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NYSTAR[®] Sci ☆ Tech News Bytes

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Dear Friends,

I thank the Beacon Institute for the opportunity to discuss expanding entrepreneurship. The Hudson Valley is a hotbed of innovation and the Southern Dutchess Chamber is demonstrating the type of commitment of support and enthusiasm which is necessary to foster growth. Promoting entrepreneurship is a critical part of our agenda here at NYSTAR. Welcome to James Myers who will be leading the Computational Center for Nanotechnology at RPI. NYSTAR looks forward to working with him and advancing the high performance computing program throughout New York. As always, feel free to contact us with your ideas at contact@nystar.state.ny.us.

—Ed Reinfurt, Executive Director of NYSTAR

NYSTAR Participates in “Beacon and Eggs” Forum

NYSTAR Executive Director Ed Reinfurt spoke at the 5th Annual “Beacon and Eggs” breakfast series held by the Southern Dutchess Chamber of Commerce at the Beacon Institute for Rivers and Estuaries.

“The most important single step recommended by the Governor’s Task Force on Diversifying the Economy through Industry-Higher Education

Partnerships, of which NYSTAR was a member, was ‘creating a culture of entrepreneurship and innovation,’” Reinfurt said.

Reinfurt continued, “The recommendation is well timed as there is a reservoir of entrepreneurial energy ready to be tapped. It just needs more encouragement and more opportunities to ignite. No where is

the culture of entrepreneurship more embraced and more visible than in the Chamber’s 40 under 40 program. The fact that you celebrate it is a testament to the value you place in it. This is no small part of creating and nurturing a culture of entrepreneurship.”

For more on the Beacon Institute: [click here](#).

RPI Appoints Cyberinfrastructure Expert James Myers

RPI News

James Myers, who currently serves as associate director for cyberenvironments at the National Center for Supercomputing Applications at the University of Illinois, has been selected by RPI to lead the Computational Center for Nanotechnology Innovations (CCNI) at Rensselaer.

Located at Rensselaer’s Technology Park in North Greenbush, CCNI is a \$100 million collaboration between RPI, IBM and NYS. The center houses one of the world’s most powerful university-based supercomputers and is considered one of the top supercomputer centers internationally. It was formally opened in 2007.

Work at the CCNI is designed both to help continue the im-

pressive advances in shrinking device dimensions seen by electronics manufacturers, and to extend this model to a wide array of industries that could benefit from nanotechnology, according to the partners. The CCNI systems consist of massively parallel IBM Blue Gene supercomputers, POWER-based Linux clusters, and AMD Opteron processor-based clusters, providing more than 100 teraflops of computing power.

“Today’s information technologies drive new discovery and scientific breakthroughs. Jim Myers brings a wealth of experience and strategic vision in these technologies to CCNI and Rensselaer,” said Rensselaer Vice President for Research Fran Berman. “We are

excited that Jim will be joining us and we look forward to his leadership of CCNI.”

“Dr. Jim Myers’ expertise in optimizing the use of high-performance computing platforms as well as his world-class researcher status makes him a key asset in the high-performance computing initiative in NY. One of the main goals of this collaboration between IBM, RPI, and NYS is to provide businesses, both large and small, the access and technical assistance to facilitate complex research which will allow them to enhance and grow their global competitiveness,” said Edward Reinfurt, executive director of the NYS Foundation for Science, Technology and Innovation.

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

NYSTAR’s 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

New

Beginning this week, we will be spotlighting New York's life sciences companies.

Spotlight on NY's Life Sciences Companies

“**Breonics** is a private research and discovery company located in Albany. Organized in 1996, the company has developed a new and innovative technology Exsanguinous Metabolic Support (EMS) which enables the continued oxidative metabolism and function of organs and tissues while isolated from the rest of the human body. EMS is the first technology that can be used to intervene after cardiac arrest and repair is chemically damaged kidneys for transplantation.”

For more information on this company:

<http://breonics.biz/index.html>

<http://www.BioNY.org> is a one-stop shop for information on New York State's growing industrial and research-based life science community.

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>

Governor Signs NYSTAR Legislation

The Governor has signed a new law establishing the Technology Commercialization Clinic Program.

The Technology Commercialization Clinic Program will be established by NYSTAR and managed by the NYS Science and Technology Law Center. Operators of the Clinics will be competitively chosen by NYSTAR.

This program will assist NYSTAR in developing strong and productive partnerships to advance commercialization of technologies throughout the state. The Clinic will provide assistance to universities, en-

trepreneurs and companies in commercializing new products and processes. The Clinic is an excellent way for students and scientists to gain entrepreneurship training and develop strategies to commercialize research projects.

The mission of the NYS Science and Technology Law Center is to assist and provide information to research centers and startup and early stage technology companies as they develop and market new technologies and seek to compete in the high technology marketplace.

For more on the Law Center: <http://nysstlc.syr.edu/>

Upcoming Events

September 14, 2010 - Rochester, NY

Entrepreneurship and Innovation at the University of Rochester
Social Entrepreneurship: Making a Difference Locally and Globally
https://secure.www.alumniconnections.com/olc/pub/URO/events_base/event_order.cgi?tmpl=events&event=2243495.0

September 17, 2010 - New York City

World Energy Forum - High-level Conference on Energy at the U.N.
<http://www.theworldenergy.org/beta/node/321>

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RPI News

The universe around us can be expressed as numbers, and those numbers in pattern paint a picture: a network of friends from the vastness of the Internet; travel patterns among residents of cold climates; or a common factor among victims of a disease. Now, the deluge of digital-age data makes possible more complex patterns and a



more complete picture — the link between the friends, their travel, and the illness.

The work of **Mohammed J. Zaki**, a Rensselaer professor of computer science, will enable us to see links and patterns we did not know existed. In recognition of the importance of his work, Zaki has been selected for the 2010 HP Labs Innovation Research Program.

<http://news.rpi.edu/update.do?artcenterkey=2764>

Life Sciences Summit 2010

September 22-23, 2010, Long Island, NY

The *only* translational science partnering meeting focused on commercially relevant next-generation medical solutions.

<http://lifesciencessummit.org/2010/>



YOUNG INNOVATORS

Young Innovator Recognized at Columbia University

Columbia University News MIT's Technology Review magazine has named Samuel K. Sia, assistant professor in the Department of Biomedical Engineering at Columbia University, to its prestigious listing of the World's Top Young Innovators for 2010 for his groundbreaking work in biotechnology and medicine.

Selected from more than 300 nominees by a panel of expert judges and the editorial staff of Technology Review, the TR35 is an elite group of accomplished young innovators who exemplify the spirit of innovation. Their work — spanning medicine, computing, commu-

nications, nanotechnology, and more — is changing our world.

Sia is using the powerful techniques of microfluidics to build low-cost handheld devices for performing sophisticated medical tests on a small microchip. His lab-on-a-chip device is currently being tested in Rwanda to collect and analyze blood tests at a patient's bedside to diagnose infectious diseases. His team is targeting pregnant mothers who may suffer from AIDS and sexually transmitted diseases, but cannot currently be tested due to their remote location.

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



Ed Reinfurt
Executive Director
NYSTAR



David Paterson
Governor