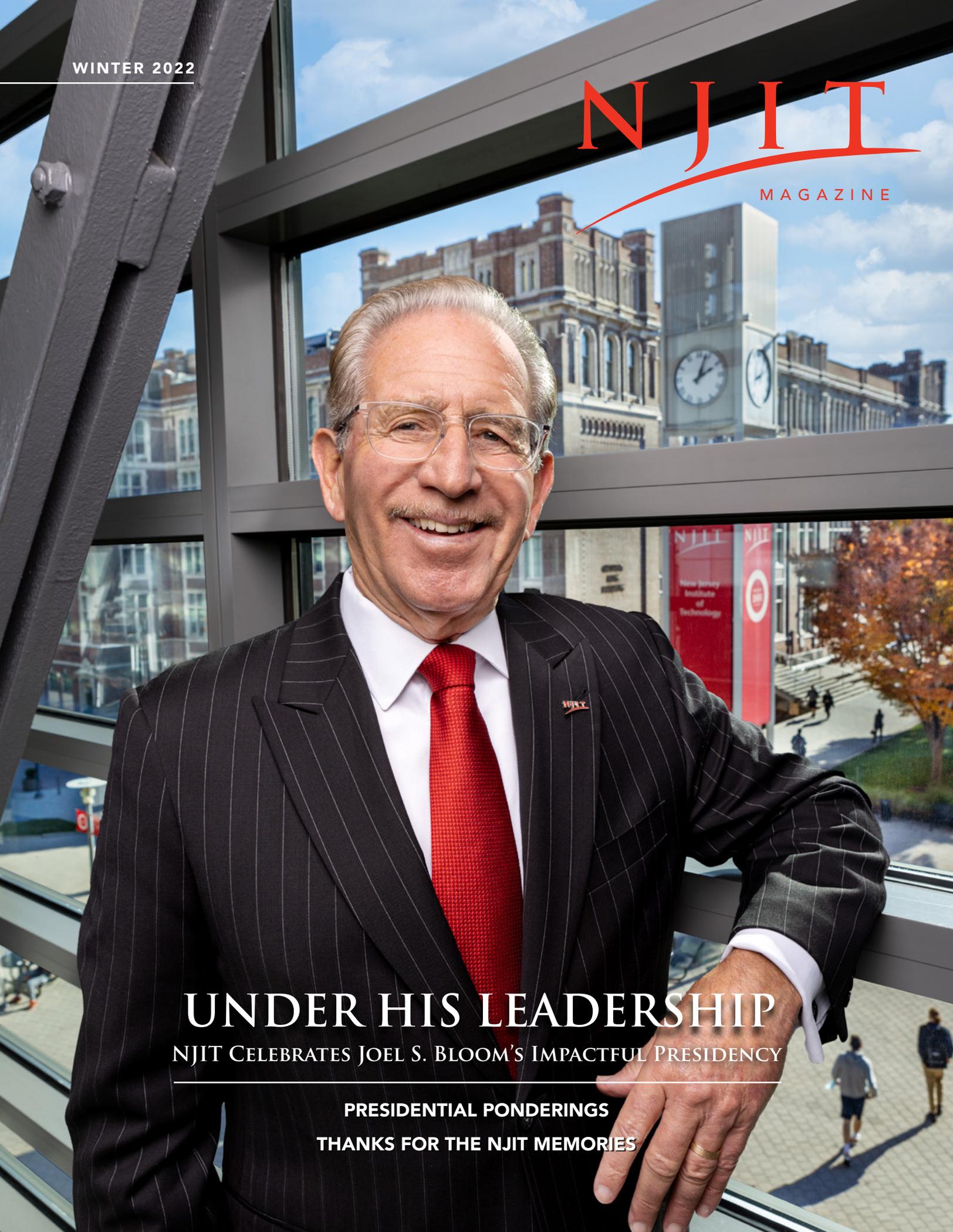


WINTER 2022

NJIT

MAGAZINE



UNDER HIS LEADERSHIP

NJIT CELEBRATES JOEL S. BLOOM'S IMPACTFUL PRESIDENCY

PRESIDENTIAL PONDERINGS
THANKS FOR THE NJIT MEMORIES

REFLECTIONS ON THE BLOOM PRESIDENCY

A MESSAGE FROM DR. ALBERT A. DORMAN '45, '99 HON

This June, NJIT will undertake a major change in leadership when Dr. Joel S. Bloom retires after 11 years as president of the university. Under his direction during the past decade, NJIT has made significant capital improvements, increased its enrollment by 50%, earned top rankings from respected organizations and expanded its worldwide reach, all while continually enhancing the rigorous, career-relevant STEM education provided to its now nearly 12,000 students.

In this special issue of *NJIT Magazine*, the cover story takes a closer look at President Bloom's impact on a myriad of fronts — from campus transformation and the university's economic impact on the City of Newark and the State of New Jersey, to local and global educational and business partnerships, to the innovative Center for Pre-College Programs and to the NJIT school that holds a special place in my heart, the Albert Dorman Honors College.

In a Q&A, President Bloom shares his perspective on what it has been like to lead this great institution for more than a decade. Here, he not only offers his thoughts on NJIT's evolution during his tenure and his hopes for the university's future, but reveals some of his presidency's most memorable and meaningful

moments as well. Additionally, this issue features a photographic retrospective of President Bloom throughout his many years at NJIT.

Although much at the university has changed during President Bloom's presidency, one critically important aspect has not: NJIT continues to be an institution of higher education where hardworking and high-

achieving students, regardless of their financial circumstances, earn an education that prepares them for success and leadership in the real world.

As data from *Forbes*, *The New York Times*, *Payscale.com* and many other esteemed organizations confirm, NJIT is an engine of opportunity for talented young men and women, who arrive at the

university with exceptional potential and then graduate prepared to excel, to contribute and to lead. President Bloom has indeed played an integral role in elevating the university and upholding its stellar reputation.

I hope you enjoy reading this issue of *NJIT Magazine*, and trust that you will join me in wishing President Bloom all the best! ■

Albert A. Dorman '45, '99 HON

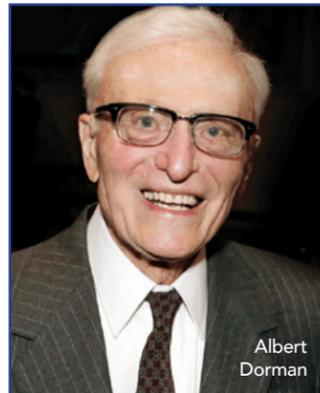


Photo: Michael Smullen

NJIT MAGAZINE

Winter 2022

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NJIT celebrates Joel S. Bloom's impactful presidency, as it comes to a close after 11 years of catapulting the university to new and greater heights.

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NJIT Magazine sat down with President Bloom to glean a special perspective of what it has been like to lead NJIT for more than a decade.

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We take a photographic look-back at President Bloom through the years.

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NJIT DEDICATES TUTORING CENTER, LECTURE HALL

The space inside Central King Building where NJIT students receive tutoring has been christened the Norma J. Clayton '81 Learning Center in honor of Clayton, a retired business leader who is now co-vice chair of NJIT's Board of Trustees.

At the same time, a renovated space at Hillier College of Architecture and Design (HCAD) has been named the Weston Alumni Lecture Hall to fete all alumni donors. Outside the hall is a plaque naming donors.

Clayton, also a trustee at Tuskegee University, earned a bachelor's in industrial administration at NJIT with the help of tutoring and the support from the university's Educational Opportunity

Program (EOP). Among her tutors was Provost and Senior Executive Vice President Fadi P. Deek '85, '86, '97, then a teaching assistant.

At the naming ceremony, Deek said that Clayton, who supports the center, EOP and NJIT's general scholarship fund, and established the Jacqueline V. Brown Memorial Scholarship in memory of her mother, "is an example who inspires our students and instills pride in our alumni."

Beyond tutoring, students can use the center to "engage in free-form thinking, learn from others and have candid conversations," Clayton noted. "I know that it will serve many students to come.

Left: Marc Parette '83, Kenneth Colao '77, HCAD Dean Branko Kolarevic, Donald E. Henry Jr. '80 and Jeanne K. Perantoni cut the ribbon for the Weston Alumni Lecture Hall.

Right: Norma J. Clayton '81, in red, cuts the ribbon on the learning center named in her honor.

It will be a continuous investment for me and hopefully for my family."

HCAD's lecture hall will be used for large classes, guest speakers and other events.

At the hall's dedication, HCAD Dean Branko Kolarevic thanked alumni donors for their "exemplary support," adding, "All of them made the renovation of the lecture hall possible." ■



Photos: Deric Raymond

\$17 Million in Federal Grants Fund Business Innovation, STEM Outreach and Female Entrepreneurship

About \$17 million in federal funding — from the National Science Foundation (NSF) and U.S. Department of Education (DOE) — will enable NJIT to partner in a regional hub for business innovation, introduce STEM to Newark high school students and foster entrepreneurship among women on campus.

The Innovation Corps Northeast Hub, backed by a \$15 million NSF grant, will provide entrepreneurial training, mentoring and resources for researchers to start companies that rapidly translate laboratory discoveries into breakthrough products.

The group is led by Princeton University and also includes Rutgers University, the University of Delaware, Rowan University, Delaware State University, Lehigh University and Temple University. The regional approach builds on NJIT's years of experience as a

standalone NSF I-Corps site.

The STEM introduction, backed by a \$1.4 million DOE grant, will come via a Forensic Science Initiative led by NJIT's Center for Pre-College Programs. Its first students will arrive in the summer of 2022 with a five-week intensive campus experience that features class and lab work, field research, tutoring and college preparation counseling.

That fall, the students will work with a professional on a capstone research project and receive tutoring and counseling through NJIT's TRiO programs. Also, NJIT will help high school teachers become certified to teach forensic science in their own schools.

The entrepreneurship effort, backed by a \$665,000 NSF grant, aims to increase the representation of women and minorities in the commercialization of technology developed



Photo: Deric Raymond

NJIT's Forensic Science Initiative, led by the university's Center for Pre-College Programs, will introduce the discipline to Newark high school students.

in academia, be it through patenting, licensing or starting companies. Researchers will train gatekeepers in tech transfer, venture development and entrepreneurship, and create a statewide network of development programs.

Partners in the initiative include the New Jersey Commission on Science, Innovation and Technology, nonprofit tech services provider Edge and seven universities: New Jersey City, Princeton, Rowan, Rutgers, Saint Peter's, Seton Hall and Stevens. ■



Catherine Z. Brennan

New CFO Brings Experience in Public Finance and Budgeting

NJIT found its new senior vice president and chief financial officer in state government: Catherine Z. Brennan previously was deputy treasurer for the State of New Jersey.

At NJIT, Brennan assumes responsibility for financial management and accountability and leads the offices of General Accounting, University Budgeting, Payroll, Procurement Services, Accounts Payable, Financial Systems and Innovation, Risk Management, Treasury and the Bursar.

As New Jersey's deputy treasurer, she led a team that developed the state's annual budget and oversaw Treasury's

responsibilities related to management of federal COVID-19 funding. Earlier in her career, Brennan held roles of increasing responsibility within the state's Office of Legislative Services.

"I understand the high value return a polytechnic research education offers, and I know that education is pivotal — even indispensable — to our economy," Brennan said. "I am extremely enthusiastic to join NJIT's leadership team and play an important role on behalf of one of the nation's premier public polytechnic universities." ■

NJIT LAUNCHES CHAPTER OF THE NATIONAL ACADEMY OF INVENTORS

NJIT has launched a campus chapter of the National Academy of Inventors (NAI), which promotes academic technology and innovation, and encourages their translation into devices and services that benefit society.

At a ceremony, NJIT inducted 32 faculty members and nine honorary members, including President Joel S. Bloom and Provost and Senior Executive Vice President Fadi P. Deek '85, '86, '97. Chapter members must hold patents issued from the U.S. Patent and Trademark Office (USPTO).

NJIT's chapter will promote translational research and its commercialization through

campus research and development programs, grants, clubs and acceleration programs, offer invention-focused networking and educational activities, and mentor and advise faculty and student inventors on further development of intellectual property assets. In addition, NJIT will recognize inventors and their achievements through events such as NAI-NJIT chapter awards and workshops, Innovation Day and the Summer Research Symposium.

NAI's fellows program recognizes academic inventors who have demonstrated a "prolific spirit of innovation in creating or facilitating outstanding

NJIT's National Academy of Inventors chapter welcomed its inaugural members.

inventions that have made a tangible impact on quality of life, economic development and the welfare of society." New fellows are inducted annually at a ceremony at USPTO headquarters in Alexandria, Va., where they share experiences and make new connections.

Since 2014, nine NJIT inventors have become fellows: Nirwan Ansari '82, Rajesh Davé, Atam Dhawan, Craig Gotsman, Somenath Mitra, Yun-Qing Shi, Kamalesh Sirkar, Gordon Thomas and MengChu Zhou. ■

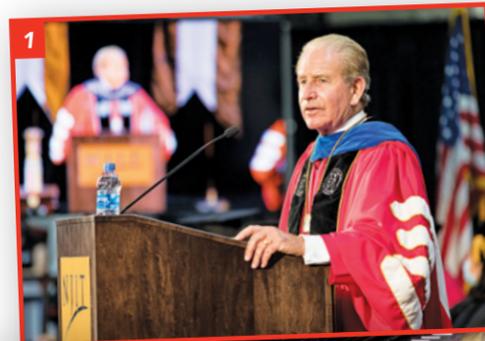




NEWS BYTES

CONVOCATION WELCOMES NJIT CLASS OF 2025

NJIT returned to in-person Convocation festivities Sept. 22, welcoming more than 1,400 first-year students — the largest and most diverse incoming class in NJIT’s history — and acknowledging excellence among alumni, faculty and staff. Gabrielle Grompone ’17, ’20, a construction project engineer with J. Fletcher Creamer & Son, Inc., provided the keynote address, sharing how she overcame her own early struggles at NJIT with the support of the university community and advising the newest Highlanders to “stay resilient.” NJIT Board of Trustees Chair Robert C. Cohen ’83, ’84, ’87 then presided over the presentation of awards and recognition of newly promoted/tenured faculty. The event, held in the Wellness and Events Center, was also livestreamed to the university community. Here, we feature some Convocation highlights. ■



1. President Joel S. Bloom thanks the students for joining the NJIT community.
2. Gonfalon carriers and faculty lead the processional.



3. Convocation 2021 was held in the WEC.

4. Twinkle Chaurasia ’21, flanked by NCE Dean Moshe Kam (left) and Provost and Senior Executive Vice President Fadi P. Deek ’85, ’86, ’97, receives the Presidential Leadership Award (Graduate).



5. Gabrielle Grompone ’17, ’20, civil engineering graduate, gives the keynote address virtually.

6. NJIT Student Senate President Anuja Badeti ’22 welcomes the first-year students.

- NJIT rose 15 spots, to 103 out of nearly 400 schools, in the 2022 edition of *U.S. News & World Report’s* Best National University Rankings. *U.S. News* also ranked NJIT a Top 50 Public University and a Best Global University.

- At Homecoming 2021, hundreds of students and alumni ate BBQ, toured Makerspace and saw the men’s soccer team play the University of Vermont at Lubetkin Field. Music also enlivened the three days of festivities, with performances by Jason Derulo and The Rhythm Shop.

- Located in California, the Big Bear Solar Observatory of NJIT’s Center for Solar-Terrestrial Research soon will become the permanent home for the National Science Foundation’s Synoptic Optical Long-term Investigations of the Sun (SOLIS) facility, which is moving from Arizona. SOLIS is the most advanced solar telescope capable of long-term and consistent monitoring of the Sun as a whole globe.

- NJIT has been named a Best Maker School internationally by *Make Magazine* and *Newsweek*. The inaugural list features just 200 colleges and universities, each evaluated on factors like integrated learning-through-doing orientation; mentoring and coaching; accessible spaces and tools that support independent, collaborative projects; and a diverse, active community of makers.

- A new agreement with Hudson County Community College (HCCC) facilitates a seamless transfer of students into NJIT’s Martin Tuchman School of Management. The deal enables students who earn an associate of science in business administration at HCCC to pursue bachelor’s degrees in business, business online accelerated entrepreneurship and financial technology at NJIT.

- Three leaders at NJIT are featured in *ROI-NJ’s* annual recognition of education influencers: Provost and Senior Executive Vice President Fadi P. Deek ’85, ’86, ’97, New Jersey Innovation Institute CEO Simon Nynens and President Joel S. Bloom, who is Influencer of the Year. *ROI-NJ* also recognized real estate leader Paul V. Profeta for endowing the launch of two new education and research centers at NJIT.



Photos: NJIT Athletics

NJIT ATHLETICS DIRECTOR PICKED TO LEAD VOLLEYBALL ASSOCIATION

NJIT Associate Vice President and Director of Athletics Lenny Kaplan has

assumed the additional role of president of the Eastern Intercollegiate Volleyball Association (EIVA).

Kaplan takes the reins as EIVA expands the number of teams that participate in its annual championship tournament — from four to six — and unveils a new logo to celebrate the association’s 50th anniversary in 2020. He succeeds Ron Shayka, who retired as senior associate athletic director for finance and operations at George Mason University.

Kaplan, who has worked at NJIT since 2000, has deep experience in collegiate volleyball, having served as a member of the NCAA Division I Men’s Volleyball Committee from 2016 to 2021 — including three years as chair — and as athletic

administration representative on the EIVA Executive Committee.

Highlights in his career include being named Athletic Director of the Year by the National Association of Collegiate Directors of Athletics in 2018, and Co-Administrator of the Year in Division I of the Eastern College Athletic Conference in 2015.

The postseason tournament’s expansion coincides with EIVA’s growth to nine members, with the addition of St. Francis College. The new tournament schedule will see three rounds played over the final four days of the NCAA’s regular season with all matches at one site — the home court of the regular-season champion. ■

NEW COACHES FOR MEN’S TENNIS AND CROSS COUNTRY, TRACK AND FIELD



Marco Matteucci

The Men’s Tennis, and Cross Country and Track and Field programs at NJIT have new head coaches.

Leading Men’s Tennis is Marco Matteucci, who most recently was head coach of the men’s and women’s programs at La Salle University. He also has been an assistant coach at top tennis



Jason Munsch

programs in the country — including at Baylor and Columbia universities — and helped lead the University of West Florida to a pair of Division II national championships in the 2000s.

At NJIT, Matteucci succeeds Ira Miller, the head coach for seven seasons. “I want to thank Coach Miller for

having created such a solid team over the years and leaving me with a great group of young men,” Matteucci said. “I look forward to developing our student-athletes and providing them the best experience possible entering the Southland Conference.”

Leading Cross Country and Track and Field is Jason Munsch, who brings extensive experience at the college and high school levels. His last collegiate role was as head men’s and women’s coach at Division II Florida Institute of Technology, from 2015 to 2017. He also was an assistant coach at the College of Charleston, University of Central Missouri and Bowling Green University, and most recently served as an assistant coach at Gill St. Bernard’s in Gladstone, N.J.

At NJIT, Munsch succeeds Al Alonso, who led the men’s and women’s programs for 18 years.

“I believe the academic prominence of NJIT, the vision and leadership of our administrative team and the location of our university within this amazing state and metropolitan area is the perfect recipe to build something truly special,” Munsch said. “I am excited about the journey that lies ahead.” ■



LENDA NAIMOLI AND VINCENT NAIMOLI '62, '09 HON NAIMOLI LEGACY LIVES ON AT NJIT

"HE WAS SO BRILLIANT. And he loved to work," Lenda says of her late husband, Vincent "Vince" Naimoli '62, '09 HON. "Building a Major League Baseball team from the ground up is not easy!"

While Vince may be most widely remembered for his success as the original owner of the Tampa Bay Rays, a move that brought Major League Baseball to the Tampa area, at NJIT he will always be associated with his dedication to his alma mater. Generous support from Lenda and Vince resulted in the naming of the Naimoli Family Athletic and Recreational Facility, home of NJIT's men's and women's varsity tennis programs, in 2011.

Vince's passing in 2019 was felt throughout the campus. However, the Naimoli legacy at NJIT continues through a charitable remainder trust created by Lenda and Vince that will ultimately support the *Dr. Joel Bloom Presidential Scholars Program*, the *Margaret and Ralph Naimoli Endowed Athletic Scholarship* and the *Naimoli Family Endowed Scholarship*. To commemorate their exemplary generosity, the university will name the Lenda and Vince Naimoli '62, '09 HON Turf Room in the Wellness and Events Center as a celebration of Vince's life and work, and of the couple's devotion to NJIT.

"Vince loved sports and he loved his work, but he also loved family and never forgot where he came from," Lenda says. "He felt that it was important to give back." Lenda shares her late husband's love of philanthropy and NJIT. "I enjoy keeping up with Vince's charities," she says, noting that she is finding solace in carrying on his tradition of generosity. "It is a good feeling," she explains, "to help the students, and to show young people that you care about them."

To learn more about Lenda and Vincent Naimoli '62, '09 HON and the legacy they have created at NJIT, please visit "Donor Stories" at njit.giftplans.org.

For further information on the 1881 Society or about how to include NJIT in your estate plans, please contact:

Beth S. Kornstein
Associate Vice President, Planned Giving
973-596-8548
bkornste@njit.edu • njit.giftplans.org

Your legacy begins today.



RANKINGS AND RECOGNITION

'BEST 387 COLLEGES'

- *The Princeton Review*

R1 CARNEGIE CLASSIFICATION[®] RESEARCH UNIVERSITY

TOP 50 PUBLIC UNIVERSITIES NATIONALLY

- *U.S. News & World Report*

#10 BEST CAREER PLACEMENT AMONG PUBLIC COLLEGES AND UNIVERSITIES

- *The Princeton Review*

TOP 2% IN RETURN ON INVESTMENT

- *Payscale.com*

#1 IN NEW JERSEY, #14 NATIONALLY — EARLY-CAREER SALARIES, PUBLIC UNIVERSITIES

- *Forbes*

TOP 100 UNIVERSITIES NATIONALLY FOR MID-CAREER EARNINGS

- *Payscale.com*

#1 NATIONALLY FOR STUDENT UPWARD ECONOMIC MOBILITY

- *Forbes*

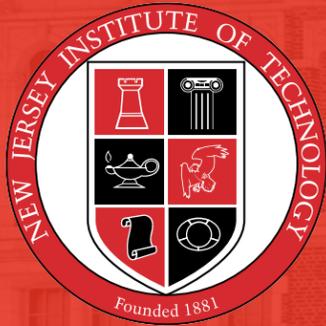
#39 BEST VALUE COLLEGE

- *The Princeton Review*

#90 USA UNIVERSITY RANKINGS

- *Quacquarelli Symonds*





UNDER HIS LEADERSHIP

NJIT CELEBRATES JOEL S. BLOOM'S IMPACTFUL PRESIDENCY

When President Joel S. Bloom joined NJIT in 1990 as associate vice president for academic affairs and student services, he already had a wealth of expertise and experience in education: as an administrator for the New York City public school system, a research director focused on urban education at Teachers College, Columbia University and an assistant commissioner in the New Jersey Department of Education's Division of General Academic Education, where he initiated curriculum

content standards, preschool programs, model urban effective schools, high school academies for science and technology and much more.

This June, after more than three decades at the university — the last 11 as president following several other administrative roles — he will retire. His impact on NJIT, particularly at the helm, has been noteworthy on a number of fronts. Not only has he broadened the university's reach both nationally and internationally, he also has shaped an institution that excels in research, opens doors to STEM education for underserved and minority students, and upholds strong and supportive ties with its hometown of Newark. Here, we take a closer look at the Bloom era, during which NJIT reached new and greater heights.





Dr. Bloom has been a steadfast and dedicated partner in supporting our city's economic growth, educational goals and the social well-being of our residents. His efforts to empower Newark's youth have provided them with the tools and wisdom of advanced education, enabling them to reach their full potential, take charge of their lives and achieve personal excellence. Under his leadership, NJIT has made an incredibly positive impact on Newark and its people, and I will always be grateful to him for doing so. His work stands as his legacy." - Newark Mayor Ras J. Baraka

CAMPUS TRANSFORMATION AND CAPITAL IMPROVEMENTS

NJIT has seen its campus transformed by capital investments of several hundred million dollars since Bloom became university president in 2011.

Current students, faculty and staff are witnessing two major capital projects — construction of a new residence hall at Warren and Wickliffe Streets, and development of a park at the former Mueller's Flower Shop at Central Avenue and Summit Street — while utilizing several past projects that were made possible by funding under Bloom's tenure.

"As NJIT president, Dr. Bloom has been an advocate for the physical improvements to our campus," said Andrew Christ '94, '01, senior vice president for real estate development and capital operations.



Above: The WEC at left, with the Science & Technology Parking Garage in the background

Bottom, from left: Greek Village, New Jersey Innovation Institute and the main floor of the renovated Central King Building



Photo: Oscar Masciandaro



Photo: Deric Raymond



Photo: Deric Raymond



Photo: Diane Cuddy

Left to right: Mueller's Flower Shop and the new public park that has taken its place, and Albert Dorman Honors College

Christ cited Bloom's leadership in obtaining nearly \$100 million in state funding for Central King Building renovations and construction of the Life Sciences and Engineering Center, \$20 million to renovate Faculty Memorial Hall and nearly \$20 million for the Makerspace and Microfabrication Innovation Center.

Bloom and the NJIT Board of Trustees authorized \$214 million for construction of the Albert Dorman Honors College Residence Hall, Greek Village, Wellness and Events Center (WEC) and Science & Technology Parking Garage.

Christ also observed that, under Bloom, NJIT invested over \$110 million in capital renewal and replacement in stewardship of its existing academic, research and student support spaces. "The annual investment in this program has risen from \$3.3 million in fiscal year 2011 to a peak of \$27 million in 2019, resulting in significantly improved facilities and a reduction in the deferred maintenance and renewal backlog on the NJIT campus," he said.

Christ added on a personal note that since Bloom established the position of vice president of real estate development and

capital operations in 2014, "I could not be more grateful to him, as it brought me back to my alma mater to help renew our facilities and plan for a sustainable future," Christ said.

Anthony Samaha '16 was a Student Senate member representing architecture and design students when planning began for the WEC in 2012. Samaha praised the NJIT administration, then newly under Bloom's tenure, for listening to his concerns about walking time between the new facility and Weston Hall.

"My biggest concern at the time was to make sure that a connection between the entire campus was maintained and spaces



Photo: Oscar Masciandaro

for architecture students still had avenues directly to Weston for ease of access," he explained. That way, he said, "A student would not have to sprint across campus to get to class and carry their models to Weston through a labyrinthine series of curbs and sidewalks." The current walk from the main WEC doors to the Weston ramp only takes a few minutes.



Dr. Bloom is a force majeure in all he does. Serving as an overseer for the last 10 years has given me a consistent view of what big-picture leadership looks like. Whether he's fundraising, promoting international expansion and student upward economic mobility, or working with the New Jersey political climate, he always stays ahead of the educational curve." - Marjorie A. Perry '05, Chair, NJIT Board of Overseers

The Bloom Years

1990 Joel S. Bloom joined NJIT as associate vice president for academic affairs and student services.

1994 Promoted to vice president for academic affairs and student services.

1995 Appointed founding dean of Albert Dorman Honors College.

2011 Became the eighth president of NJIT, installed in 2012.

2012 Designated a Champion of the Year by the Society of Hispanic Professional Engineers.

2013 Named to NJBIZ's Power 100 List.

2013 Appointed to newly formed Innovation New Jersey Coalition, to make it easier for industry and academia to collaborate on new ideas and inventions.

2013 Led the acquisition of nearly \$100 million in state funding to renovate the Central King Building and construct the Life Sciences and Engineering Center.

2014 Announced the New Jersey Innovation Institute, an economic development venture described by *ROI-NJ* "as the prototype of how universities can bring ideas in the academic world into the marketplace."

2015 Received Newark Regional Business Partnership's Leadership Award.

2016 Named Educator of the Year by the New Jersey Research & Development Council.

2017 Cut the ribbon on two of the university's largest campus-transformation projects, the renovated Central King Building and the Wellness and Events Center.



Photo: Oscar Masciandaro

ECONOMIC IMPACT ON NEWARK AND NEW JERSEY

Moments after receiving NJIT's presidential medal and mace at his installation ceremony on Sept. 14, 2012, Bloom announced that the university's long-standing commitment to New Jersey's economic growth would not only continue, it would also scale new highs.

"For decades, NJIT has had economic development as its fourth mission element. It's time to actualize that mission," he said. "We can improve student learning outcomes, grow research and apply it with industry partners, and develop a community supportive of these efforts."

Since then, NJIT's rise as one of the region's key economic catalysts has been apparent, propelling alongside Newark's emergence as a tech hub where the headquarters of Panasonic, Amazon's Audible, PSEG, Prudential, Verizon and more than 53,000 tech jobs now reside.

President Bloom outlines the impact of higher education on New Jersey's economy, including NJIT's \$2.8 billion economic impact on the state, at a 2019 joint hearing of the Senate Economic Growth Committee and Assembly Commerce and Economic Development Committee.

NJIT's progress in economic development was well underway by 2016, when an independent study found the university's economic impact in New Jersey was \$1.74 billion. At the time, Lt. Gov. Kim Guadagno observed what would become a recurring theme throughout Bloom's tenure: "NJIT is making an impact on the state's economy disproportionate to its size." Today, the figure is \$2.8 billion.

A crowning achievement during Bloom's presidency has been its role as one of the Garden State's top STEM talent creators, including educating a third of New Jersey's engineers. Students now average three job offers in-hand before graduation — many

include first-generation students that land tech positions with salaries almost 20% above the national average. A landmark *Forbes* report in 2018 named NJIT the nation's top university for student upward economic mobility; just this past September, *Forbes* ranked NJIT No. 1 in New Jersey and 14th nationally among public schools for early-career salaries.

But Bloom also recognized potential for outside collaboration to solve real-world challenges. In 2014, he announced a game-changing economic development venture, New Jersey Innovation Institute (NJII), an NJIT corporation *ROI-NJ* described "as the prototype of how universities can bring ideas in the academic world into the marketplace." Alongside the 2019 formation of VentureLink, the state's largest startup incubator, and the NJIT Venture Fund, "it's completely revitalized entrepreneurship on campus," said NJII CEO Simon Nynens.

NJII now generates more than \$30 million in revenue annually, building what Bloom calls "technology ecosystems" — from partnering with local tech companies to transform Newark into a smart city, to managing the region's health information exchange systems, to opening the first cell and gene therapy manufacturing center on a U.S. university campus, BioCentriq.

"President Bloom's impact on NJIT's mission toward economic development is unquestionable. ... We see it through the university's accolades, student successes in the workforce and the passion for innovation that's palpable around campus," said Nynens. "His leadership has laid the foundation for the future success of both NJIT and NJII."

“Dr. Bloom’s announcement serves up mixed emotions, as we are so proud of his accomplishments during his tenure at NJIT. He has been instrumental in NJIT’s transformation and rise in national rankings, instilling pride in our alma mater. His personable approach and leadership will be greatly missed.”

- Ralph Jimenez '02, President, NJIT Alumni Association

GLOBAL PARTNERSHIPS

Exponential growth has not been limited to just the physical campus under Bloom's presidency. One of the biggest areas of transformation has been at the international partnership level.

While the buzzwords descriptive of such endeavors ring familiar — high-profile, strategic, promising, dynamic — NJIT's foray onto the global stage has helped lift the university to become a leader in research, education and business development around the world. And around the world NJIT has gone — to Israel, Egypt, China, Denmark, Zambia and more.

In 2021, for example, NJIT unveiled a partnership with Israel's Ben-Gurion

University of the Negev (BGU). This partnership launched a world-class Institute for Future Technologies in New Jersey. Two powerhouse universities in the fields of cyber technologies and environmental engineering have come together to offer dual degrees, exciting new research projects and innovation and entrepreneurship opportunities.

To further broaden its worldwide presence, NJIT was the first partner of Egyptian firm Tatweer Misr to launch an international campus in Egypt as part of a \$200 million educational expansion project. This expansion is integral to a 415-acre, \$2.3 billion development plan in Mostakbal City named Bloomfields that will attract

an estimated 3,000 students annually and prepare them for burgeoning opportunities in the region and abroad — in areas that include medical informatics, information technology, civil engineering, architecture, construction management technology and manufacturing engineering technology.

NJIT's pursuit of a global campus does not stop in the classroom or laboratory. An agreement with Ørsted, a world leader in offshore wind development, lays the foundation for a partnership that will provide new need-based scholarships and funding for pre-college STEM programs at NJIT, as well as support for New Jersey's transition to offshore wind and other green energy solutions.

"President Bloom's vision and steadfast support have been invaluable in helping Choose New Jersey advocate for New Jersey around the world as the best place to do business in the U.S. Under his leadership, NJIT has taken on partnerships, like establishing the Institute for Future Technologies, that have raised the profile of the university on the global stage," said Jose Lozano, president and CEO, Choose New Jersey. "I am grateful for President Bloom's contributions to our business attraction efforts and his dedication to our great state."



Photo: Choose New Jersey

From left: President Joel S. Bloom, Gov. Phil Murphy and BGU President Daniel Chamovitz at the partnership signing

“From interacting with students in his Pancakes with the President sessions to working directly with students on important issues at the university, President Bloom has always made students feel heard and part of the process in shaping the future of NJIT.”

- Anuja Badeti '22, President, NJIT Student Senate

“As president of NJIT, Dr. Bloom has implemented transformative changes that have enhanced the quality of education for our state’s students. His legacy of serving young people will continue to inspire our own work in the years ahead.”

- U.S. Senator Cory Booker

ALBERT DORMAN HONORS COLLEGE

Like NJIT, Albert Dorman Honors College (ADHC) started small. Its precursor was the NJIT Honors Program, created in 1985 with an inaugural class of 28 students that grew to 160 by 1990. In 1995, the university made history by establishing ADHC, the first honors college in a public polytechnic university. Named for Albert A. Dorman '45, '99 HON, founding chairman and first CEO of the multinational firm AECOM, the college was headed by founding dean Joel S. Bloom, then vice president of academic affairs and student services.

During his tenure as ADHC dean, Bloom raised \$23 million for scholarships and led an initiative to develop a residential honors

program. New and accelerated programs soon followed — in dentistry, medicine, optometry, physical therapy and law. Under Bloom, the college also added staff, new research programs, seminars, publishing opportunities and student services.

ADHC has been growing ever since, now with nearly 700 students all receiving a generous scholarship. It has been ranked among the best honors colleges in the country by INSIDE Honors.

Dorman Scholars today span every college and are immersed in a challenging, interdisciplinary and academically rewarding program that centers on leadership and professional development, community engagement and technological research. Many students live on campus,

with 360 in the Honors Residence Hall that opened in 2013. Graduates of the college have gone on to work in major companies and start their own businesses, as is the case with the college’s namesake. Many other Dorman Scholars have received prestigious national awards, including National Science Foundation grants and Fulbright and Goldwater scholarships.

Some honors students have been Mayor’s Honors Scholars, through a program introduced by Bloom and Newark Mayor Ras J. Baraka in 2019 to recruit STEM students from Newark Public Schools into the Honors College with full scholarships and paid summer internships with the City of Newark.

“The Albert Dorman Honors College was formed under the leadership of Dr. Bloom, Dr. Dorman and Dr. [Saul] Fenster, and was truly visionary. Dr. Bloom has been unfailing in his support of the Dorman College, our scholars and our alumni ever since,” said ADHC Dean Louis Hamilton. “Our alumni remember his tenure as dean so fondly, because he worked closely to create opportunities for them. He has been tireless in his effort to bring in donations and resources that fund the programs and scholarships that have had such a profound effect, not only on the Dorman College, but on NJIT as a whole. We all owe a great debt of gratitude to him for his leadership.”

At the news conference in 2019 announcing the Mayor’s Honors Scholars Program: (from left) Newark Public Schools Superintendent Roger León, Newark Mayor Ras J. Baraka, President Bloom



Photo: Oscar Masciandaro



These transfer students from Middlesex College, Passaic County Community College and Delaware State University were celebrated by NJIT at National Transfer Student Week 2021.

LOCAL COMMUNITY COLLEGE PARTNERSHIPS

Even before he became president in 2011, Bloom championed the recruitment of community college students.

In his previous role as vice president for academic affairs and student services, Bloom became an ally in the halls of two-year colleges, working with administrators to help their students find a second home at NJIT, according to Anthony Jackson, the university’s associate director of undergraduate admissions. That reputation only grew when he was president.

“People at the community colleges speak about Joel with reverence,” said Jackson, who focuses on transfer recruitment. In particular,

they note “how he has made them feel welcome and how he has been willing to go above and beyond to make things work out.

“It has made my job easier, because they know that at our highest level, they have someone they have access to who can help their students get through the door here,” Jackson added.

During Bloom’s presidency, NJIT has signed new agreements with local community colleges and expanded others to incorporate new majors at four of NJIT’s six academic schools.

Today, the university has partnerships with 14 local community colleges, with those closest to campus transferring the most students. This past fall, for example,

when NJIT welcomed nearly 700 transfer students, the top three feeders were Bergen Community College, Middlesex College and Essex County College, according to Jackson.

NJIT’s transfer agreements stretch north, south and west, however, to include Sussex County Community College, Ocean County College, Warren County Community College, Hudson County Community College and others. After all, you never know where the next budding engineer, programmer or architect will come from.

The president “has always encouraged us to have more and more relationships with community colleges to attract more students, because the transfer students play a big role in what goes on here,” explained Jackson. “And they do well for themselves once they transfer in.”

Jackson further noted that Bloom has been “very hands-on in terms of talking to the community colleges and telling them just how important their students are to NJIT,” concluding, “He has been a strong advocate of the community colleges and the relationships that we formed with them.”

“Working side-by-side with President Bloom for nearly a decade gave me a front-row seat to observe him sharing NJIT’s unique role in Newark, N.J., and the world. NJIT prospered because Joel communicated our distinct identity — a public polytechnic university engaged in professional education and applied research — while expanding our additional mission elements of economic development and engagement.” - Fadi P. Deek '85, '86, '97, NJIT Provost and Senior Executive Vice President

2017 Honored with the Educator of the Year Award by the American Council of Engineering Companies of New Jersey, the leading advocate for New Jersey’s consulting engineering profession.

2018 Celebrated NJIT’s No. 1 national ranking by *Forbes* for student upward economic mobility.

2019 Appointed by Gov. Phil Murphy to the recently established Commission on Science, Technology and Innovation, to strengthen the state’s innovation economy.

2019 Received the Ellis Island Medal of Honor, given annually to U.S. citizens who “embody the spirit of America in their salute to tolerance, brotherhood, diversity and patriotism.”

2019 Led NJIT’s investment in capital renewal and replacement in stewardship of existing academic, research and student support services to a peak of \$27 million.

2019 Introduced, with Newark Mayor Ras J. Baraka, the Mayor’s Honors Scholars Program, to recruit STEM students from the Newark Public Schools into NJIT’s Albert Dorman Honors College.

2019 Marked NJIT's ascent to both a *U.S. News & World Report* Top 100 National University and an R1 Carnegie Classification® for "Very High Research Activity."

2020 Presented with the highest-level award granted by the Secretary of the U.S. Air Force to a nonemployee civilian, the Distinguished Public Service Award.

2020 Served as a member of New Jersey's Higher Education Restart Advisory Group during the COVID-19 pandemic.

2021 Cited among the Top 10 in the first-ever ROI-NJ Influencers Technology list.

2021 Facilitated NJIT's 14th community college partnership.

2022 President Bloom retires from NJIT.



President Bloom addresses the crowd at the 2017 Newark Girl Power Career Summit, a CPCP TRiO program event that welcomed to campus more than 300 female students from 14 Newark high schools.

and Liberal Arts. The MSI, working with five Newark high schools, helps strengthen students' math skills and college readiness, and assists teachers in building learning communities in math instruction. A good percentage of students are subsequently invited to complete college-level math courses on campus and many become full-time Highlanders. The FSI, backed by \$1.4 million in federal seed money, distributed by the N.J. Office of the Secretary of Higher Education, introduces Newark high schoolers to forensic science as a pathway to college and STEM education, and helps qualify educators to teach the discipline at their own schools. The program will welcome its first students this summer.

"President Bloom understands the nexus between the school-age and higher education student populations, as well as the implications for their future as citizens and contributors to the world — and its economy — through STEM careers," said Jacqueline Cusack, CPCP's executive director. "Our targeted outreach to underrepresented and underserved school-age youth is not only driven by an interest in exposing students to the superior quality of STEM education offered at NJIT, but also by a moral imperative that speaks to equity and 'doing the right thing.' Both of these tenets 'stem' from President Bloom's leadership."

CENTER FOR PRE-COLLEGE PROGRAMS

Having helped launch New Jersey's first high-tech high school, Bloom found the prospect of working at NJIT, which had been innovatively building a STEM pipeline, quite appealing. Indeed, the university's Center for Pre-College Programs (CPCP), established in 1979, had been progressive in identifying underrepresented student populations in the STEM disciplines, and addressing shortfalls with programs tailored for middle and high school students.

Bloom oversaw CPCP in his role at NJIT as vice president and has remained a staunch advocate, facilitating partnerships with the Newark Board of Education (BOE), City of Newark and Newark Mayor's Office to keep that pipeline open and flowing.

Striking statistics demonstrate CPCP's success. The center serves 4,300+ elementary and secondary students annually through

offerings ranging from academic and college prep programs such as New Jersey GEAR UP/College Bound and federally funded TRiO programs, Upward Bound and Talent Search, to sponsored competitions including the New Jersey Science Olympiad and TSA Teams, to academic summer programs and family STEM workshops (it provides professional development for teachers, too). At least 93% of seniors in CPCP's grant-funded programs enroll in post-secondary education, while 1,200 students participate in the competitions and 1,900 fourth- to 12th-graders attend CPCP's summer programs. CPCP graduates have pursued careers in engineering, scientific research, education, medicine, finance and more.

Recent collaborations between CPCP and the Newark BOE include the Math Success Initiative (MSI) and the NJIT Forensic Science Initiative (FSI), both administered with NJIT's College of Science

“There is no question that Dr. Bloom has had an amazingly positive impact on this university. His efforts have put NJIT in a great place today and on a trajectory of continued growth in both education and research. The Board of Trustees gives Dr. Bloom our sincere gratitude and a huge thanks for his partnership on always doing what is best for NJIT.” - Robert C. Cohen '83, '84, '87, Chair, Board of Trustees

RESEARCH REPUTATION, FUNDING, FACULTY AND FACILITIES

Over the past decade, NJIT has scored crucial breakthroughs in domains that shape human life — from space weather, to digital and optical networks, to nanotechnologies that probe deep into the body to diagnose and heal, to social media, to ancient Earth history preserved in amber.

In traumatic brain injury alone, NJIT researchers are designing helmets to withstand blasts from weapons such as improvised explosive devices, and investigating the secondary effects of brain injuries set off by chemical reactions that ravage neurons. In September, an NJIT-led team secured \$3.7 million from the National Institutes of Health to tackle a disabling, concussion-induced eye disorder.

Backed by a recent \$1 million grant, a chemical engineer is developing a next-generation mRNA platform that will allow for the controlled release of medications such as vaccines that will also last longer and at higher temperatures.

Since Bloom became president in 2011, the university has doubled its research expenditures from \$80 million to just shy of \$160 million; appointed more than 175 new faculty members with expertise in growing areas of strength, such as biology, computer science, forensics and digital design; expanded its reach with graduate-level programs in data science at a satellite location in Jersey City; and registered scores of patents. NJIT's ascent has continued with its first-ever designation as an R1 research facility, an elite category of 131 universities



Operated by NJIT, Big Bear Solar Observatory in California contains the world's largest solar telescope, which provides unprecedented high-resolution images of the Sun.

in the country and just three in the state that engage in "the highest research activity."

Along with these achievements, the university has steadily integrated research into every facet of campus life, from opportunities for graduate and undergraduate students, to a seed-grant program that supports interdisciplinary projects between fields as diverse as architecture and biomedical engineering, to the creation of more than 130 institutes, centers and labs to take on multifaceted societal problems.

The university recently joined a new regional research hub funded by a \$15 million National Science Foundation grant to help faculty and students convert federally sponsored research into successful businesses. New facilities such as the renovated Central King Building, a 24,500-square-foot Life Sciences and Engineering Center with specialized labs, the 21,000-square-foot Makerspace at

NJIT and the Microfabrication Innovation Center support the university's translational research. NJIT's New Jersey Innovation Institute (NJII) partners with industry and government to advance tangible solutions to societal needs.

"Our university has seen tremendous achievements in research and scholarly productivity with externally funded research growing beyond all expectations," noted NJIT Provost and Senior Executive Vice President Fadi P. Deek '85, '86, '97. "This reflects the complementary relationship between NJIT and NJII, the successful economic development corporation Joel conceived of and launched early in his presidency." ■

Contributors: Julie Jacobs, Jesse Jenkins, Evan Koblentz, Andrew McMains, Rory Pasquariello, Deric Raymond and Tracey L. Regan

“Dr. Joel Bloom has been an incredible educator! He has taken an already well-respected learning institution and made it elite! His vast knowledge and his compassion around social status and economic challenges for certain populations have created a learning environment where students can thrive. I would be remiss if I did not acknowledge the educational opportunities he has afforded the local population in and around NJIT that normally might not have had a quality education. Dr. Joel Bloom has been that leader who has created a climate of success. So upon his retirement, I commend a great leader, superior educator, a wonderful collaborator and true friend!” - Congressman Donald M. Payne Jr.



A ONE-ON-ONE INTERVIEW WITH JOEL S. BLOOM

BY JULIE JACOBS

“GREAT MEMORIES, WONDERFUL COLLEAGUES AND STUDENTS, AND SIGNIFICANT ACHIEVEMENTS AS A FOUNDATION TO BUILD THE FUTURE OF OUR UNIVERSITY,” REMARKED JOEL S. BLOOM ABOUT HIS 11-YEAR TENURE AS NJIT PRESIDENT.

WITH HIS FINAL MONTHS AT NJIT UNDERWAY, WE SAT DOWN WITH PRESIDENT BLOOM TO GLEAN A SPECIAL PERSPECTIVE OF WHAT IT HAS BEEN LIKE TO LEAD THE UNIVERSITY FOR MORE THAN A DECADE, HEAR ABOUT SPECIAL MOMENTS AND LEARN ABOUT HIS POST-NJIT PRESIDENCY PLANS.

PRESIDENTIAL PONDERINGS

Photo: Pete Labrozzi



This interview has been edited.

WHAT HAS SURPRISED YOU ABOUT HIGHER EDUCATION AND NJIT?

We're in an urban setting, my roots, which brings both complexity and energy to the position of the president. We are obligated to serve as an anchor institution with the expectation of partnering with the City of Newark to assist in improving the quality of life within our urban community. In addition, NJIT is New Jersey's public polytechnic university. It is a STEM university, which from all sources is recognized as being among the most expensive to operate. The body of knowledge in STEM is in constant flux. The knowledge and skills that people need to succeed are changing rapidly. Instructional processes, materials, labs and equipment are evolving at an incredible pace. The rapidity with which we need to adapt and the necessary resources to change is something I hadn't thought about, given my prior assignment as a vice president and dean of the Albert Dorman Honors College. Sitting in the president's office of our public polytechnic university, I very quickly realized we are in a footrace for change, growth and resources. STEM education, architecture, computing and engineering are among the most costly disciplines. In addition, the competition in higher education has become intense, whether it's hiring faculty, recruiting students, competing for research grants, fundraising or growing the university reputation, while creating an environment in which people can become increasingly productive. Therefore, the *sine qua non* of NJIT became "growth and change for continuous improvement."

HOW HAS NJIT EVOLVED MOST OVER THE COURSE OF YOUR PRESIDENCY?

I realize that, in some ways, we've created a seismic shift here at NJIT for our students.

This year's incoming class is 29% women. Wow! That's great improvement from where we traditionally have been. While we always have been an institution serving many first-generation and low-income students, today we're increasingly diverse: 25% Hispanic, and this fall 2021 was our largest incoming class of African Americans. NJIT looks like the future of higher education, as we continue to recruit diverse students. As I meet with business and industry partners, particularly alumni, the demand for our students continues to appreciate, for their diversity, the quality of their education and the hunger of our students to succeed. I ask for our business and industry partners, and alumni, to give back to our university, to give their "time, treasury and talent." After all, we contribute significantly to their talented workforce.

WHAT DO YOU FEEL ARE YOUR PROUDEST ACCOMPLISHMENTS?

What kept me here after my first three-year contract working for Saul Fenster, who was an outstanding president, was the opportunity to establish the Albert Dorman Honors College. In 1993, as I was thinking about what I was going to do next and weighing my options, I was invited to travel to Santa Monica to meet Al Dorman. Al was and is an absolute giant, having founded a renowned, worldwide engineering design firm. We talked about my having helped to establish high-tech high schools when I was an assistant commissioner of education for New Jersey, and he said, "That's what we need at NJIT, to create a place for hardworking and high-achieving students to excel." Serving as the founding dean of the Albert Dorman Honors College is still one of my proudest accomplishments. I think it has led to one of the most transformative periods

of this university and something we must continue to build on. Al continues to serve as a mentor and friend.

As president, my proudest accomplishment has been our growth trajectory. We have grown our faculty, students and facilities. Our enrollment has increased by 50%, graduation rate has increased by over 20%, research expenditures by nearly 100% and our campus facilities by 1 million square feet. We continue to monetize the assets of NJIT that have enabled its growth. We are now a nationally and internationally ranked university. I've observed and learned that higher education has changed from an ivy covered institution to a commodity. The only way commodities do well is with a growth scenario with all of the KPIs (key performance indicators) continuing to go up.

WHAT IS THE MOST VALUABLE LESSON YOU'VE LEARNED AS PRESIDENT?

A colleague said to me just the other day, "You can't make decisions by committee." While shared governance is a tradition of NJIT, which I often follow, at times you must say this is how we now need to proceed. We've had the deliberative process, we have all reviewed all the data in the room that is available to us at this time. Situational leadership requires us to reach consensus, execute and move together in the same direction. The key is building the leadership team characterized by trust, ongoing communication and accountability. KPIs and ROI have become part of the lexicon of the NJIT leadership. I would tell you today the team of people, vice presidents and senior staff, leading NJIT along with the trustees, is as good as you're going to get managing any type of high-performance organization.

LET'S TALK ABOUT SOME OF THE STANDOUT MOMENTS DURING YOUR TENURE AS PRESIDENT. WAS THERE ONE THAT BROUGHT TEARS TO YOUR EYES?

A very vivid recollection is from my inauguration — when I stood at the podium and realized who's in the audience and who's not in the audience, and the who's not in the audience in this case were my parents. Speaking about it today is still saddening. This was somewhat ameliorated by seeing my wife Diane and son Ean, as well as lifelong friends, some from kindergarten, in the audience.

SWITCHING GEARS, WHAT WAS THE FUNNIEST MOMENT?

Also at my inauguration [laughs]. As we queued up, there was a big bass drummer who I was marching behind. This guy was about 6'5" and the drum was about 5 feet wide. As we're walking, I'm thinking, gee, no one knows I'm here. It was a sunny day and he cast a big shadow. So as we marched, I fell farther and farther behind, so people could see there was someone actually behind the man with the big drum. Also, during the inauguration, John Schuring, who's a friend and a faculty member of the Department of Civil Engineering, was asked to speak. He did an imitation of me greeting people, stepping forward with a smile on my face and putting my hand out to shake. As he was doing this caricature, several times as he spoke, I found myself laughing at myself and how well he captured me and my joy in meeting people.

AND THE MOST MEMORABLE MOMENT?

I think the most memorable moment was coming into the office of the president of NJIT and sitting down at the desk. At that

moment, the celebration of the appointment came to an abrupt end and I realized the weight of the responsibility for this great university and its community. And so began the life of too many 3:30 or 4:30 a.m. wakeups, going to my laptop or picking up my cellphone to read, write, email or text.

DO YOU HAVE A MOST TREASURED MEMENTO FROM NJIT?

There are two. One is on the wall in my office. It's a picture of graduation 2012, my first as president. When you stand at that podium and you look around and see the rows filled with a very diverse group of students, along with their parents, siblings and earlier generations of family, or just prior to the opening of the ceremony, there's not a better moment than going out to talk to these families when they are seated and you get a sense of how important Commencement is to them. I will never forget when I asked a student queuing up for graduation what he was going to do with his soon to be earned salary, and he replied buy his mother a house. How special and appreciative are our NJIT students!

My second treasured memento is the prestigious Ellis Island Medal I received. I was in the Great Hall of Ellis Island where my dad had entered the United States when he was 10 years old. The night I received the award, I carried a picture of him with his mother and three sisters sitting on a steamer trunk in the Great Hall. After all, this is a nation of great immigrants, of which I am a descendant.

THERE HAS BEEN A TREMENDOUS AMOUNT OF CAMPUS TRANSFORMATION. WHAT IS YOUR FAVORITE SPOT ON CAMPUS?

During my transition from vice president and dean to president, I was a strong advocate for making sure we bought Central

High School from the Newark Board of Education. Because of my prior position, I knew many of the politicians in the state and in the city and used some of those acquaintances to ensure that the building would be offered to NJIT if it was to be sold. There are three ground floors in that building due to its grade, so when you go into the building, regardless of which ground floor you enter, there's an abundance of students. We created student workspaces and workrooms, and these attractive areas where students can hang out and relax. We also created, and here is my favorite spot, an area where students can work together in teams, receive tutoring and/or meet with advisers. You can easily observe the diligence and intelligence of our students from these spaces. Today, students still tell me CKB is one of their favorite buildings on campus. It's my first stop when I host visitors to campus, because I think it's emblematic of this institution, a composition of the past, future and our students.

HOW WILL YOU BE SPENDING YOUR RETIREMENT?

I will be president emeritus for two years, finishing June 30, 2024, and will offer my assistance, when appropriate, to my successor. There are some projects I look forward to seeing to completion, and I also look forward to continuing to serve on some boards. However, I'm very clear and know only so well that there is only one president at a time.

I look forward to spending more time with my dear wife Diane and son Ean as well.

And, for two weeks every year, my wife and I go sailing with some friends, mostly in the San Juan Islands off of the coast of California and Washington, and north into the Canadian waters where the scenery is both stunning and calming. While the



First Lady Diane Bloom and President Joel S. Bloom

WHAT IS THE BEST ADVICE YOU RECEIVED UPON BECOMING PRESIDENT, AND WHAT ADVICE DO YOU HAVE FOR YOUR SUCCESSOR?

When I came here in 1990, Saul Fenster told me I didn't know anything about being a higher educator administrator, and of course he was right. He said why don't you do some externships, bring back knowledge about leading student affairs — NJIT previously had no such VP — and take a year to learn about NJIT. NJIT was

available directly and indirectly through the state as a result of "Critical Infrastructure" and anticipated "Build Back Better" legislation. The next president must have great observational and listening skills. The NJIT community is a highly intelligent, shared-governance community of trustees, administration, faculty, students, staff and alumni. A president, particularly a new one, cannot succeed without listening and understanding the NJIT community and the context in which the university exists. However, I also learned quite a while ago about the 80% solution: Do your homework, gather and synthesize the needed information, consult with colleagues and the community, then proffer a strategy or solution, even if it's a partial one which others — vice presidents and senior staff — must help you to communicate, implement, monitor, assess and report the outcomes, and adjust if necessary. The NJIT community is an amazingly talented and hardworking community that will support open, highly communicative and participatory processes.

ANYTHING IN PARTICULAR YOU WOULD LIKE READERS TO KNOW?

There are many more people who we need to help inform about how important NJIT is to our local, national and international communities, as well as those who owe a debt to our university. We do need greater recognition of NJIT's outstanding value and achievements, that we significantly "punch above our weight," and we need more support from our multiple stakeholders, including the State of New Jersey, business and industry, and our alumni, through their "time, treasury, talent." We are producing the most diverse engineers and scientists to fuel our increasingly tech economy. These individuals are producing the processes and products that in many cases are lifesaving and significantly improving the quality of life! ■

sailing is always a challenge, we also take time to hike the remote islands and are often rewarded with some excellent island restaurants. I look forward to doing more sailing, which I have done for over 50 years. Also, our home is on the water, and nature is the best decompression chamber along with a good book. We also love to travel and do have a bucket list.

WHAT ARE YOUR HOPES FOR NJIT'S FUTURE?

The future has to be about growth and continuing to improve the reputation of this university. Our students, faculty and staff are excellent, and this must continue to be communicated. The accumulation by faculty and students of highly competitive national prizes over the recent years has been stunning. We must also continue to celebrate the diversity of our university, and the contributions it has made over the decades to improving the quality of life for our communities through STEM.

a different university in 1990, and the "commoditization" of higher education was at its threshold. The ranking of higher education by *Money Magazine* was just beginning. NJIT's marketing was about nil.

When I became president, I took the lessons I had learned at NJIT during my prior 19 years. There was an immediate context of an existential threat to NJIT, due to the proposed reorganization of New Jersey higher education. Tactically, we needed to position NJIT, uniquely, as the state's public polytechnic university producing the highly needed STEM workforce, conducting STEM research and serving as a partner to the science and technology industries of New Jersey. It became a 50-yard dash to preserve the NJIT brand. We did persevere.

Soon, a new president will join the footrace, immediately as state funding for higher education is being debated. In addition, there are very time-critical decisions about both state funding for facilities and federal funding becoming

To honor his final year as NJIT's president, make a gift in support of the Dr. Joel Bloom Presidential Scholars Program.



Established to provide talented, hardworking students from low-income families and underserved communities with a **world-class, STEM+ education.**



njit.edu/givenow



The Blooms chatting with alumni at Homecoming

From The Technology Observer's Advisor

Dear Reader:

The Technology Observer Magazine is an initiative of NJIT and Albert Dorman Honors College students. It grew from the desire of the students to learn and write about innovation and emerging technologies.

The students formed a team, researched the issues of innovation and emerging technologies, and developed business and operations plans. Armed with their intelligence and diligence they then fanned-out to find emerging technologies. With the cooperation of several companies and the commitment of scientists and engineers from Lacent Technologies, Allied Signal, Grow Tunneling Corporation, and the Princeton Plasma Physics Laboratory, they learned about new technologies and the processes and science that led to their development and applications. This learning experience was enriched by an interview with Mitchell Feigenbaum, Professor of Mathematical Physics at Rockefeller University and significant contributor to the field of Chaos Theory, as well as by interactions with NJIT faculty members, who advised and guided them in their investigations and writing. As the students gathered the information, they continuously checked the facts, wrote multiple drafts, did the edits and persevered.

The product of their initiative and the months of hard work is the Technology Observer Magazine. This achievement is all the more impressive for having been undertaken while the students continued to fulfill the rigorous requirements of the Honors College and the NJIT curriculum. The students' performance and their product exemplify the mission of the Albert Dorman Honors College: "to attract the ablest and most highly motivated honors scholars and to develop and to prepare



them for professional careers, graduate studies and positions of leadership in business, industry, medicine, law and government."

Sincerely,

Joel Bloom

Message for the Honors College's student-produced Technology Observer



A summertime gathering with Highlander alumni



Celebration fundraising gala: (from left) President Emeritus Saul K. Fenster, Albert A. Dorman and President Joel S. Bloom



The president at his inauguration

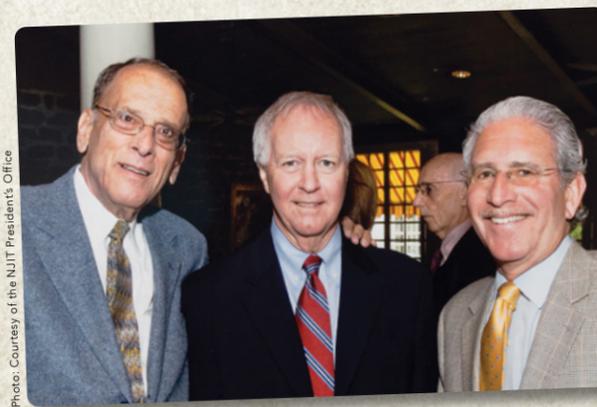
thanks for the NJIT memories



President Joel S. Bloom next to one of his most treasured mementos: a photo of the 2012 Commencement, his first as president



Martin Tuchman School of Management (MTSM) naming ceremony: (from left) Provost and Senior Executive Vice President Fadi P. Deek '85, '86, '97, President Joel S. Bloom, Martin Tuchman '62 and former MTSM dean, Reggie Caudill



A picture of presidents: (from left) President Emeritus Saul K. Fenster, President Emeritus Robert Altenkirch and President Joel S. Bloom



Serving pancakes to kick off the academic year

1950s

WAYNE WEBB '58 was inducted into the NJIT Athletics Hall of Fame for 2020 for men's basketball. In his junior year, Webb helped NCE to a 9-6 record. During his senior campaign, Webb set the school record for points in a game with 29 against Brooklyn Poly en route to finishing the season with better than 200 ppg.

1960s

VINCENT NAIMOLI '62, '09 HON was posthumously inducted as a benefactor into the 2020 class of the NJIT Athletics Hall of Fame. Naimoli's support of the athletics program at the university led to the construction of the 25,000-square-foot Naimoli Family Athletic and Recreational Facility, home of the NJIT men's and women's tennis programs, as well as NJIT's intramural programs, recreational sports and practice facilities.

JOHN RAPSOMANIKIS '68 was inducted into the NJIT Athletics Hall of Fame for 2020 for men's soccer. An All-American, he helped the men's soccer program to a 32-5-2 record, and guided the team to an NAIA Co-Championship in 1960 and NAIA Runner-Up status in 1961.

1970s

KING MOY '74, a 2020 inductee into the NJIT Athletics Hall of Fame, was the second recipient of the Herb M. Iris Award, which honors exemplary leadership and support in the advancement of athletics at NJIT. The award pays tribute to the late **HERB M. IRIS '51**, a great visionary and a major benefactor and supporter of NJIT Athletics.

1980s

JOHN RIBARDO '80, M.S. '83, senior director of transmission products at PSEG, recently published "How PSE&G Reduces Impact on Protected Environments."

NORMA B. CLAYTON '81, NJIT Trustee, was recently appointed to the Board of Directors of Nucor, the largest steel producer in the United States.

JIM IVERSEN '85, founder and CEO of Sen-Jam Pharmaceutical, announced a co-development agreement with Duke University Medical School to start a Phase II clinical trial for the company's oral COVID-19 therapeutic.

1990s

SONIA ZACHER-MARTINI '90 was inducted into the NJIT Athletics Hall of Fame for 2020 for women's volleyball. IAC Player of the Year in 1988, she helped the NJIT women's volleyball team to a program-best 26-6 overall record and an ECAC Metro NY/NJ championship semifinals appearance. She also earned GTE Regional Academic All-America and All-WIAC honors and guided the team to a 62-20 overall record in three years.

STEVE TICE '93 was inducted into the 2020 class of the NJIT Athletics Hall of Fame for baseball. A four-year member of the NJIT baseball program and three-year captain, Tice combined for 23 career wins, five saves and a .314 career batting average. He was a two-time Independent Athletic Conference (IAC) Player of the Year, a Skyline Conference Pitcher of the Year, a three-time All-IAC and Skyline Conference first-team honoree and second-team All-Skyline Conference.

2000s

WYCLIFFE GORDON '00 was inducted into the NJIT Athletics Hall of Fame for 2020 for men's volleyball. Gordon earned AVCA All-America second-team honors in 1998, when NJIT competed at the Division II level. He graduated as one of the top offensive volleyball players in Highlander history, finishing his career ranked in the top five in kills.

ASHISH PARMAR '01, M.S. '02 has been appointed to the Board of Trustees at Arcadia University in Pennsylvania. He's currently senior vice president and chief information officer for Tapestry, Inc.

SHUJAH (SHU) AWAN '02 joined Roxe, a consumer mobile payment app, as general counsel and chief compliance officer. A seasoned legal executive with considerable experience guiding multinational FinTech organizations, Awan has served as senior in-house counsel, outside general counsel and board adviser to numerous companies. He routinely advises boards and executive management teams on strategic initiatives and regulatory issues in the FinTech sector.

IKSHA HERR M.S. '03 presented "Ambient Intelligence in Healthcare Using AI in a Digital World" at the Indio-Asia Digital Health Centre global conference. She spoke about generating ambient intelligence from health-related digital data, which is generated on a continuous basis from EHRs, devices, apps, workflows, etc.

DEMOND COWINS '04 was inducted into the NJIT Athletics Hall of Fame Class of 2020 for men's basketball. He finished his career as NJIT's second all-time leading scorer (1,909) and fourth all-time leading rebounder (959). Cowins holds the school record for free throws made (478), and ranks third and ninth all-time for points in a season with 598 and 550, respectively.

HONG ZHAO '04 PH.D. recently co-authored "Toward a long-range adaptive communication via information-centric networking," a research paper published in Tsinghua University's *Intelligent and Converged Networks* newsletter. Zhao is a professor of electrical and computer engineering at Fairleigh Dickinson University in New Jersey. Her research focuses on various aspects of broadband communications and computer security, including network

traffic/performance/security analysis and modeling, and hardware Trojan detection. She serves as an associate editor of the *Journal on Multidimensional Systems and Signal Processing*, and editor of the *Journal of Computing and Information Technology*. Zhao also serves as vice chair of IEEE's North Jersey Section. She has been a TPC member, symposium co-chair, technical paper reviewer and book reviewer for IEEE conferences, journal magazines and book publishers, and served as a board chair of the Wireless and Optical Communication Conference (WOCC) (2017-2018). Zhao received the AFRL VFRP award in 2014-2016, AFOSR SFFP award in 2017-2019 and 2015 IEEE Region 1 Award for Outstanding Support for the Mission of the IEEE, MGA, REGION 1 and Section.

KELLY (CROWE) ASCOLESE '07 was inducted into the 2020 class of NJIT Athletics Hall of Fame for women's basketball. Ascolese graduated as the school's all-time leading scorer (1,497) and ranks second on the all-time list. She averaged 13.2 points per game and ranks fourth on the school's all-time assist list with 307.

NIHAR PATEL '08, UPESH PATEL '96 and **KRUPAL S. KAPADIA '04**, all U.S. Army engineers, recently published "Stitching the U.S. Army's 'Data Fabric'" in *Army AL&T* magazine.

ERIKA TAUGHER '08 was inducted into the NJIT Athletics Hall of Fame Class of 2020 for women's soccer. Regarded by many to be the best player to ever wear a Highlander uniform, Taugher holds the NJIT school record for points in a career (47) and shares the school record mark for goals in a career (16), as well as the all-time mark for career assists (15). She also ranks among the program's best in goals in a game, goals in a season, assists in a season and points in a season.

DESMOND D. HAYES '09, M.S. '11, '14 PH.D. was recently featured in *Community News* for his new hydroponic vertical farm, Geo Greens LLC.

BROOKE M. ODLE M.S. '09, '14 PH.D. received an "Up and Comer" Award from the American Society of Biomechanics. Currently, she is an assistant professor in the engineering department at Hope College.

2010s

AHMAD HAMDEH '12 was appointed principal of Clifton High School, the eighth largest high school in New Jersey. Ahmad recently served as a biology teacher and as vice principal.

HAICHEN LIU M.S. '12 was featured as an "MBA to Watch" in the *Poets and Quants* newsletter from Tsinghua University.

DARIO LOBOZZO '12 was appointed the sales director, global accounts, at Industrial Defender in May 2021. Previously, he served as global vice president, supply chain risk, at Fortress Information Security.

DINA AYMAN '17, M.S. '18 is an Egyptian-American tech professional who has set up Diversity and Inclusion Power (DIP) in New Jersey, a company that advises corporations and universities to have greater inclusion that is customized to their needs. DIP also consults for universities to bring diversity and inclusion to the academic spaces in the formative years of students.

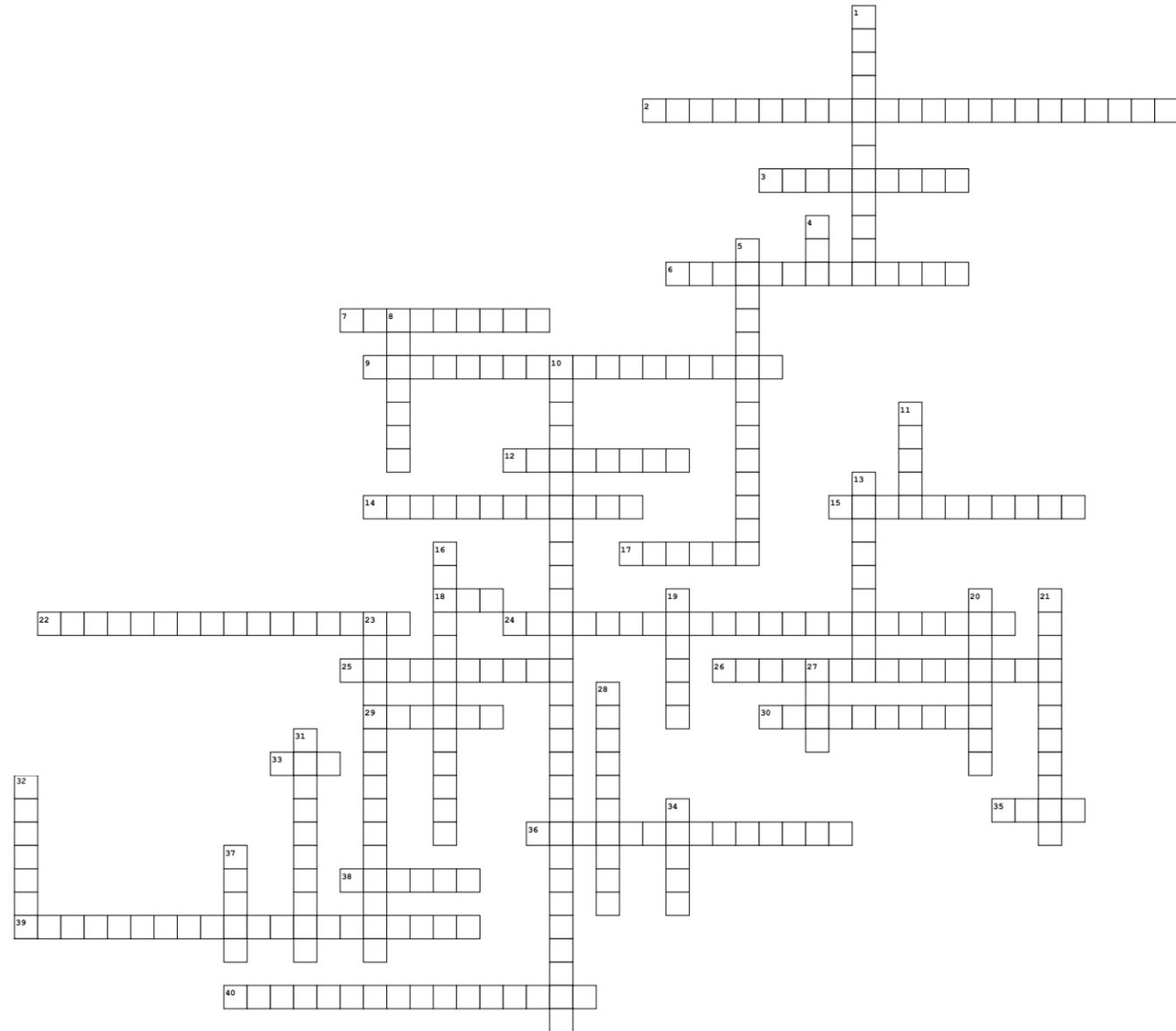
MATTHEW J. "MATT" EMMERSON '17 took on the role of transmission engineer this past July at Drive System Design Inc., a Farmington Hills, Mich., company specializing in the rapid engineering and development of electrified propulsion systems and associated technologies.

NKUAH ASARE '18 is the newly elected Alumni Association president at Essex County College in New Jersey. He received his associate degree in civil engineering from Essex County College in 2015. Asare is a geotechnical engineer at Frank H. Lehr Associates in East Orange, N.J.

IN MEMORIAM

John F. Cerullo Jr. '48
 John E. Dench '49
 Michael Roberti '49
 Frank H. Ames Jr. '50
 Joseph R. Pedrin '50
 Wallace S. Faig '53
 Edward L. Eldridge '54
 Emil P. Steiner '54
 William R. Demmer '55
 Howard H. Beyer '56
 George A. Vail '56
 Roy T. Halle Sr. '57
 Donald J. Herman '58
 William Squire '59
 William J. Ehner '61
 Richard Pressel '61
 James J. O'Farrell '62
 William L. Douma '65
 John E. Lennox '65
 John L. Perry '65
 Louis D. Piszker '65
 John E. Rivers '65
 Alfred Calafiore '66, '74
 Michael J. Flynn '66, '70
 James E. Grau '66
 William J. Miller '66
 Frank E. Pearn '66
 Roger J. Bakos '67
 Thomas D. Croghan '67
 Tommaso F. Scarfone '67
 Joseph A. Bronsard '68
 John M. Adams Sr. '69, '74
 Stanley P. Belonos '70
 Kenneth S. Jacobsen '70
 James H. McGuinness '70
 Linphord A. Darlington '71
 Robert P. Zahorcak '71 '78
 John E. Flynn '72, '76
 Frank J. Loeffler Jr. '73
 Michael J. Novak '73
 Samuel Raber '73
 Clifford K. Albright '75
 Richard R. Kerzetski '75
 Wilton J. Lacon '75
 Jose M. Muniz '75
 John P. Robinson III '76
 Harold F. (Bud) Dietrich '78
 Charles R. Mills '80
 Nicholas V. Lukianov '89
 Joseph S. Slawsky '89
 Jeff L. Barrett '92
 Ranga Aravapalli '03
 Kevin S. Wiker '10

BLOOM'S CLUES



Test your knowledge about President Bloom and his tenure at NJIT!
 Answers can be found by reading through the pages of this issue of *NJIT Magazine*
 or, if you're stumped, at the bottom of this page.

Across

- 2. NJIT partner Ørsted a leader in this technology
- 3. New NJIT chapter, National Academy of _____
- 6. President was founding dean
- 7. Key ability according to president
- 9. Phrase for what's needed from alumni
- 12. Former flower shop, site of new park
- 14. Where funniest moments of presidency occurred
- 15. NJ's largest startup incubator
- 17. Funding type
- 18. President's favorite campus spot, abbrev.
- 22. Data science satellite location
- 24. Designates R1 research rating
- 25. Fabrication facility
- 26. Nonprofit economic development agency
- 29. NJIT's newest community college partner
- 30. A first area of responsibility of the president
- 33. Pipeline-to-college program, abbrev.
- 35. NJIT corp. bringing ideas in academia to the marketplace, abbrev.
- 36. \$2.8 billion on NJ
- 38. Presidential tenure length, spelled out
- 39. One of the president's most treasured mementos
- 40. Increased significantly this year, esp. in Class of 2025

Down

- 1. Dr. Joel Bloom _____ Scholars Program
- 4. "Jewel" of the NJIT campus, abbrev.
- 5. Honors College students, by another name
- 8. The Blooms' favorite pastime
- 10. *Forbes* cited NJIT No.1 for this
- 11. NJIT country partner
- 13. Future Technologies in New Jersey partner
- 16. President's second title at NJIT
- 19. The city NJIT calls home
- 20. No. of community college agreements, spelled out
- 21. Describes NJIT
- 23. Where president was research director
- 27. What NJIT teaches
- 28. President named _____ of the Year
- 31. Former purpose of CKB
- 32. What the future of NJIT needs to be about
- 34. Month/day president stepping down, roman numerals
- 37. NJIT First Lady's first name

ANSWER KEY ACROSS 2. OFFSHORE WIND DEVELOPMENT 3. INVENTORS 6. HONORS COLLEGE 7. LISTENING 9. TIME TREASURY TALENT 12. MUELLERS 14. INAUGURATION 15. VENTURELINK 17. GRANTS 18. CKB 22. NJIT AT JERSEY CITY 24. CARNEGIE CLASSIFICATION 25. MAKERSPACE 26. CHOOSE NEW JERSEY 29. HUDSON 30. PRECOLLEGE 33. MIS 35. NJIT 36. ECONOMIC IMPACT 38. ELEVEN 39. GRADUATION PHOTOGRAPH 40. STUDENT DIVERSITY
 DOWN 1. PRESIDENTIAL 4. WEC 5. DORMAN SCHOLARS 8. SALING 10. STUDENT UPWARD ECONOMIC MOBILITY 11. EGYPT 13. BEN GUIRON 16. VICE PRESIDENT 19. NEWARK 20. FOURTEEN 21. POLYTECHNIC 23. TEACHERS COLLEGE 27. STEM 28. INFLUENCER 31. HIGH SCHOOL 32. GROWING 34. VIXXX 37. DIANE



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CELEBRATING DR. JOEL BLOOM'S 30 YEARS OF MAKING CHANGE THROUGH LEADERSHIP AT NJIT.

NJIT has planned numerous local and national events throughout the 2021-2022 academic year to provide Highlander Nation the chance to bid him farewell before he retires this June. The series of events, activities and meetings also affords the president and First Lady Diane Bloom the opportunity to extend their heartfelt gratitude to the countless members of the NJIT community who have been valued partners, mentors and friends over the years.

To find a city near you, go to njit.edu/thank-you-tour.