The TECHS-NJ program, a collaboration with Rutgers-Newark, the Newark Public Schools, and the Newark Museum funded by an NSF grant, provides scholarships to NJIT and Rutgers-Newark students who earn a teaching certificate along with their undergraduate degree in science or mathematics and agree to teach in New Jersey’s high-needs schools after graduation.

Career Development Services sponsors a variety of experiential learning programs:

- 1,013 students participated in community service projects.
- 556 students were placed in co-ops and internships.
- Students earned nearly $5 million through co-op, work-study, and community service placements.

University researchers gained 12 U.S. patents in 2007-2008:

- Yeheskel Bar-ness, distinguished professor of electrical and computer engineering and director of Center for Communications and Signal Processing Research, received five patents for various advances in fourth-generation wireless telecommunications. He also received two South Korean patents for technologies in development with Samsung. (Story on page 5.)
- Timothy Chang, professor of electrical and computer engineering, received a patent for a film-based pressure sensor.
- Atam Dhawan, distinguished professor and chair of electrical and computer engineering, received a patent for an Internet security system.
- Haim Grebel, professor of electrical engineering, obtained a patent for an antenna array for an ultra-wideband communications system.
- Yun-Qing Shi, professor of electrical and computer engineering, received a patent for a method of hiding data within an image.
- Kamalesh K. Sirkar, distinguished professor of chemical engineering, received a patent for a new method of separating a gas from a gaseous mixture that can be used in fuel cell and battery applications.
- Daniel J. Watts, Panasonic Endowed Chair of Sustainability, was the lead on a patent for active coatings. (Story on page 22.)
Edgardo Farinas, assistant professor of chemistry and environmental science, received a prestigious NSF Faculty Early Career Development Award to support his research in the development of methodologies and “rules” for enzyme design, and the application of these methods efficiently to create novel and practical biocatalysts.

The Iowa Corn Promotion Board (ICPB), NJIT and University of Sao Paulo undertook a joint agreement for licensing four pending patents on a safe, building block chemical derived from corn known as isosorbide. A joint agreement for licensing isosorbide with the University of Sao Pauli and the University of New Jersey was signed May 10, 2008.

Carol Venanzi, distinguished professor of chemistry and environmental science, was awarded a two-year grant from the National Institutes of Health for the study of “3D-QSAR Modeling of the Kappa and Mu Opioid Receptor Affinity and Selectivity of Salvinorin A Analogs.” The goal of the research is the design of non-addictive opioid analgesics with limited side affects.

Jason Wang, professor of computer science, received NSF funding for his research in RNA data mining.

The Iowa Corn Promotion Board (ICPB), NJIT and University of Sao Paulo undertook a joint agreement for licensing four pending patents on a safe, building block chemical derived from corn known as isosorbide. A joint agreement for licensing isosorbide with the University of Sao Pauli and the University of New Jersey was signed May 10, 2008.

Carol Venanzi, distinguished professor of chemistry and environmental science, was awarded a two-year grant from the National Institutes of Health for the study of “3D-QSAR Modeling of the Kappa and Mu Opioid Receptor Affinity and Selectivity of Salvinorin A Analogs.” The goal of the research is the design of non-addictive opioid analgesics with limited side affects.

Jason Wang, professor of computer science, received NSF funding for his research in RNA data mining.

The Iowa Corn Promotion Board (ICPB), NJIT and University of Sao Paulo undertook a joint agreement for licensing four pending patents on a safe, building block chemical derived from corn known as isosorbide. A joint agreement for licensing isosorbide with the University of Sao Pauli and the University of New Jersey was signed May 10, 2008.

Carol Venanzi, distinguished professor of chemistry and environmental science, was awarded a two-year grant from the National Institutes of Health for the study of “3D-QSAR Modeling of the Kappa and Mu Opioid Receptor Affinity and Selectivity of Salvinorin A Analogs.” The goal of the research is the design of non-addictive opioid analgesics with limited side affects.

Jason Wang, professor of computer science, received NSF funding for his research in RNA data mining.

The Iowa Corn Promotion Board (ICPB), NJIT and University of Sao Paulo undertook a joint agreement for licensing four pending patents on a safe, building block chemical derived from corn known as isosorbide. A joint agreement for licensing isosorbide with the University of Sao Pauli and the University of New Jersey was signed May 10, 2008.

Carol Venanzi, distinguished professor of chemistry and environmental science, was awarded a two-year grant from the National Institutes of Health for the study of “3D-QSAR Modeling of the Kappa and Mu Opioid Receptor Affinity and Selectivity of Salvinorin A Analogs.” The goal of the research is the design of non-addictive opioid analgesics with limited side affects.

Jason Wang, professor of computer science, received NSF funding for his research in RNA data mining.
John Carpinelli, professor of electrical and computer engineering and director of the Center for Pre-College Programs, received the 2007 Recognition Award from the International Network for Engineering Education and Research (INEEER) for his leadership and international contributions to engineering education.

Timothy Chang, professor of electrical and computer engineering, along with his collaborator, Peter Tolas, executive director, Institute of Genomic Medicine at UMDNJ-New Jersey Medical School, received the Thomas Alva Edison Patent Award from the Research and Development Council of New Jersey, for the invention of the SmartPin, a device designed to deliver metered amounts of liquid that can be used in genetic screening.

Osama Eljabiri, a senior university lecturer who founded, taught and continues to develop the senior project capstone course program in NJIT’s College of Computing Sciences, was named 2007 New Jersey Professor of the Year by the Carnegie Foundation for the Advancement of Teaching. He was recognized for his diligence and dedication for promoting this new type of learning.

Provost Priscilla P. Nelson was elected a fellow of the American Rock Mechanics Association. She also received the Kenneth Andrew Roe Award from the American Association of Engineering Societies in recognition of her service to the engineering community in promoting unity among the engineering societies. She was also honored by the Executive Women of New Jersey (EWNJ) at their Salute to the Policy Makers.


Management Professor Hindy Lauer Schachter was selected for an Emerald Literati Network Award for excellence based on her contributions as a reviewer in 2007 to the *Journal of Management History*.

Richard Sher, distinguished professor of history, won two prestigious prizes for his book, *The Enlightenment and the Book: Scottish Authors and Their Publishers in Eighteenth-Century Britain, Ireland, and America*. He received the 2007 Leo Gershoy Award for “the most outstanding work in English on any aspect of the field of 17th- and 18th-century western European history,” awarded by the American Historical Association, and the 2007 Frank Watson Prize for the best book on Scottish History over a two-year period, awarded by the University of Guelph, Ontario, Canada.

Anthony Schuman, associate professor of architecture, received a medal from the Newark Municipal Council for his efforts in leading a two-day celebration of the Newark Eagles, the Negro National League baseball team that played in Newark from 1926-1948.

Kamalesh K. Sirkar, distinguished professor of chemical engineering, received the Clarence G. Gerhold Award presented by the American Institute of Chemical Engineers for outstanding contribution in research, development, or in the application of chemical separations technology.

Nancy Steffen-Fluhr, associate professor of humanities and the director of NJIT’s Murray Center for Women in Technology, received the University Change Agent Award from the Women in Engineering ProActive Network (WEPAN). The award recognizes and honors an individual who has driven positive change at his/ her institution with regard to the climate for women in science, technology, engineering and mathematics (STEM) fields, with an emphasis on engineering.

Nicholas Tworischuk, associate treasurer, was named a 2008 Risk & Insurance Innovator in the Higher Education category by Risk & Insurance magazine for his work with the New Jersey President’s Council homeland security efforts.

David Ullman, associate provost for information services and technology and chief information officer at NJIT, has been named New Jersey Technology Council 2008 CIO of the Year in the nonprofit category. The award recognizes a chief information officer or an executive in an equivalent position for his/her innovation and creativity in planning and deploying their enterprise systems, future IT goals, management philosophy and service to the industry and community.

**Student Awards and Honors**

Civil engineering majors on NJIT’s Steel Bridge Team (above) finished first in the 2008 Metropolitan Regional Competition and 19th out of 42 teams in the national competition. Indira Hernandez and Nishant Shah were 2008 co-captains.

Mariana Cassimiro, Fatima Elgammal, Brian Emmanuel, Michael Lam, Nan Maung, Matthew Peragine, and Alex Virodov, all NJIT mathematical sciences majors, were recognized for their poster presentations at the Garden State Undergraduate Mathematics Conference on April 12. The students, divided in three groups, were awarded three of the first four places (including first) among all presenting four-year colleges. Math faculty Roy Goodman, David Horntrup, and Michael Siegel were the students’ research mentors.

Chemical Engineering students Giuseppe DiBenedetto and Micaela Caramellino (below, with advisor Distinguished Professor Piero Armenante) were, respectively, the first place and second place NJIT winners of the 2008 ISPE (International Society for Pharmaceutical Engineering) Student Poster Competition. They received an all-expenses paid trip to Boca Raton, FL to participate in the National ISPE Student Competition.
The NJIT team was selected as one of a few educational institutions that made it to the national semifinal site visit round.

Sean O’Malley and Peter Bonanno, both graduate students in physics, received “The Best Scientific Achievement Prize” last month at the Cornell High Energy Synchrotron Source (CHESS) Users’ Meeting for their presentation “Jahn and Teller Play with Nano-Chessboards at CHESS.” The poster explained how a ZnMnGaO₄ film consisting of a checkerboard of nanorods of two different spinel phases could be self-assembled, analyzed, and understood in terms of the packing between matching surfaces of the different domains.

Six NJIT student-athletes were named Arthur Ashe Jr. Sports Scholars by Diverse: Issues in Higher Education. They are: Angelica Sepulveda, civil engineering major, soccer (second team); Isha Toor, business major, tennis (first team); Robert Herrera, architecture major, soccer (first team); Kevin Blanco, business major, soccer (second team); Rodrigo Correa, business major, volleyball; and Leonardo Paludo, business major, volleyball. The Sports Scholars Award honors minority undergraduate students who excel both academically and athletically.

Men’s volleyball athletes Rodrigo Correa, Leonardo Paludo, Greg Wagner and Eduardo Welter were named to the Eastern Intercollegiate Volleyball Association All-Academic team for 2008.

Sheetal Rajgure, Bharat Velagapudi and Neeraj Raigure, all master’s students in computer science, earned research internships to the prestigious National Institute of Informatics in Tokyo, Japan. Sheetal and Bharat are students of Associate Professor Vincent Oria, and Neeraj is advised by Associate Professor Cristian Borcea.

Two NJIT undergraduates enrolled in the Ronald E. McNair Postbaccalaureate Achievement Program received Excellence in Engineering Awards at the 11th Annual Philadelphia Alliance for Minority Participation (AMP) Research Symposium on April 5.

Silvana Ortiz (at left), a junior majoring in chemical engineering, placed second and Gloria Portocarrero, a senior majoring in biomedical engineering, placed third.

Women’s basketball players Jill Dickinson, Katie Piekielski and Kathryn Wighton were named to the national NCAA Division I Independent All-Academic team for 2007-08.

Agnieszka Pregowska, Kristy Haeckel and Sabrina Baby of the NJIT women’s volleyball team were selected to the 2007 Division I All-Independent second team while sophomore Erica Schultz was honored with honorable mention.

NJIT junior Julia Doci was selected as the 2007-08 national Division I Independent Player of the Year in women’s tennis.

Freshman guard Jessica Gerald was selected NCAA Division I Independent Women’s Basketball Newcomer of the Year.

Seon Woo Lee, doctoral student in electrical engineering, received first prize in the Research Poster Award competition at the Fourteenth Annual Wireless and Optical Communications Conference, held on the NJIT campus. She also took first prize in the graduate division at the 2008 Provost’s Student Research Showcase. Professor Haim Grebel is her advisor.

Two students at NJIT — brothers majoring in electrical engineering — have been recognized nationally for their research. Mohammad Naqvi, who won a Goldwater Scholarship last year for researching the sun’s affects on global warming, was named to the second team of the 19th annual USA Today college academic team. His younger brother Salman Naqvi received Honorable Mention in the Goldwater competition for studying how the growth of cities — think concrete and asphalt replacing grass and trees — affects the global climate. Salman was awarded the National Oceanic and Atmospheric Administration (NOAA) Ernest F. Hollings Scholarship for 2008.

Sara Gatmir Motahari, a doctoral student in electrical and computer engineering at NJIT, was named a 2008 Google Anita Borg Memorial Scholarship finalist. The program awards academic scholarships to outstanding undergraduate and graduate women who are completing degrees in computer science and related fields and who have demonstrated a commitment to advancing women in technology.

Robert Sabattis, an attorney and former police captain, has been named director of public safety.

Robert English, professor of engineering technology, has been named interim dean of the School of Management. He was chair of engineering technology for nearly two decades.

Stewart D. Personick, internationally recognized pioneer in the theory and practical applications of new and emerging technologies in telecommunications systems and networks, was named Ying Wu Endowed Chair in Wireless Communications in the Department of Electrical and Computer Engineering at Newark College of Engineering.

Fadi P. Deek, dean of the College of Science and Liberal Arts, and professor of information systems, and James A. McHugh, professor of computer science, are the authors of Open Source: Technology and Policy, published by Cambridge University Press.

Atam P. Dhawan, distinguished professor and chair of the Department of Electrical and Computer Engineering, is the author of Principles and Advanced Methods in Medical Imaging and Image Analysis, published by World Scientific Publishing.

Senior University Lecturer Moses Fayngold is the author of *Special Relativity and How It Works*, published by John Wiley and Sons, Inc.

Karen Franck, professor of architecture, is the editor of *Loose Space: Possibility and Diversity in Urban Life*, published by Routledge.

Christopher Funkhouser, associate professor of humanities, is the author of *Prehistoric Digital Poetry: An Anthology of Forms*, published by the University of Alabama Press.


Norman Loney, associate professor of chemical engineering, is the author of *Applied Mathematical Methods for Chemical Engineers*, published by CRC/Taylor and Francis.


Rajiv Mehta, associate professor in the School of Management, is the author of *Sales Management: Building Customer Relationships and Partnerships* (with Joseph F. Hair, Ralph E. Anderson, Barry J. Babin), published by South-Western College Publishing.


Ali Akansu, professor of electrical and computer engineering, has been elected a fellow of the Institute of Electrical and Electronics Engineers (IEEE) for his notable contributions in the field of signal processing.

Karl Schweizer, professor of history, was elected a fellow in the prestigious Royal Society of Arts in London.

Nancy W. Coppola, professor of humanities, has been named Associate Editor of *IEEE Transactions on Professional Communication*. A senior member of IEEE, Dr. Coppola’s editorial domain is technology transfer and innovation.

Starr Roxanne Hiltz, distinguished professor emerita, was named a Fulbright-University of Salzburg Distinguished Chair in Communications and Media. She will lecture in Salzburg on transnational virtual teams and social software.

Durga Misra, professor of electrical and computer engineering, was named a fellow of the Electrochemical Society and was elected to chair the Dielectric Society’s Science and Technology Division. He also received the 2008 Leadership Award from IEEE Princeton Central Jersey Section for serving as general co-chair of the 2008 IEEE Sarnoff Symposium.

Ronald H. Rockland, professor and interim chair of engineering technology, was elected as an Engineering Technology Council (ETC) Director by the engineering technology members of the American Society of Engineering Educators (ASEE). The ETC of ASEE is the national organization that speaks for engineering technology education and is committed to promoting quality education and creative endeavors in engineering technology.

Pushpendra Singh, professor of mechanical engineering, has been elected as a fellow of the American Physical Society. Singh was recognized for his outstanding contributions to the development of efficient algorithms for the direct numerical simulations of multiphase fluids.

Nikki Stiller, associate professor of humanities, published a poem, “Blanche Running Bear,” in the prestigious journal *LILITH*.