

ABSTRACTS

HIGHLANDERS FOR HAITI

For the people of Haiti, whose country was devastated by last January's earthquake, NJIT students, alumni, faculty and staff have rallied to provide a wide range of assistance. A vigil and non-denominational prayer service energized support for monetary donations to the United Nations Children's Fund (UNICEF), which NJIT selected as the primary channel for Haitian relief from the university community.

HELPING ARCHITECTS FOR HUMANITY

Structural engineer Rima Taher, who teaches in the College of Architecture and Design (COAD), will join architects and engineers invited by Architecture for Humanity (AFH) to create a construction guide for safer rebuilding in Haiti. Taher's courses cover building for protection against wind and earthquakes, which she recently wrote about for *Caribbean Construction Magazine*.

AFH anticipates sending a team to Haiti and hopes to

make the new construction resource available to other groups, such as Habitat for Humanity. A nonprofit firm founded in 1999, AFH can tap a network of more than 40,000 professionals willing to dedicate time and expertise to providing design, construction and development services for those who could not otherwise afford essential assistance in these areas.

A PERSONAL CONNECTION

Seeing the destruction in Haiti, biomedical engineering alumna Darlene Clovis '04, MS '06, whose family background is Haitian, had to help. Although Engineers Without Borders (EWB) was seeking civil engineers to volunteer in Haiti, Clovis' fluency in Creole, the country's main language, would be vital. Quickly taught how to evaluate a building's structure, she went to Haiti with a team of engineers and seismic experts.



PHOTO: COURTESY OF DARLENE CLOVIS

Alumna Darlene Clovis in Haiti

"We worked in the north of Haiti, in a town called Cap-Haitien, as well as in Port-au-Prince," Clovis says. "Many of the buildings are still standing, but some are damaged, some seriously so. It was our job to rate their structural soundness. Engineers need to be versatile, and this work taught me something new. We also taught the Haitian people how to repair their houses, some basic building techniques."

In working with Engineers Without Borders, Clovis is the latest of dozens of NJIT volunteers who have contributed to previous efforts in Haiti. NJIT civil and mechanical engineering

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Darlene Clovis '04, MS '06

students, faculty, and staff volunteers have spent the past several years helping residents of the town of Milot to remove bacteria from their drinking water and halt water-borne illnesses. A May return to Haiti by the NJIT Engineers Without Borders Chapter awaits a green light from the national EWB organization. ■

PHOTO: CHRISTINA CROVETTO



Associate Director of Graduate Studies Clarisa Gonzalez-Lenahan pins a Haiti remembrance flower on Tiffany McKoy, vice president of NJIT's Caribbean Student Organization and MC at the Haiti vigil.

There's more online –
visit *NJIT Magazine* at
<http://magazine.njit.edu>

SUGAR FOR SAFER CANS

A sugar-based epoxy that could replace bisphenol A (BPA) in applications that include lining cans containing food has been patented by Michael Jaffe, professor of biomedical engineering. Jaffe developed the new sugar derivative, obtained from corn, in association with the Iowa Corn Promotion Board (ICPB). The work was part of an ongoing initiative to create commercially attractive and sustainable chemistries from corn.



BPA is also used to manufacture products ranging from baby bottles to nail polish. The chemical bonds that link BPA in polymer structures can slowly decay and release small amounts of it into the materials with which it comes into contact, such as food or water. Even minute levels of BPA may have undesirable, estrogen-like effects on living organisms.

Sharing the new patent are Anthony J. East, NJIT biomedical engineering research professor; Yi Zhang PhD '02; and Luiz Catalani, former visiting professor at NJIT and now professor of chemistry at the University of Sao Paulo, Brazil. ■

GLOBETROTTING COMPUTER PIONEERS

Starr Roxanne Hiltz and Murray Turoff are on the move – still actively contributing to their fields of expertise after more than 30 years as pioneers in computer-mediated communication and decision support, Delphi forecasting, online learning and emergency response.

Officially retired as distinguished professors emeriti in 2007, they were invited keynoters at a workshop on the “Future of Higher Education” this past October in Bucharest, Romania. In November, visiting Finland, Hiltz gave an invited presentation on “The Impact of Online Learning and Social Media on Higher Education” at the Finnish Society for Futures Studies, Helsinki, and “Social Media: Characteristics, Social Issues and Use in Marketing” at the Turku School of Economics.

Turoff’s presentations included “Emergency Response Information Systems” at Nokia in Helsinki, and a keynote address on the Delphi method at the annual Millennium Project meeting in Helsinki. And in January of this year, both Hiltz and Turoff were visiting professors at the Shidler College of Business at the University of Hawaii.

“These are exactly the kinds of opportunities we hoped to have when we transitioned to emeritus and emerita status,” says Hiltz. “It is quite wonderful to be able to work with colleagues all over the world.” ■



PHOTO: COURTESY OF RIT

*Ian Gatley named
NJIT Provost*

NJIT'S NEW PROVOST

Ian Gatley has been named NJIT provost and senior vice president for academic affairs. He also has an appointment as distinguished professor of physics. Gatley, an internationally recognized researcher and educator, comes to NJIT from Rochester Institute of Technology (RIT).

Gatley has a bachelor's from Imperial College, University of London, and a PhD from the California Institute of Technology, both in physics. After completing his PhD, he served as astronomer and project manager with the United Kingdom Infrared Telescope in Hawaii, later heading the infrared astronomy program at the U.S. National Optical Astronomy Observatories in Arizona. As chair of the U.S. National Optical Astronomy Observatories Infrared Steering Committee, he guided the collaboration that developed an infrared detector array (code-named Aladdin) adopted by observatories around the world.

In 1997, Gatley became director of the Chester F. Carlson Center for Imaging Science at RIT, where he led the integration of an Aladdin-based camera with a telescope at the South Pole. Gatley was subsequently appointed dean of the College of Science at RIT. In his most recent RIT appointment, he led the Center of Student Innovation that serves as a hub and clearing-house for RIT innovation resources.

Look for an interview with Provost Gatley in a future issue. ■



PHOTO: BILL WITTKOP

Starr Roxanne Hiltz and Murray Turoff



PHOTO: CHRISTINA GROVETTO

Andrew Chang (left), David Han and Arvind Chandaba, students at Hillsborough Middle School, with their catapult

READY TO FIRE: SCIENCE IS FUN!

Middle school and senior high school students from throughout northern New Jersey gathered at NJIT in January for the annual Science Olympiad playoffs. From assembling and firing catapults to launching model airplanes, student teams participated in more than a dozen events designed to make science, technology and math exciting, and to encourage pursuit of careers in these fields. ■

NJIT ENHANCES FREE COURSE CONSORTIUM

NJIT is the only institution of higher education in New Jersey and New York to offer free online college courses through The Open Courseware Consortium. Launched several years ago by MIT, this worldwide organization's catalog includes courses ranging from English literature to quantum physics.

NJIT plans to add some 35 courses to the Consortium's offerings in science, technology and other subjects. Also participating are institutions such as the Mathematical Institute at Oxford University, England, and the Johns Hopkins Bloomberg School of Public Health.

"It wasn't too long ago that people paid a sizable sum of money to buy CDs of the best

NJIT AMONG MOST POPULAR UNIVERSITIES

NJIT ranks among the most popular national universities according to *U.S. News & World Report*. The telling indicator is the university's "admissions yield" – the percentage of applicants accepted by an institution who actually enroll. NJIT ranked 19th in 2008, accepting 53 percent of those who applied with a yield of 50 percent. A yield this great is likely to mean that a school is both popular and has a reputation for quality that motivates students to accept admission and attend. ■

lectures by top university professors," says Gale Tenen Spak, associate vice president of continuing professional education at NJIT. "Now, thanks to the Consortium, this information is free. There is no reason for anyone not to have undergraduate- and graduate-level material at their fingertips. Self-learners and busy professionals in need of just-in-time knowledge are big users of this resource."

Some courses have a video format, while others are audio presentations. More than 200 schools and associated organizations are members of the Consortium, which is supported by the Bill and Melinda Gates Foundation, William and Flora Hewitt Foundation and the Andrew W. Mellon Foundation. ■

www.ocwconsortium.org

END NOTES

STABILE PROFESSORSHIP FOR SCHURING

Civil and Environmental Engineering Professor **John R. Schuring** has been appointed to the newly-established

Vincent A. Stabile Chair Professorship for Innovation and Technology. The professorship is named in honor of engineer, inventor and industrialist Vincent A. Stabile, an innovative thinker whose hands-on approach to problem solving complemented a masterful ability to convert concepts into commercial reality. It is awarded to an NCE faculty member with a strong professional commitment to innovation and the transfer of technology to industry, as well as a respected record as a teacher and mentor. ■



PHOTO: KAI CHAN

Professor John R. Schuring

ZHANG RECEIVES TOP NSF AWARD

For his research project titled "Dependable Data Management in Heterogeneous Sensor Networks," Assistant Professor of Electrical and Computer Engineering **Yanchao Zhang** has won a prestigious National Science Foundation Faculty Early Career Development (CAREER) Award.

A top NSF honor, the CAREER Award recognizes individuals who show exceptional promise as educators and researchers. The award will provide \$400,000 to support Zhang's work.

Zhang's research involves storage-centric heterogeneous sensor networks (SC-HSNs) consisting of many relatively simple sensor nodes that gather and send data to "master nodes" capable of responding to queries about the data. This architecture offers ideal data-sensing solutions for extreme and remote environments such as oceans, volcanoes and animal habitats. Zhang will study fundamental challenges

associated with dependable data management in SC-HSNs. His efforts are also expected to yield significant insights for dependable data management in other types of emerging wireless networks, including mobile ad hoc networks and vehicular networks. ■

ACSA HONORS SCHUMAN

Professor **Anthony (Tony) Schuman**, College of Architecture and Design, is the first NJIT faculty member to be named a Distinguished Professor by the Association of Collegiate Schools of Architecture (ACSA). The award, ACSA's highest honor, recognizes contributions across the spectrum of academic pursuits. Schuman is a past president of the association, which represents the 134 accredited schools of architecture in the United States and Canada. ■

POINT BY POINT

For the latest about all NJIT sports:
www.njithighlanders.com

The athletes assisted students with reading comprehension, writing and geography.

INSPIRATION FOR THE FUTURE

Members of the women's basketball team recently "assisted" in grades Pre-K through First at the Burnet Street Elementary/Middle School in Newark.

The athletes assisted students with reading comprehension, writing and geography. They also met with middle-school students, talking about topics such as goal setting, the importance of academics, and how the individual team members earned their athletic scholarships.

Margaret McKeon, women's basketball coach, is committed to bringing younger students the message that focusing on a passion, including athletics, and on the



Coach McKeon

right goals can open the way to achievement in college and beyond, regardless of one's financial situation. "It was hearing just such a message when I was in elementary school that first inspired me," says McKeon, "and it is my hope that our student-athletes can inspire these kids in the same way." ■



NJIT basketball players Taiwo Oyelola and Kehinde Oyelola at the Burnet Street Elementary/Middle School in Newark

PHOTO COURTESY OF WOMEN'S BASKETBALL STAFF

ATHLETES TAKE ON THE YOUNGSTERS



More than 500 sixth-, seventh- and eighth-graders from Essex, Passaic and Union Counties now know what they might experience as NJIT students. Brought to campus in January at the suggestion of Women's Basketball Coach Margaret McKeon, they were accompanied by 75 chaperones and assisted by members of the NJIT men's volleyball team. The students toured campus buildings, heard talks on college life, and watched the NJIT women's basketball team play Harvard University. Financial support from Athletics Director Lenny Kaplan helped pay for the buses that transported the students and provide box lunches. ■

GREAT WEST HONORS GROW

The Fall 2009 Great West Conference named students participating in four sports to its All-Academic team. The honorees are Joseph Ju* (biomedical engineering) in cross-country; Iulia Doci (management) in tennis; Cara Constantino* (architecture), Daisy Gallegos (information technology) and Kelsey Johnson (civil engineering) in cross-country; Sabrina Baby (management), Katrina Hornstein* (mechanical engineering) and Erica Schultz (management) in volleyball; and Christina Taylor* (mathematics) in soccer.

To be selected for the team, such outstanding individuals must achieve a minimum cumulative 3.2 grade point average and participate in at least 50 percent of the contests scheduled. ■

*Dorman honors scholars



Erica Schultz

PHOTOS: LARRY LEVANTI