Pitt Researchers Using Mathematics to Target Parkinson’s Disease Symptoms

By B. Rose Huber

University of Pittsburgh mathematicians have been collaborating with Pitt’s School of Medicine to find ways to stop the symptoms of Parkinson’s disease, thanks in part to a four-year, $1.86 million grant from the National Institute of Health (NIH). The NIH grant began in 2007 and has funded a number of research projects within Pitt’s Department of Mathematics; the NIH grant is in its fourth year.

Pitt mathematicians, working with neurobiologists, are using computational models, experiments, and analysis of models and data to study the way that signals are transferred between the basal ganglia, a collection of nuclei found in the brain that helps with motor control, and the thalamus, its downstream target in the brain. Although scientists can’t yet prevent the cell death associated with Parkinson’s, their study of mathematical patterns could guide the development of less invasive treatments that block the motor symptoms of the disease.

For Parkinson’s patients, there are often spurts and pauses in neural activity, and the firing of groups of neurons becomes more coordinated, leading to tremor and other symptoms,” said Jonathan Rubin, Pitt professor of mathematics and one of the principal investigators on the project.

“The neuronal activity is like a woodpecker knocking on a tree outside your window; it distracts you when it first starts pecking, and then the silence grabs your attention when the pecking suddenly stops. Similarly, the starts and stops in the neuronal activity can become disruptive to signal processing in the brain.”

Rubin said this firing pattern may be what leads those with Parkinson’s to experience shaking, rigid muscles, and difficulty in making quick movements. Currently, if side effects of drug treatments become too strong, surgeons fight these symptoms with deep brain stimulation, an aggressive but commonly used surgical treatment in which an implanted electrode literally penetrates the brain and sends out electrical impulses.

For the second consecutive year, the University of Pittsburgh is a top producer of Fulbright U.S. Student Program grant winners among research universities, placing 7th among all U.S. universities, public and private, outperforming its 2010 record, when it placed 12th among publics and 27th among all U.S. universities.

This year, of Pitt’s 38 applicants, 14 Pitt students—nine undergraduates and five graduate students—were awarded Fulbrights, the most in Pitt’s history of competing for Fulbrights. Pitt also was among the top two U.S. research institutions in the percentage of winners, with 37 percent of applicants receiving awards; only Maryland scored higher, with 39 percent of applicants receiving awards. With its 14 student awards, Pitt was tied with Brown, Cornell, Princeton, Rutgers, and Penn; it scored higher, for instance, than Berkeley, Notre Dame, Emory, Wisconsin, Washington University in St. Louis, William and Mary, Duke, UCLA, and NYU. Among the other research institutions in the top 17 spots were Michigan, Northwestern, Yale, Stanford, Chicago, Washington, Columbia, Harvard, North Carolina, and Johns Hopkins.

The award is granted through the U.S. Department of State and the J. William Fulbright Foreign Scholarship Board. More than 1,600 U.S. citizens are traveling abroad for the 2011-12 academic year through the program. Recipients of Fulbright grants are selected on the basis of academic or professional achievement, as well as demonstrated leadership in their potential fields. The program operates in more than 155 countries worldwide.

Three Pitt students won Fulbright awards of special note. Izabel Galiciera, a graduate student in Pitt’s Department of the History of Art and Architecture, received the only Bulgarian-Romania grant offered; Paulina Gonzales (A&S ’11) earned one of only two Malta English Teaching Assistant spots offered; and Karen Melis (A&S ’79, ENGR ’83) was selected for one of only two placements available in Slovakia.

In addition, Jonas Caballero, a 2010 College of General Studies (CGS) graduate, who earned his BPhil through Pitt’s Honors College, is the first CGS student to win a Fulbright award. He is studying in the United Kingdom (UK).

Of the approximately 600 applicants for the UK Fulbright—the largest pool of applicants for any country—only 38 were awarded.

A list of this year’s Pitt undergraduate recipients as well as their areas of study follows.

Nest Aliu, a 2011 graduate of the Kenneth P. Dietrich School of Arts and Sciences, received a BA in French and Africana studies with certificates in global studies and African studies. An Austin, Tex., native, Aliu is in France to research the political mobilization and activism of sub-Saharan African workers in France from 1960 onward.

Nick Apollo, a 2011 graduate of the Swanson School of Engineering, earned his BS in bioengineering with a minor in bioinformatics. Apollo plans to go to medical school and pursue a career in medicine.

Alum Jane Allred............

New postdoc training center.............

Scholars & Stewards: Alum Jane Allied.............

Supercomputing Center’s Blacklight Is Key Tool for Pitt, U.S. Researchers

By B. Rose Huber

Blacklight, the world’s largest shared-memory system that the Pittsburgh Supercomputing Center (PSC) acquired in July 2010, is proving to be a vital research tool for Pitt and other scientists and engineers across the nation.

Blacklight’s memory capacity is capable of holding three times the printed text in the Library of Congress. With 32 terabytes of memory, Blacklight’s technology is giving researchers the memory space necessary to help advance such research fields as astrophysics, geophysics, biotechnology, machine learning, among others.

“As we expected, Blacklight has opened new doors to high-performance computing for research communities, and it is rapidly becoming a force across a wide and interesting spectrum of fields,” wrote PSC scientific directors Michael Levine and Ralph Roskies in a statement released last week.

PSC is located between the University of Pittsburgh, Carnegie Mellon University, and Westinghouse Electric Corporation, giving Blacklight access to several of the most powerful systems for high-performance computing, communications, and data handling available for unclassified research to scientists and engineers nationwide.

Acquired with help from a $2.8 million National Science Foundation award, Blacklight has already helped astrophysicists make discoveries about black holes. Because the storage system can hold an entire space snapshot in memory (which requires between three to four terabytes of data), researchers were able to discover “cold gas flows,” a phenomenon that contributes to supermassive black holes and that has been puzzling researchers for decades.

At Pitt, Cecilia Lo, the inaugural chair of the School of Medicine’s Department of Developmental Biology, and Michael Barnamada, a professor of human genetics, have been using Blacklight to “read” sequences of DNA to better understand the order of nucleotide bases. A process that used to take two weeks now takes just eight hours with the help of Blacklight. In addition, Lo said, capillary sequencing can be enhanced to one to two weeks instead of years—a great advancement to genome studies.

Geneticists have been able to use Blacklight to better understand magnetic reconnection, which can disrupt satellites, spacecraft, and power grids on Earth. Blacklight’s architecture is critical for this analysis, because “one run” (or, visual simulation) can generate 200 terabytes of data, which used to take two weeks now takes just eight hours with the help of Blacklight. In addition, Lo said, capillary sequencing can be enhanced to one to two weeks instead of years—a great advancement to genome studies.

In addition to Pitt, Blacklight has also been proven to be an effective tool for processing the immense data available on the Internet (natural language processing). The memory system’s rapid expression of algorithms helps computer scientists better understand the language and work with more complex language models.

To learn more about the PSC, visit www.psc.edu.
Center Established to Support Postdoctoral Trainees in the Health Sciences

By Anita Srikameswaran

An innovative guidance center has been created to help postdoctoral trainees at the University of Pittsburgh Schools of the Health Sciences receive regular evaluation from their faculty supervisors as well as develop and achieve their career goals.

The Center for Postdoctoral Affairs in the School of Medicine, Nursing, Dental Medicine, and the University Honors College. The center will also assist faculty and the University Honors College.

A postdoctoral appointment provides recent PhD graduates with opportunities to continue developing their research skills while working under the supervision of senior research faculty members. These new postdoctoral trainees, usually called postdocs, can make significant contributions in a university setting, including discovering new knowledge and providing research guidance to graduate and undergraduate students.

Pitt’s Health Sciences’ postdocs will have three months to develop a career-development plan with their faculty supervisor, and will have a formal evaluation after nine months as part of the process of renewing the position. Trainees who are already in the program will enter the goal-setting and evaluation procedure at the time of renewal, so everyone will be in the new system within a year, Zellers said. As of the end of September, there were more than 650 postdocs in the health sciences, and 90 percent of them are in the School of Medicine.

“Postdocs are somewhat in limbo between student life and the workplace,” Zellers noted. “This center is intended to serve as a human resources office that will manage administration and payroll, but also will address career development, including building skills for jobs in sectors other than the academic community.

Some experts predict that fewer than 30 percent of postdocs will find work in academic settings, which means the majority must consider a future in industry, government, or another field, Zellers said. Those prospects must be taken into account when structuring a postdoc’s training experience.

The center will also assist faculty members in implementing evaluation strategies to provide constructive feedback using a new, standardized format called the Postdoctoral Progress Assessment—which will assess core competencies and progress toward stated goals, and provide conflict resolution when required. Postdocs will have a mentoring team that will include two faculty members or professionals in addition to the supervising faculty member, and the option of developing a plan for an independent research project. An advisory committee also has been established for ongoing oversight of postdoctoral affairs in the health sciences.

“We have very talented early career investigators in our postdoc community, and this focused effort to support their career aspirations will attract other promising trainees to the University,” Zellers said.

The University of Pittsburgh Schools of the Health Sciences include the Schools of Medicine, Nursing, Dental Medicine, Pharmacy, Health and Rehabilitation Sciences and the Graduate School of Public Health.

The schools serve as the academic partner to the UPMC (University of Pittsburgh Medical Center).

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The University of Pittsburgh is an affirmative action, equal opportunity institution that does not discriminate upon any basis prohibited by law.
African Liberation and Black Power

1. One of the conference's panels, "Pittsburgh and the African Diaspora," explored topics ranging from the persistence of slavery and indentured servitude in Pittsburgh to the social history of Black Pittsburgh. From

2. Considered one of the hidden jewels of the Pitt campus, the Writing Center is home to peer and faculty tutors, workshops, and other resources designed for both reluctant and experienced writers. Launched as the Writing Workshop during the 1960s, it was originally housed in the Early American Room of the Cathedral of Learning before moving to the Cathedral’s fifth floor, then to Thaw Hall, and ultimately to its current quarters in the O’Hara Student Center.

3. Du Bois’ book, organizing thoughts and guiding the flow of information from premise to conclusion. “That opportunity to be engaged with the students right at the functional level of the center just made my heart sing,” she recalls. “I didn’t expect that. I thought I was going to do my duty, walk through, and say, ‘That’s nice!’”

4. “Pittsburgh and the African Diaspora” panel discussion. The chancellor and Hill each hosted receptions for conference attendees.

PHOTOS BY JOHN MONROE BUTLER

As adults, we get into our careers and we forget those moments of awakening that happen to us at places like Pitt. We tend to forget that that was a time of great discovery for us. When you are in the midst of young people who have their whole lives and careers ahead of them, that is very rewarding.” —Jane Allred

"As adults, we get into our careers and we forget those moments of awakening that happen to us at places like Pitt. We tend to forget that that was a time of great discovery for us. When you are in the midst of young people who have their whole lives and careers ahead of them, that is very rewarding.” —Jane Allred
Continued from page 1

chemistry. Apollo, from Aliquippa, Pa., is studying retinal prosthetic implants for retinitis pigmentosa patients at Bionic Vision in Australia.

Joseph Baranowski, a 2011 graduate of the Dietrich School of Arts and Sciences from Wilkes-Barre, Pa., received a BS in mathematics with a minor in German. Baranowski is researching cosmological fluid dynamic models at the Free University in Berlin.

Jonas Cabletero, a 2010 College of General Studies and Honors College graduate, earned his BPhil through Pitt’s Honors College in international affairs and area studies. A Pittsburgh, Pa., native, Cabalero is in the United Kingdom to research Britain’s involvement in Middle Eastern society and culture.

Jay Evick, a 2011 graduate of the Dietrich School of Arts and Sciences, received a BA in Russian and linguistics with a certifcate in corporate and community relations. A Pittsburgh, Pa., native, Cabalero is in the United Kingdom to research Britain’s involvement in Middle Eastern society and culture.

Paulina Gonzales earned her BA in English literature and history with a minor in religious studies from the Dietrich School of Arts and Sciences. She is teaching English and serving as a mentor in an English-language teaching program for refugees who have been granted asylum in Malta. Gonzales is from Temecula, Calif.

Elise Hannon, a 2011 graduate of the Dietrich School of Arts and Sciences, earned a BA in English literature with minors in German and Spanish. Hannon, from Westford, Mass., is teaching English at the Wolfgang-Borchert-Oberschule in Berlin.

Karen Melis received a BS in biological sciences from the Dietrich School of Arts and Sciences and a BS in chemical engineering from the Swanson School of Engineering. A Pittsburgh, Pa., native, Melis is studying Slovak emigration from 1870 to 1914 from a village perspective in Slovakia.

Claudia Taylor, a 2011 graduate of the Dietrich School of Arts and Sciences, earned her BS in economics and a BA in Hispanic languages and literature with a Portuguese minor and a certificate in Latin American studies. From Christiansburg, Va., Taylor is taking business classes at the Instituto Tecnológico y Autónomo de Mexico and working full-time in a development program to preserve the Mesoamerican Reef in Mexico City.

A list of this year’s Pitt graduate recipients as well as their areas of study follows.

Greg de St. Maurice, a graduate student in Pitt’s Department of Anthropology in the Dietrich School of Arts and Sciences, is working towards a PhD in cultural anthropology with a graduate certificate in Asian studies. A native of Latrobe, Pa., de St Maurice is studying people who are actively reinvigorating traditional food culture in Kyoto, Japan.

Isabel Galliera is a PhD candidate studying contemporary art and critical theory. From Stamford, Vt., Galliera is working in Bulgaria and Romania to research how socio-politically engaged and community-oriented contemporary art practices have contributed to the emergence of democratic forms of civil society and citizenship in the post-Communist transitional era.

Robert Gradoville Jr., a 2011 graduate of the Swanson School of Engineering, earned his MS in civil engineering with a concentration in sustainable engineering. From North Haven, Conn., Gradoville is analyzing the Energy, Infrastructure, and Basic Services program of the humanitarian aid organization Practical Action in Peru.

John Round, a 2011 graduate of the Joseph M. Katz Graduate School of Business and Swanson School of Engineering’s joint-degree program, earned an MBA/MS in bioengineering, Round, of Manchester, Mass., is examining the potential for an economic, biofuel-based energy system in India and researching the technologies that may contribute to it.

Chelsea Wentworth, a graduate student in Pitt’s Department of Anthropology in the Dietrich School of Arts and Sciences, is working toward a PhD in anthropology with graduate certificates in Asian studies and women’s studies. She is researching how economic, environmental, and social factors affect mothers’ decision-making processes in making food choices and create pluralistic understandings of appropriate infant and child-feeding practices in Vanuatu, in the South Pacific. Wentworth is from Traverse City, Mich.

According to the Fulbright Web site, 122 graduate and undergraduate students at Pitt have won Fulbright awards since 1993, which is when the database began.

Since its establishment in 1946 under legislation introduced by late U.S. Senator J. William Fulbright of Arkansas, the Fulbright program has given approximately 300,000 students, scholars, teachers, artists, and scientists the opportunity to study, teach and conduct research, exchange ideas, and contribute to finding solutions to shared international concerns.

Fulbright alumni have achieved distinction in government, science, the arts, business, philanthropy, education and athletics. Forty Fulbright alumni from 11 countries have been awarded the Nobel Prize, and 75 students received Pulitzer Prizes. Prominent Fulbright alumni include: Muhammad Yunus, 2006 Nobel Peace Prize recipient and managing director and founder of Grameen Bank; John Atta Mills, president of Ghana; Lee Evans, Olympic Gold Medalist; Ruth Simmons, president of Brown University; Riccardo Giacomini, physicist and 2002 Nobel Laureate; Amar Gopal Bose, chair and founder of Bose Corporation; Renee Fleming, Metropolitan Opera soprano; Gish Jen, writer; and renowned architect Daniel Libeskind.

The Fulbright U.S. Student Program is administered by the Institute of International Education.
The University of Pittsburgh’s Office of Public Affairs sponsored a one-day summit to assess the coverage of young Black males in the American news media. The Nov. 1 by-invitation event at the University Club was organized by Robert Hill, Pitt’s vice chancellor for public affairs, and supported by a generous grant from the Heinz Endowments. The conference presented perspectives from journalism scholars, major media news executives, Black-owned media news executives, and young Black men. 1. Lorraine Branham, dean of the S.I. Newhouse School of Public Communications at Syracuse University, moderated a panel, “A Conversation Among the News Decision Makers.” 2. Members of that panel, from left, were Shirley Corwell, deputy managing editor of The Washington Post; James N. Crutchfield, associate professor of journalism and multimedia arts at Duquesne University and former president and publisher of the Akron Beacon Journal; Rick Henry, retired president and general manager of WTAE-TV; and David Shelnman, executive editor of the Pittsburgh Post-Gazette. 3. Pitt Vice Chancellor Hill made opening remarks and introduced the keynote speaker. 4. Larry E. Davis, dean of the School of Social Work, Donald M. Henderson Professor, and director of the Center on Race and Social Problems at Pitt, addressed the psychological impact on Black men of negative stereotypes promulgated by the media. 5. Paula Pendexter, vice president of the Association for Education in Journalism and Mass Communication and associate professor of journalism at the University of Texas at Austin, moderated the “Imagery in the News” panel and also served as a consultant to the summit. 6. Marc Lamont Hill delivered the day’s keynote address. He is an associate professor of English education at Teachers College of Columbia University and host of the nationally syndicated TV show Our World With Black Enterprise. 7. George E. Curry, president and CEO of George Curry Media, moderated the panel titled “A Conversation Among Black Media Executives.” 8. The panel “A Conversation Among Black Media Executives” comprised, from left, John B. Smith Sr., publisher and chief executive officer of The Atlanta Inquirer; Tené Croom, president of Tené Croom Communications and a former news director for the American Urban Radio Networks; and Reid Davis, editor and publisher of the New Pittsburgh Courier. 9. Panelists for “A Conversation Among Young African American Males” were, from left, Antoine Allen, freshman journalism major at Syracuse; Amani Davis, senior at Winchester Thurston School; Jasiri X, Pittsburgh-based word artist and community activist; Ashton Gibbs, senior communication major at Pitt and member of Pitt’s varsity basketball team; Raymond Hopkins, a Pittsburgh youth who attended Pittsburgh Carrick High School; Jay Oriola, senior psychology major at Pitt; and Tosen Nwadei, sophomore business administration major at Pitt.
Jonas T. Johnson, the Dr. Eugene N. Myers Professor and Chairman of Otolaryngology in the Pitt School of Medicine, is the recipient of the 2011 Dr. Rodman E. Sheen and Thomas G. Sheen Award. The $25,000 award, established in 1968, is granted annually to a doctor or doctors to advance the study and science of medicine and to reward those who have made outstanding achievements in the medical profession. The award will be presented by the Bank of America on Dec. 3 during the annual convention of the New Jersey Chapter of the American College of Surgeons in Iselin, N.J.

Steven R. Little, assistant professor of biochemical engineering in Pitt’s Swanson School of Engineering, received the 2012 Young Investigator Award from the Society for Biomaterials. The award annually recognizes an individual who has demonstrated outstanding achievements in the field of biomaterials research within 10 years of achieving his or her terminal degree or formal training. Little accepted the award at the society’s 2012 Fall Symposium in New Orleans in early October.

Ketki Raina, assistant professor in the School of Health and Rehabilitation Sciences’ Department of Occupational Therapy, received the 2011 Academic Educator Award from the Pennsylvania Occupational Therapy Association. Recognized for her excellence in innovations in education, Raina is known for her clinical expertise and research in rehabilitation related to cardiac care and fatigue.

Rory Cooper Receives 2011 AAAS Mentor Award

Rory Cooper, Distinguished Professor and Finkler-Frederick Professor of Engineering in the Department of Rehabilitation Science and Technology in Pitt’s School of Health and Rehabilitation Sciences (SHRS), has been selected to receive the 2011 American Association for the Advancement of Science (AAAS) Mentor Award. The award, which will be presented to Cooper during the Feb. 17 AAAS annual meeting in Vancouver, British Columbia, honors individuals who demonstrate extraordinary leadership in increasing the participation of underrepresented groups in science and engineering. During his time as a Pitt faculty member, Cooper has mentored nearly 100 undergraduate students, 69 master’s degree students, 37 PhD degree students, and 17 postdoctoral fellows; half of these 200-plus students and fellows have come from underrepresented groups.

Cooper came to Pitt in 1994, founding the Human Engineering Research Laboratory. In 1999, the facility became the first, and remains the only, national VA Rehabilitation Research and Development Center of Excellence in Pennsylvania. Cooper attended California Polytechnic State University, San Luis Obispo, where he earned both his bachelor’s and master’s degrees in electrical engineering. He earned his PhD in electrical and computer engineering from the University of California, Santa Barbara. He did his postgraduate fellowship at the VA Rehabilitation Research and Development Center in the Edward Hines Jr. Veterans Affairs Hospital in Hines, Ill.

2011 New Pittsburgh Courier Men of Excellence Awards

A total of 50 honorees were named Men of Excellence for their significant contributions to their professions as well as the Pittsburgh community.

Eric W. Springer, a retired health care attorney who was also a pioneer Black faculty member in the University of Pittsburgh’s Graduate School of Health (GSPH), was recognized as the New Pittsburgh Courier’s 2011 Legacy Honoree. Springer was awarded the distinction during theCourier’s annual Men of Excellence Awards reception Oct. 27 in the Fairmont Pittsburgh Hotel, Downtown. Springer was a founding partner of Horty, Springer & Mattern, P.C., one of the first health care law firms in the country, which pioneered the establishment of health care and hospital law nationwide. He was the first African American head of the Allegheny County Bar Association. In addition to his position in Pitt’s GSPH, Springer held a faculty position in Pitt’s School of Law. Springer also wrote columns for The Courier newspaper.

A total of 30 honorees were named Men of Excellence for their significant contributions to their professions as well as the Pittsburgh community. In addition, five men were honored posthumously, including the late David E. Epperson, dean emeritus and professor emeritus in the University of Pittsburgh School of Social Work.

Epperson (A&S ’61, SOC’W ’64, A&S ’70G, ’75G) was recognized by the Courier in Memoriam. He led Pitt’s School of Social Work to national prominence during his 29-year tenure, and he was the longest-serving dean at Pitt and the longest-serving dean of any American school of social work when he retired in 2009.

The Courier honored the following Pitt faculty and staff members as Men of Excellence in three categories:

Healthcare: Mario C. Brown (GSPH ’93), director of Pitt’s Office of Health Sciences Diversity, and Kevin F. Gilmore, medical director for Pitt’s Dorothy P. and Richard P. Simmons Center for Interstitial Lung Disease.

Sports: Kirk M. Bruce (EDUC ’76), Pitt associate athletic director for sports administration; and

Education: Grady H. Roberts (SOCWK ’96, GSPH ’71, EDUC ’74G), associate dean emeritus of the School of Social Work. The following Pitt alumni were named Men of Excellence:

Corporate: Carlos T. Carter (CGS ’94), senior vice president for Bank of America Merrill Lynch; and

Finance: Charles T. Curry (EDUC ’90G), executive vice president for finance and administration for Shadley Rock University.

Social Service: Kenneth J. Nesbit (CGS ’86, SOCWK ’03G), Section 3 specialist for the Coalition of Organized Residents of East Liberty; and

Healthcare: Anthony G. Robins (GSPH ’97), an epidemiologist and former director of federal program compliance for the Woodland Hills School District.

Pitt Researchers Using Mathematics to Target Parkinson’s Disease Symptoms

“If it’s not quite understood how deep brain stimulation works, said Rubin. “But it may be similar to the white noise of a window fan: It’s right there in your window next to you, so it’s potentially more distracting than a woodpecker. But actually, the regularity of the rhythm is less disruptive for you and your brain.”

—Jonathan Rubin

Jonathan Rubin

Continued from page 1

mathematics at Pitt; David Swigon, Pitt professor of mathematics; and Ivan Yotov, professor and chair in Pitt’s Department of Mathematics. The NSF grant partially funded the work of mathematics graduate student Pamela Reitsma, who carried out preliminary computational studies on the flow of signals in the basal ganglia under the supervision of Rubin and Brent Doiron, Pitt assistant professor of mathematics.

The principal investigator of the study of complex biological systems across multiple space and time scales are G. Bard Ermen,t Distinguished University Professor of Computational Biology and professor of mathematics at Pitt; David Swigon, Pitt professor of mathematics; and Ivan Yotov, professor and chair in Pitt’s Department of Mathematics. The NSF grant partially funded the work of mathematics graduate student Pamela Reitsma, who carried out preliminary computational studies on the flow of signals in the basal ganglia under the supervision of Rubin and Brent Doiron, Pitt assistant professor of mathematics.

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Concerts


Lectures/Seminars/Readings


Exhibitions

The Frick Art & Historical Center, Fairbury: The Hedges Family Collection, more than 100 objects made by Russian artist-jeweler Peter Carl Fabergé, goldsmith and jeweler to the Russian court, through Jan. 15, 3227 Reynolds St., Point Breeze, 412-371-6000, www.thefrickpittsburgh.org.


Pitt PhD Dissertation Defenses

Young Joo (Kevin) Kim, School of Health and Rehabilitation Sciences’ Department of Physical Therapy, 9 a.m., Nov. 21, “Problem-Solving Therapies to Reduce Chronic Fatigue in Cancer and Stroke Survivors,” 4065 Forbes Tower.


World Music Festival, University of Pittsburgh • November 21, 2011

Exhibition


Concert

The Thune Institute, Botany and History Entwined: Rachel Hunt’s Legacy, North Library, Carnegie Mellon University, through December 15

World Festival, William Pitt Union

Ken Hatfield, Nordy’s Café, William Pitt Union, November 30
41st Annual Pitt Jazz Seminar and Concert

Pitt marked its 41st Annual Pitt Jazz Seminar and Concert on Nov 1-5 with a week of lectures and community appearances, capped off with a stellar concert at a packed Carnegie Music Hall. 1. Drummer Billy Cobham 2. Pianist Geri Allen (A&S '83G) 3. Guitarist Larry Coryell and bassist Abraham Laboriel 4. From left, Maurice Brown, Randy Brecker, Curtis Fuller, Donald Harrison Jr., and Quamon Fowler perform under the direction of Pitt Jazz Studies Director Nathan Davis, far right. During the concert intermission, N. John Cooper, Bettye J. and Ralph E. Bailey Dean of Arts and Sciences, presented the 2011 Pitt Jazz Seminar Committee Award to Allen; Pitt Provost and Senior Vice Chancellor Patricia E. Beeson presented a Pitt Outstanding Lifetime Achievement Award to Fuller; and Pitt Vice Chancellor for Public Affairs Robert Hill inducted the names of two musicians—the late composer George Russell and trumpeter and bandleader Gerald Wilson—into the Pitt International Academy of Jazz Hall of Fame.

PUBLICATION NOTICE: The next edition of Pitt Chronicle will be published Dec. 5. Items for publication in the newspaper’s Happenings calendar (See page 7) should be received at least two weeks prior to the event date. Happenings items should include the following information: title of the event, name and title of speaker(s), date, time, location, sponsor(s), and a phone number and Web site for additional information. Items may be e-mailed to chron@pitt.edu, or sent by campus mail to 422 Craig Hall. For more information, call 412-624-3033 or e-mail robinet@pitt.edu.