

# the PIPER

## Carnegie Mellon

- **2** Everett Tademy Works To Keep Opportunities Knocking
- Graduate Students Bring Green Plan from Copenhagen
- 7 2009 Review Readers Submit Favorite Photos
- 10 Tech Transfer Casts Wider Net

# Your Green is Going Green

## Paperless Payroll Initiative Begins

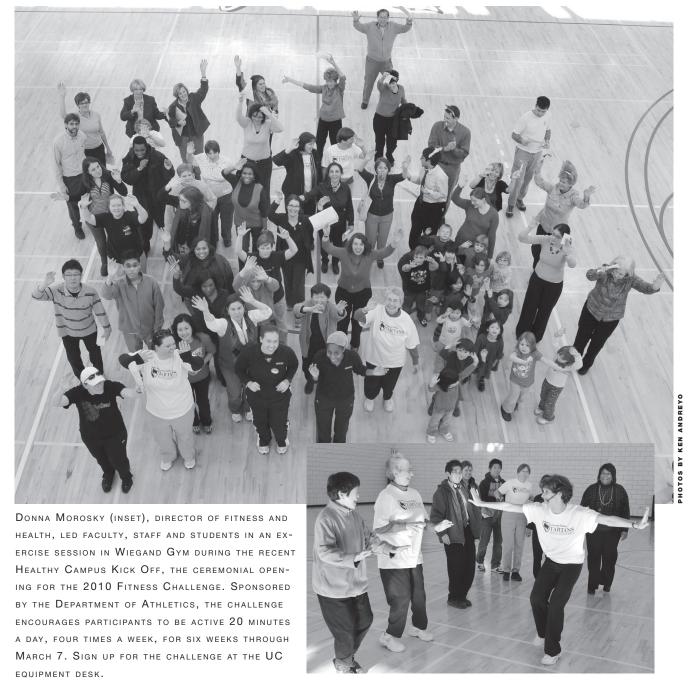
■Bruce Gerson

You can soon say goodbye to direct deposit notices and paper paychecks. Carnegie Mellon's payroll system is going green in 2010.

Colleen Bendl, assistant vice president for payroll and benefits administration, says payroll is going paperless for several reasons. "It's environmentally friendly; it creates efficiencies in payroll administration by eliminating the tasks of check sorting and check distribution; it reduces the possibility of check fraud; and it provides employees access to their pay in the event of a disaster or business disruption," she explained.

The paperless payroll initiative will be implemented in two phases. The first phase began Jan. 29, when individuals on the monthly payroll who currently have Continued on page SIX

## Take the Fitness Challenge



## Readers Respond Favorably

■ Heidi Opdyke

Two hundred thirty-eight staff and faculty from colleges, departments and administrative units across the university, including Silicon Valley, Qatar, Australia and Portugal, participated in the Piper's recent readership survey and the vast majority gave it a "thumbs up" as a valuable resource for the university community.

CONTINUED ON PAGE THREE

## Carnegie Mellon Launches iPhone App

■ Heidi Opdyke

iPhone ads tout there's an app for that
— even Carnegie Mellon has one.

The university recently unveiled a free iPhone application that ties into the university's directory, my.cmu. edu and more. It includes access to up-to-the-minute updates on news feeds, homepage stories and YouTube content, as well as map features designed to help newcomers and visitors navigate campus.

The application was created by a team including Marketing Communications staff members John Przyborski (developer), Stephen M. Chabassol (designer) and Jay Brown (project leader), as well as School of Computer Science student Isaac D. Lim (developer).

"While other universities have their own apps, we're one of the first universities to develop an app completely inhouse," Brown said. "We've been brainstorming about an app since the iPhone debuted. Interestingly, so too was Isaac. We ultimately teamed up, knowing the staff and student perspectives would complement each other Continued on page Six

## Everett Tademy Works To Keep Opportunities Knocking

#### ■ Bruce Gerson

After graduating from Reed College in Portland, Ore., in 1974 with a degree in political science, Everett Tademy saw a sign touting opportunities in Pittsburgh. So, he traveled east, fell in love with the City of Champions, and 36 years later the Oakland, Calif., native is touting and creating opportunities for others as assistant vice president for diversity and equal opportunity services at Carnegie Mellon.

Tademy says his role at the university is four-fold. He drives equal opportunity through affirmative action; he assists President Jared Cohon with all diversity initiatives; he works to make sure the university is compliant with access issues in accordance with the American Disabilities Act; and as university Ombudsman, he facilitates the grievance process to ensure university policies are upheld.

Each year Carnegie Mellon celebrates Martin Luther King Jr. Day with afternoon programs honoring the late great civil rights leader's legacy. Part of the annual celebration is the release of the university's annual State of Diversity Report (www.cmu.edu/diversity-guide/), in which Tademy plays a major role

Prior to this year's MLK celebration, we caught up with Tademy to talk



PUBLISHER

**E**DITOR

MANAGING EDITOR

#### WRITERS

Shilo Raube Mark Burd Jocelyn Duffy Kristi Ries Bruce Gerson Abby Ross Andrea Jones Byron Spice Heidi Opdyke Chriss Swaney

DESIGNER Melissa Stoebe

Communications Design Group

#### **PHOTOGRAPHY**

Ken Andreyo Communications Design Group

To contact The Piper staff, call 412-268-2900 or email bg02@andrew.cmu.edu.

Carnegie Mellon University does not discriminate and Carnegi Mellon University is required not to discriminate in admission, employment, or administration of its programs or activities

egie Mellon University does no discriminate in admission, employment or administration of its programs on the basis of religion, creed, ancestry, belief, age, veteran status, sexual orientation or gender identity, Carnegie Mellon does not discriminate in violation of federal, state, or local laws or executive orders. However, in the judgment of the Carnegie Mellon Human Relations Commission, the Presidential Executive Order directing the Department of Defense to follow a policy of, "Don't ask, don't tell, don't pursus," excludes openly gay, lesbian and bisexual students from receiving ROTO scholarships or serving in the military. Nevertheless, all ROTO classes at Carnegie Mellon University are available to all students.

from receiving HOLC scholarships or serving in the military. Nevertheless, all ROTC 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 Police Department at containing statistics about the number and type of crimes committed on the compus during the preceding three years. You can obtain a copy by contacting the Carnegie Mellon Police Department at Carnegie Mellon Police Department and the Carnegie Mellon University by calling 412-268-2000.
Produced for Media Relations by the Communications Design Group, January 2010, 10-321.

about diversity at Carnegie Mellon how it has improved and what lies ahead.

#### Why is diversity important?

It pushes us forward. I still think Dr. Cohon's 1992 statement (www.cmu.edu/ diversity-guide/overview/) is the most compelling argument for why diversity is important to Carnegie Mellon. It talks about institutional excellence — bringing together a broad group of people to help push this place further more quickly. Dr. Cohon says diversity "is essential for the university's quality to be able to recruit and to retain the very best students, faculty and staff." He says "excellence is not limited to a single race, gender, ethnic group, religion or sexual orientation." He also says "diverse perspectives and backgrounds breed the intellectual vitality essential for the health and progress of the university." He talks about contributing to social progress. Diversity is everyone's responsibility. We all have a role to play.

#### What's the general state of diversity at Carnegie Mellon?

We have a lot of work to do, but we've made some progress. I think we mirror our larger society. We're a microcosm here.

What sometimes is a problem is getting folks to talk across their affinity groups. Where I see this problem the most is in the classrooms. But, when we have professors that get their students out in the field working on a particular project, the students see that they have more in common than differences. The students don't see that unless they work on real-world projects. Football teams working to win championships forget that their pulling guard is Polish. All they know is he's a pulling guard, opening a hole for me and if he does it well, he's my best bud. I'd like to see us move more toward that model of how we work together and come together. We're making bigger strides, but we still have a long way to go.

One other important note I'd like to mention here is that the trajectory of admissions for minority students has gone up. In fact, the journal Blacks in Higher Education said Carnegie Mellon is the most improved over the last three years.

#### What are some milestones since the late 1990s, when diversity became a strategic priority for the university?

We've had several. There are the domestic partner benefits, more child care for men and women faculty, and the Barbara Lazarus Award, which was created by the President's Diversity Advisory Coun-

cil (DAC). There's also the Summer Academy for Math and Science, which aims to increase the number of very talented college-bound minority students. Our Leadership Academy, which aims to develop middle-management staff, so to speak, into senior managers, is another important accomplishment.

The Admissions Department took some ideas from the Human Relations Commission, the precursor to the DAC, and now uses leadership qualities and skills — not just SAT scores — as admission criteria. Our students are still smart, but they're more engaged.

I think the biggest thing that Dr. Cohon has done as a leader around the issue of diversity is to get people to take ownership of it. The college advisory boards are now asking each college and department what they're doing for diversity. Our colleges have taken ownership of diversity initiatives.

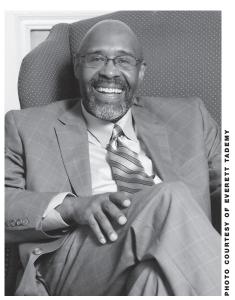
One of the things I'm most proud of is that in the university's last two strategic plans (www.cmu.edu/strategic-plan/) we were able to make diversity and community success a high priority for the university. It continues to be part of our strategic planning initiatives and gets us on track in our Stages of Diversity Development. We need to get to what I call the notion of mutualism. It requires the ability to collaborate with people and enterprises that are different. It combines diverse elements to create new ideas, and it converts diversity into innovation and innovation into wealth. That's where we want to go.

#### Has the culture here become a more welcoming environment?

I think so. In the last staff survey, people said diversity was on their minds. We see that in some student data that Institutional Research & Analysis is collecting. We also see it in faculty surveys.

Having said that, we still have issues and concerns with people not having the ability or skill to talk across differences. That's something we need to work on. Some of our affinity groups become too comfortable and they don't come out of their group. Once barriers begin to be knocked down, people realize they have more in common than they have differences. Once that happens, I think we move further as a community.

We need to be thinking beyond black, white, yellow and brown. Once you get passed that you realize we're all in the same boat. How do we then talk together to create wealth for Carnegie Mellon? The only way to do that is to talk across differences, to give people feedback and assistance where we can,



EVERETT TADEMY HAS BEEN A PART OF CARNEGIE MELLON FOR 35 YEARS.

to be inclusive and to practice mutual respect.

#### Tell me about the new "Guiding **Principle for University Culture."** (You can download the document at www.cmu.edu/diversity-guide/ community/index.html.)

President Cohon charged the DAC to update the 1992 Diversity Problem Statement into something much more motivating and actionable. This document will hopefully get people thinking about a few things. First, bringing a broad talent base or representation to Carnegie Mellon. Then, once we get that broad representation, how do we get that representation to have meaningful and authentic engagement with each other to create innovation? And then how do we convert that innovation into wealth? We are a very wealthy place in terms of human resources. If we work across differences better, I think we can inspire innovation.

The document is a work in progress, and we're soliciting feedback. We need to create a repository of some of the best practices around diversity and inclusion, and put it out there so people can see it, so they can get at the work.

#### What lies ahead for the DAC?

It's primarily filling out the implementation plan associated with the "Guiding Principle." It's also those things enumerated in the strategic plan under community success. There's a laundry list of work associated with the strategic plan to get to community success. Some of those things have to do with best practices, inclusion, treating people fairly, professional development, developing people, particularly in the lines around diversity.

CONTINUED ON PAGE ELEVEN



ONLINE: DIVERSITY RESOURCE GUIDE — www.cmu.edu/diversity-guide/

THE PRESIDENT'S STATEMENT ON DIVERSITY — www.cmu.edu/diversity-guide/overview/

A GUIDING PRINCIPLE FOR UNIVERSITY CULTURE — WWW.CMU.EDU/DIVERSITY-GUIDE/COMMUNITY/INDEX.HTML CARNEGIE MELLON'S 2008 STRATEGIC PLAN - WWW.CMU.EDU/STRATEGIC-PLAN/

## First Evidence: Child's Brain Can Rewire Itself

■ Shilo Raube

It's always been thought that through practice and instruction a child can become a better reader. Now there's scientific proof.

Psychology's Timothy Keller and Marcel Just have uncovered the first evidence that intensive instruction causes the brain to physically rewire itself, creating new white matter that improves communication within the brain.

As reported in the journal Neuron, brain imaging of children between the ages of 8 and 10 showed that the quality of white matter — the brain tissue that carries signals between areas of grey matter, where information is processed — improved substantially after the children received 100 hours of remedial training. After the training, imaging indicated that the capability of the white matter to transmit signals efficiently had increased, and testing showed the children could read better.

"Showing that it's possible to rewire a brain's white matter has important implications for treating reading disabilities and other developmental disorders, including autism," said Just, the D.O. Hebb Professor of Psychology and director of Carnegie Mellon's Center for

Cognitive Brain Imaging (CCBI).

Dr. Thomas R. Insel, director of the National Institute of Mental Health. agreed.

"We have known that behavioral training can enhance brain function. The exciting breakthrough here is detecting changes in brain connectivity with behavioral treatment. This finding with reading deficits suggests an exciting new approach to be tested in the treatment of mental disorders, which increasingly appear to be due to problems in specific brain circuits," Insel said.

Keller and Just's study was designed to discover what physically changes in the brains of poor readers who become better readers. They scanned the brains of 72 children before and after they went through a six-month remedial instruction program. Using diffusion tensor imaging (DTI), a new brain imaging technique that tracks water movement in order to reveal the microscopic structure of white matter, Keller and Just found a brain change involving the white matter cabling that wires different parts of the brain together.

"Water molecules that are inside nerve fibers tend to move or diffuse parallel to the nerve fibers," explained

Keller, a CCBI research scientist and author of the first developmental study of compromised white matter in autism. "To track the nerve fibers, the scanner senses areas in which many water molecules are moving along in the same direction and produces a road-map of the brain's wiring."

Previous DTI studies had shown that children and adults with reading difficulty displayed areas of compromised white matter. This new study shows that 100 hours of intensive reading instruction improved children's reading skills and also increased the quality of the compromised white matter to normal levels. More precisely, the DTI imaging

illustrated that the consistency of water diffusion had increased in this region, indicating an improvement in the integrity of the white matter tracts.

"The improved integrity essentially increases communication bandwidth between the two brain areas that the white matter connects, by a factor of 10," Just said. "This opens a new era of being able to see the brain wiring change when an effective instructional treatment is applied. It lets us see educational interventions from a new perspective."

For more information on the study, visit www.cmu.edu/news/archive/2009/ December/dec9 brainrewiringevidence. shtml.

## Imaging Center Breaks Ground



Marcel Just, the D.O. Hebb Professor of Psychology and director of the CENTER FOR COGNITIVE BRAIN IMAGING; JOHN LEHOCZKY, DEAN OF THE COLLEGE of Humanities & Social Sciences (H&SS); Michael Tarr, professor and co-director of the Center for the Neural Basis of Cognition; Timothy Keller, scientist; Marlene Behrmann, professor; and Walt Schneider of THE UNIVERSITY OF PITTSBURGH, CELEBRATED THE GROUNDBREAKING FOR A NEW Carnegie Mellon imaging center, which will be in Wean Hall 3604. In ORDER TO MOVE A NEW SIEMENS VERIO 3T SCANNER, WHICH WAS PAID FOR BY A \$2 million grant from the National Institutes of Health, into Wean Hall, AN ACCESS POINT IS BEING CREATED INTO THE LOWER LEVEL OF THE SOUTH SIDE OF THE BUILDING. THE FACILITY, WHICH IS EXPECTED TO BE COMPLETED EARLY THIS YEAR, WILL BE USED BY H&SS AND SCHOOL OF COMPUTER SCIENCE FACULTY, AS well as several  $\mathsf{P}\mathsf{itt}$  departments. Watch  $\mathsf{J}\mathsf{ust}$  talk about the project at THE PIPER+ ONLINE AT HTTP://BIT.LY/CMUPIPER.

## Response Favorable in Poll

The online and print survey asked faculty and staff if they were satisfied with the publication, if it helped them stay abreast of university news and major events, and about their personal preferences for content. It also solicited their thoughts about Piper+, the publication's online component that includes videos, images and related links to complement stories in print. The Web site, http://bit.ly/CMUpiper, also allows visitors to download current and archived issues.

Here are some of the findings:

- 75 percent of respondents said the Piper added to their knowledge of the university and helped to keep them informed of major happenings.
- 82 percent said once they receive the issue they either read the paper thoroughly or skim it. 20 percent take it home to read.
- 83 percent of respondents were staff members.
- Nearly 90 percent expressed satisfaction with the publication with almost 50 percent saying that were very satisfied.
- News stories are the most read items.
- More stories about staff members were requested most.

Questions and comments about the Piper + Web site drew some conflicting reactions. While some suggested that the Piper become solely an online offering, less than a third of the respondents said they visited the Web site. Of those who have visited 27 percent rated the site as excellent, another 55 percent rated it as good.

While the survey has been completed, we'd still love to hear from you. Send us your feedback by sending email to bg02@andrew.cmu.edu. Story ideas are also very much appreciated. Also send email if you'd like to be on our d-list for notification when new issues are available.

## THE SURVEY SAYS ...

Here is a sample of some of the open-ended comments we received: "The Piper does a good job covering what's going on. I look through it for stories of interest and usually check the online version as well."

"I find it to be the best-written and most interesting publication printed by the university that I receive."

"Gives more in-depth information about things previously announced as one/two lines (i.e., story on Chief of Naval Operations); some interesting stories on faculty such as Joe Rudman in the November issue."

## Inspiring Words



Daisy Hobbs (CFA'10) Performs as part of the Community and Choral TRIBUTE DURING MARTIN LUTHER KING JR. DAY ACTIVITIES. EVENTS INCLUDED PAN-ELS, SPEAKERS AND READINGS FROM THE WINNERS OF THE MLK JR. WRITING AWARDS. FOR A SLIDESHOW OF THE TRIBUTE, VISIT THE PIPER+ AT HTTP://BIT.LY/CMUPIPER.

## Take Note

## SCHOOL OF MUSIC'S COLLAGE CONCERT AN ECLECTIC TRADITION

#### ■ Kristi Ries

If you like jazz, classical and new music — or are a fan of vocalists as well as guitarists — this may be your only chance to hear it all in one evening.

Following last year's hugely successful event, the Carnegie Mellon School of Music will present its second annual Collage Concert in Oakland's historic Soldiers and Sailors Memorial Hall at 8 p.m., Friday, Feb. 12. The unconventional concert will feature all of the university's premier ensembles and several exceptional student and faculty

the while seeing and hearing groups from new angles and perspectives. The evening's music will literally surround concertgoers, as musicians will use every part of Soldiers and Sailors' performance space, including the balcony, aisles, stage and outer hallways. The 2010 Collage Concert will culminate in a dramatic finale featuring the Carnegie Mellon Philharmonic and Choirs in "Climb Every Mountain" from "The Sound of Music."

Acclaimed director and Drama Professor Gregory Lehane will coordinate the audience members' attention, illuminating each ensemble or solo performer

WHAT: SECOND ANNUAL COLLAGE CONCERT

WHERE: SOLDIERS AND SAILORS MEMORIAL HALL

Cost: \$15 ADULTS, \$12 SENIORS, \$10 COLLEGE STUDENTS

WHEN: 8 P.M., FRIDAY, FEB. 12

Noel Zahler, head of the School of Music, started the tradition and is excited about the upcoming event.

as a visual cue.

"Once each year the School of Music gathers the combined forces of our community: students, faculty and staff, to present this spectacular concert for the public that is theatrically lit by our colleagues in the School of Drama," Zahler said.

"All our ensembles, as well as student soloists and faculty soloists (including principal members of the PSO), come together to perform music spanning centuries and genres. To hear all, one after another without interruption, is a feast for the senses." This year's acts include a percussion ensemble, a flute quartet, choirs, and the Carnegie Mellon Contemporary Ensemble, among a multitude of others. Three faculty members will be featured in the lineup, including: Cyrus Forough, professor of violin; soprano Laura Knoop Very, assistant professor of voice; and Enrique Graf, artist lecturer in piano.

Tickets are \$15 for adults, \$12 for senior citizens and \$10 for college students with valid ID. To order tickets in advance, visit http://music.cmu.edu and click on Box Office. Please note that the event will have open seating, and all are asked to arrive prior to the beginning of the concert at 8 p.m. Tickets also will be available (cash only) at the hall one hour prior to the performance.



#### ONLINE:

HTTP://MUSIC.CMU.EDU — CLICK ON BOX OFFICE

soloists. There will be no pauses or applause in between pieces, as the event is planned to be a 90-minute nonstop extravaganza of sound.

During that time, the audience will be treated to popular hits, chamber works and musical theater pieces, all the seamless movement of the various groups throughout the venue. Lehane directed First Lady Michelle Obama's concert for the spouses of G-20 leaders during the September Summit at the special request of the White House.

Elaborate stage lighting will direct

## **Upcoming Events**

#### **Hunt Institute Exhibition**

"Botanicals: Environmental Expressions in Art, the Alisa and Isaac M. Sutton Collection" represents one of the finest private collections of contemporary botanical art in America.

The exhibition will be on display from 9 a.m. to noon and 1 to 5 p.m., Monday-Friday, and 1 to 4 p.m., Sunday on the 5th floor of the Hunt Library.

#### The Humanities Center Lectures, 2009-2010: Global Connections, Global Responsibilities

Dale Jamieson, director of environmental studies, professor of environmental studies and philosophy, and affiliated professor of law at New York University, will present "The Moral and Political Challenges of Climate Change."

The event is co-sponsored by the Center for the Advancement of Applied Ethics and Political Philosophy

4:30 p.m., Thursday, Feb. 4 Porter Hall 100 (Gregg Hall)

#### Carnegie Mellon Women's Association

Learn golf basics from Pattye Stragar, using simulators. Clubs will be provided. The cost is \$10 for members.
5-7 p.m., Friday, Feb. 5

5-7 p.m., Friday, Feb. 5
The First Tee of Pittsburgh (Schenley
Golf Course) 5370 Forbes Ave.
www.cmu.edu/cmwa/

## Environmental Distinguished Lecture Series Toward Sustainability

Frederick vom Saal, Curators' Professor at the University of Missouri-Columbia, will present a lecture "Changing our Physical and Chemical Environment." The event is co-sponsored by the Department of Civil & Environmental Engineering and The Shaw Group

4:30 p.m., Monday, Feb. 8 Porter Hall 100 (Gregg Hall)

## **L&D Session: Giving and Receiving Constructive Feedback**

Lola Mason will lead a session to enhance skills for giving and receiving constructive feedback in informal, one-on-one situations.
9 a.m.-noon, Tuesday, Feb. 9
McKenna/Peter/Wright Room, UC
Register online at www.cmu.edu/hr/learning/

#### L&D Session: Communicating Assertively

Ron Placone will lead a session to help better understand assertive behavior and what it means to communicate assertively.

Noon-1:30 p.m., Wednesday, Feb. 10

Connan Room, UC

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

#### **AED Training**

8:30-11 a.m., Wednesday, Feb. 10 Gates 6115

Register online at www.cmu.edu/ehs

#### School of Music Collage Concert

The one-of-a-kind concert features selections from a number of university ensembles. Tickets are \$15 for adults, \$12 for seniors and \$10 for Carnegie Mellon students with ID 8 p.m., Friday, Feb. 12 Soldiers and Sailors Memorial Hall, Oakland

#### **University Lecture Series**

Professor David Topper of the University of Winnipeg will deliver a presentation on "When Einstein Came to Town: Albert Einstein's special sojourn in Pittsburgh in 1934." See page 12 for more information. 4:30 p.m., Monday, Feb. 15
Kresge Recital Hall, College of Fine Arts

#### L&D Session: Techniques for Dealing with Stress

Bruce Rabin will lead a session to explain the mental and physical symptoms of stress and provide assistance in building skills to minimize the effects of stress on health.

1-4 p.m., Tuesday, Feb. 16 Rangos 3, UC

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

#### L&D Session: Basic Budgeting

PNC Workplace Banking will offer a workshop for people motivated to improve their financial situations but are not savvy regarding budgeting techniques.

1-2:30 p.m., Thursday, Feb. 18 Connan Room, UC Register online at www.cmu.edu/hr/learning/

### **Environmental Distinguished Lecture Series**

John McLachlan of Tulane University will discuss "Toward Sustainability: Changing our Physical and Chemical Environment." 4:30 p.m., Thursday, Feb. 18 Porter Hall 100 (Gregg Hall)

#### School of Drama Production

Nikolai Gogol's The Inspector General is a hilarious indictment of political corruption in 1836 provincial Russia. 8 p.m., Thursday, Feb. 18 through Saturday, Feb. 27 Philip Chosky Theatre

## Innovation and Invention in Science & Technology Lecture Series

Esther Takeuchi will present "Toward the Bionic Human: Medical Devices and How They Are Powered." The lecture is co-sponsored by Biomedical Engineering, Engineering & Technology Innovation Management, the College of Engineering, Mellon College of Science and the Department of Biological Sciences. 4:30 p.m., Monday, Feb. 22 Porter Hall 100 (Gregg Hall)

#### School of Art Lecture Series

Paul Ramirez Jonas creates as he speaks. He treats pre-existing texts (a diary, an old photograph, a footpath, etc...) as a score, where the act of "reading" can take the form of a performance, sculpture, photograph or video. 5 p.m., Tuesday, Feb. 23 Kresge Recital Hall

#### **Black History Month Keynote**

Steve Perry is a best-selling author, founder and director of a successful college preparation program for low-income minority students, and founder and principal of one of Connecticut's most successful middle and high schools. 7 p.m., Wednesday, Feb. 24 McConomy Auditorium, UC

#### L&D Session: Social Networking Made Simple

David Holzemer will lead a session to demystify social networking such as Facebook, Twitter, LinkedIn, Blogger and others.
Noon-1:30 p.m., Thursday, Feb. 25
McKenna/Peter/Wright Room, UC
Register online at www.cmu.edu/hr/learning/

#### **University Lecture Series**

Eva Maria Höller-Cladders, adjunct professor of organizational behavior, will present this Journeys lecture on "Daring to Jump – The Quest for Purpose." 4:30 p.m., Thursday, Feb. 25 Porter Hall 100 (Gregg Hall)

#### School of Art Lecture Series

Daniel Bozhkov employs variety of media, from fresco to performance and video, and works with professionals across many fields, using different strategies to activate public space. 5 p.m., Tuesday, March 2 McConomy Auditorium

#### **AED Training**

9-11:30 a.m., Friday, March 12 Baker Hall 231B Register online at www.cmu.edu/ehs

## **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. Noon-1:30 p.m., Tuesday, March 16 McKenna/Peter/Wright Room, UC Register online at www.cmu.edu/hr/learning/

#### 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.

1-4 p.m., Thursday, March 18 McKenna/Peter/Wright Room, UC Register online at www.cmu.edu/hr/learning/

## A Green Plan

#### GRADUATE STUDENTS WORK TO MAKE CAMPUS EVENTS ZERO-WASTE

#### ■ Abby Ross

Zero is not often a desired state, but for graduate students Mike Blackhurst, Justin Parisi and Vanessa Schweizer it's exactly what they want. After attending a student workshop at the University of Copenhagen in Denmark shadowing the United Nation's Climate Change Conference in December, they are hoping to make Orientation 2010 a near zero-waste event.

At the workshop, the trio joined 14 other student teams from five continents to lend a voice to ongoing debates about global warming issues. Each team was tasked with presenting a project to bring back to their respective universities to promote and enhance campus sustainability.

Carnegie Mellon's team chose to focus on creating a zero-waste event, which requires that organizers and attendees reduce waste, reuse equipment and recycle or compost used materials. They are working with the Green Practices Committee on this initiative



MIKE BLACKHURST, VANESSA SCHWEIZER AND JUSTIN PARISI REPRESENTED CARNEGIE MELLON AT A STUDENT WORKSHOP IN COPENHAGEN DURING THE UNITED NATION'S CLIMATE CHANGE CONFERENCE.

Committee meets regularly to establish priorities, goals and mechanisms for implementing environmental practices.

"The Green Practices Committee has been thinking about how to reduce waste in a big way for freshman orientation because it covers a number of days coordinator.

Blackhurst, a graduate student in the Civil and Environmental Engineering and Engineering and Public Policy departments, thinks that the university's research and commitment to green practices has been beneficial thus far, but that more can be done.

"It's clear that Carnegie Mellon has done a lot of 'nuts-and-bolts' type projects and is really active in the construction of LEED certified buildings, and I think we've thought about — as part of our curriculum — sustainability more so than other schools," Blackhurst said. "We also have an obligation to engage in the research required to get us to that point, and to communicate that research and our activities to the whole campus. We must make sure people know what we're doing and people understand the implications of their choices from a sustainability standpoint."

Creating a large-scale, zero-waste event in less than a year is a hefty goal, and will need the collaboration of the campus community.

"All of it is doable, but a lot of it is speculative. We'd like to do this, and intend to move forward in these areas, but now we need to engage people at the university to pull it all together," Parisi said.



#### ONLINE: WWW.CMU.EDU/GREENPRACTICES/INDEX.HTML

to provide an opportunity for the university community to connect sustainability with everyday life.

"The major criteria for choosing a project were one that we could make a lot of progress on and one that has a larger growth potential in terms of conceptualizing sustainability and being a catalyst for additional sustainable practices," noted Schweizer, delegation leader and a Ph.D. candidate in the Department of Engineering and Public Policy, where she conducts research about climate and energy policy.

People deal with food and utensils every day, and requiring them to recycle or compost cups, food waste and utensils will bring sustainability issues to the forefront. Sustainability and green initiatives are strategic priorities of the university, and the Green Practices

with such a large group across campus. Orientation 2010 would be a really good time to roll this out, and make zero-waste standard for campus events after that," said Parisi, a dual master's degree student at the Tepper School of Business and the Department of Civil and Environmental Engineering, and a student member of the committee.

Barb Kviz, co-chair of the Green Practices Committee, knows that zero-waste events are possible with pre-planning.

"The payoff is teaching about green practices while actually doing it. Green Practices looks forward to working with all involved to decide what a near zero-waste event would look like for Orientation 2010 and then working with the planners to achieve it," said Kviz, Carnegie Mellon's environmental

#### RECYCLEMANIA

For the seventh year, Carnegie Mellon is kicking trash to the curb with RecycleMania, a 10-week competition for U.S. and Canadian colleges and universities to promote waste reduction activities to campus communities.

From Jan. 17 through March 27, more than 400 schools will report recycling and trash data, which will then be ranked on a number of scales.

Faculty, staff and students can participate by disposing of recyclables properly on campus. Recyclable materials that can be reported include — paper, magazines, books, plastic and glass bottles, aluminum cans and cardboard boxes.

To learn more about RecycleMania and view the weekly results and rankings go to www.recyclemania.org.

#### TOP GREEN POWER

Carnegie Mellon is among the top green power purchasers in the United States, ranking second among universities and 41st overall on the Environmental Protection Agency's Green Power Partners list. Carnegie Mellon buys 87 million kilowatt-hours of green power each year in the form of renewable energy certificates, which is enough to meet 75 percent of the university's energy needs.

## Research Improves Air Quality, Climate Predictions

#### ■ Chriss Swaney

Animals, plants and entire habitats are at risk from the ongoing warming of our planet. From dying coral reefs to melting glaciers, from eroding permafrost to vanishing rainforests — no part of nature is an island.

Carnegie Mellon researchers understand the stakes. That's why Neil Donahue and Allen Robinson are working with a team of more than 60 scientists, including researchers from the University of Colorado and the NOAA's Cooperative Institute for Research in Environmental Science to develop a more holistic approach to improving climate and air quality prediction models.

Donahue, head of the Center for Atmospheric Particle Studies (CAPS), created a chemical map that provides some of the first clear images of how organic aerosols change once they become part of the atmosphere, while Robinson led an experimental team demonstrating those changes for aerosols emitted from diesel engines and wood fires.

"Atmospheric processing alters the effects of aerosols on climate and human health. It appears to greatly simplify the effect of the aerosols from different

sources on cloud formation and rainfall," said Robinson, a professor of mechanical engineering and engineering and public policy.

Donahue reports that his map tracks two key properties — volatility (the tendency to evaporate) and the oxygen to carbon ratio that evolves as particles make their way through the atmosphere.

"This ratio is important because it is an indicator of how much the organic matter is gaining oxygen and building up on particles floating in the air. The chemical roadmap also can help people predict the ability of the particles to

participate in cloud formation," Donahue said.

regineering and engineering and For more than a decade, university researchers have been working to pin-point the sources and effects of harmful atmospheric particles.

"This new collaborative effort will take a lot of mystery out of how and where these airborne particles go and how they impact both humans and our climate," said Donahue, whose work focuses on chemical production and transformation of particles in the atmosphere.

## iPhone Apps Available Continued from Page one



well in delivering a strong product."

Brown said the feedback has been overwhelmingly positive.

"We're eager to hear more from users — what they like, what they don't, what they want to see. All of this will be helpful to future versions," Brown said.

For more information about the app or to provide feedback, visit www.cmu. edu/CMUapp. The app also has a Twitter channel, Twitter.com/CMUapp.

Here's a few of the other local creations that are available:

#### iBurgh & YinzCam



Carnegie Mellon was in the news earlier this year when Pittsburgh Councilman Bill Peduto announced iBurgh, an

iPhone application that helps improve government's customer service response to city residents.

The app was created by Peduto and YinzCam Inc., a company run by Priya Narasimhan, associate professor of electrical and computer engineering and co-director of Carnegie Mellon's CyLab Mobility Research Center.

The application allows constituents to use their iPhone to take a picture of a pothole, or other concern, and instantly submit a picture and location along with the complaint to the city's 311 system. Pittsburgh is the first major city in the

country to utilize this type of government integrated iPhone application.

#### Snapture



An iPhone app designed by three recent electrical & computer engineering (ECE) graduates is changing the way people

take pictures with their iPhones.

Snapture Labs, founded by ECE alums Bowei Gai, Samir Shah and Ajay Panagariya, and Occipital, a TechStarsfunded startup that develops state-of-theart computer vision in mobile applications, brought the technology to market after a nearly two-year effort. The first version was created while Gai, Shah and Panagariya were students and released in April 2008. Now in its eighth version, Snapture has had more than 3.4 million downloads

"We have been developing and improving on Snapture's technology for about a year," said Gai, who is the CEO of Snapture Labs. "We truly believe that Snapture will become the default camera application for our users going forward."

#### **Jibbigo**



Alex Waibel, professor of computer science and language technologies at Carnegie Mellon, created the startup company,

Jibbigo LLC, that recently launched a

the iPhone 3GS, has a vocabulary of roughly 40,000 words. It is a general translator, though it is particularly attuned to the needs of international travelers and medical doctors. Users simply speak a sentence or two at a time into the iPhone and the phone will

respond with an audible translation.

translator that converts English speech

The Jibbigo app, which works on

into Spanish, or vice versa.

"Jibbigo's software runs on the iPhone itself, so it doesn't need to be connected to the Web to access a distant server," Waibel said. "That's important for travelers and especially for humanitarian aid workers who venture beyond the big cities. It's in those areas, where wireless hotspots are few and far between — if they exist at all — that Jibbigo might be needed the most."

In addition to Waibel, the Jibbigo LLC team that developed the speech-tospeech translation app includes 10 former students and graduates of Carnegie Mellon's Pittsburgh and Silicon Valley campuses and of the University of Karlsruhe.

#### Flixster & Currency



Jeffrey Grossman (CS'11) created a "Movies" application when Apple's App Store debuted in 2008. It was

one of only 500 apps accepted by Apple

Flixster, a new and growing moviebased social networking site, quickly contacted him and purchased the app. It was the first acquisition of its kind. Grossman also has a contract with Flixster. During a fulltime summer job, he continued to enhance the app with additional features such as online ticket purchasing and links to nearby restaurants. The app has been downloaded more than 8 million times.

"I am still working for Flixster on the Movies application," Gross said. "We just updated it to add in actor pages and actor photos."

A second application by Grossman is Currency, which is the top currency converter with more than 2 million downloads of its free version. A paid version, "Currency Pro," sells for \$9.99.

"I haven't had a chance lately to work on any new apps, as I've been very busy with my existing work and school work," Grossman said.

#### **iTeleport**



Jahanzeb Sherwani (CS'09), a Silicon Valleybased adjunct faculty member at the Language Technologies Institute, cre-

ated an application that allows the user to screen share and gain full control of one's PC or Mac from virtually anywhere in the

Sherwani started the work as a graduate student and is now working on the mobile remote desktop full time as the CEO of iTeleport LLC. Sherwani's application allows users to view their computer through the iPhone interface and "click" on their machine by tapping on the screen. This fall, Sherwani's creation was listed among the top 200 grossing apps in the U.S. iTunes App Store.

"The most exciting part for people might be that we're hiring — and are looking for talented people to join the team (particularly programmers with a strong background in computer science)," Sherwani said. "We're working on a number of new spinoffs of this technology, which should be launching in the next few weeks and months."

## Paperless Payroll Begins

CONTINUED FROM PAGE ONE

their paychecks directly deposited did not receive paper deposit notices and earning statements.

To view their earning statements, employees must register for "I-pay," a secure online system in which their monthly earning statements are posted. For information on how to register for I-pay, go to the payroll Web site at www.cmu.edu/ finance/forms/payroll/index.html.

Once registered for I-pay, you'll receive an email notifying you when your new monthly statement is available for viewing.

For employees who get paid biweekly — or are being transitioned to bi-weekly pay — and use direct deposit, the new system will begin March 19.

The second phase of the paperless payroll initiative will get under way this spring for employees who receive a paper paycheck. According to Bendl, those employees will receive an electronic pay card to which their net pay will be loaded each payday.

"The electronic pay card will be like a debit card or gift card," Bendl said. "They can be used anywhere PIN debit cards are accepted or at ATMs with a Maestro, Cirrus, Star, NYC or Pulse logo. They also

can be used at All Points ATMs."

Bendl said the first transaction at Maestro, Cirrus, Star, NYC and Pulse ATMs will be free, but users will be charged a small fee for subsequent transactions.

Electronic pay card employees will also receive Money Network Checks. Individuals can use these checks to pay their bills or to get cash up to the balance on their pay card at any participating Wal-Mart.

Like direct deposit employees, individuals using the electronic pay card must register for I-pay to view their earning statements online.

Bendl said more information on the electronic pay card would be forthcoming when the Administrative Leadership Group begins to introduce the card in April or May.

In limited cases in which paper paychecks cannot be avoided, checks can be picked up between 8:30 a.m. and 4:30 p.m., Monday through Friday, at the UTDC Building, 4516 Henry Street. Proper photo ID and a signature will be required.

The paperless payroll system will not apply to employees paid in Australian dollars or to employees paid in Qatari Riyals.

## A Top 20 Donor



THE CENTRAL BLOOD BANK (CBB) RECENTLY HONORED CARNEGIE MELLON AS BEING ONE OF ITS TOP 20 DONORS FOR 2009. THE UNIVERSITY COMMUNITY DONATED 735 UNITS DURING BLOOD DRIVES, WHICH HAS THE POTENTIAL TO SAVE MORE THAN 2,200 LIVES. EACH YEAR, THE CBB RECOGNIZES THE TOP 20 GROUPS THAT DONATE THE MOST UNITS TO OUR community blood program, which serves more than 40 hospitals in southwestern PENNSYLVANIA AND SUBROUNDING AREAS. ON AVERAGE, THE RECOGNIZED GROUPS ACCOUNT FOR ALMOST 20 PERCENT OF THE TOTAL UNITS COLLECTED AT THE CBB. REPRESENTATIVES OF THE CBB VISITED CAMPUS TO PRESENT THE AWARD. PICTURED IN THE PHOTO FROM LEFT ARE TAYLOR GRABOWSKY (CMU), DALE ELLGASS (CBB), PRESIDENT JARED COHON, JOHN PAPINCHAK (CMU), KAREN FITTIPALDO (CBB), DEBRA JAMES BAILEY (CMU) AND DAVE MATHENY (CBB). PAPINCHAK AND BAILEY SERVE AS CO-FACULTY AND STAFF BLOOD DRIVE COORDINATORS. THE NEXT CAMPUS BLOOD DRIVE WILL BE 8 A.M. TO 2:45 P.M. ON Tuesday, Feb. 9 at the University Center in Rangos 1.

## Readers Submit Favorite Photos from 2009



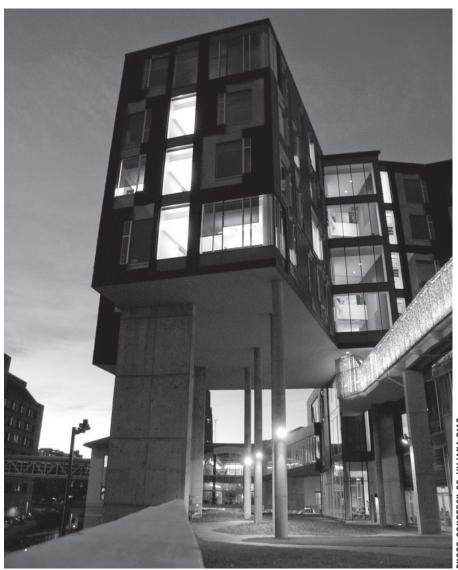
A facemask was placed on one of the "Walking to the Sky" statues during the fall semester when the campus was at high alert for the H1N1 flu. Clinics were conducted to vaccinate faculty, staff and students last semester. Vaccines are still available at Student Health Services.



Chia-Lung Albert Hsieh received his master's degree from the Information Technology-Information Security program in Kobe, Japan, but traveled to Pittsburgh to be a part of Commencement.



CARNEGIE MELLON PURCHASED SEVERAL PARCELS OF LAND IN 2009 TO THE WEST OF PANTHER HOLLOW, INCLUDING THE HILLSIDE IN FRONT OF THE "CLOUDMAKERS" AS SEEN ABOVE. MATTHEW MOROSKY, A MASTER'S STUDENT IN THE HUMAN-COMPUTER INTERACTION INSTITUTE, DESCRIBED THIS VIEW THROUGH THE FENCE AS A FAMILIAR SIGHT FOR STUDENTS.



THE GATES CENTER FOR COMPUTER SCIENCE AND THE HILLMAN CENTER FOR FUTURE-GENERATION TECHNOLOGIES OPENED IN SEPTEMBER, AND THE PAUSCH BRIDGE WAS DEDICATED DURING HOMECOMING.

# piperTRIVIA

Thank you to Carrie Chisholm, Juliana Diaz, Matthew Morosky and Ann Lyon Ritchie for submitting their favorite photos from 2009. To see all of the submissions, visit the CMUnews fan page on Facebook at http://bit.ly/CMUnewsFacebook.

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.

## New TV Studio Connects Faculty, Experts With Global News Agencies

#### ■ Mark Burd

On a recent winter morning Allan Meltzer, the Allan H. Meltzer University Professor of Political Economy, participated in a roundtable discussion that was broadcast live on C-SPAN, a news channel devoted to national policy and politics. Although it is not uncommon to see professor Meltzer on TV, one special element of this appearance was that he was connected to the program through a new television studio at the university.

"It is wonderful to have a broadcast studio on campus," Meltzer said. "Where a television appearance used to require an extra hour of time to commute back and forth from off-campus locations, our connection to broadcast media outlets is now just a short walk from my office. I'm much more willing to do short commentaries, and I am pleased to have the Tepper School and Carnegie Mellon branded logos in back of me instead of a picture of Pittsburgh."

The studio, located in a quiet corner of the Tepper School of Business, is the result of a unique arrangement with the Pittsburgh Videotech Center (PVTC), a division of Pittsburgh International Telecommunications Inc., one of the largest privately held teleports in the world. The PVTC regularly plays host to visiting celebrities, political and sports figures and area business leaders - connecting them with global news programs. At Carnegie Mellon's studio, the PVTC owns the equipment and provides the crew and same services as they do for interviews conducted at its studio located in downtown Pittsburgh.

"Historically, we have worked to put many experts from Carnegie Mellon on the airwaves and we believe that the new campus location will certainly increase the frequency of these appearances which will bring added exposure for the university," said Missy Gralish, director of business development for the PVTC. "Carnegie Mellon University offers world-class spokespersons on a wide variety of topics, which is a valuable resource for news agencies and their public audiences."

Conducting interviews and making guest appearances on television requires skills and practice that is unique from any other form of media conversation. It also requires a time commitment.

Given that a guest is experienced in TV etiquette, appearances still require a great amount of time for researching current news stories, preparing sound-bites and key messages, conducting pre-interviews with program producers and rehearsing.

"As a rule, the guest needs to be seated in the studio 15-20 minutes before the scheduled segment airs, so that they can be equipped with their earpiece



ALLAN MELTZER PROVIDES INSIGHTS DURING A TELEVISED ROUNDTABLE DISCUSSION ON C-SPAN ON JAN. 6.

and microphone. In addition, we contact the news program engineers to adjust the lights, sound levels and to discuss other technical details," Gralish said. "For everything to appear smooth on television, there must be great attention to every detail."

All told, brief TV appearances lasting less than five minutes can easily require 30 minutes in the studio and more than an hour of preparation and rehearsal.

The studio is now fully operational and is playing host to familiar faces and new experts from the university community who are participating in global discussions of policy and technology. With such a short commute, faculty and experts can return to academic duties more

efficiently after publicizing research and highlighting the university's wealth of expertise to large public audiences.

Whether you prefer to watch news programs on the major TV networks, cable broadcast channels like FOX, CNN, Bloomberg and Al Jazeera, or the scores of other broadcast stations based around the world, your chances of seeing a familiar expert just got a little better with Carnegie Mellon's new TV studio.

For more information about the television studio, contact Teresa Thomas, assistant vice president for media relations, at 412-268-2900, or Mark Burd, director of media relations at the Tepper School of Business.

## **Business Whims**



IN JANUARY, THE TEPPER SCHOOL OF BUSINESS' ATRIUM HOSTED A TEMPORARY INSTALLATION CREATED BY JIWON HUR, A SENIOR IN ARCHITECTURE. HUR DESIGNED THE INSTALLATION TO DRAW PEOPLE'S ATTENTION TO THE THIRD-FLOOR EXTENSION AND SKYLIGHT. "BUSINESS CLASSES AND CONFERENCES ARE HELD AT THE TEPPER SCHOOL OF BUSINESS BUILDING, AND THE OVERALL MOOD OF THE PLACE IS VERY SERIOUS AND HEAVY," HUR WROTE IN HER PROJECT STATEMENT. "THIS INSTALLATION NOT ONLY ADDS A JOYFUL MOOD TO THE SPACE, BUT ALSO PROVIDES RELIEF FOR THE PEOPLE WHO ARE OUT IN THE HALLS TAKING A BREAK FROM THEIR CONFERENCES." THE COMPONENTS ARE SPRAY-PAINTED PLASTIC AND HUNG FROM THIRD-FLOOR HANDRAILS. ASSISTANT PROFESSOR OF ARCHITECTURE JEREMY FICCA OVERSAW THE PROJECT. TO SEE MORE STUDENT INSTALLATION PROJECTS, GO TO THE CMUNEWS FACEBOOK.

# SILICON VALLEY ENERGY GRANT TO ENHANCE BUILDING EFFICIENCY

■ Sylvia Leong

Carnegie Mellon Silicon
Valley's Abraham Ishihara is
the principal investigator for
one of 10 awards from the
U.S. Department of Energy in
support of Smart Controllers
for Smart Grid Applications is
part of an \$18 million dollar
investment supported by
the American Recovery and
Reinvestment Act.

Ishihara, a research faculty member at the Silicon Valley campus, will direct the work in collaboration with Carnegie Mellon Silicon Valley scientist Shahar Ben-Menahem and Wattminder Inc., a startup based in Sunnyvale, Calif. The six-month, \$140,000 project should be completed by June 2010.

"The primary goal of this project is to enhance the energy efficiency, of building integrated photovoltaics (BIPV)," Ishihara said. "Due to the diverse solar panel locations and orientations, the influence of numerous environmental factors can significantly reduce performance and overall efficiency, rendering the BIPV system economically infeasible. This project will develop online fault detection methods and an actionable alert messaging system for the building owners/ operators in order to optimize performance and integration with the smart grid."

The smart grid is, loosely speaking, the entire gamut of technologies that enable the transmission and distribution of electricity. The smart grid market is projected to reach \$100 billion by 2030. A key component to this growth is the Advanced Metering Infrastructure (AMI). This project addresses the AMI by developing a suite of algorithms to monitor and detect faults that may occur in the photovoltaic system.

"By alerting building owners/operators to the fault, intelligent decisions can be made to optimize demand response and increase energy efficiency," Ishihara said.

## Andrew Carnegie Goes Digital

■ Cindy Carroll

Andrew Carnegie's first job earned him \$1.20 a week as a bobbin boy, but through hard work he became one of the richest men in the world and gave away millions. Photographs show him from venues as broad as relaxing at home in his yard to greeting crowds from the back of a train. His writings explain his thoughts on philanthropy and founding the technical school that is now Carnegie Mellon. For those interested in learning more about the university's founding father, his projects and libraries, Carnegie Mellon University Libraries and the Carnegie Library of Pittsburgh have made the quest easier.

The two institutions have launched a joint digital archive of Andrew Carnegie materials on the Web at http://diva.library.cmu.edu/carnegie/.

from archival collections that are physically located in two of the earliest-established Carnegie institutions: the Carnegie Library of Pittsburgh, founded in 1895, and the University Libraries of Carnegie Mellon, which began as the Carnegie Technical Schools some 110 years ago. The online archive brings together Carnegie Mellon's Andrew Carnegie and James Bertram collections; the Carnegie Library of Pittsburgh's Andrew Carnegie Benefaction Photographic Collection; the Carnegie Correspondence Collection (pertaining to the building of the Main Library and the original museum buildings, and their development and growth); and the Margaret Barclay Wilson Collection of pamphlets and other writings penned by Carnegie, including Gospel of Wealth, Simplified Spelling Reform and



Andrew Carnegie says goodbye to Pittsburgh on Oct. 29, 1914.

breadth of Carnegie's experiences, activities and interests. Universally recognized as a captain of the iron, steel and railroad industries, he firmly believed that it was the duty of the wealthy to help others better themselves and to benefit society.

Carnegie held strong opinions and he did not hesitate to write, speak and contribute to support a variety of causes throughout his life. He opined in print for the first time at the age of 17, arguing in the Pittsburgh Dispatch that he and fellow telegraph messengers be permitted to use a local lending library, which, at the time, was open only to young men in mechanical and other trades. That successful argument launched a lifetime of writing on social issues and politics, and the benefits that he gained from free access to Col. James Anderson's Mechanics' and Apprentices' Library spurred unparalleled philanthropy toward libraries and education.

Carnegie's own experience taught him that education was the key to success and his primary philanthropic passion was to give all people free access to information. He established thousands of public libraries and educational institutions worldwide.

"Of his innumerable benefactions, Carnegie Institute of Technology differed from all the others in two interesting particulars — it was, and is, the only college to perpetuate his name, and it is the only one of his foundations the products of which are not books, or scientific formulae, or awards for heroism, or pensions for teachers, or proposals for peace, but generation after generation of young men and women competently trained to play their part in the world of work," wrote Arthur W. Tarbell in The Story of Carnegie Tech. A later chapter describes the five visits that Carnegie made to Tech between 1907 and 1914, and the mutually rewarding relationship that Tech students of that era enjoyed with "Uncle Andy." This history comes alive in the documents of the Andrew Carnegie Collection.

The Andrew Carnegie Collection is available for free on the Carnegie Mellon site (http://diva.library.cmu. edu/carnegie/) and in the Access Pennsylvania Digital Repository, www.accesspadr.org/cdm4/browse. php?CISOROOT=%2Facamu-acarc. Detailed metadata for each item enhances searching and browsing. The Access PA site includes thumbnail graphics that further facilitate browsing this fascinating collection.

ONLINE: VIEW A SLIDESHOW OF IMAGES FROM THE COLLECTION AT THE PIPER+, HTTP://BIT.LY/CMUPIPER.

Integrating five collections in one searchable full text resource, the site facilitates a digital repository of Andrew Carnegie materials held by institutions worldwide.

"The Andrew Carnegie Collection not only includes interesting and plentiful source materials but represents a great opportunity to make a whole that truly is more than the sum of its parts," said Gabrielle V. Michalek, head of the Archives and Digital Library Initiatives Department on campus. "We look forward to getting feedback from users. We especially hope to hear from other Carnegie archivists who might wish to join us."

The inaugural Andrew Carnegie Collection contains digitized content

the League of Peace. Bertram served as Carnegie's confidential secretary from 1897 to 1914, and was secretary for the Carnegie Corporation of New York from 1911 until 1934. Wilson was Carnegie's biographer and a trusted family friend.

Users of the integrated Andrew
Carnegie Collection will be able to access
photographs; listen to Carnegie speak;
study his correspondence; read his writings and other documents that detail his
provision of libraries, church organs,
scholarships and the work of many
Carnegie institutions; and, most notably
for many of us, learn about his founding
and subsequent visits to Carnegie Tech.
The collection reveals the surprising

## Online Tutoring Program Helps City Science Students

■ Jocelyn Duffy

A high school student can't figure out how to solve a physics problem. He asks his tutor for help, and the tutor begins to diagram possible solutions on a white board, guiding the student through the problem. While this may sound like a standard classroom tutoring session, Carnegie Mellon students have introduced a new twist, doing all of this online as part of a new initiative in the TutorNet program.

"TutorNet is an example of one of many ways Carnegie Mellon is helping students in the Pittsburgh Public Schools," said the program's founder Newell Washburn, assistant professor of chemistry and bioengineering. TutorNet offers traditional in-class tutoring, as well as the new online program, providing a physical and virtual network between high school and college students.

In the Web-based program, the high school students log in from their

home computer to a session hosted by a Carnegie Mellon tutor. They are able to ask the tutor questions using an online chat program. Tutors use a tablet computer to diagram problems on an online white board and continue to use the chat program to discuss problem-solving methods with the student. The online program was developed in collaboration with the Technology Consulting in the Community Program (TCinC), which fosters partnerships between non-profit organizations, schools, government agencies and Carnegie Mellon students.

"We feel that TutorNet not only helps high school students to master their coursework in science but it also gets them to start thinking about majoring in science and pursuing careers in science. The program gives them role models in Carnegie Mellon student tutors. They think 'that could be me in a few years,'" Washburn said.

TutorNet began in 2006 as a traditional tutoring program. Carnegie Mellon students traveled to Schenley High School to help the students learn and get excited about science.

While the tutors still travel to Schenley, now located at the Reizenstein

participate in the program.

Washburn said many Carnegie Mellon students come to the university having been active volunteers in high school, and they are eager to continue this volunteerism while in college. TutorNet allows them to share their



ONLINE: WWW.CMU.EDU/TUTORNET

campus, to offer in-person tutoring in biology, chemistry and physics after school, the new program makes tutoring available to students who might not be available at the end of the school day due to other commitments, like extracurricular activities or part-time jobs. It also allows Carnegie Mellon students who might not be available to tutor during afterschool hours an opportunity to knowledge and experiences while learning the responsibility of becoming a role model.

"In high school, I was a tutor and I received tutoring. TutorNet is a good way to give back and show how much I appreciated what I received," said Bernard Parker, a sophomore chemistry major who is active in the TutorNet program. "It's an opportunity to help students."

## Tech Transfer Center Employs Social Media To Cast Wider Net

#### ■ Bruce Gerson

Robert Wooldridge and his staff at the Center for Technology Transfer and Enterprise Creation (CTTEC) are among the best in the country at helping university inventors become entrepreneurs. With 50 spin-off companies and more than \$30 million in royalties for the university over the last five years, they have the track record to prove it. But they want more.

of social media and marketing consultant Ari Lightman, (TPR'00), who has created and now is assisting in implementing a social media strategy.

"The decision was made early on that if we were going to invest in social media outlets, we needed to direct people to a brand new Web site with updated content focused on interactive digital media highlighting a lot of the very cool innovative technologies coming out of

In addition to its Twitter account, which is attracting followers from industry and venture capital firms, the CTTEC also co-manages a group called "Carnegie Mellon Startups" on the business-tobusiness social network LinkedIn.

"We're tracking visitations, session times and page views to make sure we're providing the right kind of content to the right audience. You can then mine the data for intelligence. You can find out what people are interested in and then provide them with a mechanism for them to connect back to the university," Lightman said.

The CTTEC staff, which includes Associate Director Tara Branstad, Senior Manager Anita Jesionowski and Manager Reed McManigle, is also producing podcasts with university inventors that will be available on their Web site. The podcasts, being produced by Riccardo Schulz in the School of Music's recording studio, will feature some of the many new technologies being developed at Carnegie Mellon.

Lightman said a podcast was recently produced about a new spinoff called

"Zipano Technologies" with founding faculty member Norman Sadeh, director of the Mobile Commerce Lab, and Ziv Baum (TPR'09). He said the company creates "smart" location-sharing technology that gives you control over who can access your location at any given time. Robotics Professor Illah Nourbakhsh and his GigaPan panoramic digital camera technology will be featured in an upcoming podcast.

Videos may also be featured on the Web site in the future.

"We have the strategy, we have the tools, so 2010 is the year we push it all out," Wooldridge said of his social media initiative. "If at the end of the year, through our expansion and use of social media tools, we connected a startup with \$500,000 from an 'angel' in Silicon Valley, and there were three to five positions filled at startups through our network, and five alums were connected with startups to serve on their boards of directors or advisory boards, I would say that would be a very successful 2010.

"It's all about the power of networks," he said.



ONLINE: WWW.CMU.EDU/SOCIAL-MEDIA -A DIRECTORY OF UNIVERSITY SOCIAL MEDIA CHANNELS.

"It's really all about the power of networks for any tech transfer office and any business," said Wooldridge, who oversees the CTTEC team and all functions of the licensing process. "There are many startups and new technologies coming out of the university from about 2,000 different university inventors, including faculty, Ph.D. students and staff, and there are only four of us here in the office. We need help."

Today, the CTTEC is working to get that help by building a wider network to attract interested alums, venture capitalists, advisers, engineers, and potential chief executive and chief technology officers for its rapidly growing something of incredible value." list of clients. They're weaving and casting that net through social media.

"We're looking for additional resources to help in the evaluation process, to get companies rolling and then also to sustain, maintain and grow the company," Wooldridge said.

Wooldridge has secured the talents

Carnegie Mellon," said Lightman, an adjunct professor who is teaching a social media project class at the Heinz College this semester. "So, we revised everything."

Visitors directed to the new site (www.cmu.edu/cttec/) through a tweet about a new technology on the CTTEC Twitter page (twitter.com/CMU\_CTTEC) can join the CTTEC community.

"We don't want to barrage people with quarterly news information. We want to establish a dialogue," Lightman said. "A lot of folks join because they want to track certain developments in CTTEC. But some want to join to deliver

Lightman said that value could come in the form of an entrepreneur looking for a new technology in which to invest. "That's something we'll pursue," he said.

Lightman said some community members may be looking to fill positions in their companies and some are looking to join a startup.

#### **W**ANT TO LEARN HOW TO USE SOCIAL MEDIA TO HELP YOUR DEPARTMENT?

#### L&D Session: Social Networking Made Simple

David Holzemer will lead a session to demystify

social networking such as Facebook, Twitter, LinkedIn,

Blogger and others.

WHAT: Register at www.cmu.edu/hr/learning/ Noon-1:30 p.m., Thursday, Feb. 25 WHERE: McKenna/Peter/Wright Room, UC

## News Briefs

#### **Nominations Requested for Barbara Lazarus Award**

The award was created in 2004 to celebrate the spirit and legacy of Barbara Lazarus, the late associate provost for academic affairs, teacher, scholar and mentor. Starting this year, the award will be presented at the Education Awards in April every other year. Past winners include Nancy Monda, business manager for the Modern Languages Department, and Sharon Burks, associate head of the Computer Science Department and assistant dean of the School of

The nominee must be an individual or a group (faculty or staff) who has demonstrated extraordinary leadership in making significant and far-reaching contributions to mentoring graduate students and junior faculty at Carnegie Mellon.

Nominators should submit a cover page with the title "Barbara Lazarus Award for Culture and Climate;" the nominee's name, e-mail address and campus phone number; and their own contact information, signature and date. Please also include a letter, no more than two pages, citing specific cases as examples of impact and up to 10 letters of support from students, staff and faculty. Packets should be addressed to Everett Tademy, Whitfield Hall 200.

#### **Changes To Occur for** Reporting Student, **Employee Data**

Beginning in Fall 2010, the Department of Education is changing the format for mandatory reporting of student and employee race and ethnicity data by colleges and universities. While the current format limits reporting to one race per individual, the new format allows reporting of multiple races and ethnicities per individual. During the spring semester, the offices of the Registrar, Institutional Research and Analysis, and Human Resources will be asking all community members to update their race and ethnicity information using a very quick process through Student Information Online or HR Connection. Details and instructions will be e-mailed to everyone when the

#### In Severe Weather, Check TV, Web for Cancellations

In the event of severe weather, members of the university community should tune in to KDKA-TV, WTAE-TV or WPXI-TV for official university announcements regarding delays, cancellation of classes and/or office closings. Announcements also will be posted on the Web (www. cmu.edu) and Web Portal (http://my.cmu.edu), and recorded on the Carnegie Mellon main

switchboard (412-268-2000). Unless otherwise noted, the cancellation of classes will include evening classes at the Heinz College and the Tepper School of Business. Unless an official notification is issued, the university will maintain normal operations

While Carnegie Mellon may cancel classes or close offices due to severe weather, the university cannot close operations because it provides residential space and services for thousands of students on campus. Therefore, essential employees from several departments, including Facilities Management Services. University Police, and Housing and Dining Services, may be required to report for work. Supervisors should identify and brief essential personnel regarding their responsibilities during severe weather.

#### Volunteers Needed for **Annual Fund**

Carnegie Mellon's Faculty & Staff Annual Fund Committee is looking for a few good volunteers. Committee members work as advocates on behalf of the university and foster relationships with other faculty and staff members to enhance the effectiveness of the university's fundraising efforts. The group meets several times a year. To learn more about volunteering, contact Carole Panno in the Office of Annual Giving at cp1g@andrew.cmu.edu or visit

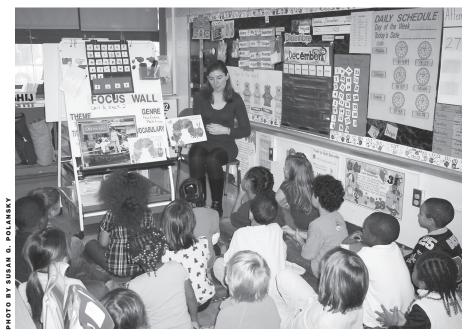


www.cmu.edu/campaign/involved/faculty.html.

An additional way to demonstrate your pride and commitment is by making a gift to the Faculty & Staff Annual Fund. By investing in Carnegie Mellon with a gift of any size, you are underwriting the continued strength and vitality of our students, faculty and programs. You are also participating in the philanthropic history on which this institution was founded more than 100 years ago. The size of your gift is not nearly as important as the act of giving itself. Even better — you can designate your gift to an area on campus of particular interest to you! (Direct questions to Panno.)

With the pay schedule change, gift payments made through payroll deduction change slightly for employees with bi-weekly pay. Gifts will now be taken out twice in two equal amounts that total the original gift amount. For months when you receive more than two paychecks, you will still only have two deductions taken out for your gift that month, not three. Payroll deduction forms are available at www. cmu.edu/campaign/ways/fy-09\_payrollrom.pdf.

## Hungry for Learning



Part of Nicole Rappin's (BHA'11) final project for Tutoring for Community Outreach was to help teach colors, days of the week and numbers in Spanish to kindergarten students at Pittsburgh Phillips Elementary School. Here, she's reading "La Oruga Muy Hambrienta" (The Very Hungry Caterpillar) to the students. Modern Language students tutor in the Pittsburgh Public Schools at all grade levels during the semester. Languages range from Spanish to German and Japanese. For more on outreach activities, visit http://ml.hss.cmu.edu/ML/outreach.html.

## Tademy Keeps Opportunities Knocking

CONTINUED FROM PAGE TWO

I see the "Guiding Principle" helping us to move beyond those who are already on board, so to speak, into the hinterlands to share with people how they might benefit from diversity.

#### On a personal note, what's kept you here for 35 years?

This place is unique. This is a place where you can actually pick up the phone and talk to President Cohon. This is a place where people roll their sleeves up. This is a place where I've met Richard Dunlap, Toby Davis, Dick Cyert, Robert Mehrabian, Barbara Smith, Marilyn Taft-Thomas, Joe Trotter. This is a place where you can get to know folks and see the difference that you make.

## STUDENTS TO DESIGN THEATER AT NYC'S WTC SITE



Hal Hayes, adjunct associate professor of architecture, and architecture students Ben Lehrer, Silvia Park, Ranjit Korah and Eddie Wong traveled to New York City to present designs for the planned 1,000-seat Joyce Theater's International Center for Dance. This key component of the cultural complex planned for the World Trade Center site was the subject of their design studio this past fall. The Joyce Theater Foundation annually hosts more than 340 performances for audiences in excess of 135,000. The students presented their designs to the executive and programming directors of the Joyce Theater, the city architect from the office of the Deputy Mayor for Economic Development in charge of the project, the City Cultural Affairs director, the Port Authority's project manager for the WTC site and representatives from HOK, an architecture firm responsible for the subterranean part of the project.

#### Barth Receives Humboldt Award

Alison Barth, associate professor of biological sciences, has received a Friedrich Wilhelm Bessel Research Award from Germany's Alexander von Humboldt Foundation. The award will allow Barth to spend seven months in Germany to work on research projects with neuroscientist Michael Brecht at the Bernstein Center for Computational Neuroscience in

The Bessel Research Award is given to scientists and scholars who have completed their doctorates less than 12 years ago and who are expected to continue to produce cutting-edge achievements that will have a seminal influence on their discipline beyond their immediate field of work.

Barth studies plasticity in neurons, specifically how experience transforms the properties of neurons to encode memory. She developed and patented the first tool to locate and characterize neurons activated by experience in a living animal — a transgenic mouse called the "fosGFP" mouse. The mice, which have been licensed to every major pharmaceutical company in the United States and distributed to more than 80 researchers worldwide, have facilitated research into a wide range of neurological diseases and in the study of learning and memory.

#### NREC Machine Inspects, Sorts Strawberry Plants

Researchers at the National Robotics Engineering Center (NREC) have developed a plant-sorting machine that uses computer vision and machine learning to inspect and grade harvested strawberry plants and then mechanically sort them by quality — tasks that until now could only be done manually.

In a successful field test this fall, the machine classified and sorted harvested plants more consistently and faster than workers could, with a comparable error rate.

During a 10-day field test, a prototype system sorted more than 75,000 strawberry plants. On average, it sorted 5,000 plants per hour, several times faster than human sorting. The NREC hopes to achieve sorting rates of 20,000-30,000 plants per hour with the final system. While the sorter's overall error rate was close to that of human workers, it was more consistent in inspecting and sorting plants.

#### Study Shows Research Participants Link Pay, Risk

A new study finds that paid research participants naturally, and often incorrectly, assume that low-paying studies are low risk. Carnegie Mellon's Alex John London and George Loewenstein joined others to investigate how payment levels affect the anticipation of risk for

the estimated 15 million Americans recruited annually to take part in clinical trials.

Loewenstein, the Herbert A. Simon Professor of Economics and Psychology, says the findings, which were published by the journal Social Science and Medicine, contradict some of the common guidelines used for establishing participation incentives.

"Most organizations that do research prohibit participation payments that substantially exceed compensation for time and expenses," he said. "The fear is that people will be overly tempted by high payments to take excessive risks. Our research challenges this convention. It suggests that people assume that studies that don't pay much aren't risky."

## Foundations Grant \$4 Million to OLI

Carnegie Mellon has been granted \$4 million from the Bill & Melinda Gates Foundation, the Lumina Foundation for Education and The William and Flora Hewlett Foundation to launch the Community College Open Learning Initiative. This new project builds on the success of the university's innovative Open Learning Initiative (OLI), which offers courses in a variety of subjects, including French, statistics, chemistry and visual communication design.

In collaboration with community college faculty across the country, Carnegie Mellon

will blend the best of learning science and technology to create virtual learning environments that support teachers and accelerate students' academic progress. The grants will be dedicated to creating a partnership with these faculty members to create open "gate keeper" courses to help more community college students achieve success.

#### **Ericsson Fellow Named**

Ericsson Silicon Valley has named Ph.D. student Senaka Buthpitiya a fellow at Carnegie Mellon's Silicon Valley campus, in association with the CyLab Mobility Research Center. Buthpitiya will receive this appointment for the academic year and will focus on mobile

"It is an honor to be awarded a fellowship from Ericsson, a technological giant in my research area," said Buthpitiya, whose research area is in the development of a new context toolkit for mobile devices and telecom infrastructure. "Having access to the knowledge, experience, and resources of such an organization will help me immensely with my research."

As Ericsson fellow, Buthpitiya will have access to the Ericsson research project groups and its lab. He will work under the mentorship of a corporate advisor who will guide his research through the industry's best practices.

## LECTURE SPOTLIGHT: EINSTEIN'S CAMPUS VISIT RECALLED ON 75TH ANNIVERSARY

#### ■ Heidi Opdyke

When Albert Einstein visited the Carnegie Institute of Technology in December of 1934 to deliver the Josiah Willard Gibbs Lecture of the American Mathematical Society (AMS), a thousand people mobbed the theater trying to get in to see the famous physicist derive his equation  $E = mc^2$  on two small, badly lit portable blackboards.

David Topper, a Pittsburgh native and professor at the University of Winnipeg, will explain the historical context of Einstein's trip to Pittsburgh using photographs and documents in a University Lecture Series program, "When Einstein Came to Town," at 4:30 p.m., Monday, Feb. 15 in Kresge Recital Hall, the same theater where Einstein spoke. The event is sponsored by the Office of the Vice Provost for Education.

The trip was one of Einstein's first public appearances since moving to the United States in 1933. Topper's lecture will focus on several photographs taken before and during Einstein's lecture.

"Three pictures are of him standing in front of a blackboard; they were posed shots prior to the lecture," Topper said. "The fourth was taken during the lecture from the balcony in the theater; it's blurry, and there's a story behind that image.

"Specifically it is, as far as I know, the only image of Einstein with a blackboard containing his famous equation. But there is a catch, as will be seen."

Topper has written a number of publications on Einstein. A 2007 paper, which is part of a series in progress by Topper and fellow Winnipeg Professor Dwight Vincent, discusses the scientist's visit to Pittsburgh during the peak of his popularity. Topper and Vincent are focusing on images of Einstein and blackboards.

"I like blackboards," Topper said. "In my teaching I still like to draw diagrams and talk at the same time, instead of always presenting only prepared images. I believe the whole process of speaking while drawing has pedagogical value. There is much spontaneity missing with PowerPoint presentations. Nonetheless, I will be presenting my lecture in Pittsburgh using PowerPoint, since I'm sure you do not want to set-up that two-blackboard contraption they hobbled together for Einstein 75 years ago. Interestingly, for Einstein's 1934 lecture, he wrote-out all the equations on the two blackboards before the lecture, and hence one may call it a PowerPoint presentation for the time."

The 1934 lecture was limited to a crowd of about 400. Half of the audience were AMS members. About 100 tickets went to selected individuals and another 100 distributed randomly. Police restrained the hundreds more who tried to get into the space.

"There were reports of scalpers asking \$50 for a ticket," Topper wrote. "Our

WHO: DAVID TOPPER, PROFESSOR OF HISTORY AT THE

University of Winnipeg

WHAT: "WHEN EINSTEIN CAME TO TOWN"
WHEN: 4:30 P.M., MONDAY, FEB. 15

WHERE: KRESGE RECITAL HALL, COLLEGE OF FINE ARTS

guess is that this crowd was probably the largest attendance of all time for the Gibbs Lectures, which continue today."

He also will discuss some of the other aspects of Einstein's visit.

"There's a lot of little Pittsburgh things that I dug up that didn't go into the published paper," Topper said. "Despite the proliferation of publications on Einstein, there's always something new to find with him. He's such an interesting person."

For the past 40 years, Topper has taught, among other classes, history courses on science, art and Einstein.

"I was just enamored with him as a kid growing up," Topper said. "His name was in neon lights, and I discovered later in life that one could approach him historically as well as scientifically."

Topper's background includes a bachelor's degree in physics from Duquesne University, master's degrees in physics and the history of science from Case Institute of Technology and Case Western Reserve University in Cleveland, and a Ph.D. in history of science from Case Western. He is the



DAVID TOPPER

author of "Quirky Sides of Scientists:
True Tales of Ingenuity and Error from
Physics and Astronomy." He was the
recipient of two teaching awards: the
Robson Memorial Award for Excellence
in Teaching at the University of Winnipeg (1981), and Canada's national 3M
Teaching Fellowship (1987). Since 1982
he has been an international co-editor
and, from 2005, honorary editor of the
journal Leonardo. His recent publications are on matters involving problem
solving and creativity related to the
work of Galileo, Newton and Einstein.

## Pizza and Politics

### OPEN DISCUSSION FORUM POPULAR IN QATAR

■Andrea L. Zrimsek

Engaging in open dialogue about current events, world news and campus hot topics may be commonplace in the Unites States. But in Qatar, an Islamic-ruled country that does not quite have full freedom of speech, it's still a relatively new idea.

Countries in the Middle East are not democratic, thus challenging government, rules or authority figures is simply not done. People do not typically voice their opinions in an open forum with people of differing viewpoints. Nor are there regular forums to

foster such types of discussions.

To encourage undergraduate

students to explore intellectual discussions, Student Affairs at Carnegie Mellon University in Qatar created Pizza and Politics in 2007. Held several times each semester, the lunchtime discussions are one of the most well attended activities on campus. Students, faculty and staff participate.

"In a university setting, students are exposed to lots of different ideas.

Pizza and Politics is a good platform for students to learn and understand each others' perspectives," said Jill Duffy, student development coordinator at Carnegie Mellon Qatar.

With a student body comprised of 34 nationalities, and faculty and staff from upwards of 25 countries, understanding what makes everyone different is extremely valuable. Duffy said students tend to come to discussions with a very black-and-white perspective. After listening to all points, many students realize most issues are not so cut and dry.

"Pizza and Politics gives our students a chance to understand the intricacy of

diversity. It's not just about religion, nationality or skin color. There are multiple layers of complexity and many things in each person's life that influence their way of seeing things. These events allows students to see many other sides and they also encourage critical thinking," Duffy said.

Topics for Pizza and Politics have ranged from Arab women in the media

and free expression to the 2008 U.S. Presidential election and Doha's bachelor ban, in which men, mostly immigrant laborers, unaccompanied by women are not allowed in malls and public places.

A facilitator from Student Affairs usually kicks off the discussion by offering key points relevant to the topic of the day. From there, everyone is encouraged to begin to offer opinion

to begin to offer opinions, ask questions or share experiences.

Student Affairs tries to keep a balance between global, local and campus issues. According to Duffy, staff typically select topics, however students do suggest ideas on occasion. One revolving issue with students is a campus dress code. Currently, there is no dress code on campus other than that suggested in Qatar, which is to dress modestly keeping shoulders and knees covered. However, more conservative students



LUNCHTIME DISCUSSIONS HAVE BEEN AN OPPORTUNITY FOR STUDENTS, FACULTY AND STAFF TO DISCUSS A VARI-ETY OF CURRENT EVENTS AND CAMPUS TOPICS.

often push for more stringent clothing restrictions.

Between 40-70 people attend each Pizza and Politics session, which lasts an hour. And while a few come solely for the free pizza, the majority of people come to engage in the discussion or listen to what is being said. Four events were held in the fall 2009 term, and two are on tap for this spring.