

NJIT TechQuest shows school on cutting edge

Contest helps locate next generation of entrepreneurs

BY DOUG SCANCARELLA

Glaucoma is the second-leading cause of irreversible blindness worldwide. It is a chronic condition, characterized by damage to the optic nerve. It afflicts more than 2.2 million Americans, yet only half are aware of their ailment.

Those horrifying statistics were very much on the minds of New Jersey Institute of Technology (NJIT) undergraduates **Hassan Muhammad** and **Roa Al-Abdalla**, as they conceptualized and then invented the Trans-Palpebral Self-Tonometer.

It would be an innovative, non-invasive method and device for detecting and measuring glaucoma.

Working with their advisor, physics professor **Gordon Thomas**, the pair developed a technology that allows patients themselves to continually monitor fluid pressure within the eye, a symptom of glaucoma, through the eyelid.

The device was on display earlier this month at the second annual NJIT TechQuest and Innovation Day at the Campus Center Atrium.

More than 40 undergraduate and graduate students from STEM fields (science, technology, engineering and mathematics) participated. They presented their research, inventions, business concepts and creative works from various NJIT programs and clubs.

Muhammad and Al-Abdalla took home first prize.

"It's a self-operated device," Muhammad said. "It allows patients to personally and continuously monitor intraocular pressure through the eyelid and report their findings to eye care providers."

"Portability, ease of use and noninvasiveness are significant advancements over the standard tonometers used in clinical care," Al-Abdalla added.

Innovation Day was sponsored by the James Stevenson Foundation, which this year gave out a total of \$14,000 in awards divided up among the three top-placing teams.

The second place winner, Quik Graft — made up of **Ilesha Sevak**, **Matthew Armanious**, **Sayali Kulkarni**, **Ashas Pathan** and **Evan Tyerman** — proposed using a modified 3-D printer to create an antibiotic-resistant skin graft compact enough to be employed on-site and capable of yielding ready-to-apply skin grafts within hours.

See **NJIT** on page 9

A bridge too far gone

Business community prepares for economic impact of Pulaski closing

BY ANDREW GEORGE

It was just after 6 o'clock last Monday morning when Jersey City Mayor Steven Fulop arrived at the city's Office of Emergency Management, coffee in-hand.

Fulop peered out over 12 closed-circuit television monitors displaying various high-traffic areas throughout the city, looking for any signs of backup due to it being the first weekday of the much-feared, two-year northbound closure of the Pulaski Skyway.

Traffic that day

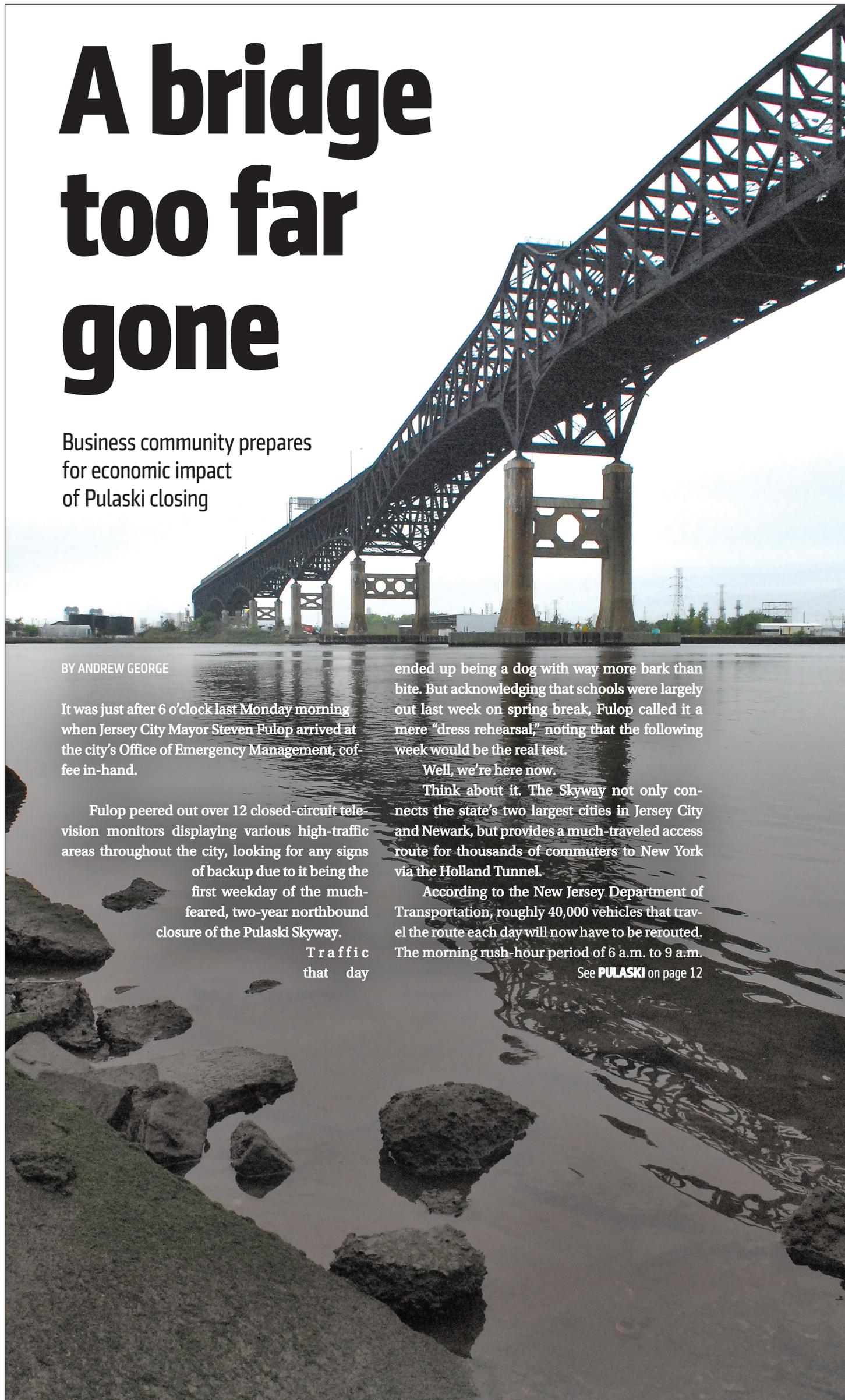
ended up being a dog with way more bark than bite. But acknowledging that schools were largely out last week on spring break, Fulop called it a mere "dress rehearsal," noting that the following week would be the real test.

Well, we're here now.

Think about it. The Skyway not only connects the state's two largest cities in Jersey City and Newark, but provides a much-traveled access route for thousands of commuters to New York via the Holland Tunnel.

According to the New Jersey Department of Transportation, roughly 40,000 vehicles that travel the route each day will now have to be rerouted. The morning rush-hour period of 6 a.m. to 9 a.m.

See **PULASKI** on page 12



The Pulaski Skyway connects the state's two largest cities: Newark and Jersey City. -AARON HOUSTON



Jeffrey Schotz, an executive VP at SJP Properties, sees interest from media companies. —FILE PHOTO

The agency also plans to extend the service to its trains and other stations over the next three years, officials said last year.

“That can only broaden the fact these employees can work from anywhere, so maybe being physically located downtown is not as important,” said **Matthew Dolly**, vice president of research with the brokerage firm **Avison Young’s** New Jersey office.

If nothing else, publishers everywhere are weighing their options as advertising revenue dwindles.

“I would say that the industry is under cost-containment pressures, which is why I think they look at New Jersey as a lower-operating-cost platform,” said **Dan Loughlin**, an international director in JLL’s New Jersey office. He added that media companies “see it as a labor play, especially in Hoboken and the waterfront,” where they’re able to attract and retain top talent.

The consolidation trend is playing out within the Garden State’s own media industry, where many prominent newspapers are downsizing and shedding excess space. In January, the Jersey Journal moved its headquarters to a 10,000-square-foot office in Secaucus, leaving behind its landmark 100,000-square-foot building in Jersey City.

The Asbury Park Press, meantime, is moving from its sprawling headquarters in Neptune to an office building across Route 66. Its new space will be about one-third of the size of its existing 175,000-square-foot building.

But when it comes to luring companies from out of state, New Jersey can offer business incentives that are now more potent than ever. Schotz, the SJP executive, said it’s tough to overlook the impact of the Grow New Jersey tax credit program, which lawmakers strengthened last year with the Economic Opportunity Act.

“That’s not the only reason, but that is a huge draw,” Schotz said of the incentives. “Once you get through looking at what your options are in New York, and you start doing your financial analysis, you add Grow New Jersey to it (and) it’s overwhelming.”

E-mail to: joshb@njbiz.com

On Twitter: @joshburdnj

NJIT

CONTINUED FROM PAGE 4

The third place award went to CAS-Imaging, led by **Pitambar Daya**, for a device that would be incorporated into fMRI machines to detect lateral, axial and rotational head movement and analyze it in real time.

Winners of the Big Data Visualization Challenge, a theoretical acquisition pitch contest sponsored by **S&P Capital IQ**, a business unit of **McGraw Hill Financial**, in-

cluded the team of **Geoffrey Ching**, a business and finance major; **James Barr**, a finance and accounting major; **Orest Bidnyk**, an accounting major; **Pedro Santos**, a civil engineering major; **Rodolfo Marquez**, an accounting and finance major; and **Grant Barr**, a mathematics and finance major.

“The ingenuity and the entrepreneurial drive of our students, as well as the extraordinary range of their talents, are quite impressive,” said **Judith Sheft**, NJIT’s associate vice president of technology development.

“Our students also demonstrated the commercialization potential of their research ideas. Submissions were judged not only on their inventiveness, but on their market viability as well. Students were required to show how they would propel their ideas from ‘Bench to Bedside’ or from the ‘Lab to the Market.’ It was wonderful to have a showcase that allows us to see the breadth of achievement on campus.”

Doug Scancarella is a freelance writer based in Wayne.

What can *Your* Business count on today?



FREE Small Business Checking

Managing a business today is no small feat. At Columbia Bank we want to do all we can to make it easier. Our FREE Small Business Checking comes with unbeatable benefits.

1,000 FREE Monthly Transactions* • NO Monthly Service Charges
NO Minimum Balance Requirements • Up to \$110 in Cash Rewards**
FREE Online Banking and Bill Pay

We Have The Best Checking Deal Around. Open Your Account Today!



Convenient Offices Throughout New Jersey

Main Office: 19-01 Route 208 • Fair Lawn, NJ 07410 • 1-800-522-4167

columbiabankonline.com

Count on Columbia.

Member FDIC



*Transaction items include checks/debits paid, check/items deposited and deposit tickets. If your Free Small Business account exceeds 1,000 free monthly transactions, the account may be converted to another checking product which will incur charges. **Cash offer for businesses only and is only valid for new Business Checking accounts. \$50 will be deposited into your account within 60 days after paying your first bill through Columbia Business Online Banking. \$50 will be deposited into your account 60 days after you make 5 purchases with your Columbia Bank Business Debit Card. \$10 will be deposited into your account at the same time you present your unused business checks and/or business debit card to a branch representative. To earn these cash rewards, the activity must occur within 60 days after account opening. New money only. Cash rewards will be reported to the IRS on a 1099-INT. Please consult your tax advisers concerning the reporting to Internal Revenue Service of payments as interest on accounts and for the cash rewards. Minimum \$50 to open account. Bank is not responsible for typographical errors.