



Carnegie Mellon

- 2 Babcock Helps Women Negotiate Success
- 3 Financial Aid Process Responds to Economic Changes
- 9 Peter Stumpf Stays In Tune With Pianos' Needs
- **12** Dickson Prize Winner Explores Mysteries of Expanding Universe

Refreshed Wordmark **Emphasizes** University

"CMU" APPROVED

Bruce Gerson

"University" is back in, and so is "CMU." Those are the two major developments in Carnegie Mellon's refreshed branding and graphic identity guidelines recently released by the university's Marketing Communications Group.

The new guidelines, which will be available at www.cmu.edu/marcom/ brand-guidelines/index.html later this month, adds "University" to the Carnegie Mellon wordmark and offers the CONTINUED ON PAGE TEN

Fenced In



CARNEGIE MELLON WAS FENCED IN WITH SNOW FOR SEVERAL DAYS BEGINNING SATURDAY, FEB. 6, WHEN NEARLY TWO FEET of snow fell in the Pittsburgh area. The severe snowstorm closed the university for an unprecedented three DAYS AND THE SNOW KEPT THE CAMPUS' ICONIC FENCE FROM BEING PAINTED FOR SEVERAL WEEKS. PAGE 6 HAS MORE ON THE HISTORIC SNOWFALL. SEE MORE SNOW IMAGES FROM MEMBERS OF THE CAMPUS COMMUNITY AT HTTP://BIT.LY/CMUNEWSFACEBOOK FOR READER-SUBMITTED IMAGES

Campus Responds to Haitian Crisis

Abby Houck

Ouick and collaborative are two words that best describe the Carnegie Mellon student body's response to the devastating 7.0 earthquake in Haiti on Jan. 12. Less than 48 hours after the tragedy struck Port-au-Prince, 27 students representing a variety of organizations gathered in the University Center to plan a unified response.

"We sat down and discussed how we could use our different resources, our different strengths to put together a campaign that raised awareness on our campus and called for action from $\mathsf{C}\mathsf{o}\mathsf{n}\mathsf{t}\mathsf{i}\mathsf{n}\mathsf{u}\mathsf{e}\mathsf{d}$ on page seven

Talent Pool Deepens With Academy Graduates

Bruce Gerson

Carnegie Mellon's internal pool of talent for senior-level leadership positions has recently become a little deeper thanks to the Leadership Academy's first graduating class. Created by Human Resources, in collaboration with the Tepper School of Business' Executive Education Program, the academy's purpose is to equip managers and directors with the skills and analytical thinking they need for promotion.

"The goal is to help develop an even stronger pipeline because we have a history of promoting from within," said Human Resources' Ron Placone, assistant vice president for Learning and Development and one of the founders of the Leadership Academy. "The intent is to help the middle group become more viable candidates should there be opportunities for career advancement. Ideally, some of these folks will indeed land in areas of increased responsibility."

Nineteen staff members in job grades 61-65, selected from a group of about 40 applicants, completed 10 full days of class Lola Mason from Human Resources, and participated in a university-specific team capstone project during a 10-month CONTINUED ON PAGE SEVEN

period. Classes focused on leadership, decision-making, business management, organizational culture and performance, finance and cost management, strategic planning, business planning, change management, teamwork and problem solving.

Instructors included Placone and Tepper School professors Dave Lamont,

Q&A: Babcock Helps Women Negotiate Success

Heidi Opdyke

Linda Babcock, the James M. Walton Professor of Economics at Carnegie Mellon's H. John Heinz III School of Public Policy and Management, will be teaching hundreds of women and girls how to negotiate from 8:30 a.m. to 12:30 p.m. on Saturday, March 6 at the Heinz College. To learn more about the event, or to register, contact ledford@andrew. cmu.edu or call 412-268-8650. The Piper caught up with Babcock to learn more about the event and her research into negotiating.

What is **PROGRESS**?

PROGRESS is the Program for Research and Outreach on Gender Equity in Society. It's kind of a mouthful, but it's an organization that strives to teach women and girls the value of negotiation.

We have several goals for the March 6 event. We're having women and girls and we're hoping that girls will bring their moms. I'm going to teach the mothers and other women and professionals in the audience how to negotiate. Volunteers will help Ayana Ledford, executive director of PROGRESS, who will work with the girls on fun activities, games, movies and more.

Do men still dominate the field of economics?

For maybe the past 20-25 years there



Nevertheless, all HO1C classes at Carnegie Mellon University are available to all students. Inquiries concerning application of these statements should be directed to the Provost, Carnegie Mellon University, 5000 Forbes Avenue, Pittsburgh, PA 15213, telephone 412-268-6684 or the Vice President for Campus Affairs, Carnegie Mellon University, 5000 Forbes Avenue, Pittsburgh, PA 15213, telephone 412-268-2057. Carnegie Mellon University publishes an annual campus security report describing the university's security, alcohol and drug, and sexual assault policies and containing statistics about the number and type of crimes committed on the campus during the preceding three years. You can obtain a copy by contacting the Carnegie Mellon Delice Department at 412-268-2323. The security report is available through the World Wide Web at www.mu.edu/police/. Obtain general information about Carnegie Mellon University by calling 412-268-2000. Produced for Media Relations by the The Communications Design and Photography Group, March 2010, 10-361.

have been so many women getting Ph.D.s in economics, but it's been one of those leaky pipeline issues. A lot of women are entering the field, but many women aren't getting their Ph.D.s, and they're also not ending up at top-flight research institutions. So we still have the same problem where only about 12 percent of full professors in economics are women. We thought things would have changed maybe in the last 10 or so years, but we're still seeing women aren't rising to the top of the profession.

Are there more women in mid-level positions?

Women tend to choose different careers in economics. When they get their Ph.D.s, they tend to choose government institutions to go and work or private companies. I think the hours are a little better in those sorts of organizations, and the hours often for academics are not real conducive for the prime childbearing age that women are when they finish their Ph.D.s.

Explain a bit about your research?

My research is really in the field of behavioral economics, which is a combination of economics and psychology. The research I do is on women and whether they initiate negotiations. A lot of the research is on how men and women negotiate differently, but my research really takes a step earlier in the process to look at who negotiates. When we look at a wide range of different kinds of studies - experimental studies, field studies, administrative data — we find that men are about four times more likely to

initiate negotiations to ask for what they want. Women are just more likely to accept the status quo - whatever they've been offered — and just be happy with that. Whereas men just know to really change the status quo to their benefit, and this can be about all kinds of things like initiating negotiations over salary, special projects, promotion possibilities or to be involved in networks that give you visibility. The result is that men are earning more, and they're moving up the ladder in their organizations faster.

What do you want people to take out of your research?

I want them to take out how important it is to initiate a negotiation. I teach a lot of students negotiation, but none of my tricks or skills will help them if they don't engage in the process. The first step is to think about what you want and then go after it in negotiation. You can wait a really long time for someone to offer you what it is you want. You're going to be most likely to get it if you take that first step to ask.

What's important about this for women is that they can't really ask in the same way that men can ask. So my new research is on the styles men and women engage in when they negotiate. What we find is it doesn't matter how men behave.



LINDA BABCOCK

They can be aggressive, cooperative, friendly or direct. People like it when men negotiate. But people have a strong preference about the style that women use. As you might imagine, the styles that don't work well are the styles that are very direct or aggressive for women. A woman has to be a little more careful about how she negotiates. She needs to negotiate in a more cooperative, relationship-oriented way.

What findings have surprised you the most?

The most surprising for me is we really haven't found differences in the gap across age cohorts. What I expected going into this research is that for women of my generation and older, there would be gaps between us and our male colleagues. But what is really surprising is the gaps between the young women and men are just as large as the gaps between older men and women. For example, for students in college today, there are these huge gender gaps between the propensity to engage in negotiation between the female college students and the male college students.

Does the gap change between ethnicities?

That's one thing we haven't studied but are really anxious to look at. Because we do think there will be some difference across other demographic groups. Such as the gaps between men and women in New York City are going to be a little different than gender gaps in the Deep South. So that's one thing we'd really like to study.

We'd love to study this issue by different racial groups, and we're working on doing several different studies with that right now. We think it's really important because I think different cultures have very different ways to approach negotiating, and I think we'll see some interesting things from that research.

Have you changed your own style of negotiating based on your research? I don't think I've really changed my style. I do try to be more vocal about advising people I know and trying to get the word out about how important it is to negotiate effectively. We're really not going to make progress on the wage gap and issues like the glass ceiling until we have a culture that allows women to negotiate the way we allow men to negotiate. I guess I was drawn to the topic because I negotiate a lot. Maybe that's why I ended up studying this.

Anything else you'd like to add?

Sometimes I'm criticized that it appears I'm blaming women for not negotiating. That's the last thing I want to do. Really it's our society that tells women it's not appropriate to negotiate, and often punishes them when they do. So I think what needs to change is women do need to change to start negotiating, but also our society needs to change to let them.

The other thing I'd say about PROGRESS is we have really been spending the last few years focused on training girls to negotiate. Because it would be really nice if in 30 years I didn't have to be doing this, because the new generation of girls coming into the labor force were already so familiar and comfortable with negotiating it was just in their tool kit.

I'm really passionate about getting this next generation of women, today's girls, really thinking about negotiating. That's why I've been so happy with our PROGRESS events, like our events with the Girl Scouts, who have really endorsed this idea of women negotiating. And we developed a badge for them, called "Win-Win: How to Get What You Want," where girls do a series of 10 activities to learn about negotiating. So I really want to get the message out there that it's important for girls to learn this early. Because in our society, boys learn it early and girls are at a real disadvantage if they don't learn it.

Financial Aid Process Responds University Commits To Retaining Students With Economic Changes

Heidi Opdyke

As a freshman, Amy Kao's financial aid package included scholarships she won for community service and leadership roles from pageants, organizations and companies. The impact of those awards was reduced, however, when she learned her financial aid from Carnegie Mellon would be adjusted because of a university policy that capped external grants and scholarships at \$6,000.

In 2009 after her father was laid off, the reigning Miss Teen Pennsylvania and sophomore in the Tepper School of Business knew she and others needed help

"I wanted to do something to see if I could change the policy," Kao said. "The more people I talked to, I realized there were a lot of students affected by the policy and I wanted to help them."

The business major from Edison, N.J., researched peer institutions and their policies on external funding and how it affects internal awards. She then approached Linda Anderson, director of financial aid.

And several changes have been made.

Beginning in the 2010-11 academic year, outside scholarships received by students will be used to meet the student's unmet financial need, and where applicable the funds can offset or reduce loans and work.

Some conditions still apply, such

as when students are receiving federal grants or loans, these funds, in combination with any outside scholarships, cannot exceed the student's financial need. All outside scholarships, in combination with all aid received, cannot exceed the student's cost of attending the university.

The policy change means that institutional grants and scholarships will not be reduced due to a student receiving outside scholarships, unless the funds exceed their financial need or their cost of attendance.

"In addition to the outside scholarship policy change, the university has also made a commitment to respond to special circumstances," Anderson said, such as a parent losing a job or experiencing a reduction of income due to the current economic climate. "We care very much about our students. As part of our commitment to retaining students, we were able to assist many with additional funds during the 2009-10 academic year."

During the recent economic crises, Carnegie Mellon and peer institutions have been able to provide additional grant funding, which positively impacts the recruitment and retention initiatives by easing the financial burden. Anderson said the university is experiencing an increase of students applying for aid and receiving aid.

Kao approached Anderson at the same time the university had been



KAULEN

HOTO

AMY KAO IS ONE OF MANY STUDENTS WHO RELY ON FINANCIAL AID FROM THE UNIVERSITY AND OUTSIDE RESOURCES.

considering revising the policy to allow students to retain more of their outside scholarships.

"It positively acknowledges the student's effort to obtain this outside scholarship funding," Anderson said. "To see the success of all the students is the greatest reward."

But for some, getting school loans has become tougher. Credit scores, also known as FICO scores, are being scrutinized more closely than before.

"FICO scores and overall credit worthiness have to be much higher these days to qualify for private loans," Anderson said.

How can students get help?

Anderson says students whose parents have experienced a reduction in income or have other extenuating circumstances may contact the assistant directors in the HUB. Enrollment Services. She said that even as late as December, grant aid was still being awarded to undergraduate students for the 2009-10 academic year.

"The goal is to be there for students, to listen and help them navigate the enrollment and financial aid process," Anderson said. "We have a strong infrastructure that allows us to stay in contact with students and enable students to

remain enrolled."

Grant Aids St. Bede Youth Cyberawareness

Chriss Swaney

Today, more than 89 percent of children are involved in online social networking, but less than 34 percent of their parents are aware of these activities. To help bridge that social networking gap, Carnegie Mellon's Information Networking Institute and CyLab have teamed up to deliver targeted educational workshops.

The INI and CyLab recently announced a \$20,000 grant from the Verizon Foundation to help deliver a community-wide cyberawareness outreach program at St. Bede School in the city's Point Breeze neighborhood. "This dynamic cyberawareness

outreach program will design, create and

deliver targeted educational workshops and materials that raise cyberawareness and promote safe and responsible computing in the St. Bede community to teachers, children and parents," said Dena Haritos Tsamitis, INI director and director of education, training and outreach for Carnegie Mellon CyLab.

Tsamitis said two web-based tools - the MySecureCyberspace portal, www.mysecurecyberspace.com, and the Carnegie Cyber Academy children's Web site, www.carnegiecyberacademy. com/ — will be central to the delivery of the community cyberawareness modules and assessment of student outcomes.



STUDENTS AT ST. BEDE WILL BENEFIT FROM A \$20,000 GRANT BY THE VERIZON FOUNDATION. IN THE BACK ROW ARE ST. BEDE AND VERIZON REPRESENTATIVES ALONG WITH DENA HARITOS TSAMITIS (THIRD

FROM RIGHT) AND PITTSBURGH MAYOR LUKE RAVENSTAHL (SECOND FROM RIGHT).

piperTRIVIA

Congratulations to Jessica DeCerbo for knowing that Professor Gregory Lehane coordinated the recent Collage Concert at Soldiers and Sailors Memorial Hall.

Go online to the Piper+ at http://bit.ly/CMUpiper for this month's question. Previous winners are ineligible. Winners will receive a prize from the Carnegie Mellon Bookstore.

Connect with Internal Communications



http://bit.ly/CMUnewsFacebook



http://www.twitter.com/CMUnews

U.S. Cabinet Members Visit Carnegie Mellon Campuses

Piper Staff

Carnegie Mellon hosted three U.S. Cabinet members at the Qatar and Pittsburgh campuses in late February.

U.S. Secretary of State Hillary Rodham Clinton visited Carnegie Mellon in Qatar on Monday, Feb. 15 to take part in a town hall meeting. Clinton took questions from students and Education City guests on a variety of topics including nuclear weapons in Iran, the Israeli/Palestinian situation, and her role in the implementation of President Barack Obama's agenda. The event was organized and moderated by Al Jazeera in collaboration with Qatar Foundation and Carnegie Mellon Qatar.

"I have been following the progress of Education City from the United States, and I am delighted to be able to see with my own eyes the extraordinary commitment of the Qatar Foundation, His Highness the Emir and of the people of Qatar to the importance of education," Clinton said.

"Secretary Clinton understands and appreciates the mission of Education City. It's clear her visit to Carnegie Mellon Qatar is just the beginning," said Charles E. Thorpe, dean of Carnegie Mellon Qatar. "President Obama has an initiative on entrepreneurship in the Arab world: Carnegie Mellon is suited to be one of those centers. He also has extensive plans for science and technology development in the Arab world: Education City is the ideal place for that."

U.S. Secretary of Energy Steven Chu delivered a lecture in Qatar on Thursday, Feb. 25. Chu is a distinguished scientist and co-winner of the Nobel Prize for Physics in 1997. He has devoted his recent scientific career to the search for new solutions to our energy challenges and stopping global climate change.





U.S. SECRETARY OF STATE HILLARY RODHAM CLINTON VISITED QATAR IN FEBRUARY. EXECUTIVE VICE PRESIDENT AND PROVOST MARK KAMLET AND DEAN CHARLES E. THORPE, BACKGROUND, GREETED HER ON THE VISIT.

PSC Discover 2010



CONGRESSMAN MIKE DOYLE, U.S. SECRETARY OF COMMERCE GARY LOCKE AND PENNSYLVANIA GOVERNOR ED RENDELL ANNOUNCED A \$130 MILLION GRANT TO IMPROVE INTERNET ACCESS IN THE STATE.

In Pittsburgh, U.S. Secretary of Commerce Gary Locke, Pennsylvania Governor Ed Rendell and Congressman Mike Doyle recently announced the creation of the new Pennsylvania Research and Education Network (PennREN) during a press briefing at Carnegie Mellon, a PennREN founding member. The three government officials also announced a large-scale effort to bring high-speed, affordable Internet access to unserved and underserved rural areas in Pennsylvania. The PennREN and Internet access initiative will be funded by nearly \$130 million in grants — \$99.6 million in federal stimulus funding as part of the Obama administration's 2009 American Recovery and Reinvestment Act and \$29 million in private funds.

"PennREN represents an historic opportunity for the Commonwealth

of Pennsylvania and its citizens to recognize the benefits of high-speed broadband networks," said Carnegie Mellon President Jared L. Cohon. "The collaboration will connect urban centers and underserved areas across the state, enabling distance learning, telemedicine and a host of new applications not otherwise possible. In addition, we hope the network will facilitate more opportunities for Carnegie Mellon to partner with other Pennsylvania education institutions connected by PennREN, including community colleges and K-12 schools, to improve the quality of education in Pennsylvania."

The recent visits follow U.S. Secretary of Labor Hilda Solis' visit to campus in November 2009 as part of a CNBC's "Meeting of the Minds: Rebuilding America" broadcast.

Upcoming **Events**

AED Training 9-11:30 a.m., Friday, March 12

Baker Hall 231B Register online at www.cmu.edu/ehs

Masters of Software Engineering **Program Celebrates 20 Years**

Program alumni and collaborating faculty from around the world will return to Carnegie Mellon to reconnect. Find more information on the reunion at http://mse isri.cmu.edu/software-engineering/News/ alumni-reunion.html March 12-13

Gates Center for Computer Science

L&D Session: Facebook: **Personal Privacy Settings**

David Holzemer will lead a session to walk through some of the personal privacy options that are available to use in Facebook.

Tuesday March 16 McKenna/Peter/Wright Room, UC www.cmu.edu/hr/learning/

School of Drama Performance

"Slow Dance on the Killing Ground," by William Hanley, will be directed by Tina Robinson. 8 p.m., Wednesday, March 17 and Thursday, March 18; 4 and 8 p.m., Friday, March 19

Helen Wayne Rauh Studio Theatre L&D Session: Communicating

More Effectively in a Multicultural Environment

Peggy Heidish will present a session that explores strategies and techniques for

communicating more effectively in a multicultural environment. Learn more on page 12. 1-4 p.m., Thursday, March 18

McKenna/Peter/Wright Room, UC www.cmu.edu/hr/learning, Hacking Comes of Age: Climategate,

Cyber-Espionage and iWar Panel discussion 4:30 p.m., Thursday, March 18 Porter Hall 100 (Gregg Hall)

Russia Today: Energy, Economics, Public **Policy in Transition**

This joint course of Carnegie Mellon and the University of Pittsburgh is the fourth in a series of weekend courses that explore modern economies and societies of countries emerging as economic forces of the 21st century. Friday March 19 - Sunday Frick Fine Arts Auditorium, University of Pittsburgh

MFA Thesis Exhibition

The opening reception is 6-8 p.m., Friday, March 19 Exhibition Dates: March 19 - April 18 Miller Gallery, Purnell Center for the Arts

Open Forum with President Cohon

Presented by Staff Council Noon-1 p.m., Wednesday, March 24 McConomy Auditorium

University Lecture Series

The Pittsburgh Supercomputing Center, 300 S. Craig St., will have its Discover 2010 open house from 10 a.m. to 4 p.m. on Tuesday, March 23. The

day is designed for university professors and students, as well as industry researchers and decision makers. Exhibits will demonstrate how to use high performance computing to solve today's challenging problems and will include tools such as computational science, modeling, simulation, visualization and data mining. The event is free and open to the public. To RSVP or for more information, visit http://discover.psc.edu.

> Russell A. Berman of Stanford University will present "Europe's War on Terror and the Atlantic Divide." Co-sponsored by the International Relations and Politics Program and Department of Modern Languages 4:30 p.m., Wednesday, March 24 Margaret Morrison Carnegie Hall 103 (Breed Hall)

NGOs, Civil Society and Human Rights in the Middle East

The Humanities Center Lecture Series. "Global Connections, Global Responsibilities. presents Maha Abdel-Rahman, university lecturer in development studies at the Centre of International Studies, University of Cambridge The talk is co-sponsored by the Center for the Advancement of Applied Ethics and Political Philosophy 4:30 p.m., Thursday, March 25

Porter Hall 100 (Gregg Hall)

Playground: A Festival of **Independent Student Work**

Details for the School of Drama's annual event will be announced at a later date. March 25-27

Faces of Globalization:

International Film Festival The Humanities Center sponsors the annual festival. March 25-April 10 For dates and times for films, please visit www.cmu.edu/faces/.

University Lecture Series

Dean Keith Simonton of the University of California, Davis, will discuss "Creativity in the Arts and Sciences: Contrasts in Disposition, Development and Achievement" as part of the Victor M. Bearg Science and Humanities Scholars Speaker Series. 4:30 p.m. Thursday April 1 Porter Hall 100 (Gregg Hall)

Women@SCS Lecture & Celebration

Richard Ladner, Boeing Professor in Computer Science and Engineering, University of Washington, will present "New Directions in Accessible Computing Research. 4:30 p.m., Tuesday, April 6 Rashid Auditorium 4401. Gates & Hillman centers

University Lecture Series

Anne Applebaum, a columnist for the Washington Post and Slate, is currently doing research for a new book on the Stalinization of post-war Central Europe. This talk is sponsored by the International Relations and Politics Program, the Humanities Scholars Program, and the Department of Modern Languages and Culture. 4:30 p.m., Tuesday, April 6

Adamson Wing, 136A Baker Hall

Students "IMPAQT" the Carnegie Mellon Experience

Abby Houck

Eight students will spend part of spring break dune riding, sword dancing and camping in the desert. Their destination is Doha, home to Carnegie Mellon in Qatar (CMU-Q), and their purpose is to make an IMPAQT.

Facilitated by Renee Camerlengo, Student Affairs liaison to CMU-Q, IM-PAQT is the result of a joint proposal by Fifth Year Scholars and students leaders in 2008 to cultivate meaningful relationships between the students in Pittsburgh and Education City. IMPAQT members make an 18-month commitment to create awareness among Pittsburgh's student body about what life is like for students in the Middle East. After spending spring break at CMU-Q, the students facilitate networking among similar interest groups on both campuses.

Camerlengo and Chris Menand from the Office of International Education (OIE) are accompanying students on the trip. IMPAQT members have been meeting weekly since the end of January to learn more about the culture of Qatar and to plan their spring break itinerary. The group is serving as hosts for 12 students from CMU-Q who were scheduled to visit Pittsburgh during their Feb. 28–March 5 spring break.

Eda Akyer, a junior biological sciences major, said her involvement with the 2010 IMPAQT team has helped her clarify assumptions she made about CMU-Q. Akyer originally thought CMU-Q had the same enrollment as the Pittsburgh campus and that students lived in dorms.

"I found it really interesting that students are mostly commuters," Akyer said. "I'm interested in seeing how this affects student life."

Nicole Rappin, a junior in the Bachelor of Humanities and Arts Program, said the group is meeting student leaders and visiting classes. The team is eager to experience similar social and cultural activities that predecessors, including sophomore Caroline Kessler, raved about — dune riding, sword dancing, camping in the desert, henna ceremonies and homestays with Qatari families.

Jessica Dickinson Goodman, a junior philosophy major, enjoyed her 2009 experience with IMPAQT so much that she is spending the entire spring 2010 semester at CMU-Q. In addition to working with the OIE to streamline the approval process for studying there, she's planning to host a "girls' night in" with female IM-PAQT members and her friends in Qatar.

Junior Christian Young, is also looking forward to meeting students and faculty in his program at CMU-Q. "I'm interested in seeing how we can expand the Information Systems Program on both campuses, because it leads to a very global-minded career path," he said. 2010 IMPAQT members plan to

ROBOT RULERS



The Fredkin University Research Professor William "Red" Whittaker (right) makes a point as Rodney Brooks of MIT listens during a robotics panel discussion hosted by Discover magazine, Carnegie Mellon and the National Science Foundation at the Hillman Center. The panel was the latest installment of the series "The Grand Challenges of Science." Panelists included Robin Murphy of Texas A&M and Javier Movellan of the University of California at San Diego. Corey S. Powell, Discover magazine editor in chief, moderated the discussion.

build on the work of the 2009 team, which hosted a photo exhibit at the Frame Gallery and spoke at the Community Collage during orientation. The 2009 team also applied for a grant through the International Festival Awards to purchase webcams to increase collaboration with CMU-Q students.

While many students involved in this year's trip have traveled abroad before, this will be the first time any have visited Qatar. "Study abroad is a cool way to reflect and understand more about the world and how you fit into it," Rappin said.

Hopper Celebrates Every Day as National Grammar Day

Shilo Raube

As the song goes, "Conjunction junction, what's your function? Hooking up words and phrases and clauses."

But wait, shouldn't it be "hooking up words, phrases and clauses?"

Grammar rules can be confusing. Especially with texting abbreviations, lyrics, slogans, 140-character limits and Internet slang contributing to what seems like more generally accepted flexibility in grammar. To promote awareness of proper grammar and its importance for clear communication, the Society for the Promotion of Good Grammar designated March 4 as National Grammar Day. It is intended to encourage people to speak and write well and to celebrate language.

Paul Hopper, the Paul Mellon Distinguished Professor of the Humanities, doesn't need a special holiday to commemorate grammar. A world-renowned linguist, Hopper focuses on the relationship between the structure of language and rhetoric. Last summer, he took a sabbatical and spent it pursuing research and lecturing as a Senior Fellow at the Freiburg Institute for Advanced Studies at Albert Ludwigs-Universität in Germany. His current research questions how grammar is approached in spoken language. "People tend to think grammar is just about writing correctly," Hopper said. "Historically, linguists have been interested in written language, but now technology allows us to study spoken language. When we talk, we string together phrases that we've heard before. This creates its own structure as time goes on, and written grammatical rules are not used."

Hopper feels that his quest to understand how people speak will uncover the nature of communication in an entirely different way. "What I'm seeing is that spoken grammar follows routines," he said. "It's not that we're obeying rules of correctness, but more like we're following routines."

In addition to teaching classes in the English Department, Hopper travels abroad to give various lectures. Last fall he was the keynote speaker at a conference at the University of Helsinki with a paper on "Phrase Building Strategies in Longer Utterances." And, on March 9, he will celebrate National Grammar Day a few days late with a talk at Carnegie Mellon Qatar on "Language in Global Hotspots."

Hear Hopper discuss his research at http://bit.ly/CMUpiper.

Support Student Initiatives With CMU Flip Video Camera



CAPTURE YOUR FAVORITE PEOPLE AND FLIP FOR GOOD. CREATED BY TEPPER ALUMNUS JONATHAN KAPLAN, THE FLIP CAMCORDER IS AN EASY-TO-USE, HIGHLY PORTABLE VIDEO CAMERA. THROUGH THE FLIP FOR GOOD PROGRAM, \$10 OF EVERY FLIP CAMERA PURCHASE WILL SUPPORT STUDENT INITIATIVES AT THE UNIVERSITY. THE CAMERAS ARE AVAILABLE FOR PURCHASE AT HTTP://BIT.LY/CMUFLIP.



 ${\sf S}{\scriptstyle {\sf NOW}}$ hung heavy on trees and bushes around CAMPUS, RESULTING IN SOME TREE LIMBS BREAKING.

 ${\sf S}{\sf tudents}$ returned to classes on THURSDAY, FEB. 11 AFTER AN UNEX-PECTED THREE-DAY BREAK DUE TO MORE than 21 inches of snow. City of PITTSBURGH PUBLIC SAFETY OFFICIALS HAD REQUESTED THE UNIVERSITY LIMIT STAFFING TO ESSENTIAL PERSONNEL IN LIGHT OF ROAD CONDITIONS AND SAFETY ISSUES DUE TO THE STORM.



HOTO BY JOEL TAR The Carnegie Mellon men's and women's tennis teams used their unexpected free time to shovel out $\mathsf{O}\mathsf{a}\mathsf{k}\mathsf{l}\mathsf{a}\mathsf{n}\mathsf{d}$ community members on $\mathsf{W}\mathsf{e}\mathsf{d}\mathsf{n}\mathsf{e}\mathsf{s}\mathsf{-}$ day, Feb. 10. The Tartans cleared Normlee Place, a cul-de-sac off of Forbes Avenue that abuts the Carnegie Mellon campus. The street hadn't BEEN TREATED SINCE SNOW BEGAN FALLING FIVE DAYS EARLIER. THEY ALSO WORKED

on driveways along Beeler Street and Techview Terrace. "It was really REWARDING FOR OUR TEAMS TO GET OUT THERE AND HELP PEOPLE IN THE AREA GET cleared out from this snow," said Head Coach Andrew Girard. "We have A TALENTED GROUP OF MEN AND WOMEN ON OUR TENNIS TEAMS THAT ARE GOING TO HAVE LOTS OF EXCEPTIONAL ACHIEVEMENTS IN THEIR LIVES. ALONG THE WAY, IT IS IMPORTANT THAT THEY NEVER LOSE SIGHT OF THE TREMENDOUS DIFFERENCE THEY CAN MAKE BY GIVING BACK TO OTHERS."



IN ADDITION TO 20 STAFF MEMBERS WHO PUT IN INCREDIBLY LONG HOURS, MARTY ALTSCHUL, UNI-VERSITY ENGINEER, SAID AN OUTSIDE COMPANY WAS BROUGHT IN TO HAUL SNOW AFTER THE CREWS RAN OUT OF PLACES TO PUT IT. ALTSCHUL SAID UNIVERSITY CREWS STARTED PREPARING FOR THE SNOWSTORM ON FRIDAY, FEB. 5.

A lone bicyclist crosses campus on Thursday, Feb. 11. Few cyclists braved the weather, with many BICYCLES VISIBLE UNDER HEAVY COATS OF SNOW AND ICE.

PHOTO BY KEN ANDREYO

Campus Responds to Haitian Crisis CONTINUED FROM PAGE ONE

every member of the Carnegie Mellon community," said Student Government President Rotimi Abimbola.

M. Shernell Smith, along with additional members of the Student Affairs team, have been providing mentorship and support to the students throughout the Helping Haiti Campaign.

The students established a Dollar Challenge, which called upon every student, faculty and staff member to donate at least one dollar to relief efforts. As of Feb. 19, the Dollar Challenge has raised a total of \$5,248. A number of individuals have pledged matching gifts.

Students collected money in their housing communities, and at Winter Gala and Martin Luther King Jr. Day events. They also took advantage of foot traffic between classes, braving the winter weather to collect donations outside. Members of the Silicon Valley campus also responded to the call for help.

"While we are a branch campus, we do want to make sure that we support important student-initiated efforts at the main campus," said Gerry Elizondo, director of Student Affairs at Carnegie Mellon Silicon Valley.

Students from the Heinz College sold note cards depicting Haitian culture, held a dinner and bowled to raise money. Tyler Savage, a master's degree student in public policy and management, said nearly \$6,000 was raised, including a \$2,500 matching gift from the Heinz College. The money will be distributed to Brother's Brother Foundation, Hôpital Albert Schweitzer and AIM Haiti (Altruism In Motion), which is dedicated to education.

Additional awareness and fundraising efforts included teach-ins about the history and culture of Haiti, a prayer service, candlelight vigil at the Fence and a "Do Something for Haiti Day."

Alpha Phi Omega (APO) service fraternity partnered with Pittsburghbased Brothers' Brother Foundation to collect personal hygiene supplies for victims and relief workers. According to Lauren Campbell, APO service chair, nearly 2,000 items were collected within a week.

Alex Blair, outreach chair for Facilitating Opportunities for Refugee Growth and Empowerment (FORGE), led efforts to host a Late Night event in the University Center. Even though the event landed on the night of a recordbreaking snowfall, approximately 200 students gathered to complete hands-on activities in support of relief efforts. Dancers Symposium and the Originals acapella group performed, and several local restaurants donated refreshments.

Although nearly two months have passed since the Jan. 12 earthquake, student organizations are continuing to discuss plans for future initiatives in support of the people of Haiti.

"We don't want these efforts to just

be a week. There are going to be continuous efforts, because the situation in Haiti isn't going to end when the semester ends," Abimbola said. "It's going to be a huge rebuilding process, and this is our opportunity as a campus community to be a part of that."

Personal Ties

For some faculty and former staff, personal ties have been refreshed. Sharon Dilworth, an associate professor of English, and her husband, David Baker, spent time 10 years ago at the Hôpital Albert Schweitzer, an 80-bed country hospital founded by Pittsburgh's William Larimar Mellon and Gwen Grant Mellon. The hospital is now operated by Ian and Lucy Rawson of Pittsburgh.

Dilworth served as a translator twice for her husband's work at an eye clinic, 42 miles outside of Portau-Prince.

"They rely on a lot of American doctors to go down there. There was a student here who gave me Creole lessons, and when we went down the first time, I translated while David ran an eye clinic," Dilworth said.

One teenager, Manno, who they befriended returned with the couple to the states and lived in Pittsburgh with them for more than a year before moving to Florida for school. He now works as a truck driver in Miami.

"He's like a son," said Dilworth,

who has written a novel based in Haiti. "We were panicked when we heard the news about the earthquake. Not because he was there, he had just been in Pittsburgh for the holidays, but he lost family members. He was devastated. I still think he has hope that he will find some of the cousins he can't find."

Jim Tinsley, a former Carnegie Mellon School of Architecture employee, is the facilities director for Hôpital Albert Schweitzer. His son, Jeremiah, is a filmmaker in Pittsburgh and has been in constant contact with his father.

Translation Tools

The Language Technologies Institute (LTI) released spoken and textual data they've compiled on Haitian Creole so that translation tools can be rapidly developed.

Since Carnegie Mellon began to make the data publicly available, a team at Microsoft Research has used it to help develop an experimental, web-based system for translating between English and Haitian Creole (www.microsofttranslator.com/). Translators Without Borders (www.tsf-twb.org/), a not-forprofit association based in Paris, plans to distribute a medical triage dictionary to doctors in Haiti once that data has been converted into a readable format. LTI researchers, likewise, have begun working on their own translation system for Haitian Creole.

Talent Pool Deepens With Leadership Academy Graduates CONTINUED FROM PAGE ONE

Denise Rousseau, John Hooker, Laurie Weingart, Pierre Liang, Anita Woolley and Jonathan Glover, and David Krackhardt of the Heinz College.

"Over the course of the academy, I learned new skills on topics ranging from negotiations, to effective communicating to teamwork," said academy graduate Amy Faber, assistant treasurer. "All of the instructors and classes were truly great. I think the academy taught me what skills are necessary to advance at the university, and retaining and improving those skills is up to me."

While most of the courses aimed to teach or enhance the participants skills or understanding of certain topics, Mason's course, "Benchmarks 360 Feedback for Leadership Assessment," gave the participants the opportunity to receive an anonymous evaluation of their leadership skills from their supervisor, colleagues and direct reports. Mason also taught a course called "How Do Your Leadership Skills Measure Up?"

"The biggest takeaway for me would have to be these skills we learned on what makes a strong leader, and how my own strengths and weaknesses affect those leadership skills," Faber said.

"I learned that different types of employees, direct reports versus management, perceive me differently and I've acquired the skills to help along those lines," said Ruth Staudacher, director of finance for Campus Services.

Benchmarks 360 was a favorite of Sudha Durairaj, a principal software engineer for Computing Services. "The 360-degree evaluation helped me to learn about my strengths and opportunities to improve. Now I always solicit feedback about how I can change and improve myself," he said. success of associated initiatives. The "Return on Investment (ROI)" team was asked to assess the university's ROI model with an emphasis on analyzing decisions with no financial returns. The "Organizational Culture" team explored the implications of increasing universitywide expansion and the ability to effectively adapt and make recommendations for improved change management.

ONLINE: TO VIEW A LIST OF LEADERSHIP ACADEMY GRADUATES, VISIT HTTP://BIT.LY/CMUPIPER. FOR MORE INFORMATION, VISIT CMU.EDU/LEADERSHIP-ACADEMY/.

Gloria Gruber, director of organizational development for University Advancement, also spoke highly of Benchmarks 360. She said the evaluation process helped her to discover some hidden strengths and learn specific strategies to enhance her weaknesses.

The academy concluded with four team projects in which the participants put their newly gained knowledge to use. The "Summer Utilization" team explored opportunities to enhance the use of campus facilities during the summer months. The "Enterprise Risk Management" team was charged with helping to prioritize and establish plans to address identified risks and measure "What they suggested in their team project reports are some very, very solid recommendations," Placone said. "They took their opportunity quite seriously, worked hard and produced good results. The primary goal was to use these projects as a way to apply what they learned from the classroom instruction. But when you get something that's meaningful, that's all the better. These contribu-

tions could have a real impact." Faber said the project experience pushed her out of her comfort zone. "Learning to work in a group environment where team members were coming from such different view points and backgrounds was at times challenging, but always positive and for the benefit of the group as a whole. The final presentation to the project sponsors and class was also challenging for me, but again a growing experience that was invaluable," she said.

Indirect benefits of the academy were the relationships that the participants were able to form with each other.

David Eber, director of admission for the Heinz College, said one of his biggest takeaways was how the academy enhanced communication and promoted collaboration among staff from across the university. Gruber also recognized the relationships she built with other participants as a great benefit of the program.

The application process for Carnegie Mellon's next Leadership Academy will begin this spring with the program commencing in the fall. This time the academy will be for staff in grades 58-60.

"Our goal is to have classes every year and to alternate between these two groups (61-65 and 58-60). By extending the academy to multiple organizational levels we increase the likelihood of achieving our desired impact, a deeper talent pool at Carnegie Mellon," Placone said.

Driving the Future of Complex Systems: SEI Celebrates Quarter Century of Leadership and Excellence

Kelly Kimberland

When the Department of Defense (DoD) began looking for assistance to improve its software development capabilities in 1985, they found some of the world's top computer science minds at Carnegie Mellon.

"We had the reputation of being a leading technology university and had some of the world's foremost experts in computer science," said Angel Jordan who was Carnegie Mellon's provost in the mid-1980s. "We wanted to aggressively pursue this and lend our expertise, knowledge and network to the U.S. government."

Today, Carnegie Mellon is home to the Software Engineering Institute (SEI), the Department of Defense's only federally funded research and development center in software engineering. Celebrating its 25th anniversary this year with the theme "Driving the Future of Complex Systems," the SEI works closely with defense and government agencies, industry and academia to continually improve software-intensive systems that support the military.

The SEI helps find ways to develop systems more quickly and confidently, leading software and cyber engineering research for the DoD that is critical to the performance, quality, security and mission assurance of the department's computer systems.

Since its establishment in 1984, the SEI has produced worldwide best practices in process improvement, software architecture, software product lines, and cyber and networked security, including the establishment of the CERT[®] program in 1984 – the world's computer security incident response team.

"We may be 25 years old, but we are only just beginning," said Paul D. Nielsen, CEO and director of the SEI. "This is an exciting time to be part of today's technological advances. We look forward to the next 25 years and providing organizations with the research, skills and tools they need to build better, faster, more reliable and more secure software."

Carnegie Mellon President Jared L. Cohon underscored the importance of the SEI to the university and to the nation.

"The SEI is a leader in understanding and providing solutions for computer and network security, in software architecture and in software process improvement," Cohon said. "Its influence extends across many aspects of society and around the world. We are proud to have SEI as part of our university, and I congratulate all who have worked so hard



to get to this important anniversary."

Along with defense work that has included improving quality, reducing costs and delivering software on schedule, the SEI has built a worldwide reputation by providing government, industry and academic organizations with the knowledge and research to improve the way to develop software. To expand its research efforts, the SEI provides training and education, certification and partnership opportunities to individuals and organizations. But, Nielsen said the SEI's work is just getting started.

"Software is not limited to just computers and military weapon systems. It is part of our everyday life in automobiles, phones, kitchen appliances and airplanes," Nielson said. "But, as technology rapidly changes, the development and use of software is ever changing and growing exponentially. We cannot afford to rest on our past accomplishments, but rather we must look to the future to see how we might be able to resolve challenges in complex systems."

The SEI has renewed its emphasis on research that will enable it to expand its legacy of network and systems survivability. Evaluating research against the current and future demands of the DoD, the SEI will focus on the cyber environment and related technologies to enable organizations worldwide to address cyber intelligence, workforce development, acquisition excellence for software-reliant systems and flexible systems capabilities.

NOTABLE ACCOMPLISHMENTS

• The SEI's first office opened in January 1985 on South Aiken Avenue in Shadyside employing 55 individuals, including 12 managerial staff members and 19 researchers. Two years later the SEI moved into its current headquarters at 4500 Fifth Avenue in Oakland. Today, the institute has over 500 employees with offices in Pittsburgh, Washington, D.C., Colorado Springs, Colorado and Frankfurt, Germany.

Some of the SEI's most notable
accomplishments include the
development of the now retired
Capability Maturity Model for
Software (SW-CMM), Capability
Maturity Model Integration (CMMI)
and Team Software Process (TSP).
SW-CMM and TSP initiatives were
both led by National Medal of
Technology laureate and SEI Fellow Watts Humphrey, who joined
the SEI in 1986.

• When the Morris worm crippled 10 percent of the Internet in 1988, the SEI was called into action by the Defense Advanced Research Projects Agency (DARPA) to halt the attack. As a result, the world's first computer emergency response team — now the CERT Program — was started and remains at the forefront of cyber-security research and development.

• In the early 1990s, the SEI launched research initiatives into software product lines and software architecture. The first technical report on the emerging field of software architecture was published and described the design problems in large systems.

• In 1998, the first book on software architecture, "Software Architecture in Practice," was published as a guide for practitioners. In 1997, a cutting-edge research initiative involved the development of the Architecture Tradeoff Analysis Method (ATAM). • In 2001, the SEI established the Acquisition Support Program to help the DoD and other government organizations improve their practices in acquiring softwareintensive systems.

• In 2004, the SEI published the Architecture and Analysis Design Language (AADL) that provides a new framework that allows analysis of system deigns prior to development. System developers in industry and researchers in leading universities in Europe and the U.S. use AADL to predict and validate nonfunctional properties.

• In 2006, a study on Ultra-Large-Scale Systems requested by the U.S. Army outlined a comprehensive recommendation on how to tackle the new complex systems of the future.

Piano Man PETER STUMPF STAYS IN TUNE WITH PIANOS' NEEDS

Heidi Opdyke

When world-renowned pianists such as Associate Professor of Piano Sergey Schepkin or the phenomenal Lang Lang perform at Carnegie Mellon, few may realize the string of events that happens before they sit at the piano.

But piano technician Peter Stumpf does

As caretaker for the university's 80 pianos, some \$4 million of equipment, Stumpf stays busy. A few of the instruments have been here for 60 or 70 years.



The School of Music, which is designated as an All-Steinway School, uses Steinway pianos for classes, lessons, compositions, performances, accompaniments and more.

"Pianos are the backbone of any school of music," said Noel Zahler, head of the School of Music. "To teach and perform, students and faculty need to have the best tools possible. Peter does a



ONLINE: WATCH PETER STUMPF DISCUSS PIANO TUNING AT HTTP://BIT.LY/CMUPIPER.

articles you'll find anywhere on campus," Stumpf said. "You certainly won't find computers or vehicles or furnaces or anything that are as old as some of these pianos."

As many instruments as Stumpf has under his watch, he wouldn't mind more to maintain.

"We don't really have enough pianos. If you go down to the practice halls, you'll see that there are very few rooms actually open, so it's very hard for us to get rid of a piano if we don't have a

"Some of the pianos are among the oldest fantastic job of keeping the instruments we have at the best possible level of performance."

> Stumpf and a small cadre of students work to keep the instruments in topplaying condition. Stumpf teaches half a dozen students how to build and replace piano parts. The average Steinway has 12,000 pieces.

"Big things happen if piano strings break or if pedals need some service," Stumpf said. "We turn those into classroom teaching opportunities."

One instrument that has been over-



PETER STUMPF

hauled was the Steinway in the Alumni Concert Hall.

"My students and I attacked it one summer. And we put all new strings on it, new dampers on it, regulated it, and kind of breathed some new life into it," Stumpf said.

Many troubles can plague pianos, including wear and tear, spills and breakages. "There's a lot of triage," he said. "Anything can happen to them — we cannot put pianos behind glass. My job is a mixture of being proactive and staying ahead of the needs and service, and being reactive when necessary."

Depending on the use of each piece, the piano technician may adjust instruments every few months or each week.

Prior to joining the university in 2006, Stumpf worked as an independent tuner for 14 years. He received a degree in piano technology from the Winchester Virginia Shenandoah Conservatory of Music.

"All the performance instruments are like good friends to me. I can easily tell which one is which just by hearing them," Stumpf said. "If there's the slightest thing wrong with them it's just like your children, you can hear their voice from across the room."

Not only does Stumpf keep the university's instruments in shape, he is the official piano technician for the Pittsburgh Symphony Orchestra (PSO) and has a list of individual clients as well. Stumpf says he often works seven days a week. He says it's worth it, however.

"Most people in the world today really don't know too much about live music anymore," Stumpf said. "But here it's live music — it's real music. It's filtered up and down the halls constantly. And if you go to one of these performances where students have worked thousands of hours to prepare for it, it just doesn't get any better than that."

Staffer Targets Support to Her TechBridgeWorld

Heidi Opdyke

Sarah Belousov bridges a number of worlds.

As a project manager for Tech-BridgeWorld in the Robotics Institute, she works with students, faculty and staff from across our university's Pittsburgh and Doha campuses on projects that benefit people living in underserved communities in the United States and around the world.

"Although we're a relatively new organization, we're one of the leading research groups in ICTD, information and communication technologies for development. What we do shows that Carnegie Mellon can make a difference in the lives of people who live on less than a dollar a day," she said.

TechBridgeWorld, www.techbridgeworld.org, is celebrating its fifth-year anniversary, and Belousov has been a staff member at Carnegie Mellon since 2005. She received her bachelor's degree in international studies and French from Johns Hopkins University. In 2009, she received her master's degree in public policy and management from the Heinz College, which she earned as a part-time student.

"I've had incredible experiences helping students to prepare and work on really innovative projects and I've seen the impact of their work firsthand with developing communities," she said.

With the rest of the TechBridge-World team, she is currently preparing six Carnegie Mellon students from the Doha and Pittsburgh campuses to live and work in Bangladesh and conduct research projects through the group's iSTEP ("innovative Student Technology ExPerience") internship program this summer. Along with working closely with TechBridgeWorld founder and director, Assistant Research Professor M. Bernardine Dias, Belousov's responsibilities entail strategic planning, fundraising, program planning, and supporting other staff and interns. "Dr. Dias is a very dedicated and inspirational person, and I love working with her and the rest of the TechBridgeWorld team," Belousov said.

Recently, Belousov added a volunteer role by joining Carnegie Mellon's Faculty & Staff Annual Fund Committee. The move came after talking with Mike Haas, assistant director of annual giving.

"I was excited to learn how our group's fundraising efforts could help the university reach its overall targets. I really enjoyed the first committee meeting

I attended and look forward to staying involved and encouraging other people to become involved as well," she said.

Committee members work as advocates on behalf of the university to foster relationships with other faculty and staff members and promote the university's internal fundraising efforts. The group meets several times a year.

Belousov also recently started giving to the Annual Fund through payroll deduction. She said donations from other individuals to TechBridgeWorld encouraged her to give personally.

"I don't know exactly why I had not thought to donate to the university before, but when you work day in and day out for a university and you get something in the mail that asks you to give part of your hard-earned money back to the organization, it's not easy to do," she said. "Once I really learned about the options for staff giving from Mike, I saw how easy the payroll deduction option is and that really appealed to me."

In addition, Belousov learned from Haas that her gifts could be targeted to benefit TechBridgeWorld or any other area of the university that is meaningful to her.

"I'm not in a financial position where I can donate a huge chunk of

money to any organization, but I am willing to give up the value of a few cups of coffee a month. It accumulates over time and those small amounts can add up to a significant contribution to Carnegie Mellon. I realized that was something important to me," she said.

"Giving in this way can benefit Carnegie Mellon as a whole and also our group specifically. I really believe in what our group is doing, and so I was really excited to hear that faculty and staff contributions could be designated to benefit our work. My gifts and those of other TechBridgeWorld sponsors support unique learning opportunities and firsthand experiences for Carnegie Mellon students to pursue research in the field of ICTD to make a positive impact in developing communities."

The Faculty & Staff Annual Fund Committee is looking for additional volunteers. To learn more about volunteering or the annual fund, contact Carole Panno in the Office of Annual Giving at cp1g@andrew.cmu.edu, Michael Haas at mbhaas@andrew.cmu.edu or visit www. cmu.edu/campaign/involved/faculty. html. Payroll deduction forms are available at http://www.cmu.edu/campaign/ ways/fy-09_payrollrom.pdf.

FUTURITY

AAU Schools Create Online Science News Magazine

Jocelyn Duffy

Last fall, Carnegie Mellon joined 51 other leading research universities from the United States. Canada and the United Kingdom to launch Futurity (www. futurity.org), an online research channel that brings together the best research news in the environment, health, science, society and other areas of scientific interest.

Submissions to the site come directly from the member institutions, all of which belong to the Association of American Universities (AAU) or the U.K.'s Russell Group. Carnegie Mellon's submissions are coordinated through its Media Relations Department and feature recently published science research from each college.

The site was created because the pressures of the Internet have caused many newspapers to trim their science coverage. As a result, readers are getting their information from other sources, such as social media networks and other online sites. Futurity offers a direct link to the research pipeline in an accessible way.



ONLINE: FUTURITY.ORG

"Carnegie Mellon signed on to this project from the start as a way to get our research news to multiple audiences. Futurity readers get a preview of where research is today and where it is headed tomorrow," said Teresa S. Thomas, assistant vice president of Media Relations.

Futurity is active among social networks like Twitter and Facebook, and provides information to news aggregators like Yahoo News. The ultimate goal is to reach a wide audience, specifically the general public and research funders, to educate and inform them about the important science research being completed at the member institutions.

All members of the Carnegie Mellon community are encouraged to visit Futurity.org and subscribe by email. Any faculty member who would like to have their research considered for publication in Futurity should contact their college's Media Relations representative.

Refreshed Wordmark Emphasizes University

Carnegie Mellon

University

CONTINUED FROM PAGE ONE

new wordmark in the form of a straight line as well as a three-deep stack, with Carnegie on top, followed by Mellon and University.

"The Carnegie Mellon wordmark has been refreshed to help clarify our higher education category, now appearing with the word 'University.' There's been confusion among certain audiences that Carnegie Mellon is a bank, library or company because 'Carnegie' and 'Mellon' are common brand names among a variety of industries," explained Robbee Kosak, vice

president for University Advancement.

Sophie Elias, director of Marketing Communications for Brand Initiatives, said it's not

necessary for members of the university community to discard their materials with the previous Carnegie Mellon wordmark. She said the new graphic identity will be rolled out gradually.

"Don't throw your existing letterhead, business cards and signage away. When ordering new materials, make the switch to the new look," Elias said.

Elias said she will be contacting many groups across campus in the next few months to help introduce the new graphic and branding standards.

The university community can download a vast array of branding resources from the updated branding

guidelines Web site. Resources include wordmarks and templates for letterhead, business cards, PowerPoint slides, fax covers, memos and display advertising. The Web site also has templates for new unitmarks for colleges, schools, centers, institutes and programs, which Elias said also will be rolled out over time.

While the bookstore introduced new merchandise last fall bearing "Carnegie Mellon University" and the CMU acronym, which must always be applied together, CMU will now be mak-

> ing its way back into written materials. Previously the use of CMU was discouraged because it was thought to be a registered trademark of Central Michigan University. But that's

not the case, which pleases the webmasters of www.cmu.edu.

"CMU is not a registered trademark with Central Michigan University, nor is it a trademark with Carnegie Mellon," Elias said. "So, based on feedback from the university community, we are now approving it to be used as a second reference in print and on the Web. Carnegie Mellon University should always be the first reference, followed by either Carnegie Mellon or CMU."

A writers' style guide, offering many more writing standards, also will be available for download on the branding guidelines Web site later this month.

IEWS BRIEFS

2010-2011 Applications **Increase 16 Percent**

As of Feb. 1, the Office of Undergraduate Admission reports that 26,431 applications have been received for 1,400 available first-year spots for 2010-2011. This marks a 16 percent increase over the previous record of 22,780 applications received for the 2009-2010 academic year. The office also reported a 30 percent increase in applications to the Information Systems Program. A recent Pittsburgh Tribune-Review story quoted Barmak Nassirian, associate executive director of the American Association of Collegiate Registrars and Admissions Officers in Washington, as saying the increase is "jawdropping, eye-popping and completely out of the ordinary."

Tuition Increase Among Lowest in Decades

For the second consecutive year. Carnegie Mellon has announced one of its smallest tuition increases in 35 years to help provide relief for families dealing with the economic downturn. This year's increase of 2.98 percent follows a 2.94 percent increase last year. For 2010. tuition for entering first-year undergraduate students will be \$41,500. Housing costs will be \$6,300 with board costs at \$4,450. The Board of Trustees authorized the new rates at its Feb. 12 meeting.

Dzombak To Chair NRC Committee



Carnegie Mellon's David A. Dzombak has been named chair of a new National Research Council (NRC) Committee, which will provide advice to the U.S. Army Corps of Engineers on scien-

tific, engineering and water resource issues.

Dzombak, the Walter J. Blenko Sr. Professor of Civil and Environmental Engineering and faculty director of the Steinbrenner Institute for Environmental Education and Research, said the committee will develop a series of reports to help the Army Corps of Engineers anticipate and prepare for emerging water resource challenges. In addition to working with the Corps, the committee will work with experts and representatives from other federal agencies, including U.S. congressional staffers, state governments and the private sector.

Students Design Plans for U.S. Steel Tower Roof

David Bear, STUDIO for Creative Inquiry fellow, is leading a project to explore hypothetical options for transforming the presently empty, one-acre rooftop of the U.S. Steel Tower into a green, sustainable, all-weather, publicly accessible garden and viewing area.

School of Architecture students and faculty

participated in a four-day sketch competition proposing creative and sustainable uses for the rooftop space. The winning designs are posted at www.highpointpark.org. Several proposals will be used in an Institute for Social Innovation (ISI) student case competition at the Heinz College. Both architecture and ISI students must analyze the realistic potentials and costs of developing the space, while considering selfsustaining structures, future programming and marketing possibilities.

Hughes Continues Health Education Project

Kristin Hughes, associate professor in the



School of Design, is partnering with local family support centers to launch phase two of Fitwits, an obesityprevention program that delivers healthy lifestyle messages, tools and

services to children and families. A two-year, \$300,000 grant from The Heinz Endowments will fund the development of "Fitwits Zones" in East Liberty and McKeesport community centers. The zones are designed to train parents to become agents of change for healthier lifestyle behaviors.

Kitchin Earns Early Career Award



Carnegie Mellon's John Kitchin was awarded a five-year, \$750,000 grant from the U.S. Department of Energy to develop new materials for producing hydrogen and oxygen from water using

electrochemistry.

Kitchin, an assistant professor of chemical engineering, is one of 69 researchers nationwide to receive funding under the American Recovery and Reinvestment Act as part of the Energy Department's Early Career Research Program.

"Our research is designed to make hydrogen production from water more efficient, which will ultimately enable the development of future energy systems to store intermittent renewable energy in chemical form, and to make better use of biomass to fuel everything from cars to large turbines and factories," Kitchin said.

Discount Tickets Available To Upcoming Shows

The Pittsburgh Cultural Trust is offering discount tickets for Carnegie Mellon students, staff and faculty to many upcoming performances in March. For more details and to order tickets online go to www.pgharts.org/events/tickets/login. aspx and enter the promo code CMU.

Heinz Alumni Help Staff University **POPULAR PROGRAMS ALLOW EMPLOYEES TO ATTEND SCHOOL PART-TIME**

Brad Stephenson

Enter any building at Carnegie Mellon, and you'll likely bump into a Heinz College graduate; there are more than 200 of them on the staff. All told, about 800 faculty and staff have undergraduate and graduate degrees from the university.

This is due in large part to the college's part-time master's degree offerings in public management and information technology. Nearly two-thirds of the Heinz alumni employed by Carnegie Mellon comprise graduates of these two programs.

Cornell Lesane (MPM '03), associate director of undergraduate admissions, has been working at the university for 10 years.

"I was actually first generation, and to get my bachelor's was a big thing," Lesane said. "So to get that master's degree was huge. My family is certainly very proud of me for that accomplishment."

and the remainder work for for-profit companies.

Michael Murphy, vice-president for Campus Affairs, is a 1986 MPM graduate. Murphy said the degree program went beyond classroom learning and provided a framework for putting the information into context.

"At the time, I was a pretty young guy, and the program helped me understand the ways in which academic work translated into real work, and that the capacity to analyze data and solve problems intentionally was an important complement to having a good notion," Murphy said. "It also taught me the value of teamwork in ways I had not fully appreciated before."

Murphy, who now serves as an adjunct instructor for the MPM program, has been with the university for more than 28 years. "The distinctive work ethic of

LEARN MORE: THE HEINZ COLLEGE WILL BE HOSTING AN INFORMATION SESSION FOR ITS PART-TIME DEGREE PROGRAMS FROM 5:30-7 P.M. ON WEDNESDAY, MARCH 10 IN HAMBURG HALL. FOR MORE INFORMATION, CONTACT HEINZ ADMISSIONS AT HNZADMIT@ANDREW.CMU.EDU.

The Master of Public Management (MPM) Program is designed to promote personal and professional development by honing strategic, analytical and communication skills. About half of MPM students come from public or non-profit organizations, such as higher education,

faculty, staff and students is a big part of it, but also the creativity, the energy — the commitment that this is the ideal place for great ideas to translate into real world impact," Murphy said. "(The MPM) program is a terrific opportunity for Carnegie Mellon staff members ----



HEINZ COLLEGE DIRECTOR OF STUDENT AFFAIRS JACKIE SPEEDY (MPM '09) CONFERS WITH HEINZ COLLEGE DEVELOPMENT ASSOCIATE KRISTIN NICESWANGER (HNZ '07) AND STUDENT JAKE ORESICK.

one that can have a profound career impact while also facilitating meaningful contributions to this community."

Like Murphy and Lesane, Jackie Speedy (MPM '09) serves in an advisory capacity for students as director of Student Affairs. Her role initially made studying alongside students a bit awkward. Her biggest concern, she said, was contributing to class discussions in a way that would reflect positively on her job.

"It was always in the back of my head, 'Oh boy, are they going to think I'm not intelligent enough to do this job?" she said.

Speedy, who received her bachelor's degree in environmental science from Allegheny College, said higher education is a very rewarding field.

"It's a really gratifying place to work," Speedy said. "You give a lot to the students, but you get a lot in return."

Haebin Kim, marketing and information systems specialist for the Heinz College's Center for Arts Management and Technology (CAMT), holds two graduate degrees from Heinz. She completed the Master of Arts Management (MAM) as a full-time student in 2001 and the parttime Master of Science in Information Technology (MSIT) Program in 2005. CONTINUED ON PAGE TWELVE

Evilevitch Studies the Physics of Viruses

Alex Evilevitch, associate professor of physics, has directly measured the energy released from a virus during an infection. This is a pivotal discovery toward fully understanding the physical mechanisms that control viral infection and designing drugs to interfere with the process.



"We are studying the physics of viruses, not the biology of viruses." Evilevitch said. "By treating viruses as physical objects, we can identify physical properties and mechanisms of infection that are common to a variety of

viruses, regardless of their biological makeup, which could lead to the development of broad spectrum antiviral drugs."

Evilevitch's findings have the potential to improve the development of gene therapy, which uses viruses to deliver functional genes directly to human cells to replace defective genes that are causing disease.

Carnegie Mellon Joins Open Cirrus Test Bed

The School of Computer Science is the latest research institution to host a site as part of Open Cirrus(tm), a global, open-source test bed for the advancement of cloud computing research and education. A computing cluster

housed in Carnegie Mellon's Data Center Observatory will provide additional resources for Carnegie Mellon faculty and other researchers worldwide. Open Cirrus was launched in 2008 by HP, Intel and Yahoo! to promote open collaboration among industry, academia and governments on data-intensive. Internet-scale computing. The test bed now includes cloud computing infrastructure at 10 "centers of excellence" worldwide.

Fuchs Proposes New Manufacturing Theory



Engineering and Public Policy, recently spoke to policymakers in Washington, D.C., about how manufacturing offshore

changes the economic viability of emerging technologies in the automotive and photonic semiconductor industries.

"In both cases, my results show that when U.S. firms shift production from the U.S. to countries like China, the most advanced technologies that were developed in the U.S. no longer pay," said Fuchs, a former fellow at the United Nations in Beijing.

Among other issues, Fuchs explains how this can leave the most advanced technologies abandoned, and create a barrier to pursuing innovation in the United States.

Urban Named Head of Biological Sciences



Nathan N. Urban has been named head of Carnegie Mellon's Department of Biological Sciences, effective March 1. He succeeds Professor John Woolford, who served as acting department head since the passing of Elizabeth Jones in June 2008

A member of the Carnegie Mellon faculty since 2002, Urban is best known for his research into the molecular, cellular and circuit-level mechanisms of sensory processing in the olfactory system. In 2005, Scientific American recognized Urban as one of the nation's top

50 science and technology innovators. He has received numerous awards, including the Association for Chemoreception Sciences 2009 Young Investigator Award and the 2007 Polak Young Investigator Award. He also was presented with Carnegie Mellon's Eberly Family Career Development Professorship in the Biological Sciences and the Human Frontiers in Science Program's Young Investigator Award.

"This is a very exciting time for the department and for biomedical sciences across campus," Urban said. "The field of biology is changing rapidly as new technologies and quantitative approaches are applied to fundamental questions about living systems. Carnegie Mellon is poised to emerge as a leader in these nascent areas that stand to revolutionize the field.

"Lam honored to be named head of the Biological Sciences Department, and L look forward to working with my many outstanding colleagues in the department and to strengthening our connections with other departments and centers in our pursuit of excellence in research and teaching in the life sciences," Urban added.

Urban received his bachelor's degree in neuroscience from the University of Pittsburgh, studied mathematics and philosophy as a Rhodes Scholar at Oxford University, and earned his doctorate in neuroscience at Pitt while a Howard Hughes Medical Institute pre-doctoral fellow. He was an Alexander von Humboldt Fellow at the Max-Planck Institute for Medical Research in Heidelberg, Germany, where he worked with Nobel Laureate Bert Sakmann. He is currently a member of Carnegie Mellon and Pitt's Center for the Neural Basis of Cognition, and an adjunct faculty member in Pitt's Department of Neuroscience.

LECTURE SPOTLIGHT: MULTICULTURAL COMMUNICATION: MORE THAN JUST LANGUAGE

Abby Ross

Knowing is half the battle. And in a multicultural environment like Carnegie Mellon, there's a lot to know.

That's why Peggy Heidish, director of the Intercultural Communication Center (ICC), is leading a Learning and Development session on "Communicating More Effectively in a Multicultural Environment."

"A lot of times people think that cultural misunderstandings just have to do with language, but there's a lot more than that," Heidish said. "You want to have insight into your own cultural assumptions so you are not blinded by them. Awareness goes a long way. Once you are aware of the differences, half the battle has been won."

Course attendees will define "culture" and focus on how cross-cultural differences can hinder communication. Heidish said they will come away with strategies and approaches to help them deal more effectively with cross-cultural misunderstandings they might encounter on the job. The free, two-hour course is aimed for faculty and staff of all backgrounds.

"This session is not solely intended for people from the U.S. You could be



Peggy Heidish is the director of the Intercultural Communication Center.

from France and you could work with a lot of people from China and India all the time — everybody is in some sort of cross-cultural environment here," she said.

This L&D session is just one of the many offerings of the ICC, which primarily equips international students with the skills they need to succeed in their academic programs. The center assisted more than 850 students in the 2008-2009 academic year through 32 workshops, classes and seminars, and individual tutoring for oral and written communication. The ICC also administers the International Teaching Assistant (ITA) test, which is required for all non-native English speakers who want to work as TAs.

Since the ICC was established in 1985, the university's multicultural environment has grown to include an increasing number of students, faculty and staff from around the world.

"Carnegie Mellon celebrates its diverse community, as it creates an exciting learning environment," Heidish said. "But, it also poses communication challenges for students, faculty, administrators and staff."

Lola Mason, director of organiza-

tional development, stresses the importance of this workshop. In the university's diverse, multicultural environment, misunderstandings and conflict can occur around differences in everyday behaviors, including the ways people dress, make decisions, complete tasks, manage time and more.

"By stepping back and considering how the other person might be viewing the situation, we're less likely to take it as a personal affront and more likely to engage the other person in an open dialogue," Mason said. "Through open and honest discussion we can build trust and find ways to appreciate and leverage our differences, and improve the way we work together."

- **Who:** Peggy Heidish, director of the Intercultural Communication Center
- WHAT: LEARNING AND DEVELOPMENT SESSION ON "Communicating More Effectively in a Multicultural Environment"

WHERE: MCKENNA/PETER/WRIGHT ROOM, UC

WHEN: 1 P.M., THURSDAY, MARCH 18

Register online: www.cmu.edu/hr/learning/

Stalking Dark Energy Dickson Prize Winner Explores Mysteries of Expanding Universe

Jocelyn Duffy

Saul Perlmutter, a widely acclaimed astrophysicist best known for the revolutionary finding that the universe is expanding at an accelerating rate, has been named the recipient of the 2009 Dickson Prize.

The Dickson Prize in Science is awarded by Carnegie Mellon to an individual who has made outstanding contributions to science in the United States. The annual award has been given since 1970. Perlmutter, who is a professor in the University of California at Berkeley's Department of Physics and a senior scientist at the Lawrence Berkeley National Laboratory, will give the Dickson Prize Lecture, titled "Stalking Dark Energy and the Mysteries of the Expanding Universe," at 4:30 p.m., Wednesday, March 17 in McConomy Auditorium.

Perlmutter is leader of the Supernova Cosmology Project, an international collaboration of research teams from seven countries that are measuring the expansion history of the universe. The group is best known for discovering that the universe is growing at an increasing speed, contrary to what previously had been believed. The observations, which could be due to Einstein's cosmological constant, were named Science Magazine's 1998 Breakthrough of the Year. "Saul Perlmutter pioneered the idea of using supernovae as standard candles for studying the expansion of the universe," said Lincoln Wolfenstein, University Professor and professor emeritus in the Department of Physics, in his nomination letter. "There are now a number of major projects studying these supernovae and trying to better understand dark energy."

The Supernova Cosmology Project researchers observed light coming from distant exploding stars, called supernova. From that light they were able to gain valuable information about the universe's history and future. Prior to the group's analysis, it was thought that the expansion of the universe was decelerating, and eventually the universe would stop growing altogether. In their groundbreaking research, Perlmutter and his colleagues found the opposite to be true - the universe was expanding at faster and faster rates with no apparent end to its growth. The findings implied that the mysterious dark energy first hypothesized by Einstein in his "cosmological constant" was counteracting gravity, causing the universe to swell.

For this research, Perlmutter has received numerous awards and honors, including the E.O. Lawrence Award in Physics from the U.S. Department of Energy, the Henri Chretien Award from the American Astronomical Society and the International Antonio Feltrinelli Prize. He shared the Padua Prize, the Shaw Prize in Astronomy and the Gruber Cosmology Prize.

A prolific author, Perlmutter has written more than 100 papers in the field of physics, astrophysics and cosmology, addressing such topics as the cosmological constant, dark energy, supernovae, pulsars, gravitational lenses, massive compact halo objects and advanced detector systems for astrophysics. Perlmutter is an elected member of the National Academy of Sciences and the American Academy of Arts and Sciences, and a fellow of the American Physical Society and the American Association for the Advancement of Science.



ASTROPHYSICIST SAUL PERLMUTTER WILL DELIVER THE DICKSON PRIZE LECTURE ON MARCH 17.

Alumni Help Staff University CONTINUED FROM PAGE ELEVEN

Kim credits her work in software development for CAMT as the catalyst for her pursuit of the MSIT degree.

"After moving here from Korea, I didn't really expect to stay in Pittsburgh very long," Kim said. "But I felt comfortable here, and I liked the job I had after the MAM degree."

The MSIT program was created specifically for working IT professionals seeking a master's degree without having to leave the workforce or relocate. Students in this program select one of three curriculum tracks — information technology management, information security and assurance, or software design and management.

"I wanted to study more about technology, and I liked working for Carnegie Mellon so the (MSIT) degree made sense," Kim said.

University employees may be eligible for tuition remission and should contact Human Resources for specific information.