The Ties That Bind
Pitt Community Bonds Are Strengthened As Many Join Hands in Challenging Times

Numerous people within the University of Pittsburgh community—students, faculty, alumni, staff, administrators, and friends—are looking inward and reaching out to one another during a time of uncertainty on the Oakland campus as a rash of bomb threats against campus buildings has occurred since Feb. 13. Members of the Pitt community and their efforts to help maintain normalcy, safety, and an ability to learn during difficult, challenging times.

Student Government Board

Pitt’s Student Government Board (SGB) has initiated two campuswide campaigns: “Keep Calm and Hail to Pitt” and “See Something, Say Something,” designed to empower students to report suspicious activity to the police, according to Kenyon Bonner, Pitt associate dean and director of student life as well as an SGB advisor. SGB members continue to spread the motto on Facebook and Twitter accounts—and, soon, on T-shirts.

On April 9, SGB hosted a “Pitt Pride Day” event on the veranda of the William Pitt Union. Students wearing blue and gold were treated to free pizza and popcorn. More than 600 students emptied 45 boxes of pizza and signed a thank-you poster for the Pitt police.

“It helped students get their minds off everything,” said Pitt junior Richard White, a political science major who chairs SGB’s Transportation and Safety Committee. “It was an opportunity to have a good time and be proud of this university.”

The thank-you poster will be presented to the University of Pittsburgh Police Department this week, along with a resolution of gratitude drafted by White’s committee and a collection of doggie treats for the bomb-sniffing police dogs.

Visible Support for Pitt Police

During Spring Fair 2012, Pitt students signed thank-you cards for the University’s police officers as well as for the bomb-sniffing police dogs used to search buildings during threats. The fair was held April 12 in Schenley Quadrangle.

George E. Klinzing, Pitt Vice Provost for Research, to Return to Faculty

By John Harvith and B. Rose Huber

George E. Klinzing, vice provost for research at the University of Pittsburgh since 1995, has requested to return to the University’s faculty, Pitt Provost and Senior Vice Chancellor Patricia E. Beeson has announced.

Klinzing—who has been Whiteford Energy Professor since 1990 and professor of chemical and petroleum engineering since 1996—will resume his faculty duties full-time in September 2012.

During his 17 years as Pitt’s vice provost for research, Klinzing has helped the University community navigate a period of tremendous growth in funded research and increased government regulation of the research enterprise.

“George Klinzing has been a University of Pittsburgh’s research enterprise officer during a period in which research funding has more than quadrupled, resulting in hundreds of millions of additional dollars flowing into the Commonwealth annually, creating not only unprecedented advances in the health sciences, basic science, and engineering, but thousands of new jobs,” said Pitt Chancellor Mark A. Nordenberg.

“George’s personal and creative approach has helped shape the research landscape at Pitt, and he has headed a number of initiatives that have brought the fruits of Pitt researchers out of the laboratories and into the marketplace,” the Chancellor added. “In 2001, for instance, he oversaw the development of the Technology Commercialization Alliance’s successful process to commercialize the research work of Pitt faculty, staff, and students. Since then, the number of invention disclosures at Pitt has increased sixfold.

The University will always be grateful for the extraordinary range and impact of George’s service.”

“No one at the University has done more than George Klinzing to foster collaboration among the best and brightest of Pitt researchers,” said Beeson. “He has played a key role in the development and expansion of interdisciplinary research through the creation of centers such as the Peterson Institute for Nanoscience and Engineering, the Simulation and Modeling Center, the Center for National Preparedness, and the Center for Energy.

He also has facilitated the development of many other interdisciplinary research areas across Pitt that have successfully obtained outside funding, and he has continued to lead efforts to expand the capability of the Office of Technology Transfer to commercialize the fruits of Pitt research and place them in the marketplace.”

Continued on page 3

Chancellor’s Office of the University of Pittsburgh

Pitt Is 3rd Among Publics, 5th Among All Universities In Federal R&D Spending

By John Harvith

Pitt ranks third among the nation’s public institutions of higher education and fifth among all universities, public and private, in its federally financed research and development (R&D) expenditures, according to the latest figures from the U.S. National Science Foundation (NSF).

The annual rankings, just released by the NSF, cover fiscal year 2010. Pitt’s federally derived R&D expenditures for that period totaled $594.7 million. Its total FY 2010 R&D expenditures added up to $822.5 million. The other two top public universities in the rankings of federally financed R&D expenditures were the University of Washington—Seattle and the University of Michigan-Ann Arbor; the top two private institutions in the rankings were Johns Hopkins University and the University of Pennsylvania.

In rank order, the top five universities in the NSF’s annual survey were Johns Hopkins, Washington, Michigan, Pitt and the universities ranked in the second five were Stanford, the University of California at San Diego, Columbia, the University of North Carolina at Chapel Hill, and the University of Wisconsin.

“The rankings from the National Science Foundation are a testament to the talent and commitment of our researchers, who compete for this funding against the very best faculty members at the very best universities in the country. But these rankings also are very good news for Western Pennsylvania and the Commonwealth as a whole, because they present in clear and concrete terms the major dollars-and-cents impact of Pitt through its power to import hundreds of millions of dollars into the state, funds that now support, directly and indirectly, more than 40,000 local jobs,” commented Chancellor Mark A. Nordenberg.

“The rankings also unmistakably demonstrate the enormous return on investment the Commonwealth receives through its support of this university as a public institution,” added Nordenberg. “The comparison between $822.5 million in research support with our current state appropriation of $144.5 million is stark. It is unlikely that the Commonwealth achieves anything close to that level of return on any of its other investments.

In addition, these rankings clearly reveal the elite institutions, both research and private, with which Pitt now keeps company, and it is widely recognized around the world that the kind of innovation and creativity that the best research universities will be a key to economic success in the 21st century.”

“The rankings of Pitt as a remarkable success in attracting increasingly large amounts of federal support stems directly from the indefatigable efforts of our world-class faculty in pursuing trailblazing research that has made and continues to make life a little better for millions worldwide, from the development of the Salk polio vaccine in the 1950s to today’s advances in the health sciences, basic sciences, and engineering,” said Pitt Vice Provost for Research George E. Klinzing.

“All of this is as it should be, since Pitt, as our region’s premier public research university, not only makes it possible for its students to learn in an atmosphere alive with creative ferment, but also, as part of its public mission, acts as a powerful economic engine.”

Continued on page 2
Relyea Study Is First to Show That Pesticides Can Induce Morphological Changes in Vertebrate Animals

By B. Rose Huber

The world’s most popular weed killer, Roundup®, can cause amphibians to change shape, according to research published in the March issue of Ecological Applications. Rick Relyea, University of Pittsburgh professor of biological sciences in the Kenneth P. Dietrich School of Arts and Sciences and director of Pitt’s Pymatuning Laboratory for Ecology, demonstrated that sublethal and environmentally relevant concentrations of Roundup® caused two species of amphibians to alter their morphology. According to Relyea, this is the first study to show that a pesticide can induce morphological changes in a vertebrate animal.

Relyea set up large outdoor tanks at Relyea’s laboratory, which contained many of the components of natural wetlands. Some tanks contained caged predators, which emit chemicals that naturally induce changes in tadpole morphology (such as larger tails to better escape predators). After adding tadpoles to each tank, he exposed them to a range of Roundup® concentrations. After 3 weeks, the tadpoles were removed from the tanks.

“It was not surprising to see that the smell of predators in the water induced larger tadpole tails,” says Relyea. “That is a normal, adaptive response. What shocked us was that the Roundup® induced the same changes to tadpoles not designed to affect animals, but we are learning that they can have a wide range of surprising effects by altering how hormones work in the bodies of animals. This is important because amphibians not only serve as a barometer of the ecosystem’s health, but also as an indicator of potential dangers to other species in the food chain, including humans.”

For two decades, Relyea has studied community ecology, evolution, disease ecology, and ecotoxicology. He has authored more than 80 scientific articles and book chapters and has presented research seminars worldwide. For more information about his laboratory, visit www.pitt.edu/~reylea.

No More Virtual Pickpocketing of Credit Cards, Thanks to Technology Developed by Swanson School Researchers

By B. Rose Huber

With technology has come ease. These days, thanks to near-field communications (NFC) and radio frequency identification (RFID), consumers no longer have to swipe credit cards through an interrogative machine—they are able to simply wave their credit cards to make purchases or withdraw money from their bank accounts.

Such ease, however, also has brought with it theft and fraud. Researchers at the University of Pittsburgh’s Swanson School of Engineering have come up with a method to improve security through a new credit card design that allows a card to turn “on” and “off.”

RFID tags and NFC credit cards are currently enabled to operate any time they’re placed in an electromagnetic field. However, that can be dangerous, according to Martin Mickel, the Nickolas A. DeCocco Professor of Engineering and director of the RFID Center for Excellence in the Swanson School. That’s because tamperable cards are now available for less than several hundred dollars, making it possible for thieves to simply pass a reader near an NFC credit card and charge purchases to it or extract cash from a bank account.

“Our new design integrates an antenna and other electrical circuitry that can be interrupted by a simple switch, like turning off the lights in the home or office,” says Mickel. “The RFID or NFC credit card is disabled if left in a pocket or lying on a surface and unreadable by thieves using portable scanners.”

—Martin Mickel

“George E. Klinzing, Pitt Vice Provost, For Research, to Return to Faculty

Continued from page 1

Research to meet the demands of a rapidly growing enterprise.”

“George Klinzing has served as the University’s chief research officer during a period in which Pitt’s funded research has more than quadrupled, resulting in hundreds of millions of additional dollars flowing into the Commonwealth annually, creating not only untold advances in the health sciences, basic science, and engineering, but thousands of new jobs.”

—Mark A. Nordenberg

Additional dollars have flowed into the University’s research budget, quadrupling the number of researchers to more than 2,000. Pitt’s Office of Research also has been recognized as the nation’s top institution for intellectual property, earning $144 million in licensing revenue. Pitt now holds three U.S. patents for technology that could aid in the treatment of Alzheimer’s disease, and has licensed 23 other patents and 125 copyrights with the University’s Office of Technology Transfer.

“I have continued to serve as an advisor to interdisciplinary research teams after he resumes his role as a full-time engineering faculty member. I am confident that he and the entire Engineering community have the intention of identifying Klinzing’s successor before the beginning of the fall semester.

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—Martin Mickel

225 Stories to Celebrate

Dan Marino: Hometown Hero, NFL Legend

Dan Marino grew up in the shadow of the Cathedral of Learning before going on to stardom at Pitt and the National Football League. Many consider him to be the quintessential quarterback.

While at Pitt from 1979 to 1982, Marino broke nearly every major passing record in school history and led Pitt to four consecutive top 10 finishes. Marino had one of the most dramatic endings in bowl history when he threw a touchdown pass with seconds left to give the Panthers a 24–20 victory over the University of Georgia in the 1980 Sugar Bowl.

A first-round draft pick of the Miami Dolphins in 1983, Marino went on to gain recognition as one of the greatest quarterbacks in NFL history, with a record-breaking 17-year career. He retired following the 1999 season as the league’s all-time leader in passing attempts, completions, yardage, and touchdowns.

Pitt retired Marino’s number 13 jersey. He is both a College and Pro Football Hall of Fame inductee.

For more stories about Pitt’s legacy of achievement or to share your own stories about the University, visit www.225.pitt.edu.
Continued from page 1

Sarah Halperin created a “We Support the Pitt Police” Facebook page in early April (www.facebook.com/WeSupportthePittPolice). By the end of its first week, the page had collected more than 4,200 likes and garnered hundreds of wall posts, becoming an unofficial forum for Pitt community members to voice their praise for the Pitt Police.

“When you look at the response to the Western Psych shooting and the vigil displayed during these [bomb threat] incidents, these men and women absolutely deserve to be recognized for their dedication and hard work in protecting us,” Rhodes said.

Rhodes and Halperin, with the assistance of students who have been evacuated from a University building during one of the bomb threats, the trying times of this semester have shown the resilience of Pitt’s students and the expertise of those assigned to protect them.

“Speaking firsthand, it’s a very nerve-racking experience, but I believe the situation has been handled well,” he said. “I think the overall sentiment is that everyone is really thankful for [the police] and all the steps they’ve taken to keep us safe here.”

Faculty: Regrouping on the Fly

Even under the best of circumstances, the end of Spring Term elevates stress levels, with term papers due, final exams approaching, and course grades on the line. But the recent onslaught of bomb threats and building evacuations has complicated the academic process immeasurably. Nevertheless, faculty and students have together sought solutions to get the job done.

In early April, Provost Beeson offered guidance to faculty regarding options for finishing the semester, and she encouraged accommodation and flexibility. Some faculty members have held classes outside, under the trees on the Cathedral lawn or beneath the canopy at Schenley Plaza. Others have quickly organized virtual class sessions, where they work through a variety of activities, including the use of specimens and performing experiments in class, but the recent evacuations have interfered with scheduling and have raised uncertainty. So Dechant has set up a virtual lab environment utilizing a software platform included with his textbook to convey anatomy and physiology concepts. For a lab session on digestive enzymes, for instance, the online program enables students to view and separate enzymes virtually and to complete self-tests about the lab content, with feedback assessments from Dechant. While the situation isn’t ideal, he says: “The students know the material, they’ve still engaged, they’re still able to understand the content.”

Dechant and other professors are also using a traditional online system called Course Web, which has been used at Pitt for nearly a decade. This blogspot.com was created April 3 by a student named Andrew, who said he is “an intelligence analyst who wants to take a shot at figuring this out.” The site has garnered more than 700,000 page views from posters, some of whom self-identify as Pitt students as well, on occasion, Pitt professors and Pitt parents. The site includes a detailed listing of the bomb threats as well as a map pinpointing the location(s) of threats.

Christine Wheilen, a visiting assistant professor in the Pitt Kenneth P. Dietrich School of Arts and Sciences’ Department of Sociology, said the online communities “provide a safe forum for a modern town hall meeting.”

“These are valuable communities,” she said, adding that “they’re really no different than communities that would have town hall meetings 30 or 40 years ago. But this is the language of this generation.” Wheilen is the author of Generation WTF: Getting from “What the F*ck?” to a Waco, Tanacrus, and Feelings: You (Templeton Press, 2011).

And as “pittchick22” posted April 11, “...spoke to my math teacher today, and she said, ‘my friend posted a reminder about perspective and I thought it’d be appropriate to post here... though it’s (obviously) frustrating to deal with the bomb threats, shouldn’t we all be thankful that there hasn’t been a bomb?’ And I think the pitt community is becoming so close that students are offering others they’ve never met couches to sleep at night? I don’t think anyone realized the sense of community we have around us and how lucky we are to be part of such a wonderful university, just a thought :) loving on my fellow panthers. H2P!!”

—pittchick22 on blog

Online Connection Is Modern-Day Town Hall Meeting

Many in the Pitt community have turned to existing and newly created online communities in their daily quest for the latest information about the bomb threats on Pitt’s campus.

Pitt’s official Facebook and Twitter pages have provided a forum for many, primarily students, to express their opinions and concerns about the spate of threats that began on Feb 13. The social networking sites that have grown up include various Pitt-related online rednet.com as well as the “We Support the Pitt Police” Facebook page (www.facebook.com/WeSupportthePittPolice), launched by Pitt students Alexander Rhodes and Sarah Halperin.

“This page is a small step to show the Pitt Police that their work is noticed and appreciated” during both the Western Psych shooting in March and the continual bomb-threat evacuations, Rhodes said.

Although wheilen@dptsh.edu (Sharon S. Blake, Diane Herron Chavis, Cynthia Gill, Cara Masset, Anthony M. Moore, and Jane-Ellen Robinet contributed to this story)
CHANCELLOR HOSTS BRITISH DELEGATION

MARK A. NORDENBERG hosted a breakfast for a visiting British governmental delegation seeking information on how Pittsburgh became a model for achieving economic renaissance. The March 29 breakfast, held in the O’Hara Student Center Ballroom, also included as guests Pittsburgh Mayor Luke Ravenstahl and members of the Allegheny Conference on Community Development, among others. Pictured, from left, Chancellor Nordenberg, The Right Honorable Lord David Trimble, Member of Parliament (MP) Angela C. Smith, MP Christopher Pincher, and MP Derek Twigg.

NUCLEAR CONFERENCE


C.F. REYNOLDS MEDICAL HISTORY SOCIETY

The C.F. Reynolds Medical History Society recently recognized Jonathan Eden (third from left) for his longtime service to the organization, including his roles as financial officer, membership chair, and, for the past 20 years, the society’s meetings planner. The society is one of the largest regional history-of-medicine societies in the United States. Seen, from left, are David K.C. Cooper, the society’s immediate past president and a professor of surgery in the Pitt-upmc Thomas E. Starzl Transplantation Institute, James Johnston, society president and a professor of medicine in the Renal-Electrolyte Division of the Pitt School of Medicine; Eden, who also served as the society’s honorary secretary and who is the curator of the History of Medicine Collection of the Falk Library and an adjunct assistant professor in the Kenneth P. Dietrich School of Arts and Sciences’ Department of History; and George Duker, society president-elect and an assistant professor in the Department of Cell Biology and Physiology in the Pitt School of Medicine. The society presented Eden with the award he is holding and also voted to designate an annual lecture in his name.

4TH ANNUAL INCLUSIVE VOICES

Several Pitt alumni served as designated “conversationists” during the 4th Annual Inclusive Voices luncheon, a signature event of the Program to Aid Citizen Enterprise (PACE), which brings together individuals from different backgrounds, fields, and disciplines to explore ideas with community leaders in various fields. PACE works with local, neighborhood-based nonprofits that support African American and economically disadvantaged communities. The March 30 event was held in the Omni William Penn Grand Ballroom, Downtown. Pictured from left are Kevin L. Jenkins (SOC WK ’90G), senior program officer and director of community initiatives, The Pittsburgh Foundation; Kelly Kochamba (KATZ ’07), a community outreach specialist, FBI Pittsburgh Field Office; and Maria C. Browne (GSPH ‘05), director, Office of Health Sciences Diversity Programs, University of Pittsburgh.

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Oscillating Gel Acts Like Artificial Skin, Giving Robots Potential Ability to “Feel”

By B. Rose Huber

Sooner than later, robots may have the ability to “feel.” In a paper published online March 26 in Advanced Functional Materials, a team of researchers from the University of Pittsburgh and the Massachusetts Institute of Technology (MIT) demonstrated that a nonoscillating gel can be resuscitated in a fashion similar to a medical cardiopulmonary resuscitation. These findings pave the way for the development of a wide range of new applications that sense mechanical stimuli and respond chemically.

A team of researchers at Pitt made predictions regarding the behavior of Belousov-Zhabotinsky (BZ) gel, a material that was first fabricated in the late 1990s and shown to pulsate in the absence of any external stimuli. In fact, under certain conditions, the gel, sitting in a petri dish resembles a beating heart.

Along with her colleagues Anna Balazs, Distinguished Professor of Chemical and Petroleum Engineering in Pitt’s Swanson School of Engineering, predicted that BZ gel not previously oscillating could be re-excited by mechanical pressure. The prediction was actualized by MIT researchers, who proved that chemical oscillations can be triggered by mechanically compressing the BZ gel beyond a critical stress. A video from the MIT group showing this unique behavior can be accessed at http://vvgroup.scripts.mit.edu/WP/.

“Think of it like human skin, which can provide signals to the brain that something on the body is deformed or hurt,” says Balazs. “As a result, I became fascinated with the plant and its unique hide-and-seek qualities—the plant leaves fold inward and droop when touched or shaken, reopening just minutes later. I knew there had to be a scientific application regarding touch, which led me to studies like this in mechanical and chemical energy.”

Also on Balazs’s research team were Olga Kuksenok, research associate professor, and Victor Yashin, visiting research assistant professor, both in Pitt’s Swanson School of Engineering. At MIT, the work was performed by Krystyn Van Vliet, Paul M. Cook Career Development Associate Professor of Material Sciences and Engineering, and graduate student Irene Chen. (Group Web site: http://vvgroup.scripts.mit.edu/WP/).

Funding for this research was provided by the National Science Foundation and the U.S. Army.

“A big challenge in neuroscience is translating variability expressed at the cellular and brain-circuit level with that in cognitive behaviors,” said Brent Doiron, assistant professor of mathematics in Pitt’s Kenneth P. Dietrich School of Arts and Sciences and the project’s principal investigator. “It’s a fact that short-term memory degrades over time. If you try to recall a stored memory, there likely will be errors, and these cognitive imperfections increase the longer that short-term memory is engaged.”

Doiron explains that brain cells increase activity during short-term memory functions. But this activity randomly drifts over time as a result of stochastic (or chance) forces in the brain. This drifting is what Doiron’s team is trying to better understand.

“As mathematicians, what we’re really trying to do is relate the structure and dynamics of this stochastic variability of brain activity to the variability in cognitive performance,” said Doiron. “Linking the variability at these two levels will give important clues about the neural mechanisms that support cognition.”

A team of University of Pittsburgh mathematicians is using computational models to better understand how the structure of neural variability relates to such functions as short-term memory and decision making. In a paper published online April 2 in Proceedings of the National Academy of Sciences (PNAS), the Pitt team examines how fluctuations in brain activity can impact the dynamics of cognitive tasks.

Previous recordings of neural activity during simple cognitive tasks show a tremendous amount of trial-to-trial variability. For example, when a person was instructed to hold the same stimulus in working, or short-term, memory during two separate trials, the brain cells involved in the task showed very different activity during the two trials.

“A big challenge in neuroscience is translating variability expressed at the cellular and brain-circuit level with that in cognitive behaviors,” said Brent Doiron, assistant professor of mathematics in Pitt’s Kenneth P. Dietrich School of Arts and Sciences and the project’s principal investigator. “It’s a fact that short-term memory degrades over time. If you try to recall a stored memory, there likely will be errors, and these cognitive imperfections increase the longer that short-term memory is engaged.”

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Using a combination of statistical mechanics and nonlinear system theory, the Pitt team examined the responses of a model of a simplified memory network proposed to be operative in the prefrontal cortex. When sources of neural variability were distributed over the entire network, as opposed to only over subsections, the performance of the memory network was enhanced. This helped the Pitt team make the prediction published in PNAS, that brain wiring affects how neural networks contend with—and ultimately express—variability in memory and decision making.

Recently, experimental neuroscientists are getting a better understanding of how the brain is wired, and theories like those published in PNAS by Doiron’s group can give a context for their findings within a cognitive framework. The Doiron group plans to apply the general principle of linking brain circuitry to neural variability in a variety of sensory, motor, and memory decision-making frameworks.

Two Pitt students participated in Doiron’s research: Amber Polk (A&S ’11), an undergraduate at the time the research took place and now a law student at the University of Illinois, and Ashok Litwin-Kumar, a neural computational PhD candidate with the Center for the Neural Basis of Cognition, a partnership of the University of Pittsburgh and Carnegie Mellon University.

Funding for this research was provided by the National Science Foundation and Sloan Foundations. For more information on Doiron’s lab, visit www.math.pitt.edu/~bdorion/Welcome.html.
African Music and Dance Ensemble, Bellefield Hall Auditorium, April 20

Graduate Student Composers Concert, with IonSound Project, Pitt’s ensemble-in-residence, performing new music by Pitt’s graduate student composers, 8 p.m. April 16, free, Bellefield Hall Auditorium, Pitt Department of Music, 412-624-4125.


University of Pittsburgh Symphony Orchestra performing Bruckner’s Symphony No. 7 in E Minor, 8 p.m. April 18, free, Bellefield Hall Auditorium, Pitt Department of Music, www.music.pitt.edu.


2012 Pitt Jazz Ensemble Concert, annual spring concert, 8 p.m. April 20, Pitt students free with ID, Bellefield Hall Auditorium, Pitt Department of Music, 412-394-3353, www.goorastickets.org.


IonSound Project
Graduate Student Composers Concert, Bellefield Hall Auditorium, April 16

Concerts
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Tom Brokaw, renowned television journalist, 8 p.m.

April 26, Heinz Hall, 601 Penn Ave., Downtown, Pittsburgh Speakers Series.

“Natural Goals of Action in Aristotle,” Hendrik Lorentz, associate professor, Department of Philosophy, Princeton University, 2 p.m. April 27, 244B Cathedral of Learning, Pitt Department of Classics, www.classics.pitt.edu/classics-philosophy.

MISCELLANEOUS


April 16, 412-622-3131, cmnhweb@pitt.edu.

4400 Forbes Ave., Oakland, through Aug. 30.

Michael Gobat, associate professor, University of Iowa’s Department of History, “Imperialism, Democracy, and Race,” A Transnational History of Anti-Semitism, 4:30 p.m. April 22, 244B Cathedral of Learning, Pitt Department of Classics, www.classics.pitt.edu/classics-philosophy.

MISCELLANEOUS


Pitt PhD Dissertation Defenses

Chi Song, Graduate School of Public Health’s Department of Biostatistics, “Hypothesis-Testing and Methods for Genomic Meta-analysis,” 10:30 a.m. April 14, 203 Cathedral of Learning.

Abigail I. Wald, School of Medicine’s Molecular and Microbiological Graduate Program, “Role of microRNA-346 in Human Papillomavirus-Associated Squamous Cell Carcinoma of the Head and Neck,” 4:30 p.m. April 16, 109B Phipps Hall.

Leekyoung Hwang, Dietrich School of Arts and Science Department of Chemistry, “Development and Mechanistic Study of a Peptide-Based Methodology for the Preparation of Nanoparticle Superstructures,” 10 a.m. April 17, 107 Sherry Hall.

Di Ma, School of Medicine’s Program in Integrative Molecular Biology, “Endothelin Sorting and Functional Kidney Development,” 2 p.m. April 17, LHAS Auditorium, 7th Floor, UPMC Montefiore Hospital.

Eun Young Lee, School of Education’s Department of Administrative and Policy Studies, “Higher Education Expansion and Economic Growth in Japan and Korea,” 1:30 p.m. April 19, 4321 Posvar Hall.

Pete-Lui Lui, Dietrich School’s Department of Linguistics, “Transitive and Intransitive Constructions in Japanese and English: A Priming Experiment,” 10 a.m. April 24, 2039 Cathedral of Learning.
Pitt Jazz Ensemble’s Annual Spring Concert April 19 to Feature International Guest Artists Jimmy Owens, Curtis Fuller

By Sharon S. Blake

The Pitt Jazz Ensemble—a student ensemble comprising nearly 30 musicians—will hold its annual spring concert at 8 p.m. April 19 in the Assembly Room of the William Pitt Union.

Featured guest performers will include legendary trombonist Jimmy Owens and renowned jazz trombonist Curtis Fuller, both of whom have been frequent guests at Pitt’s annual fall Jazz Seminar and Concert. Accompanying Owens and Fuller will be Pittsburgh-area musicians Tony Depaolis (bass), Greg Humphries (drums), Alton Merrill (piano), and Cecil Washington (Latin percussion).

Concert tickets are $10 general admission and $5 for students and are available at the WPU box office or at the door the night of the concert. They can also be purchased from ensemble musicians. For more information, call 412-624-4187.

The Pitt Jazz Ensemble will perform under the direction of interim ensemble director Ralph Guzzi. The group has played at the Montreux Jazz Festival in Switzerland and has toured the southern United States and Trinidad. Since 1990, the ensemble annually spends two weeks in residence in Jamaica, touring area schools and performing at community festivals.

Jazz trumpeter, composer, and educator Jimmy Owens began studying the horn at a young age under Donald Byrd, by the time he was 15, he was sitting in with trumpet legend Miles Davis and playing with the Newport Youth Band. Over the years, he performed with Lionel Hampton, Duke Ellington, Hank Crawford, Count Basie, Herbie Mann, and many others. In the 1960s, he was a member of the New York Jazz Sextet.

His experience covers a wide range of international musical achievements, which include extensive work as a studio musician, soloist, bandleader, and composer of orchestral compositions and film scores. Owens received a master’s degree in education from the University of Massachusetts. He is an active member of the jazz education community and sits on the board of the Jazz Foundation of America. In 1990, he helped establish the Jazz Musicians’ Emergency Fund, which provides musicians in need with medical, financial, and housing assistance.

Curtis Fuller, who was born and raised in Detroit, picked up the trombone at age 16. Soon, he was playing in a U.S. Army Band led by Cannonball Adderley. When he returned from the service in 1955, he settled in New York City, where word about his unique style and sound spread quickly. A month later, in his early 20s, he recorded his first album as a leader. He performed with Miles Davis, Jimmy Smith, and Bud Powell, and then recorded the celebrated Blue Train album with jazz legend John Coltrane. After only eight months in New York City, Curtis had recorded six albums as a leader and was featured on 15 others. He was an original member of the Art Farmer-Benny Golson Jazztet, and his career included stints with Dizzy Gillespie, Lester Young, James Moody, and Quincy Jones. But it was with Art Blakey and the Jazz Messengers that Curtis would reach the pinnacle of his career, contributing A La Mode and several other classics to the band’s repertoire.

With his legacy as one of the most influential trombonists in jazz well established, Curtis spent the following years performing with jazz greats Count Basie and Jimmy Heath, among many others.