Office of Academic Affairs

Research Newsletter

CUNY

April 2006 Volume 2, Issue 2

DEAN'S CORNER

Technology Commercialization

CUNY faculty are engaged in a vast array of research projects, both basic and applied. In many cases this work has the potential to be developed for the purpose of commercialization and/or economic development. The University has a strong interest in, and commitment to, licensing discoveries made by our research faculty. Providing assistance in obtaining patents and in advancing new technology encourages technological advancement, which could result in the creation of new companies, new processes and new jobs in New York State.

Although licensing is not CUNY's primary mission, it fits within our goals of research excellence and service. Indeed, we have a number of centers that are specifically geared toward economic development and commercialization including:

The **CUNY Institute for Software Design and Development (CISDD)**, a CUNY Consortium that aims to promote economic development in New York by encouraging the growth of the software industry through incorporating technological innovations in software functionality, performance, ease of development, and maintenance. Directed by Dr. **Ted Brown**, CISDD pairs CUNY's experienced faculty members with software industry professionals and governmental institutions to sponsor and develop the research and creation of new and marketable software technologies, provide specialized professional development courses, create job opportunities and continue to build CUNY's reputation as a software center in New York.

The **New York State Center for Advanced Technology in Photonics Applications (CAT)** that develops and disseminates knowledge in photonics technology in order to promote New York economic development for the medical, biological, industrial and military sectors. Directed by Dr. **Robert Alfano**, the CAT carries out cutting edge photonics research, develops technological innovations and applications, facilitates product development and leverages its NYSTAR funding with industrial and federal funds. It supports NYS industry through licensing of intellectual property, technology transfer, project collaboration and training of technicians and students. *(Continued on page 3)*

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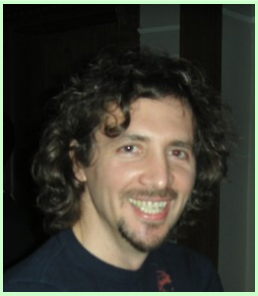
FACULTY SPOTLIGHT

Hernan Makse



On January 9, 2006, Dr. **Hernan Makse**, associate professor of physics at City College, was named a co-recipient of the 2005 **Mayor's Award for Excellence in Science and Technology** in the Young Investigator Category. Administered by the New York Academy of Sciences (NYAS), the Mayor's awards are presented annually to "pay tribute to those who harness their creativity and passion and contribute immeasurably to the advancement of our community." This year, Mayor Bloomberg selected eight winners from a list of finalists developed by NYAS following a comprehensive nominating process that included outreach to all sectors in the City's scientific communities.

Although his Mayor's Award was presented under the Young Investigator Category, Dr. Makse's list of accomplishments in the field of granular materials and soft condensed matter physics is already very distinguished. *(Continued on page 2)*

FACULTY SPOTLIGHT

Anthony Sclafani

Dr. **Anthony Sclafani**, distinguished professor of psychology, directs the Feeding Behavior and Nutrition Laboratory at Brooklyn College. Dr. Sclafani, a Brooklyn College alumnus, returned to the College as an assistant professor in 1970 after receiving his Ph.D. in psychobiology at the University of Chicago. He became associate professor in 1975, professor in 1980 and distinguished professor in 1994. Dr. Sclafani has also been a member of CUNY's doctoral program in psychology since 1970. *(Continued on page 4)*

Hernan Makse *(Continued from page 1)*

Dr. Makse came to CUNY as an assistant professor of physics in 2000. He received his Bachelor's degree ("Licenciatura") in physics from the University of Buenos Aires in Argentina in 1991. After earning his Ph.D from Boston University in 1997, he held a post-doctoral position at Schlumberger-Doll Research, where he studied granular matter, as well as a position as Visiting Scientist at Ecole Superirieure de Physique et de Chimie Industrielles, Paris. He became an associate professor in 2005. Professor Makse is a member of the Benjamin Levich Institute for Physicochemical Hydrodynamics and of the Ph.D program at the Graduate Center. He is a regular reviewer of highly ranked journals such as *Nature*, and *Physical Review Letters*, as well as a reviewer for numerous granting agencies including the National Science Foundation, the Department of Energy and the European Science Foundation.

While teaching, giving talks around the world and continuing to pave the way in our theoretical and experimental understanding of complex systems and granular matter, Dr. Makse heads a laboratory at City College consisting of six graduate students and two postdoctoral fellows. His research interests lie in understanding Complex Systems, Granular Flows and Micromechanics and "jamming" in soft-matter systems. In the area of Complex Systems, he has recently published an article in *Nature*,[1] which showed that complex networks show self-similarity, a property of fractal structures. While fractal structures are approximated by many natural systems, such as coastlines and mountain ranges, scale-free complex systems were previously not thought to show fractal properties, making the finding significant. Dr. Makse's group's results suggest "a common self-organization dynamics of diverse networks into a critical state, pointing to a new architectural law for complex systems." This new understanding of complex networks has widespread implications, for example, in protecting the World Wide Web from hacker attacks or for designing drugs with few side effects. Results from his research lead to important questions about the complicated biological machinery surrounding us: "Could it be that evolution has evoked a self-organizing principle such that it is not only the functionality of the individual molecules that are carefully designed, but the emerging properties on the level of the system as a whole?" Professor Makse's inquiry into this question is soon to appear in a paper recently accepted by *Nature Physics*.[2]

In the area of Granular Flows, Dr. Makse uses theoretical and experimental methods to investigate pattern formation of granular materials, which has important industrial applications. One of the puzzles in pattern formation of granular materials is the tendency of grains to differ in size, density or surface properties to segregate. For instance, large and small grains in a container will stratify into layers, where large grains will form the top and small grains form the bottom layer, an effect known as the "Brazil nut effect." Professor Makse and his colleagues conducted an experiment to show that the "Brazil nut effect" is due to the different grain sizes. In addition, they showed the phenomenon of granular self-stratification: a spontaneous periodic pattern arising as a consequence of flow instabilities of granular mixtures poured in a vertical cell. This striking behavior and the importance of mixing problems from a technological point of view have led to a broad interest in granular materials in the physics and engineering community.

Another major area of interest for Dr. Makse is that of understanding "Jamming" in disordered systems. Jamming, defined as a state that emerges when a system is blocked in a configuration far from equilibrium, from which it takes too long a time to be quantifiable for the system to relax, is understood to be a fundamental feature of many systems, such as granular materials (sand, sugar, marbles), emulsions (milk, custard), structural glasses (silica glass) and other materials. Using a combination of theory, simulations and experiments, Professor Makse and his colleagues have made significant contributions,[3] to our understanding of the theromodynamics of jamming, leading to the development of statistical theories of jammed materials. This work is supported by Dr. Makse's recent NSF CAREER Award.

[1] *Nature* 433, 392-395 (2005).
[2] Accepted *Nature Physics* (2006).
[3] *Nature* 415, 614-617 (2002).

COMMUNITY COLLEGE COLLABORATIVE GRANT

Round 3 Proposals Due April 28

The Office of the University Dean for Research is now accepting proposal submissions for the 3rd Round of the **CUNY Community College Collaborative Incentive Research Grant program**. The purpose of this program is to support the research efforts of faculty, especially junior faculty, at the Community Colleges, and to encourage collaborations with faculty within and across the CUNY campuses. The program is open to research projects in the disciplines that constitute the traditional academic divisions of the physical sciences, biological sciences, mathematical sciences, social sciences, and the humanities.

In order to encourage faculty to think in terms of major initiatives, budgets of up to $30,000 will be considered. The funding period for this year will be September 1, 2006 – June 30, 2007. Funding levels for successful proposals will depend on the budget request, the faculty review committee's view of budgetary need, and the ranking of the proposal. The University expects to fund up to 10 awards.

A total of 21 collaborative research proposals were submitted in the last round, of which 11 were funded.

To be considered for an award, proposals must arrive at the Central Office no later than 5:00 PM on Friday, April 28, 2006. For further information please visit www.cuny.edu/research or email Ms. Millicent Pascall at millicent.pascall@mail.cuny.edu.

Technology Commercialization

(Continued from page 1)

The Center **for Engineered Polymeric Materials (CePM)**, a NYSTAR funded initiative directed by Dr. **Nan-Loh Yang**. The mission of this Center, which is housed at the College of Staten Island, is to expand collaborative efforts with the private sector for the advancement of New York's polymeric material industries through collaborative applied research and technology transfer within the industry, industry-oriented education and training, outreach and networking.

In order to support and strengthen our efforts in the area of technology commercialization and economic development we are pleased to welcome **Jake Maslow** to the CUNY Research Office as the Director for Technology Commercialization. Mr. Maslow comes to CUNY from the Boston-Cambridge Metro area with nearly thirty-years of experience in different aspects of Intellectual Property (IP) law, technology transfer and commercialization.

Prior to his most recent role as an independent consultant, Mr. Maslow was a cofounder and IP Counsel at Sionex Corporation and Synkinetics, Inc.—spin-offs from MITs Draper and Lincoln Laboratories. From 1988 to 1992, Mr. Maslow, as Intellectual Property Attorney at Boston's Lahive & Cockfield and Fish & Richardson, represented universities and Fortune 500 high-tech companies in the areas of patents, trademarks, copyrights, technology transfer, licensing and contracts. Previous to that, he was an assistant director and IP Attorney at MIT's Patents & Technology Licensing Office where he managed IP and tech transfer in various technology areas, including engineering, computers and life sciences. Mr. Maslow holds a BA in political science from Columbia University and a JD from Brooklyn Law School.

The Technology Commercialization Office is located at the CUNY Central Office - Mr. Maslow can be reached at 212-794-5679 or at jake.maslow@mail.cuny.edu

EVC DISTINGUISHED LECTURE SERIES

History and Destiny in World Fisheries

The 4th and last installment of this year's Executive Vice Chancellor Distinguished Lecture Series, co-hosted by, Queens College and the *New York Times* took place on March 22nd, 2006 at the Graduate Center. Dr. **Carl Safina**, an author of more than a hundred publications, including *Song for the Blue Ocean* (Henry Holt, 1998) and *Eye of the Albatross: Visions of Hope and Survival* (Henry Holt, 2002), gave a lecture entitled "History and Destiny in World Fisheres." The talk was attended by faculty and students across CUNY as well as representatives from City and State agencies and Non-Profit Organizations. Following introductions from the office of academic affairs and the faculty sponsor, Professor **John Waldman** of Queens College, Dr. Safina explored the role of overfishing, fishery discards, fish farming, and human-altered habitats in the world's oceans.

In a talk that was part science lecture, part biography, and part book reading, Dr. Safina informed that despite serious problems, recent good news indicates that downward trends are beginning to reverse in some areas, with some recoveries underway due to improved management and greatly increased public awareness. Stating that the implications of these changes for both sea life and human communities are important, he commented that people's seafood choices can add momentum to a new movement of consumer-led efforts to improve fisheries and restore abundant marine life.

OFFICE OF RESEARCH CONDUCT

CUNY Contributes to Regional Research Compliance Conference

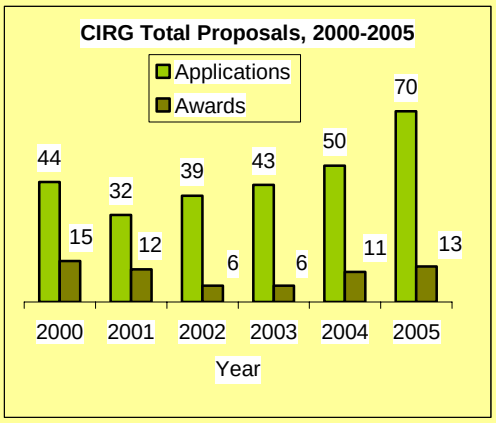
The University of Nevada at Las Vegas, along with the University Medical Center, the Office of Human Research Protections, and HCA Inc/Sunrise Hospital and Medical Center, presented the conference "Creating a Culture of Research Compliance: Challenges and Opportunities" in early March 2006. Professor **Martin Wallenstein**, John Jay College of Criminal Justice IRB Chair, was an invited speaker. His first workshop, titled "Sensitive Populations and Topics: Navigating through the IRB" was designed to help IRB members and staff in providing assistance to Principal Investigators who are proposing research studies with vulnerable populations or with extremely sensitive data. Professor Wallenstein discussed the ways in which IRB can help investigators without overstepping their role as independent, unbiased reviewers by becoming an advocate for the investigator in the IRB review of the proposal. Given his legal background, Professor Wallenstein was asked to chair a second workshop entitled "Role of the IRB Lawyer" where he discussed the many "hats" an attorney might be wearing as an attorney on the IRB.

Patricia MacCubbin, Director of Research Conduct, also attended the conference. Her background, prior to becoming involved in human subjects protections, was in public health research at the New York State Department of Health. At the request of Liz Bankert, associate provost at Dartmouth College, and Dr. Jeffery Cohen, president of HRP Associates, Inc., Ms. MacCubbin discussed the issue of public health research vs. public health practice at the beginning of a workshop on "Public Health Data Mining." The discussion helped set the stage for the presentations on HIPAA and public health data, and data mining in general.

CUNY COLLABORATIVE INCENTIVE RESEARCH AWARD

Two Changes Introduced in Round 13

In late February 2006, the Office of the University Dean for Research began accepting proposals for the 13th Round of the CUNY Collaborative Incentive Research (CIRG) Award. The program is becoming increasingly competitive, with a 40% increase in applications received in Round 12. In order to accommodate a further increase in the number of applications without a corresponding increase in the program budget, the Faculty Committee overseeing the program deliberated earlier in the year about ways to increase the effectiveness of the program.



During these deliberations the faculty committee reflected upon one of the core objectives of the program—to lay the groundwork for successful grant submissions to an external funding agency. Given the scarcity of research funding nationwide, committee members felt that a stronger emphasis needed to be placed during the review process to evaluate the potential of a proposal to generate its own external funding over time.

Thus to address these dual concerns of increasing number of applications and successful submissions for future external funding, based on faculty committee recommendations, two changes were introduced in the current round of the program:

- To increase the total number of awards, the funding period has been changed from 2-years to 1-year, and
- In addition to its technical merits and feasibility, proposals will now also be numerically ranked based on its potential for generating own external funding. In prior years, the overall ranking of a proposal was based primarily on the former criterion.

In order to encourage faculty to think in terms of major initiatives, budgets up to a maximum of $40,000 a year for one year can be requested. In this thirteenth round of the CIRG program, the committee expects to fund between 12-15 one-year awards. Award announcements are expected to be made by the beginning of Fall semester.

Anthony Sclafani (Continued from page 1)

Dr. Sclafani's research on the psychobiology of appetite and obesity began with a small grant from the National Institutes of Health in 1971 and his laboratory has been funded by the NIH ever since. One project on "Carbohydrate Appetite, Fat Appetite, and Obesity" is currently in year 22 of NIH support and was renewed in 2001 as a MERIT award. The NIH MERIT Award program provides long-term support (8 - 10 years) to investigators with impressive records of scientific achievement in research areas of special importance or promise. Fewer than 5 percent of NIH-funded investigators are selected to receive MERIT Awards.

Obesity is currently a major health problem that increases the risk for many diseases, including diabetes, heart disease, hypertension, and some forms of cancer, and is an area of special interest to the NIH. The growing prevalence of overweight and obese individuals is attributed in part to environmental factors such as the abundance of palatable, energy dense foods that are high in sugar and fat. Dr. Sclafani has been investigating the interaction of taste, nutrition, and learning in the appetite for sugar and fat rich foods. This research uses animal models (rats and mice) to reveal the brain areas that control appetite and learned food preferences and the role of the taste and gastrointestinal systems in stimulating appetite. Experimental findings indicate that animals readily learn to prefer food flavors that are associated with the nutritional actions of sugar and fat in the gastrointestinal tract and, once established, these flavor preferences are long lasting. This work has stimulated research on food preference learning in humans by investigators at other universities.

Dr. Sclafani's appetite research is a collaborative effort and his research team includes Dr. **Karen Ackroff**, Dr. **Khalid Touzani** and CUNY doctoral student **Emma Yiin**. Assisting in his effort are research technicians Kristine Bonacchi and Martin Zartarian and many Brooklyn College undergraduate students who complete research projects in the lab. Several research scientists outside CUNY also collaborate with Professor Sclafani on this project including investigators at Albert Einstein School of Medicine, Barnard College of Columbia University, St. Luke's -Roosevelt Hospital Center, Mount Sinai School of Medicine, Pennsylvania State University College of Medicine, and Washington University School of Medicine.

Dr. Sclafani recently expanded his research program to include studies on the neuropharmacology of learned food preferences with the support of a new 5-year NIH research grant. This project focuses on two neurochemical systems, the brain dopamine and opioid systems, that are involved in the rewarding aspects of food as well as of drugs of abuse. The novel approach of this project is that it will investigate the role of dopamine and opioid reward systems in learning new food preferences. Co-investigators on this project include Dr. **Richard Bodnar** of Queens College and Dr. Khalid Touzani of Brooklyn College and they are assisted by research technician Steven Zuckerman. It is worth mentioning that this NIH project developed out of a **CUNY Collaborative Research Grant** awarded to Professors Sclafani and **Andrew Delamater** at Brooklyn College and Richard Bodnar at Queens College.

Around the Campuses

NSF CAREER AWARDS

Hunter and City Faculty Add to CUNY's List of Awardees

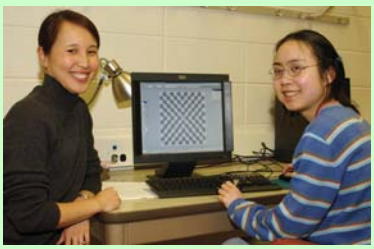
Dr. **Neepa Maitra,** assistant professor of physics and astronomy at Hunter College, and Dr. **Carlos Meriles**, assistant professor of chemistry at City College received prestigious CAREER Awards earlier this year from the National Science Foundation. "The Faculty Early Career Development (CAREER) Program is a Foundation-wide activity that offers the National Science Foundation's most prestigious awards in support of the early career-development activities of those teacher-scholars who most effectively integrate research and education within the context of the mission of their organization." Dr. Maitra won an Award for research to develop accurate functionals for use in time-dependent density functional studies of electronic excitations and dynamics in systems of chemical interest. Dr. Meriles, received an Award to develop a new strategy for high-sensitivity detection of Nuclear Magnetic Resonance (NMR) for use in micro-imaging and micro-spectroscopy of organic and biological materials. Professors Maitra and Meriles join five other Hunter College faculty and ten City College faculty who have won CAREER Awards in the past four years:

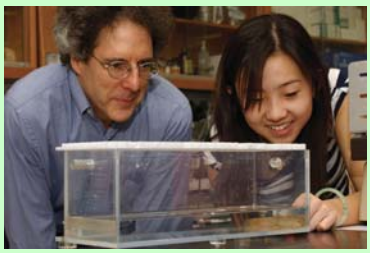
- **Derrick Brazill**, Biological Sciences, Hunter College (2004)
- **Bingmei Fu**, Biomedical Engineering, City College (2004)
- **Ranajeet Ghose**, Chemistry, City College (2004)
- **Urs Jans**, Chemistry, City College (2002)
- **Jacqueline Li**, Mechanical Engineering, City College (2002)
- **Hernan Makse**, Physics, City College (2003)
- **Hiroshi Matsui**, Chemistry, Hunter College (2002)
- **Ross Nehm**, Biology & Education, City College (2003)
- **Benjamin Ortiz**, Biological Sciences, Hunter College (2003)
- **Tatyana Polenova**, Chemistry, Hunter College (2003)
- **Mark Shattuck**, Physics, City College (2002)
- **Despina Stylianou**, Mathematics Education, City College (2005)
- **Ioannis Stamos**, Computer Science, Hunter College (2003)
- **Kolluru Subramaniam**, Civil Engineering, City College (2003)
- **Sergey Vitkalov**, Physics, City College (2004)

QUEENS COLLEGE

Three Intel Semifinalists were mentored by Queens College Professors

New York City High School students Belinda Tzen, Hilana Lewkowitz-Shpuntoff and Anjie Zheng were among 300 participants to make it to the semifinal round in the prestigious annual Intel Science Talent Search sponsored by the Intel Corporation. The competition attracted over 1600 participants from across the country. Belinda Tzen, who is in her final semester at Great Neck South High School, worked with Dr. **Andrea Li**, assistant professor of psychology. Belinda used techniques in visual psychophysics to investigate the mechanisms involved in the perception of three-dimensional shapes from two-dimensional images.





Hilana Lewkowitz-Shpuntoff was mentored by Dr. **Susan Croll**, assistant professor of psychology and director of the neuroscience program. Hilana analyzed brain sections of mice that had a genetic shortage of receptors for a particular protein – a deficiency previously known to cause behavioral problems. Compared to normal mice, these genetically impaired specimens were found to have enlarged brains, a finding that may have implications for developmental disorders in children with similarly distorted brains.

Anjie Zheng, who is soon to graduate from Townsend Harris High School, was mentored by Dr. **Mike Barry**, assistant professor of biology. Anjie investigated how barbels, the whisker-like organs found around the mouth of Oriental weatherfish, make the bottom-feeder hungry for its next meal. (Courtesy of Maria Terrone, Queens College)

Submit research related news items from your campus by emailing them to oaaresearch@mail.cuny.edu

QUEENS COLLEGE

DOE Awards $19.2 Million to Support Research on Occupational Disease

The Center for the Biology of Natural Systems (CBNS) of Queens College received a four-year $19.5 million award from the U.S. DOE for support of a research program of early detection of occupational disease, including lung cancer, among nuclear weapons workers at five DOE sites in Tennessee, Ohio and New York. This award includes support of the use of low dose CAT scanning for the early detection of lung cancer. This contract sustains the occupational health research of DOE workers for which the Center for the Biology of Natural Systems and Dr. **Steven Markowitz** have already received approximately $20 Million from 2000 to present.

"The nuclear weapons industry was one of the most hazardous in the United States with over 600,000 workers over the past 6 decades. I am very pleased that the Department of Energy and the United States Congress understand the importance of continuing to address the needs of these workers and have provided ongoing support for documenting and helping to improve the health of this work force," commented Dr. Markowitz.

The $19.5 million awarded from the Department of Energy is one of the largest grants ever received by Queens College. The Center for the Biology of Natural Systems of Queens College is an environmental and occupational health institute that strives to identify and help to rectify environmental threats to human health. (Courtesy of Dr. Steven Schwarz, Queens College)

GRADUATE CENTER

White House Honors Alumnus

Graduate Center alumnus Dr. **Ashok Puri** was honored by the White House as a recipient of a 2005 Presidential Award for Excellence in Science, Mathematics and Engineering Mentoring (PAESMEM). Puri received his doctorate in physics in 1982 and is currently university research professor in the department of physics at University of New Orleans. While a doctoral student, Puri was mentored by Joseph Birman, distinguished professor of physics at City College. The award, which includes a $10,000 grant for continued mentoring work, is supported and administered by the National Science Foundation (NSF).

This year, ten individuals and one organization were honored. According to an NSF announcement, Puri "works to support the retention and matriculation of minority students at his university, as well as those children identified and served in K-12 outreach activities....One of the greatest strengths of his mentoring program is the effort to systematically address under-preparation of undergraduate minority students in science, technology, engineering, and mathematics." He has also had outstanding success in encouraging these students to pursue advanced degrees. When hurricane Katrina displaced Dr. Puri and his colleagues and students, he continued his work online from a temporary location in Texas, returning to New Orleans in February 2006. (Courtesy of Nan Shaw, Graduate Center)

GRADUATE CENTER

Graduate Students Take Advantage of the New Research Grant Opportunity

In Fall '05 the University funded a new competitive Research Grant Program for doctoral students. Run through the Graduate Center's Provost's Office in partnership with the co-chairs of the Graduate Center's Doctoral Students Council, the program was open to 2nd-7th year doctoral students. This initiative provided support in the amount of up to $1500 for the purposes of supporting research expenses or dissemination of research.

Selection took place in a two-tier system to ensure a fair and manageable administration of the program. The first stage consisted of programs in each discipline selecting a number of students for further recommendation (a number proportional to the discipline's size). Each doctoral program assigned their nominees to categories 1 and 2 according to their evaluation, where a category 1 assignment would guarantee an award, and a category 2 assignment would result in a 60% chance of award. In the second stage, three Disciplinary Cluster Committees (one each for the humanities, sciences and social sciences), each comprised of faculty and student members appointed by the Provost's Office, selected awards from the applications assigned to category 2.

This year, 199 graduate students in the humanities, social sciences and sciences received research grants. Their proposed project titles reflected the great breadth of the graduate disciplines supported by the Graduate Center, ranging from an ethnographic analysis of a college writing class (English), investigations of modal logic in cognitive science (Philosophy), modeling risk-aversion and optimism-pessimism in a fuzzy information framework (Economics), creating knowledge sharing agents using genetic algorithms in mobile ad hoc networks (Engineering), investigating photoreceptor mitochondrial uptake and vesicular release of ionic zinc (Biology), examining housing policy of the mentally ill in a changing policy environment (Social welfare) to studying brain bases for first language attrition (Speech & Hearing Sciences).

During the course of implementing this new Graduate Research Grant program, it was noted that some students in the humanities and the social sciences are less familiar than their colleagues in the sciences about the grant writing process. In response, the Graduate Center has decided to offer in the fall of 2006, a brief course in grants and proposal writing to doctoral students who wish to apply to the next round of this program. As successful procurement of funds for research is an integral component of any research endeavor, such a course in grant writing will be a valuable resource to budding researchers in all disciplines. Overseen by Vice President Dr. **Brian Schwartz**, the program expects to receive final reports from grant recipients in January 2007. (Courtesy of Dr. Brian Schwartz, Graduate Center)

BROOKLYN COLLEGE

$3.2 Million SCORE Award from NIH

Brooklyn College has been awarded its first NIH Support of Continuous Research Excellence (SCORE) award for nearly $3.2 million over four years. The SCORE program will improve the College's capacity to train underrepresented individuals in biomedical research and enhance the professional development of underrepresented minority faculty and students. Dr. **Louise Hainline**, dean of research and graduate studies, Dr. **Ray H. Gavin**, professor of biology, Dr. **Richard Magliozzo**, professor of chemistry and Ms. **Barbara Naso**, director of the office of research and sponsored Programs, designed a program to improve the research infrastructure and increase the hiring of faculty of color.

With this award, Brooklyn College now joins three other CUNY campuses where training and professional development of underrepresented minorities have been supported by NIH SCORE awards—**City College** since 1979, **Hunter College** since 1980, and **Lehman College** since 1985.

COLLEGE OF STATEN ISLAND

CSI Joins Prestigious Cohorts in Spinal Cord Injury Research

With a $213,158 grant from the New York State Department of Health's Spinal Cord Injury Research Board program to Dr. **Maria Knikou**, assistant professor of biology, College of Staten Island is amongst a prestigious cohort of awardee institutions that includes Columbia College of Physicians and Surgeons, Mt. Sinai School of Medicine, New York University School of Medicine, and Weill Medical College of Cornell. Dr. Knikou will study how natural receptors and nerves in the legs that are sensitive to mechanical/electrical stimuli influence the activity of the leg muscles during walking in people who have motor incomplete spinal cord injury (SCI). The relevant impact of spasticity on the walking pattern will also be determined.

For the first time, two previously-used techniques of reducing patients' body weight during testing - using full-harness support, and varying partial reduction in harness support - will be combined under real conditions of walking in SCI patients. Research findings will help predict more specific types of locomotor rehabilitation strategies aiming to restore walking in individuals with motor incomplete SCI, as well as contribute to identifying potential therapies for the treatment of spasticity.

Dr. Knikou's award further extends CUNY's research portfolio in the area of Spinal Cord Injury Research. Dr. **Marie Filbin**, distinguished professor of biology at Hunter College has a number of ongoing research projects funded, among others, by the NIH and NYS Department of Health, which explore the role of myelin in spinal cord regeneration. (Courtesy of Marie Miller, College of Staten Island)

LEHMAN COLLEGE

Lehman Enters Partnership to Promote Environmental Health Education and Research

Lehman College, in collaboration with Montefiore Medical Center, Albert Einstein College of Medicine, and the community-based organization For a Better Bronx, recently received a major award from the National Institute of Environmental Health Sciences (NIEHS). The funding provided with this award is intended to help facilitate the work of the South Bronx Environmental Justice Partnership (SBEJP), which consists of the four collaborating organizations, in improving the health of the people who live in the South Bronx. It is a four-year grant of approximately one million dollars.

Dr. **Juliana Maantay**, associate professor of urban environmental geography, the director of the geographic information science (GISc) program in Lehman College's department of environmental, geographic, and geological sciences (EGGS), and associate professor in the earth and environmental sciences program at the CUNY Graduate Center, is the Lehman College Co-PI for the project. She manages the Urban GIS Lab in the EGGS Dept., where the GIS research and exploratory spatial data analyses pertaining to this project will take place.

The Lehman team plans to work very closely with the participating community-based organizations and medical experts in developing and implementing the research design for the project. Lehman's main tasks in the Partnership are to conduct Geographic Information Systems environmental health research on cardiovascular disease and diabetes related to air pollution and land use in the Bronx, including epidemiological and small area analyses describing the spatial relationships between hospitalizations for diabetes and heart disease and potential sources of endocrine disruptors, stationary and mobile sources of air pollution, and noxious land uses such as brownfields, waste transfer stations, and high-volume roadways, as well as mitigating features of the built environment, such as parks, community gardens, etc. They will also examine the possible spatial correspondence between health disparities and areas with a high degree of culturally- and linguistically-appropriate maps, tables, graphs, and risk communication materials for community presentation to promote community education and social action. An additional component of the project is the development of an environmental health GIS course in the new Masters in Public Health (MPH) degree at Lehman. This course will be offered for the first time in Spring 2007 and taught by Prof. Maantay. (Courtesy of Dr. Juliana Maantay, Lehman College)

Events & Announcements

APRIL 21, 2006

Convergence of Industry, Government and Academia in Applied Polymer Research

The **Center for Engineered Polymeric Materials** (CePM) located at the College of Staten Island will host a networking event on Friday, April 21, 2006. The event, which will commence at 8:30am at the Center for the Arts- Building 1P, will feature examples of academic, industrial and government collaboration in the applied polymer field. Academia is challenged by a third mission beyond teaching and research by being asked to make a direct contribution to local and regional industries. Government can supply leadership and act as a catalyst for those activities. A good example of a positive governmental role can be found in the NYSTAR program where government funds are provided to an academic center based on matching funds from industry for work on joint projects. Topics of discussions will also include NYS Science and Technology Law Center (a NYSTAR funded organization)—a legal resource that helps NYS academic Centers and industries to achieve successful commercialization of technology projects.

This program should stimulate good discussions on how CUNY can more effectively achieve its commercialization aims by using all three legs of the technology stool. To register and obtain further information for this free event please contact Jasmine Cardona at (718) 982-3942 or Cardona.cepm@mail.csi.cuny.edu.

MAY 10, 2006

Foundation Antoine Saugrain Lecture: Samuel Stupp

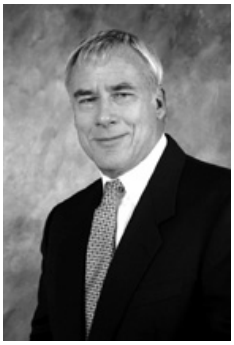
The Center for Study of Gene Structure and Function (Gene Center) at Hunter College is sponsoring the Foundation Antoine Saugrain Lecture to be given by Professor **Samuel I. Stupp** of Northwestern University on Wednesday, May 10th. Professor Stupp was a member of the faculty at Northwestern until 1980 and then spent 18 years at the University of Illinois at Urbana-Champaign where he was appointed in 1996 Swanlund professor of materials science and engineering, chemistry, and bioengineering. In 1999, he returned to Northwestern as a Board of Trustees professor of Materials Science, Chemistry, and Medicine, and later was appointed Director of Northwestern's Institute for BioNanotechnology in Medicine.

(Courtesy of Northwestern University)

Professor Stupp's talk, titled "Molecular Self-Assembly to Repair Human Biology" will be held at 714 West Building, Hunter College, at 12:45PM. For more information please contact Professor Charles M. Drain at cdrain@hunter.cuny.edu.

SEPTEMBER 8, 2006

Fall Symposium for IRB Members and Staff



The Office of Research Conduct has scheduled the 2006 Fall Symposium for IRB Members and Staff. This year's Symposium will be held September 8, at the Newman Center of Baruch College.

CUNY is pleased to announce that the featured speaker will be Dr. **Ernest Prentice**. Dr. Prentice is the Associate Vice Chancellor for Academic Affairs at the University of Nebraska Medical College in Omaha and the co-Chair of the UNMC IRB. He is a nationally recognized expert in the protection of human subjects and featured speaker at national conferences. Dr. Prentice is currently the chair of the Health and Human Services Secretary's Advisory Committee on Human Research Protection (SACHRP), appointed by the President. He is also a member of the Association for the Accreditation of Human Research Protection Programs (AAHRPP) Council and the Collaborative IRB Training Initiative (CITI) Developers Group. For additional information about the symposium, please contact Ms. Arita Winter at arita.winter@mail.cuny.edu.

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