class — and a year after it earned the federal designation of being a minority-serving institution that serves Asian Americans and Native American Pacific Islanders. ■

TRANSFORMING PUBLIC SPACE IN AUSTRIA

Associate professors at NJIT’s Hillier College of Architecture and Design, Gernot Riether and Andrzej Zarzycki, led a group of 16 students who studied abroad in Austria, where they worked on the redesign of a public space that connects the art venues of the Kunstmeile (art mile) in Krems.

The Kunstmeile offers a mix of contemporary art and culture through museums and galleries. Krems is the cultural capital of Lower Austria and a gateway to the Wachau region, a



Rendering: Isabella Gil, Valeria Gomez, Karla Vazquez



Photo: Gernot Riether

UNESCO World Heritage site. Tourism is big there, especially in the summer, but the city wants the 24,000 locals to enjoy the public space of the Kunstmeile year-round.

Before arriving in Krems, the students spent a week in Vienna, where they experienced its architecture and learned about contemporary urban developments.

Students experimented with new technologies to design an urban space for a digital culture, a performative space that can be programmed in

multiple ways, and a gathering space that becomes a destination in itself.

“We need to find ways to better connect the existing art venues to the public space and find out what the needs of the community are. You can only do that through a dialogue with the community and all stakeholders,” Riether explained. ■



HELPING ASIAN AMERICANS AND NATIVE AMERICANS PACIFIC ISLANDERS TRANSITION INTO COLLEGE

With \$1.94 million in federal funding, NJIT launched a new program that will help Asian American and Native American Pacific Islander (AANAPI) students navigate the academic, social and emotional challenges of

transitioning into college.

The initiative, known as Improving AANAPI Student Outcomes Through Opportunities for Engagement, or ISOTOPE, begins this summer with academic and experiential orientation for 175 first-year AANAPI students.

ISOTOPE comes amid NJIT becoming an AANAPI-serving institution and with 21% of the university’s first-year class being Asian American or Native American Pacific Islander. The threshold for that federal distinction is 10%.

The new program is modeled after NJIT’s Educational Opportunity Program (EOP), which supports scholars with limited financial means. Collectively,

ISOTOPE, EOP and pre-college primers like the Math Success Initiative, Forensic Science Initiative and STEM Boot Camp create pathways for underrepresented minorities to thrive at NJIT. Each is designed to raise retention and graduation rates through a multifaceted support system.

That demonstrated need and NJIT’s track record of surrounding students with a web of support services were key to securing the funding from the U.S. Department of Education, according to Ashish Borgaonkar, co-project director and summer experiential learning coordinator of ISOTOPE and an assistant professor of engineering. ■

ABSTRACTS

FORENSIC TEAM HELPS OVERTURN WRONGFUL CONVICTIONS

A crime scene reconstruction by a faculty and student forensic team at NJIT has helped clear the names of two wrongfully convicted men who spent a combined 37 years in prison for murder.

A long-awaited moment of vindication came for Armond McCloud and co-defendant, Reginald Cameron, when their convictions were vacated by a state Supreme Court judge in Queens, N.Y. after a joint motion was filed by the New Jersey Innocence Project at Rutgers University, the New York City Legal Aid Society and the Queens District Attorney.



Both men had maintained they were coerced into falsely confessing to the murder of 22-year-old Kei Sunada on the night of Aug. 4, 1994, after they were held for 13 hours under interrogation without legal counsel. Their case received a lifeline after the Innocence Project got involved in 2020.

In January 2022, the group contacted members of NJIT's Forensic Science Program to revisit the crime scene and piece together the chain of events that unfolded on the night of the shooting.

"The Innocence Project sought our help conducting a crime scene reconstruction to see if the proffered statements [filed in the initial police investigation] were physically possible," said Kevin Parmelee, an NJIT forensic science professor of practice and former Somerset County, N.J. detective who led the reconstruction. "In the end, the physical evidence and reconstruction proved all the statements erroneous, and we provided the true shooting scenario." ■



RISKS AND REWARDS OF APPLYING AI TO GAMING

Researchers at NJIT and University Carlos III of Madrid wanted to know if mixed-reality games could be improved by handing control to artificial intelligence software in the form of conversational language applications. Well, they can, but the results may put players in danger.

The question stemmed from

an annual tradition of serious-yet-silly experiments led by NJIT Assistant Professor of Humanities Niccolo Pescetelli and Professor Manuel Cebrian of

University Carlos III of Madrid's statistics department and the Santander Big Data Institute.

In a working paper, the researchers defined alternate reality as narrative-driven experiences using the real world as a platform and augmented reality as the overlaying of digital information onto the real world. In a series of tests, they prompted their language model to develop a game narrative for real-world situations.

The model "proved adept at crafting cohesive narratives, puzzles and challenges that responded in real-time to participant actions," but at times it lost its train of thought and when instructed "this is not a game," it sometimes took the guidance too seriously, the researchers found. What's more, the model "may lack sufficient understanding of ethics, legality and social norms to guide responsible [alternative and augmented reality] game development alone," the researchers wrote. "This necessitates proper oversight and fail-safes by accountable humans with contextual judgment. It also underscores the need for AI creators to prioritize ethics and human well-being." ■



Photo: Courtesy of Venkat Kurtua

ABIR THAKURTA '00 **BUILDING CONNECTIONS –** **AND A LEGACY – AT NJIT**

“LOOK TO THE PAST BUT KEEP YOUR EYE ON THE FUTURE” is the phrase that Abir Thakurta '00 uses to reflect on his time at NJIT.

With just \$300 in his pocket, Abir arrived in the United States 25 years ago in pursuit of the American dream. He had earned a B.S. in civil engineering from Manipal Institute of Technology in India, and, after working for two years, enrolled at NJIT to pursue a master's degree in transportation and supply chain management. With offers from other prestigious universities such as Northwestern, University of Illinois Chicago and Purdue, Abir chose NJIT. His reason was simple – NJIT provided a rigorous interdisciplinary academic program that met his career goals and was financially within reach.

Abir notes that his years at NJIT taught him the importance of community, collaboration and connection. He carries these critical life lessons with him to this day in his role as Vice President, Global Supply Chain at Havertys Furniture and as an advisory board member for NJIT's Martin Tuchman School of Management.

When asked if he would consider a gift to support NJIT's talented and hardworking students, Abir responded enthusiastically and endowed the *Abir and Anupa G. Thakurta Scholarship*. With his eye on the future, Abir chose to increase his commitment by including the *Thakurta Scholarship* in his will. In due time, this estate commitment will significantly increase the award amounts available for future generations of NJIT students.

To learn more about making a gift and including NJIT in your will, please contact:

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Your legacy begins today.



THROUGH PARTNERSHIP, BASEBALL FINDS NEW HOME

Photo: NJIT Athletics



Montclair State University and NJIT partnered to renovate Yogi Berra Stadium in Montclair, N.J. and create a shared home field for their baseball teams.

The \$5.3 million in renovations – including new turf, new bullpens and batting cages, upgrades to

the dugouts and locker rooms – enables the stadium to host conference and NCAA baseball tournaments and other high-profile events.

“We are proud to embark on this initiative with NJIT

to not only revitalize one of the crown jewels of New Jersey baseball, but to provide what we hope can be a new model for how colleges and universities can work together,” Montclair State President Jonathan Koppell said.

NJIT President Teik C. Lim

described the effort as an “outstanding example of institutions working together and sharing resources to address a need and develop a mutually beneficial partnership that serves our students.”

NJIT competes in the NCAA Division I America East Conference and earned a trip to the NCAA Tournament in 2021, winning its first NCAA Tournament game. Montclair State’s Division III program won national titles in 1987, 1993 and 2000 and has reached the NCAA Tournament 15 times. ■

WOMEN’S BASKETBALL WELCOMES FIVE STANDOUTS

Five standouts from Minnesota, Pennsylvania, New York and New Jersey will join the NJIT women’s basketball team for the 2024-25 season.

“These five players improve our overall versatility, basketball IQ and bounciness,” said Head Coach Mike Lane. “They understand the exceptional value of a degree from NJIT and look to move our women’s basketball program forward in the America East!” Here’s a closer look at the newcomers.

Mayah Alford, Guard, Levittown, Pa.



At Trenton Catholic Preparatory Academy in Hamilton, N.J., Alford earned All-League and All-Area second-team honors. She plans to major in business administration.

distinction of Most Improved Player. She plans to major in biology.

Piper Engelby, Guard, Andover, Minn.



At Andover High School, Engelby earned NWSC All-Conference honors and, as a junior, led her team in four

categories: field goal percentage, three-point percentage, steals and assists. She plans to major in biology in a pre-med track.

Olivia Kulyk, Guard, Edinboro, Pa.



At Mercyhurst Preparatory School in Erie, Pa., Kulyk was named Region Player of the Year, All-Region first team

and All-District 10 first team when her team won the 2023 District 10 Championship. She’s also expected to major in biology.

Olivia O’Meally, Forward, Niskayuna, N.Y.



O’Meally, a 6-foot forward, attended Niskayuna High School and played AAU for coach Terrence Florence.

Like many of the other newcomers, she’ll study biology.

Allison Cannon, Guard, Holmdel, N.J.



Cannon, a 5-foot-9 guard, helped Holmdel High School win a division title in 2023, when she earned the

Photos: NJIT Athletics



Joan and Albert Dorman at the 25th anniversary of ADHC.

REMEMBERING ALBERT DORMAN

The entire NJIT community mourns the passing of Albert Dorman '45, '99 HON. The founding benefactor of the Albert Dorman Honors College (ADHC) passed away last November at the age of 97. Dr. Dorman graduated NJIT first in his class at the age of 19, with a B.S. in mechanical engineering.

Dr. Dorman served his country as a member of the U.S. Army Corps of Engineers. At 29, he was the civil engineer of record for Disneyland. In 1954, he founded his own civil engineering firm and went on to become the founding chair and CEO of AECOM. He was the author of more than 20 scientific papers and was a member of the National Academy of Engineering, a Fellow of the American Institutes of Architecture, and an honorary member of the American Society of Civil Engineers.

In 1995, Dr. Dorman's leadership and support led to the elevation of NJIT's successful honors program

into its first named college. It is thought to be the first honors college at a public polytechnic university. ADHC now boasts more than 6,000 alumni. Describing the success of the graduates of his namesake college, Dr. Dorman observed, "To me, that is a greater reward than almost anything. That's why the 'Albert Dorman' isn't the important thing. It's the 'Honors.'"

At the 25th anniversary of ADHC, Dr. Dorman reiterated:

"I want to challenge all of you to become committed; to augment your technical skills with other skills; to make it a lifelong duty to help define and achieve important social as well as scientific goals [and] an action plan for the common good."

President Teik C. Lim noted that "Dr. Dorman embodied the best of what NJIT strives to develop in all of our students. The Dorman Honors College will stand as an enduring tribute to his many professional

"Dr. Dorman embodied the best of what NJIT strives to develop in all of our students. The Dorman Honors College will stand as an enduring tribute."

- President Lim

achievements and his steadfast dedication to education, to our university community, and to society as a whole."

Dr. Dorman is survived by his wife Joan, three children, three grandchildren and a sister.

On-campus celebrations of his life took place April 24 - 26. ■



Growing Tech Talent in the Garden State

NJIT builds the economy and improves life in New Jersey

By Theta Pavis

NJIT launches careers, helps commercialize research and forges international partnerships, making it a key driver in New Jersey's success. The university's research and educational innovation can be felt across the state — and far beyond. Highlanders are interested in using technology to improve lives, while making sure the next generation of scientists and entrepreneurs are prepared to take on the future. NJIT educates about a third of all engineers and scientists in New Jersey and fuels more than \$2.8 billion annually in business and economic activity statewide.



NJIT’s Sustainable Environmental and Nanointerfaces Laboratory is just one example of a campus program with far-reaching impact. With funding from the New Jersey Department of Environmental Protection, the lab’s director, Professor Wen Zhang, is working to solve a growing problem facing hundreds of lakes in the Garden State. There are roughly 1,900 large lakes in New Jersey, and all of them are vulnerable to toxic algae blooms. Zhang hopes new technology could make fighting these phosphorescent blue-green clusters easier. He’s working with a team of biologists, engineers and entrepreneurs on technology to inject micro- and nanobubbles of air into lakes, lifting algae from as deep as four feet and scooping it out.

In addition to the state, Zhang and his team are working with the Meadowlands Research and Restoration Institute and BRISEA Inc., an environmental company, to demonstrate their prototype’s effectiveness in clearing algae.

A ROADMAP FOR NJ POLICY MAKERS

Another new project aims to help lower-income homeowners take advantage of the state’s clean energy programs. NJIT launched a community outreach project (with a year-long study of under-resourced neighborhoods in Newark) toward the adoption of renewable

energy. It encourages people to engage in N.J.’s Community Solar Program — a key initiative in the state’s goal of reaching 100 percent clean energy by 2050. Results from the study will also aim to provide a broader “sustainability roadmap” for N.J. policymakers to enhance energy justice throughout the state.

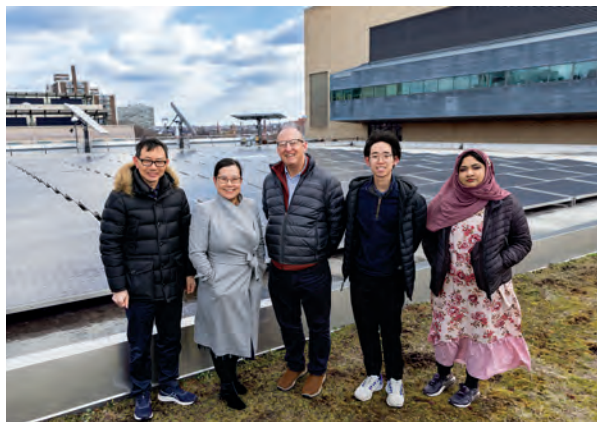
Led by Yao Sun, assistant professor in the Department of Humanities and Social Sciences, the \$30,000 study is one of 10 projects to receive funding from the New Jersey State Policy Lab of Rutgers University; it’s administered by the Office of the Secretary of Higher Education.

“As climate change intensifies the severity of weather-related disasters, it is imperative to ensure both community and environmental equity when designing and implementing energy and climate policies,” said Sun. “It is

Top right: Wen Zhang tests nano- and microbubble technology.

Bottom right: Brian Wlodawski, senior geographic information systems specialist, goes for a test-run on the Hackensack River in a prototype of a custom-designed boat that uses technology to remove algae blooms.

Left to right: professors Zeyuan Qiu, Yao Sun, Maurie Cohen, with undergraduate research assistants Tai Vu and Sania Murtuza.





Newark Mayor Ras Baraka with HCAD students during the launch of Hope Village II

energy, especially low- and moderate-income families.”

HELPING NEIGHBORS

Hope Village I, a 28-unit project, has placed over 50 formerly homeless people into permanent housing in Newark since it opened in 2021. The project sparked the interest of Hillier College of Architecture and Design (HCAD) professors of practice Erin Pellegrino and Charlie Firestone, along with their students. In January, the city opened Hope Village II, with the complex featuring a reimagined welcome booth designed and built entirely by NJIT students.

Newark launched its first homelessness strategic plan in late 2022 and in its first year saw a 57.6% decrease in the unsheltered population, according to the state’s Department of Community Affairs.



In Fall 2022, HCAD students in the studio class designed a community of dwellings that could offer more services, amenities and comfort than the original Hope Village. At the opening of the latest complex, Mayor Ras Baraka — who has called those designs “brilliant, beautiful, efficient and effective” — thanked NJIT’s engagement in the strategic plan and announced that Hope Village III will be designed and built by NJIT architectural students.

Many Highlanders also volunteer locally. Students from the Albert Dorman Honors College do at least 60 hours of service per year, half of them off campus. More than 14,000 off-campus volunteer hours are

important to provide households with opportunities to voice their thoughts and concerns, actively engage in shaping the community solar program, and collaborate with policymakers to improve energy justice.”

This work dovetails with the state’s recent commitments to the Clean Energy Act outlined in the New Jersey Energy Master Plan: Pathway to 2050, which includes developing a community solar program that allows more residents “to benefit from solar

Modernizing Health Records for the Most Vulnerable

By Tracey Regan

Over a decade ago, an NJIT health care startup took up a daunting challenge: to train 5,000 primary care providers in the state to adopt electronic health record systems that would allow them to better track their patients, improve the quality of care and securely share information.

The federal government, which funded the \$50 million effort, had identified cumbersome and sometimes illegible paper records as one of the health care system’s principal vulnerabilities. The group,

NJ-HITEC, ultimately trained people at 7,500 facilities.

Years later, at the request of the state, a successor organization at NJIT is plugging a gap in that initiative: modernizing record-keeping systems for one of the most complex and vulnerable segments of the patient population — people with substance use disorders.

“This is a severely siloed system. The aim is to integrate it and enable interoperability so that facilities can share information,” noted Renu Tadepalli, who runs the program for the health care division of the university’s New Jersey Innovation Institute (NJII). A primary goal is to reduce opioid abuse, but treatment centers say their new systems also allow them to keep better track of patients’ overall health and to respond quickly to crises.

Left: Student volunteers help clean up Branch Brook Park in Newark.

Below: Life Sciences and Engineering building



performed annually in Newark, with a focus on education, biodiversity/sustainability, public health and emergency aid.

ENTREPRENEURSHIP AND INNOVATION

Three years after NJIT's New Jersey Innovation Institute launched BioCentriq, a cell and gene therapy company, it was bought in 2022 by a South Korean company — but its operation remains local.

BioCentriq was formed in collaboration with leaders in the

pharmaceutical industry, top regulators at federal agencies that oversee biologic therapies and state economic development officials. It was the first such enterprise in the nation backed by a university. Its mission is to accelerate the advancement of cell and gene therapies by improving the efficiency and effectiveness of manufacturing processes and technologies.

NJII President Michael Johnson said BioCentriq is a perfect example of how NJII and NJIT spur innovation. "We're having a very significant impact on New Jersey's economy," he said.

Meanwhile, many NJIT students go on to start their own businesses. Martin Tuchman School of Management Dean Oya Tukul notes that the university has given over \$4 million in funding to startups created by students.

Members of the NJIT National Society of Black Engineers gather at an event on campus.



Photo: Theta Pavis

A BETTER QUALITY OF LIFE

With new funding from the National Science Foundation (NSF), NJIT sees a future where it will be able to translate more science and engineering discoveries into market-ready technologies. Research that improves lives will be supported with a \$6 million NSF grant awarded by the agency's Directorate for Technology, Innovation and Partnerships.

"NJIT's goal is to become a regional leader in research translation," said Atam Dhawan, senior vice provost for research and the grant's principal investigator. "We have many game-changing technologies in the pipeline that are on the cusp of commercialization. This grant provides crucial backing for these projects."

*(See full story, page 12)

By connecting with the New Jersey Health Information Network, an electronic exchange of patient health information run by NJII, treatment centers receive alerts, for example, when a patient checks into a facility or a doctor orders a new prescription.

"We're able to see when a patient is in and out of the hospital and what they were admitted for," said Katy Linton, CEO and facility administrator of Greater Essex Counseling Services in downtown Newark.

With funding from the New Jersey Department of Health and the New Jersey Department of Human Services for both the systems and the training, NJII has so far enrolled 110 facilities in the program.



Left to right: Renu Tadeipalli, Katy Linton, Chris Vardas and Patricia Ackerman-Blanco

Photo: Theta Pavis



Moving Promising Prototypes to Market

By Tracey Regan

A New Center for Translational Research at NJIT – and \$6M from NSF – Will Help Commercialize Campus Inventions

A \$6 million grant from the National Science Foundation (NSF) will help NJIT translate science and engineering discoveries into market-ready technologies tackling problems in areas ranging from health care, to sustainable energy, to data privacy.

Awarded by the agency's Directorate

for Technology, Innovation and Partnerships, the grant will accelerate the development of promising prototypes and enable market validation and other commercialization activities. It will also strengthen the university's entrepreneurial culture by funding and organizing training workshops in technology translation for undergraduates, Ph.D. students, postdoctoral researchers and faculty through the newly created Center for Translational Research at NJIT.

Atam Dhawan, senior vice provost for research and the grant's principal investigator, explained that the grant

is designed to bolster NJIT's Technology Innovation Translation Acceleration (TITA) program, which drills down on the potential

commercial benefits of university research at earlier stages of the translation and market validation process. Launched by his office last year, TITA provides seed grants of up to \$75,000 per project over three phases of development, as well as guidance and feedback from an industrial advisory board composed of inventors and entrepreneurs. Inventors must have external partners. Over the next four years, the new NSF grant will enable seed funding of \$50,000 to \$100,000 per project for up to 10 TITA research teams to help them develop and validate translational research and identify pathways to commercialization. Such funding can help developers move past the initial proof of concept, including determining interest and acceptance by potential users, to identify purchasers of the technology, such as clinicians, businesses or communities.

So far, nine projects have been awarded TITA grants under the current NJIT program. Sagnik Basuray, an associate professor of chemical engineering, for example, is developing a modular, point-of-care



Salam Daher, assistant professor of informatics

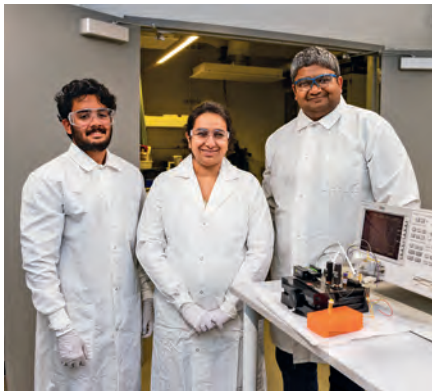
FAST FACTS

- **Among public universities in N.J., NJIT awards 62% of all the engineering degrees earned by African Americans and Hispanics.**
- **“A third of New Jersey computing professionals graduate from NJIT,” said Ying Wu College of Computing (YWCC) Interim Dean Ali Mili. “Our industrial relations program funnels students to places such as Amazon, Apple, Microsoft and Google.”**
- **NJIT offers one of the only undergraduate Forensic Science programs in the state and has built relationships with the state Public Defender’s office. The program has been awarded full accreditation from the Forensic Science Education Programs Accreditation Commission (FEPAC) of the American Academy of Forensic Sciences.**
- **Grace Wang, YWCC associate dean for research, serves on the New Jersey Supreme Court Committee on AI and the Courts.**
- **Serving more than 3,000 students each year (grades 4-12), NJIT’s Center for Pre-College Programs offers a variety of programming for New Jersey students, educators and families to nurture STEM learning.**
- **Students from the class of 2023 volunteered at 214 different community-based organizations.**

Photo previous page:

Left to right: Nick DeNichilo '73, '78, co-vice chair of the NJIT Board of Trustees and former president and CEO of Mott MacDonald; Judith Sheft, executive director of the New Jersey Commission on Science, Innovation and Technology, New Jersey Economic Development Authority; Brian Kiernan '70, chair of the NJIT Undergraduate Research and Innovation Advisory Board and former executive vice president and chief scientist of InterDigital Communications Corp.; Atam Dhawan, senior vice provost for research and director of the Center for Translational Research; Robert Cohen '83, '84, '87, chair of the NJIT Board of Trustees and president of Digital, Robotics and Enabling Technologies at Stryker; Teik C. Lim, president of NJIT; Gina Lim, first lady of NJIT; John Pelesko, provost of NJIT; Craig B. Arnold, vice dean for innovation at Princeton University and the Susan Dod Brown Professor of Mechanical and Aerospace Engineering; Andrew Christ, senior vice president for real estate development and capital operations

Below: Chemical engineer Sagnik Basuray (right) is working with Ph.D. student Niranjan Haridas Menon and postdoctoral researcher Charmi Chande to commercialize a point-of-care device that detects low levels of animal-borne diseases.

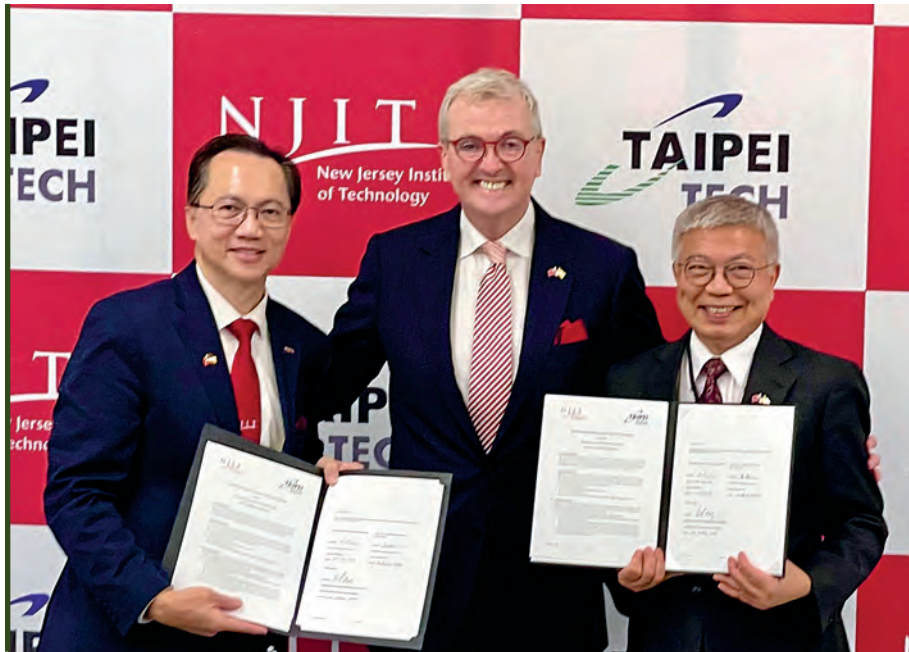


microfluidic device capable of quickly detecting multiple animal-borne diseases, including infectious diseases that can be transmitted between animals and humans. Salam Daher, an assistant professor of informatics, is working on software and hardware that will measure irregularly shaped wounds accurately and create customized wound dressings. “Healthcare workers are still using rulers and Q-tips to measure wounds,”

Daher noted. “We use 3D-tracking technology. We can also simulate the progression of healing.”

Two TITA teams are also developing technologies that will detect and destroy the industrial compounds per- and polyfluoroalkyl substances (PFAS). The first is a highly sensitive

and selective portable sensor capable of detecting and quantifying PFAS at current federal limits in treated water. It will be extended to detection in field samples in the future. The second is a reactor that uses ultrasound and argon nanobubbles to disintegrate the contaminants, among others.



President Teik C. Lim, Governor Phil Murphy and Taipei Tech University President Sea-Fue Wang in Taiwan

Another collaboration will enhance the global competitiveness of Korean and New Jersey companies. President Lim signed an agreement between the Korea Accelerator Association (KAA), Korea Early Stage Investors Association (KESIA) and NJIT. The agreement will enable NJIT, KAA and KESIA to work together.

President Lim also signed an agreement between the Korea Astronomy and Space Science Institute (KASI) and NJIT, which focuses primarily on collaborative research in solar physics. The reaffirmation of this agreement (originated in 2014 and now extended to 2029) continues collaboration between KASI and NJIT to advance joint research efforts. The collaboration is unique, as it centers around NJIT's Big Bear Solar Observatory.

In another solar initiative, NJIT also agreed to work with ECOVE Solar Energy Corporation in Taiwan on a wide range of ventures to spur economic growth and innovation. The agreement will enable NJIT to purchase solar energy produced by ECOVE's subsidiary in New Jersey – further supporting the university's mission to become a more sustainable campus.

"These international partnerships are expected to fuel the further strengthening of our academic, research and innovation, as evident from NJIT's rise in all the major classifications this past year – including the *Wall Street Journal* ranking that puts NJIT at number 2 nationally among all public institutions," Lim said.

NJIT in East Asia

By Theta Pavis

Innovation, Engagement and Technological Exchanges Mark a Successful Mission

President Teik C. Lim joined New Jersey Governor Phil Murphy on a recent East Asia economic mission aimed at generating investment and strengthening academic ties.

"Industry in America and abroad play a very critical role in helping us fulfill our mission as one of the greatest producers of technological talent and knowledge that fuel the economic growth throughout the state," Lim said.

The delegation included former NJIT Vice President Kathy Naaz and was organized by the nonprofit Choose New Jersey, which plans on opening the New Jersey Asia-Pacific Center in Taipei City, Taiwan. The delegation also visited Japan and South Korea.

During the mission, President Lim signed several important

agreements. One, between NJIT and National Tsing Hua University, will facilitate joint research activities and the exchange of faculty and students.

President Lim also signed an agreement with National Taipei University of Technology – the third such collaboration between the two institutions. This one, Lim said, will create a Joint Research Program, with three projects chosen each year to be funded by both Taipei Tech and NJIT. The projects will be co-led by faculty members from each university and will focus on STEM. The continuing partnership with Taipei Tech recently resulted in 15 NJIT students from various disciplines spending two weeks in Taipei for an immersion into Taiwan's higher education institutions, language and culture.

Creative Space

A photo essay exploring NJIT interiors and labs.

Since its beginnings during the country's Industrial Revolution, NJIT has grown from a technical college to a world class university. Its innovative interior spaces offer students everything from a brand new dorm to a repurposed high school with soaring ceilings. From Maple Hall to Makerspace, the lively, urban campus boasts new lecture halls and labs. Combined, NJIT's spaces make for an exceptional environment for learning and creating. Guided by the Division of Real Estate Development and Capital Operations, NJIT's physical plant has expanded in the past few decades from 800,000 gross square feet to nearly 3 million.

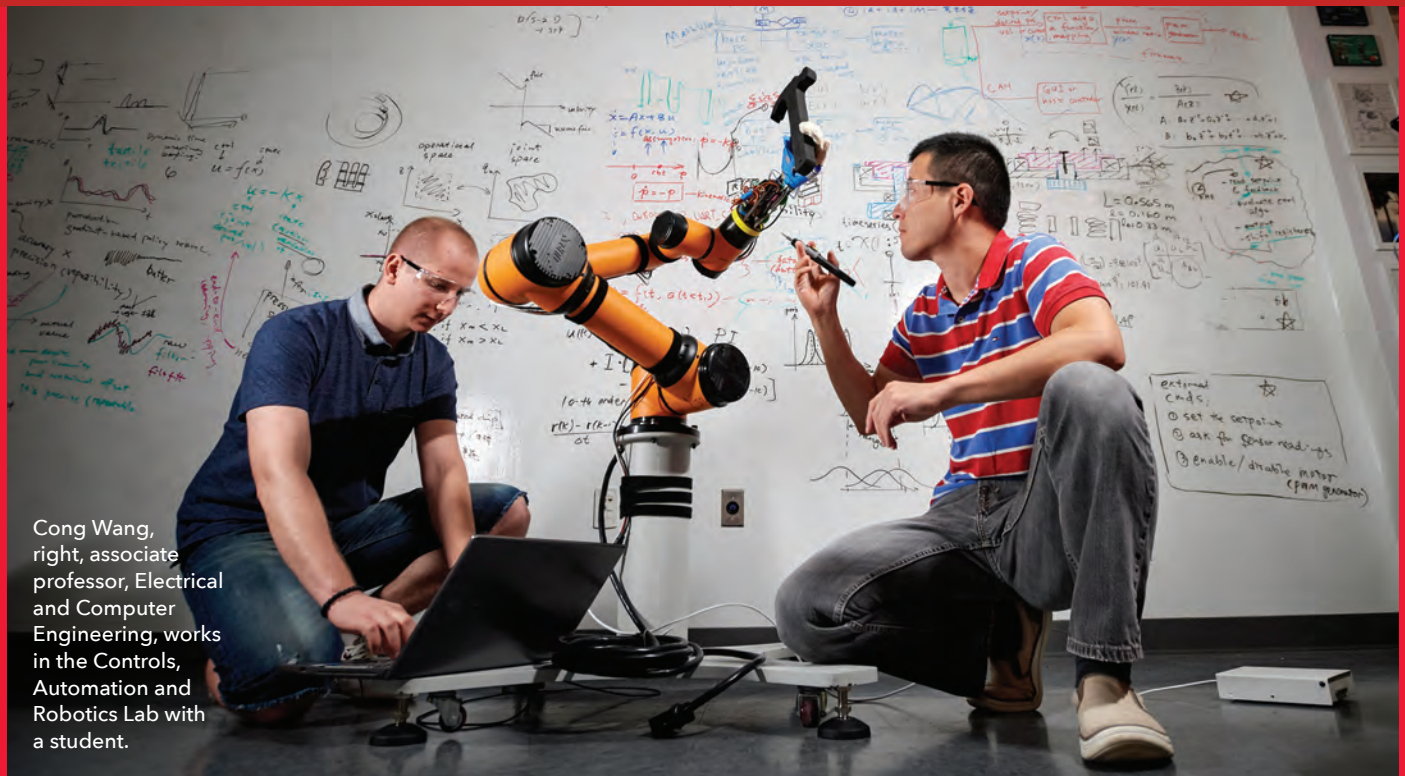
The Central King Building has state-of-the-art STEM teaching spaces, study areas and much more.



Photo: Marvel Architects

▲ Students work inside the Central King Building. Formerly Newark's Central High School, the building was transformed into a state-of-the-art STEM teaching and learning hub. It is also home to the Norma J. Clayton '81 Learning Center.

▲ The MIXRLab in the Ying Wu College of Computing is a unique facility designed for social interaction, application development and research. With an academic theme on game design and simulation, classes utilizing the lab focus on virtual, augmented and mixed reality, 2D and 3D app development and game design.



Cong Wang, right, associate professor, Electrical and Computer Engineering, works in the Controls, Automation and Robotics Lab with a student.

▼ A student practices inside the Lenda and Vince Naimoli '62, '09 HON Turf Room, an indoor training facility for NJIT student-athletes, especially the men's baseball team, men's and women's soccer teams and men's lacrosse team.

▼ A new Forensic Science Lab in Tiernan Hall provides students with equipment and practices used by professionals for crime scene investigation and evidence analyses.



Photo: NJIT Athletics



Photo: Jeffrey Totaro



▲ The Ben and Bernadette Aiello Hospitality Suite on the third floor of the Joel and Diane Bloom Wellness and Events Center, overlooking Lubetkin Field at Mal Simon Stadium.

▲ Madeline D. and Joseph J. Longo Power and Energy Systems Laboratory inside Faculty Memorial Hall.



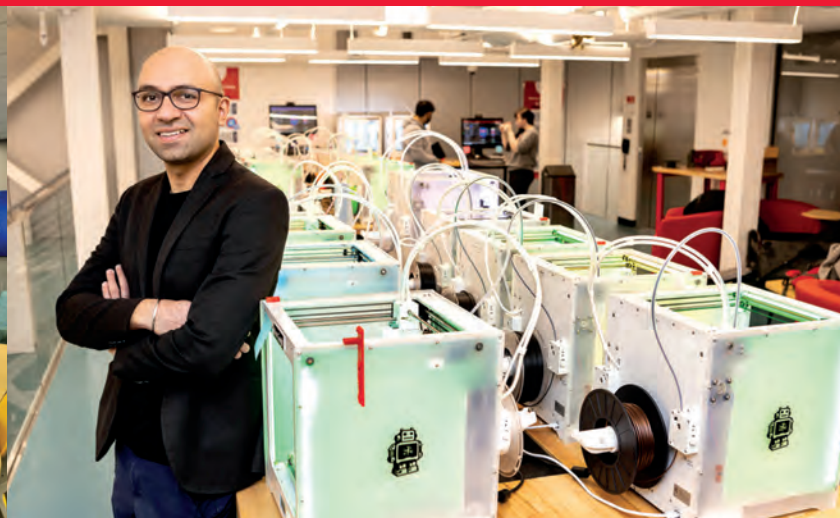
Students attend class inside the Central King Building.

Photo: Marvel Architects

Photo: Marvel Architects

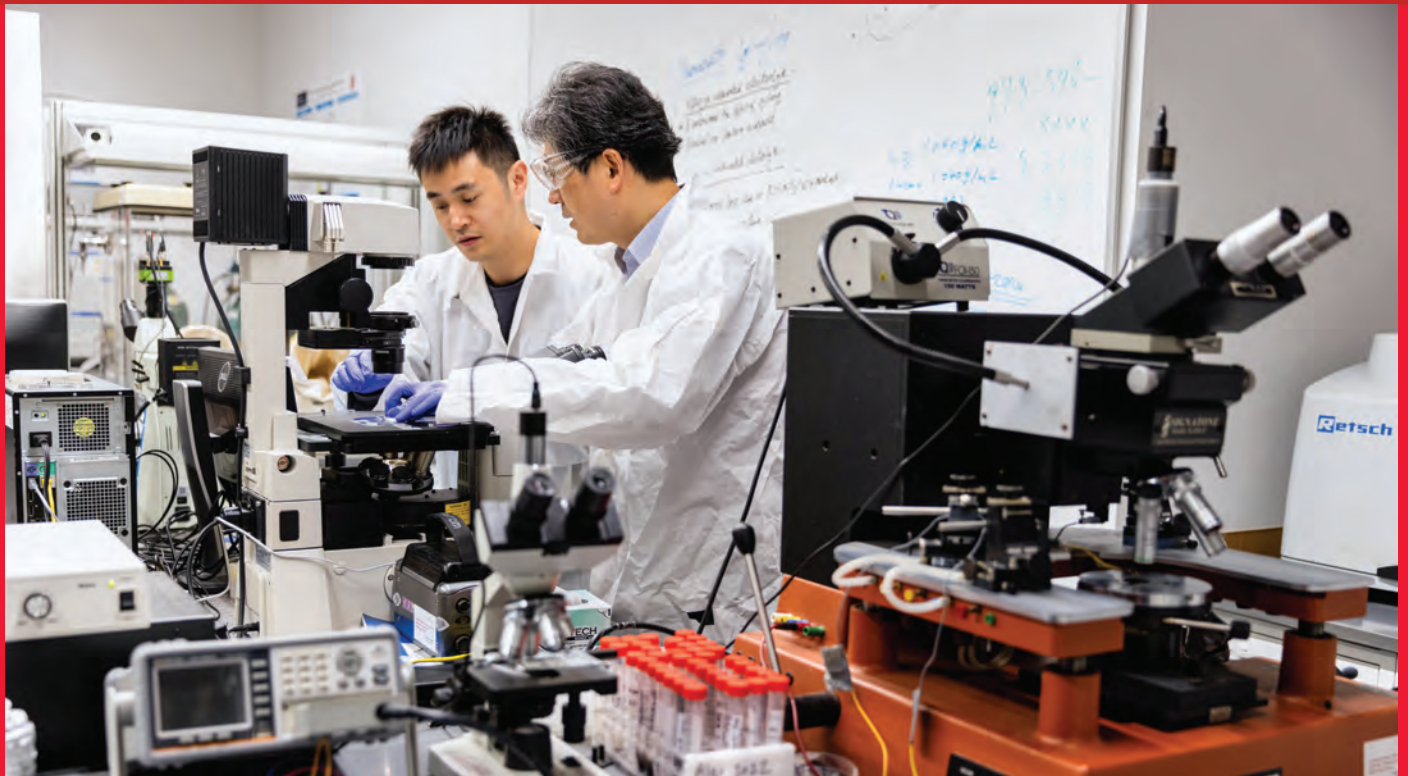
▼ Opened in 2021 inside the Robert W. Van Houten Library, the Leir Data Observatory room provides a high-tech collaborative workspace for staff as well as graduate students and faculty from the Martin Tuchman School of Management.

▼ Pramod Abichandani, assistant professor, School of Applied Engineering and Technology, at the 3D print lab inside Makerspace. At 21,000-square feet, Makerspace is the largest educational facility of its kind in N.J.





▲ Maple Hall, an apartment-style dorm, boasts a spacious terrace with a fire pit, outdoor kitchen and seating areas. The eight-story building, which opened in 2022, also features an open kitchen, private and group study rooms, lounges, indoor and outdoor cafes, a game room and more. Photos: Andy Frame Photography



▲ Associate Professor of Mechanical and Industrial Engineering Eon Soo Lee works with a student inside the Advanced Energy Systems and Microdevices Laboratory. Lee directs the lab.

▼ Makerspace is a rapid prototyping and collaboration facility where student engineers, architects, designers and scientists can create and test ideas, put theory into practice and turn ideas into reality.





▲ The Paul V. Profeta Real Estate, Design and Innovation Center serves as a hub for researching, teaching and training. Housed in the Martin Tuchman School of Management, the center was made possible through a historic donation by Paul Profeta.



▲ The 3,200-square foot Materials and Structures Laboratory in Weston Hall is equipped to do computational analysis, experimental testing and advanced materials characterization of concrete and other infrastructure materials at scales ranging from nanometers to meters.



View of the Vincent A. Stabile Laboratory Wing for Systems Engineering and Management Program inside the Guttenberg Information Technologies Center building.

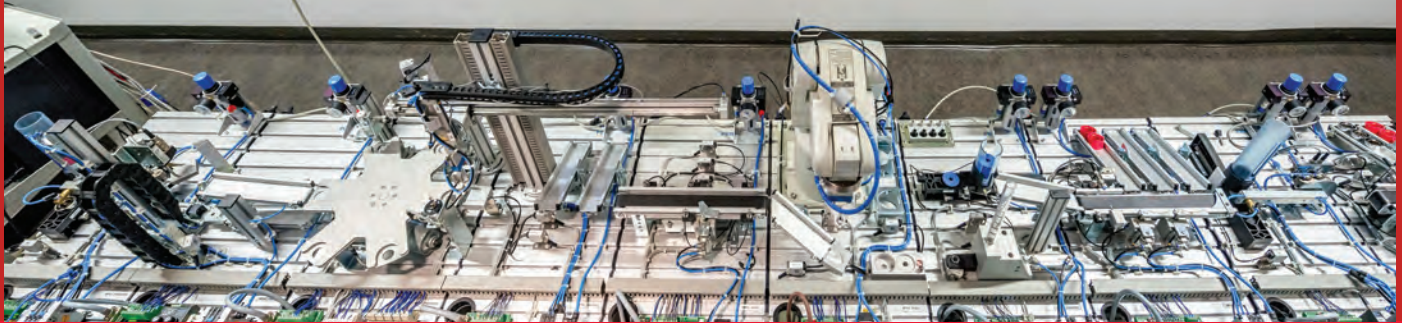


Photo: Earl Richardson

▼ Students in a newly renovated physics Lab inside Tiernan Hall.



▲ See more at the NJIT Campus Planning website

PROFILE

KRYSTAL HUNTER '21 Ph.D.**A Statistician Delves into Health Disparities****Biostatistician, Cooper Research Institute****Associate Professor, Cooper Medical School
of Rowan University****Q: What is your role as the lead biostatistician for a research hospital?**

A: If a physician notices a phenomenon in a segment of the patient population, he or she may initiate a research study to examine the characteristics of those affected by it. A surgeon may notice, for example, a high rate of surgical site infections with a type of suture. As a biostatistician, I help set up the statistical plan for the study, including the statistical tests that will be run to test the hypothesis. I also provide a sample size to ensure that there is enough data within the study to avoid a false negative result due to a lack of sample. At the end, I analyze the numbers using the methodology I outlined. I also help administer survey studies where I quality-check the data looking out for double-barreled or confusing questions in research and process improvement surveys of patients and staff.

Q: What's at stake?

A: Making sure that we collect the correct data that will enable the team to answer their research question. What if we spend years collecting data and can't use it? Not only does that waste resources, it also can present an ethical issue as we either exposed study participants to risk without reporting a result or we risked confidentiality when doing a review study of health records. It's also important that we look at the collected data and are aware of confounders. Let's say we're looking at the relationship between the outcome of chronic pain and age and find a statistically significant relationship between the two. But we also have another explanatory variable of arthritis. People with arthritis tend to be older. This bears the question: Is it truly age that is affecting chronic pain or is it the age-effect of arthritis?

Q: What is your focus as a researcher?

A: I'm focused on health disparities, and birth outcomes in particular. With preterm births, for example, there's always been a disparity between white women and Black women, who are at higher risk. This includes Black women with high economic status. The gap between high and low economic status white women is large, but it's much tighter with Black women. Foreign-born Black women from sub-Saharan Africa have comparable rates of low-birth-weight babies with white women. Unfortunately, a study of low birth weight showed that foreign Black women were the only group where with each succeeding generation, their risk increases. The goal is to bridge those gaps. ■

- Tracey L. Regan

1960s

NICHOLAS G. BINDER '69 was appointed to the St. Augustine Port, Waterway and Beach District Board of Commissioners. Binder is currently retired, previously serving as a professional engineer for the New Jersey Department of Environmental Protection.

ROBERT F. HOLTAWAY '69 stepped down from the New Jersey Highlands Water Protection and Planning Council after more than a decade of service. Holtaway, appointed by then Governor Jon Corzine in 2009, continued serving voluntarily beyond his official term. During his tenure, he held various roles within the council, including treasurer and chair of the Highlands Development Credit Bank Board. Holtaway's contributions were commemorated with a plaque and a resolution passed by the council.

1970s

ISMAEL DIAZ '74 was featured in *Printing Impressions* as the CEO and president of Postal Center International (PCI). PCI is a certified minority-owned business and one of the largest mail, print, fulfillment, signs, packaging, promotional and marketing solutions provider nationwide.

HONORIO J. PADRON '75, vice president of C3 AI, a world leading provider of Enterprise AI software for accelerating digital transformation, was featured on the cover of the

September edition of *World's Leaders* magazine.

1980s

THOMAS L. MANISCALCO '80, '93 was highlighted in the NYU Tandon School of Engineering online alumni publication in recognition of his many contributions to the mechanical and aerospace engineering industry.

CHARLES M. GRUBER '81 was appointed as the new president and CEO of Haws Corporation, a leading global manufacturer of hydration and safety equipment.

MICHAEL H. JAEGER '83 joined Acela Architects and Engineers, which specializes in architecture and engineering, and is a health care sector leader.

KELLY A. GIBLIN '84, '93 was recently promoted to vice president, Engineering East at RailPros, Inc. Giblin joined RailPros, Inc., a 1,000+ employee national railroad engineering consulting firm, in 2018 after retiring from his position as chief engineer of Design & Environmental Services at NJ Transit, where he spent 33 years working in Engineering and Capital Programs units.

PAUL MANZ '84 received the prestigious Weems Award from the Institute of Navigation for outstanding contributions and

exceptional technical leadership in the development and delivery of resilient and survivable Positioning, Navigation and Timing capability for assured precision weapons and munitions. Manz, who holds a dozen U.S. patents, currently serves as chief technology officer for the Joint Program Executive Office for Armaments and Ammunition. He was previously recognized as the Top Engineer in Department of Defense, defacto Top EE in Federal Government and Top Precision Weapons/Munitions Engineer in the U.S.

DAVID J. KROPACZEK '85 joined Veracity Nuclear as chief executive officer. His experience includes five years leading prominent nuclear modeling and simulation programs within the U.S. Department of Energy, such as the Consortium for the Advanced Simulation of Light Water Reactors and the Nuclear Energy Modeling and Simulation Program at Oak Ridge National Laboratory.

PATRICK J. MC GOWAN '85, '88 was honored as Business Executive of the Year by the New York City Knights of St. Patrick at their annual gala in October. McGowan was honored for his significant contributions to the business, labor, philanthropy and non-profit sectors in New York. He is the founder and CEO of McGowan Builders, a leading construction firm in New York, with projects including Manhattan's Dream Hotel and Sirius

PROFILE

SANMI KOYEJO '05

Bias, Diversity and Truth in AI

Assistant Professor of Computer Science,
Stanford University

Co-Founder and President, Black in AI



Photo: Ananya Navale

Q: Should we be alarmed about the rise of AI?

A: AI has been around for a long time and its deployment is ubiquitous. Almost every online platform has some automated decision making: Google web searches; fraud detection; and hiring decisions based on automated systems. What has changed recently, in the public consciousness at least, is that ChatGPT and OpenAI got released and people saw that these tools seemed to work well, but also in a way they could engage with easily. I'm trying to make sure that the impact on society is more beneficial than not.

Q: How can you counter bias?

A: The way these tools are built depends strongly on the data that exists, so behavior in the past is used to make predictions about behavior in the future. This can be problematic, as in decisions that are correlated with past histories of discrimination. It shows up in a benign way in how different

video cameras work for people with different skin tones, but it also shows up in police applications that make more mistakes on people with darker skin tones and can result in people being in prison incorrectly. Having people in the room that have different lived experiences, not just diversity of thought, has a direct impact on building tools that work for everyone.

Q: Can AI help us detect biases in health care that affect outcomes?

A: Unfortunately, a lot of the history of medical care has systemic biases of different care being administered to different groups, sometimes by demographics and sometimes by wealth status. It's sometimes hard to tell which differences are biological and which are due to the biases of the decision makers. We were looking at care around COVID and found systematic differences in care and outcomes that were tied to demographics. An interesting finding was that language seemed to

be a really good predictor of who got better or worse care. If people came in and they didn't speak English sufficiently well, their care was systematically worse, their outcomes were systematically worse.

Q: What prompted you to be a founding member and current president of Black in AI?

A: Circa 2016, a few of us who came together with the shared experience of being the only Black person we knew working in the field. At the time, some impacts of technology could be explained by the fact that there was no one in the room with the lived experience to speak to a tool being built that would have a worse outcome for certain demographics. We're about 5,000 people now and international. It's rewarding to hear stories from people who tell us they would not be in the field if they had not engaged in the group early on, and they've gone on to have incredible careers. ■

- Thomas Kertscher

XM's recording studio renovation in Miami Beach.

1990s

ELISA A. CHARTERS '92, '93, president and co-founder of Latina Surge, received the Latina Pioneer Award at the Latina Civic PAC's 2023 Annual Awards Reception on November 2.

CHRISTOPHER M. ANDREWS '96, '02 was recently appointed chief operating officer of Collective Audience, Inc., a leading innovator of audience-based performance advertising and media.

STEPHANIE H. FARRELL '96 has been inducted into the American Society for Engineering Education 2023 Hall of Fame. The induction recognizes Farrell's significant impact on engineering education and her commitment to advancing the field. Farrell is the founding chair of the Experiential Engineering Education Department in Rowan University's Henry M. Rowan College of Engineering.

RAFAEL J. FERRALES '96 joined national accounting and advisory firm Weaver as managing director of tax services.

GARY LADER '97 led 4/4 Architecture to receive an Award of Excellence for the renovations of Hellertown Lofts at the AIA Eastern Pennsylvania Design Awards. The adaptive reuse

project transformed a former auto dealership into a distinctive residential space, contributing significantly to the Borough of Hellertown's revitalization.

MARIE GARGAS '98 has been appointed senior director of Regulatory and International Affairs at the American Cleaning Institute (ACI). In this role, she will oversee environmental health and safety regulatory issues and expand ACI's collaboration with international organizations.

2000s

SWATEE SINGH '03H was featured in *CDO Magazine* as one of its "Data Leaders 100 - The Leading Influencers North America List 2023." This compilation spotlights the most disruptive trailblazers transforming the future of data in North America. Singh currently serves as the chief data and AI officer at TIAA and is responsible for enhancing the enterprise's data and AI strategy and impact across business lines.

BOSE NITHIN BALSA SUBASH '05 was appointed as chief customer officer at Digibee, an iPaaS company specializing in versatile integration architecture.

VICTOR B. STOLBERG '06, '07, an associate professor and counselor at Essex County College in Newark, is the author of seven articles, including "Globalization" and "Tobacco," in last

year's *Wellness Around the World: An International Encyclopedia of Health Indicators, Practices and Issues*.

POOJA CHATTERJEE '08 has been appointed vice president, clinical at HeartBeam, Inc., a leading cardiac technology company known for its innovative credit card-size 3D-vector electrocardiogram (VECG) platform designed for at-home patient use.

2010s

VANESSA ENG '10, '11 joined Qortex as head of programmatic. In this role she will work closely with Qortex portfolio brands to increase revenue through their use of video advertising.

TIFFANY L. HARRIS-DELANEY '12 recently took the role of director, Department of Economic Development for Paterson, N.J.

JAMAINE MUNGO '13 has been appointed chief information security officer at the City of Philadelphia Department of Aviation.

LUIS REYES '15 joined SESI Consulting Engineers as an assistant project engineer II (Site/Civil) and obtained his Professional Engineering License.

PRATIK A. JAIN '16 received the "Most Promising Business Analyst of the Year-IT & BPM" award at the Leaders Awards celebration in New Delhi, India. Jain currently works as

PROFILE

WILLARD ROBINSON '62

An Engineer Gives Back



Photo: Courtesy Willard Robinson

When Willard Robinson graduated from Newark College of Engineering (NCE) in 1962, he was at the top of his class. Now 92, he's been giving an annual gift to NJIT for a remarkable 50 straight years.

After high school, Robinson enlisted at 17 and became an electronics technician on a Navy destroyer during the Korean War. After the Navy, he got an associate's degree in radio engineering, which led him to being recruited by Bell Labs in 1954. He worked in the military systems lab as a technical assistant on radar and anti-ballistic missile systems.

One of the projects he tackled was improving the range unit for radar systems. This new design, which he shared a patent for, was used in a system that guided satellite launches from Cape Kennedy in Florida.

Seeing that his employer valued education, Robinson enrolled at NCE. At the time, he and his wife had been married for just a year. Living in West Orange, where his wife Joyce was a high school teacher, Robinson would leave work and then attend classes four nights a week, until 10 p.m. Then, after a bus ride home, he would study at a

small desk set up in the hallway of their second-floor apartment for another hour and a half. The schedule was grueling, and his new bride once said to him, "I'm not sure we're going to know if we're even compatible — I hardly see you!" They ended up being married for nearly 70 years.

Once he graduated from NCE, Bell Labs rehired him as a member of the technical staff and put him into their Graduate Study Program. He went on to earn a master's degree in electrical engineering from NYU.

In 1971, Bell Labs moved his division to work on a new microwave radio relay system for AT&T that would be built in North Andover, MA. He and his family relocated there, where he still lives. He has four children: an engineer, an architect, a special education teacher and one that is retired.

In 1982, Robinson received one of the first new "sustained individual performance" awards at Bell Labs. The award was given — not to a manager — but to a seasoned, high performing engineer who excelled in their work. Bell Labs offered Robinson a retirement package in 1989, when he was 58.

At the time, Robinson had been getting more involved in his local

church and soon began volunteering at a middle school in the nearby town of Lawrence, which had a large number of immigrant students. After volunteering in a Saturday math program, Robinson was asked to help the school's science teachers and did hands-on science experiments. Later he got more involved in district-wide science programming and training teachers; he ended up volunteering with the schools for 20 years.

Thinking back to his time at NCE, Robinson said he remembers one of his classes going into Manhattan to see *Inherit the Wind* and then coming back to campus to discuss it. He credits another class — a labor relations course he took his senior year — with turning him into "a liberal." Robinson said NCE's approach was that students were engineers first, then an EE, ME, or CE second. Because of that, students were required to take a wide variety of courses in other engineering disciplines than the one in which they were majoring. Robinson said he found that was helpful in his career.

"I never thought of not giving back to NJIT for my fine education," he said. ■

- Theta Pavis

a lead business analyst at ACS Global Tech Solutions Pvt Ltd, collaborating with ServiceNow to drive their ESG implementation goals.

VALERIA BARRA '18 will join San Diego State University as a tenure-track assistant professor of Mathematics and Computational Sciences.

2020s

TIZIANA CAPPUCCIA '23 writes, “Around the same time as graduation, I published the book *Blinded by the Spoken*. It is fiction and describes the journey a girl takes to uncover the truth about an angel being accused of being a devil.”

IN MEMORIAM

Harold A. Cleveland '58
 Albert Dorman '45, '99 HON *
 George J. Kelly '67
 Rodney M. Krich, BS ME '72
 Paul D. Tauscher '80
 Alan R. Vitalis, BS ME '68
 Linda Werdann '86

* See full story page 7

NATIONAL ACADEMY OF CONSTRUCTION ADDS HIGHLANDERS

Andrew Christ '94, '01, NJIT's senior vice president for real estate development and capital operations, has been elected to the National Academy of Construction.

The academy recognizes exceptional leaders from across the construction industry – including construction managers, contractors, designers, educators and financial managers – who advance the industry through innovation and lasting improvements.

During Christ's tenure, the university has completed some \$600 million in construction and building renovations that have transformed its campus. Key projects include the construction of the



Makerspace, Joel and Diane Bloom Wellness and Events Center, Maple Hall and Life Sciences and Engineering Center; the renovation of the Central King Building, Faculty Memorial Hall and dozens of labs and classrooms.

Christ becomes the fifth Highlander to join the academy, which also elected

alumnus Glenn Steiger '70, '87 this time. The other members are Senior University Lecturer Andrew Ciancia, Board of Trustees Co-Chair Nicholas DeNichilo '73, '78 and alumnus Patrick Natale '70, '75, who serves on both the Foundation Board of Directors and the Board of Visitors for the Newark College of Engineering. ■

PROFILE

HRISHI SIDHARTHA '15

'Grinding Gears' in a Job Most Gamers Dream About



Photo: Courtesy Hrish Sidhartha

Hrish Sidhartha '15 turned an elective into a career to envy. As a game designer with Grinding Gear Games, he spends his day shaping Path of Exile 2, one of the most anticipated action role-playing games on the market. He had to relocate to the other side of the world — or at least down under — to join the Auckland, New Zealand-based company, but making necessary life adjustments was literally in the name of the game when he was offered a once-in-lifetime opportunity.

“One of my main roles is working on the itemization of the game. This involves working on everything to do with items that drop in the game, including all the really wacky ones. It’s a highly creative role, and I love it,” he said.

Sidhartha recently returned to NJIT for the first time since moving seven years ago, as a special guest speaker for

Senior University Lecturer DJ Kehoe’s IT 266 Game Mod Programming, the class where it all began for him. He credits Kehoe with sparking the inspiration to change majors from computer science to information technology.

“I knew Professor Kehoe’s class would be fun, but I didn’t expect to learn as much as I did. I wound up learning more through him than in any other class. IT 266 became my favorite because it was so useful.”

As one would expect, the road to finding his dream job was anything but simple. “I was lucky — but I also worked hard. I had sent out around 500 applications to get to the No. 1 job at the No. 1 company I wanted, which was the first one I applied to!” Sidhartha continued.

Sidhartha feels that he may have had a slight advantage over other job candidates because Kehoe’s class was

“not just talking,” but required students to build a competitive portfolio. Nevertheless, Kehoe also places great importance on developing the art of interviewing, including the confidence to speak in detail about a project and the depth of knowledge to answer the most difficult, unforeseen questions. His class also uses engines that are standard in the gaming industry.

When asked to offer some insight on creating a successful career in gaming, Sidhartha advises finding ways to stand out. “And definitely don’t underestimate a class requiring you to make a game full circle. It’s a big challenge, but so is the pay off,” he said.

Last, but not least, have a thorough understanding of the company and their product, stay current on what’s new — and, of course, “play a lot of games!” ■

- Michael Giorgio

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R1

**Research University,
the highest rating
awarded by the
Carnegie Classification®**

**Hispanic-Serving
Institution (HSI)**

- U.S. Department of Education

**Asian American
and Native American
Pacific Islander-
Serving Institution
(AANAPISI)**

- U.S. Department of Education

30

**straight semesters
of 3.0 GPA or higher**

- Highlander Athletics

\$5 million

**raised towards \$30
million goal for
Highlander Promise
Scholarship**

\$10 million

**investment into a
campus-wide, AI
initiative**

**New Strategic Plan 2030:
NJIT Makes an Innovation Nexus**

NJIT's JERSEY GIRL

Visits from therapy dogs have become popular at many colleges, but at NJIT one special police canine has taken up full-time work.



NAME:
Jersey AKA "Jersey Girl"

BREED:
Goldendoodle (hypoallergenic)

AGE:
1 year 4 months

JOB:
Police K-9 Therapy/Wellness Dog

FAVORITE PERSON:
Police Officer Kevin Berge,
NJIT K-9 Handler

TRAINING:
Florida Sheriff's Department,
three-month Police K-9 wellness
program

FAVORITE SNACK:
Chicken Jerky

FAVORITE SPOTS ON CAMPUS:
The Campus Center, in the
heart of the action (because
she gets a lot of hugs). Second
is in the Detective Bureau
(because they sneak
her treats).



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NJIT MAKES success stories. Begin yours now.

New Tech MBA A technology-driven MBA at NJIT's Martin Tuchman School of Management builds your understanding of data, data visualization, analytic technologies and software to create complex business plans and drive strategic decision making. Students take two concentrations; options are finance, innovation and entrepreneurship, management information systems and marketing. Students may pursue custom concentrations from courses in other fields. There is an online option, as well as a Mini-MBA Graduate Certificate available. For more information, please contact: gradbizadvising@njit.edu.

Online M.S. in Artificial Intelligence (AI) With a master's degree in AI from NJIT's Ying Wu College of Computing, students will be able to demonstrate expertise in several areas, including designing and building custom AI models using programming languages and frameworks such as Tensorflow and PyTorch. Among other skills, students will also learn to: design and develop software in the form of scalable AI software architectures and APIs; process and analyze a variety of data in different formats including text, images, audio, videos, and time series data; and formulate complex problem statements and solve them using specific AI models. For more information, please see: ds.njit.edu/graduate-programs.