



From left: Diane Montalto '82, Dennis M. Toft and Robert Cohen '83, '84, '87

NJIT BOARD OF TRUSTEES ADDS THREE NEW MEMBERS

NJIT announced the appointment of three new members to its Board of Trustees, including two alumni. Joining the Board of Trustees are Robert Cohen '83, '84, '87, Diane Montalto '82 and Dennis M. Toft, Esq.

“In addition to Robert and Diane being alumni of NJIT, these new trustees bring with them impressive science and technology backgrounds,” said NJIT President Joel S. Bloom.

Cohen is the vice president and chief technology officer, Joint Replacement, at Stryker Orthopaedics. Stryker, one of the world’s leading medical technology companies, offers innovative orthopedics, medical, surgical, neurotechnology and spine products and services, which help improve patient and hospital outcomes. Cohen’s illustrious career spans over 30 years in the biotech industry. He holds more than 25 patents, has been published dozens of times and was the recipient of

NJIT’s Alumni Achievement Award in 2012.

Montalto manages real estate development projects and supports hospitality industry ventures. She spearheads the fundraising campaign for Hearts for Hunger, a nonprofit charity that she founded in 2015, which partners with the Center for Food Action in Englewood, New Jersey and funds weekend food enrichment programs for select school districts in Northern New Jersey. Montalto previously worked at Par Pharmaceutical for nearly 20 years, holding various senior positions in corporate engineering, facilities management and information technology. Par, a subsidiary of Endo Pharmaceutical, is a highly focused generics and specialty-branded pharmaceutical company delivering quality medicines to patients in need through development, manufacturing and commercialization.

Toft is a renowned environmental lawyer who applies a keen understanding of science and the complexities of regulatory process when addressing the wide range of issues that his clients face. Highly regarded as one of New Jersey’s leading Brownfields redevelopment practitioners, Toft regularly appears before the New Jersey Department of Environmental Protection, the Army Corps of Engineers, the U.S. Environmental Protection Agency, and in state and federal courts. Toft played a key role in the adoption of the New Jersey Brownfields and Contaminated Site Remediation Act, as well as the development and adoption of the New Jersey Site Remediation Reform Act. He received his J.D. from Columbia University Law School and his bachelor’s degree in physics from Massachusetts Institute of Technology. ■



THE BIG PAYBACK

NJIT is one of the nation's best colleges for students seeking a superb education with great career preparation at an affordable price, according to The Princeton Review.

The education services company profiled NJIT in the 2018 edition of its annual guide, *Colleges That Pay You Back: The 200 Schools That Give You the Best Bang for Your Tuition Buck*. To make the list, institutions must be affordable and offer a strong academic program as well as opportunities for career prospects after

graduation. A return on an academic investment is a highly sought-after quality, and according to the guide, NJIT is among the top 1 percent in the United States for occupational earnings power.

"Our students know that an NJIT degree is both affordable and a catalyst for career success," said NJIT President Joel S. Bloom. "The fact that our students graduate with an average of nearly three job offers in hand and starting salaries almost 20 percent above the national average shows that they will receive an

immediate and lasting return on their educational investment."

The Princeton Review editors praised NJIT for "...constantly developing new curriculums to adapt to the marketplace" and note that in the past decade, the campus has doubled in size "in a direct answer to the call for more STEM-oriented skill sets in the workplace."

The guide describes how "...the Career Development Services office makes sure students are prepared via workshops, practice interviews and two career fairs (and preparatory sessions), and are very good at providing students with job experience."

NJIT students surveyed by the company described the university as "a very diverse campus" with a selling point being "its prestige and how many companies love NJIT students." ■

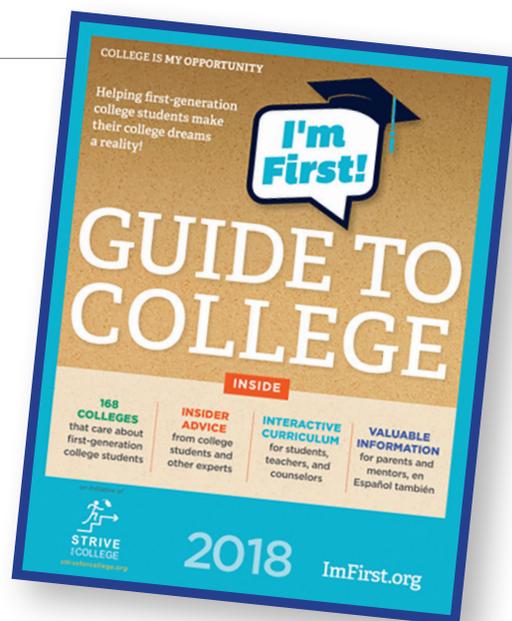
FIRST AND FOREMOST

NJIT has been recognized in nonprofit Strive for College's 2018 *I'm First! Guide to College*, a comprehensive college guidebook designed to help low-income, first-generation students make college a reality. The university is among the edition's 168 higher education institutions highlighted for their outreach efforts, financial aid opportunities and student support services.

"Higher education is an investment, especially for families from lower income brackets, and NJIT leads the nation in terms of the upward economic mobility it provides to students from low-income

families," said NJIT President Joel S. Bloom.

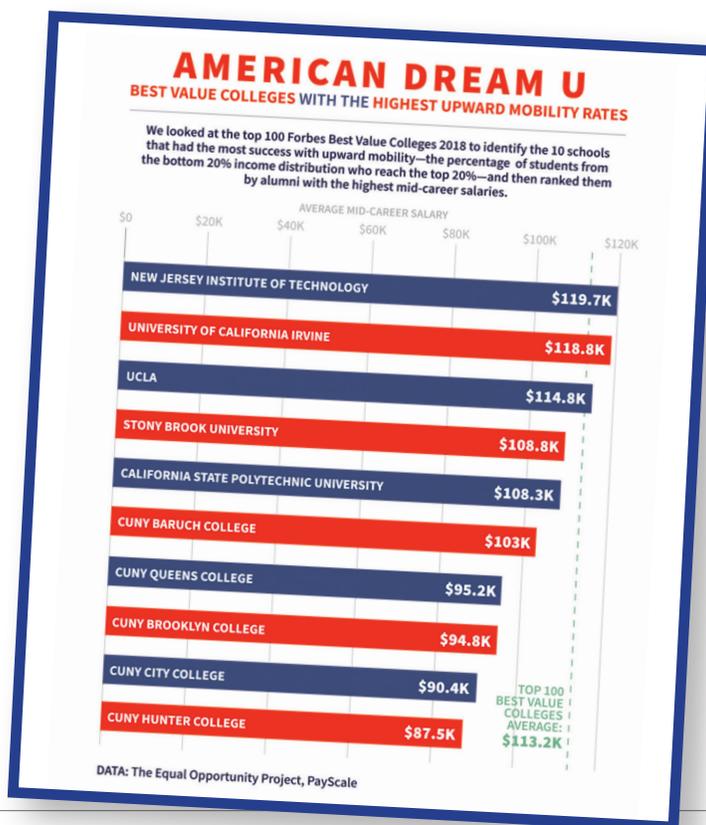
NJIT's support of first-generation college students and other traditionally underserved students is ongoing through a series of programs which include the NJIT Ronald E. McNair Post-baccalaureate Achievement Program, the Educational Opportunity Program, the Center for Pre-College Programs and First Fellows, which offers support and peer mentoring to students who are the first in their families to attend an institution of higher education. ■



#1 in Student Upward Mobility

A recent report from *Forbes* ranked NJIT #1 nationally for the percentage of students from the bottom fifth of the income distribution who end up in the top fifth. The study was based on an analysis by the Equality of Opportunity Project, which compared the financial status of a student's family before entering college with the graduate's earnings after college.

In the same publication, NJIT jumped 99 spots and landed at #96 among America's Best Value Colleges 2018. ■



HIDDEN FIGURES

Yun-Qing Shi, a groundbreaking computer engineer best known for devising methods to hide and retrieve data embedded in digitized images and speech, has been named a 2017 Fellow of the National Academy of Inventors.

“Data hiding” techniques are used to protect and verify intellectual property, such as photos that have been digitally “watermarked” and can be accessed only by unlocking the encrypted information within the image. More recently, Shi has developed methods for returning these images to their untampered form after the embedded data

have been removed. Data hiding also is used by organizations seeking to communicate secretly.

The data hiding process links two sets of data, a set of the embedded data and another set of the cover media data, while the relationship between the two sets of data differs depending on the application. In covert communications, the hidden data are irrelevant to the cover media. In authentication, however, they are closely related.

“Good and bad people send images with hidden information,” notes Shi, who adds that data can be secretly embedded inside voice signals, as well as images.

Shi also is an expert at determining whether digital information, including speech, has been altered.

“We want to be able to detect changes, and it’s important to understand how people manipulate this data,” he says. “As our society increasingly goes digital, whether images and speech are trustworthy becomes more and more important.”

Shi was named an IEEE Fellow in 2005 for his contributions to multidimensional signal processing. He has been issued 30 patents for his inventions.

He is among 155 renowned academic inventors designated as fellows of the National Academy of Inventors this year, who together are named on nearly 6,000 issued U.S. patents. They join the nearly 760 fellows, representing over 250 research universities and governmental and nonprofit research institutes, inducted during the past several years.

Shi will be inducted into the National Academy next April at a ceremony in Washington, D.C. Andrew Hirshfeld, commissioner for patents for the U.S. Patent and Trademark Office, will be the keynote speaker. ■



Professor Yun-Qing Shi