

October 22, 2009

# NYSTAR<sup>®</sup> Sci ☆ Tech News Bytes

Dear Friends,

NYSTAR welcomes Colin Hill to our Board of Directors. His life sciences and business expertise will be an important asset to the Board. We look forward to working with him. As always, feel free to contact us with your ideas at [contact@nystar.state.ny.us](mailto:contact@nystar.state.ny.us).

—Ed Reinfurt, Executive Director of NYSTAR

## NYSTAR Welcomes Colin Hill



NYSTAR salutes Colin Hill, President, Chairman & Co-Founder of Gene Network Science (GNS).

Mr. Hill was recently appointed by the Senate to the NYSTAR Board of Directors.

Colin co-founded his company as a graduate student. In fact, GNS was the first company invested in by the Cornell Venture Fund, Big Red Ventures.

GNS was the industry partner for a 2003 project with NYSTAR's Cornell Center for Advanced Technology. As one of NYSTAR's early users of the State's investment in the RPI supercomputer, GNS participated in the inaugural HPC Conference held for industry and academic researchers last fall.

A theoretical physicist, Mr. Hill was named to MIT Technology Review's TR100 list of the top innovators in the world

under the age of 35 in 2004. He graduated from Virginia Tech with a degree in physics and earned master's degrees in physics from McGill University and Cornell University.

GNS is a leader in the use of computer simulations to assist the pharmaceutical industry in prioritizing and identifying targets for drug discovery.

GNS is headquartered in Massachusetts but continues its operations in Ithaca.

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## Albany College of Pharmacy Awarded Grant

### ACPHS News

Shaker A. Mousa, Ph.D., Executive V.P. and Chairman of the Pharmaceutical Research Institute (PRI) at Albany



College of Pharmacy and Health Sciences, was recently awarded a \$372,680 research grant from the National Cancer Institute, part of the NIH. Dr. Mousa and a team of PRI investigators will use nanotechnology to explore new approaches for managing thyroid activity in patients suffering from breast cancer.

The thyroid naturally produces hormones that help regulate heart rate, blood pressure, body temperature and weight. Unfortunately, these hormones also accelerate tumor growth in cancer patients by stimulating blood vessels. Medication can

decrease the production of thyroid hormones, thereby helping limit the spread of the cancer, but such an approach will impact vital hormonal function.

By allowing hormone production to occur at a normal rate, regular body activity may continue uninterrupted, but at the risk of the cancer spreading more quickly throughout the body. Dr. Mousa is exploring an approach that will allow normal thyroid activity to take place in cancer patients while eliminating the adverse effects related to the spread of the disease.

"The continued evolution of nanotechnology is now allowing the scientific and medical communities to rethink what is possible in terms of treating patients and preventing disease," said Dr. Mousa. "We

expect that the results of our research will not only impact patients suffering from breast cancer, but those suffering from other forms of cancer as well."

"In the last decade, ACPHS has placed an increased emphasis on research, through investments in our laboratory facilities, development of a master's program in pharmaceutical sciences and the cultivation of faculty and student research activities. We now have more than \$7.1 million in active research grants, contracts, and awards, and we expect that figure to increase dramatically in the future," said James Gozzo, Ph.D., President of Albany College of Pharmacy and Health Sciences.

[http://www.acphs.edu/release\\_mousa-nih.html](http://www.acphs.edu/release_mousa-nih.html)

NYSTAR's internationally recognized programs spur the development, design and manufacture of new technologies in a wide range of areas, including nanotechnology, electronics, life sciences, information technology, materials processing, and many others.

[www.nystar.state.ny.us](http://www.nystar.state.ny.us)

## Spotlight on the Stimulus

Yeshiva University's **Albert Einstein College of Medicine** has received a \$2.1 million federal stimulus grant to expand and enrich its Hispanic Center of Excellence. The Center provides leadership and training in research to Hispanic students and faculty, and education relating to Hispanic health issues, disparities in health, and other health care concerns of the Hispanic community. For more on this grant: [click here](#).

For more information on stimulus programs, please visit:  
<http://www.nystar.state.ny.us/stimulus.htm>

NYSTAR's **Funding Opportunity Newsletter (FON)** provides information on funding opportunities for high-technology academic research and economic development in NYS. To see the newsletter: <http://www.nystar.state.ny.us/fon/funding.htm>

## "Technology Innovation" Topic of Local Roundtable

*Times Union*

U.S. Rep. Paul Tonko held a "technology innovation" roundtable, hoping to look for ideas on how the Capital Region can keep the momentum going following President Barack Obama's visit last month to Hudson Valley Community College.

The discussion, which included about 70 local business and education leaders at The Crossings in Colonie, highlighted the fact that the region still has a long way to go in several areas before it can capitalize on the successes that have earned it the label Tech Valley. Those successes include the construction of a \$4.2 billion computer chip factory in Saratoga County and the \$5 billion Albany NanoTech complex at UAlbany.

Work force training and the lack of success by technology start-ups were the main concerns of those who attended the two-hour event.

One of the biggest problems, attendees said, was getting ideas out of the universities and into start-up companies. The transition often lacks adequate funding -- and also inventors with management and business expertise.

"We have some of the most prestigious universities in the world," said Gavin McIntyre, cofounder of Ecovative Design LLC, a Green Island start-up that came out of Rensselaer Polytechnic Institute in Troy. "But the inventors aren't always the entrepreneurs."

—Larry Rulison

For full story: [click here](#).

## Upcoming Events

**October 29, 2009 - Troy, NY**

Center for Economic Growth 2009 Annual Meeting  
[http://www.informz.net/ceg/archives/archive\\_797413.html](http://www.informz.net/ceg/archives/archive_797413.html)

**October 30, 2009 - Bronx, NY**

5th Annual Alternative Vehicle Technology Conference  
<http://www.nycharities.org/app/bccf/alttech.asp>



NYSTAR salutes Fredonia State University geosciences



professor **Gary Lash** who is working to create a Shale Institute at SUNY Fredonia.

He "has been working with Marcellus Shale for the past 10 years, before it was the talk of the energy world."

"For the past year, however, Lash, along with his colleague and Penn State Professor Terry Engelder, have been center of attention in the Marcellus Shale discussion due to their knowledge about its incredible

potential as an energy resource."

"It was the technology that came out of the Texas-Fort Worth basin low-level drilling and high gas prices last year," Lash said about the confluence of two events that led to the discovery. "I've been working with these shales for 10 years, back when people didn't care about shales. They were the rock you had to get through to get to the sandstones where the hydrocarbons are located. It's a different world now."

—Michael Rukavina  
*Observer Today*

For full story: [click here](#).

## Syracuse Center of Excellence

Seeks Commercialization Assistance Program Applicants

CAP grants are awarded for projects that commercialize new products and services in the fields of indoor environmental quality, water resources, and clean and renewable energy. The deadline to apply is Dec. 16, 2009.

<http://syracusecoe.org/OIC/oiccap.aspx>



**YOUNG INNOVATORS**

**"Hacker" With a Cause**

*NYU-Poly News*

After a sleepless 24 hours rooting out security vulnerabilities last weekend, Julian Cohen did what only a handful of participants have done over CSAW's six-year history: make the top 10 in the Capture the Flag Application Security challenge as a freshman, and as a one-person team.

CSAW, or "Cyber Security Awareness Week," is Polytechnic Institute of NYU's annual competition designed to test computer science students' security chops. Its title is a bit of a misnomer as the competition's six challenges

vary in length. Students have several weeks to complete their submission for the Security Awareness Poster challenge, for example, and only hours to make it to the final round of the Quiz Tournament on Nov. 13's Awards Day, the culminating event for CSAW 2009.

Along with his fellow participants, Julian solved as many security "puzzles" as his wits and stamina – his fuels of choice are Skittles, Mike and Ikes, and Sprite – would allow during the midnight-to-midnight CTF challenge.

For full story: [click here](#).



**Ed Reinfurt**  
Executive Director  
NYSTAR



**David Paterson**  
Governor