

# thePIPE 2/09 Issue

# Carnegie Mellon

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### Policy Shapers

### **Professors** ADVISE OBAMA **T**HROUGH **A**PPOINTMENTS

■ Heidi Opdyke

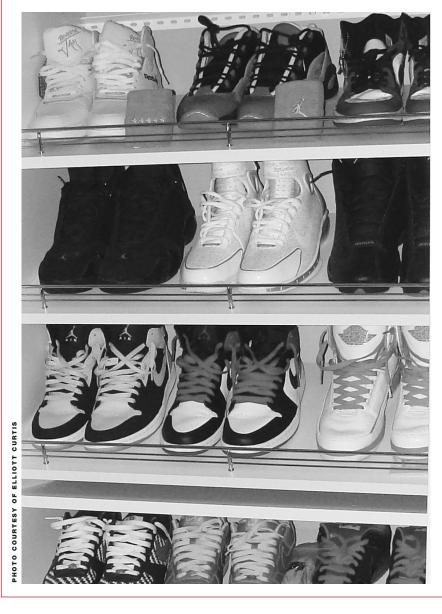
During his inauguration speech, President Barack Obama promised to "transform our schools and colleges and universities to meet the demands of a new age." Through the many advisory appointments held by Carnegie Mellon faculty, the university can help meet this goal.

"Carnegie Mellon is well positioned to support the administration," said Kiron Skinner, who serves as a member of the Chief of Naval Operations Executive Panel and the National Security Education Board. "We have a unique set of interdisciplinary projects and research activities here that can be used if called upon for national readiness."

CONTINUED ON PAGE FOUR

# It's a Shoe In

### STUDENTS' LOVE OF SNEAKERS SPAWNS 2ND STUCO COURSE



Abby Houck

You only get one chance to make a first impression. And if you're meeting Carnegie Mellon seniors Jesse Chorng and Elliott Curtis, it's best to lace up your most impressive footwear.

This pair met at orientation four years ago and immediately noticed each other's vintage shoes — a sure sign they were both "sneakerheads." During that first year at college, Chorng and Curtis started VitaminThick, an urban clothing line featuring screen-printed T-shirts and custom-painted Nike Air-Force Ones.

Last spring, the students turned their passion into an official Carnegie Mellon course — Sneakerology 101. The course — now in its second year — explores sneaker culture, from its 1970s roots in New York City street ball to shoe design, manufacturing, child labor issues and marketing. The course encourages students to purchase shoes that express creativity and individuality.

"It's not about getting the newest sneaker, the most sought-after sneaker," Curtis said. "It's about having a connection with your shoes."

Sneakerology 101 is part of Carnegie Mellon's Student College

CONTINUED ON PAGE SIX

# Focus the Nation, RecycleMania Highlight Green Practices

While it's still white outside, students are thinking green through two campus initiatives to raise awareness on climate change and recycling.

The first was Focus The Nation from Feb. 4-6. Student group Sustainable Earth coordinated teams of students, faculty and industry professionals who held activities at Carnegie Mellon on the topic of "Global Warming Solutions for the First 100 Days" of the nation's new administration.

Vanessa Schweizer, vice president of Sustainable Earth, was the lead coordinator for the university's events.

"I came from a conservative

household, so whenever my dad would think of our household energy consumption, he was really thinking about our money. Simply put, saving energy saves you money, but people often data, which will then be ranked on a lose sight of the big picture," Schweizer said. "Instead of thinking about your energy costs only once a month when you pay your bill or whenever you fill up your car, consider what your energy costs are like over the course of a year."

#### A Friendly Competition: RecycleMania

A longer-term project that began Jan. 18 is RecyleMania, a 10-week competition for U.S. and Canadian colleges and

universities to promote waste reduction activities to campus communities. Through March 28, more than 400 schools will report recycling and trash number of scales. To learn more about RecycleMania and view the weekly

results and rankings go to www. recyclemania.org/

Carnegie Mellon has been active in this for six years. This year, however, the university's effort includes composting by Parkhurst Dining Services, which last CONTINUED ON PAGE TEN

# Acker Wins Public Health Award For Her Work To Help Drug Users

#### ■ Heidi Opdyke

Associate History Professor Caroline Acker recently received the 2008 Benjamin Rush Individual Public Health Award from the Allegheny County Medical Society (ACMS). Established in 1947, this award honors a layperson, who has made an outstanding contribution to the betterment, health and welfare of citizens in Allegheny County. Acker is the co-founder and board president of Prevention Point Pittsburgh (PPP), a nonprofit organization dedicated to providing health services to injection drug users. PPP sponsors a needle exchange program aimed at reducing HIV/AIDS, Hepatitis C and other blood-borne infections in injection drug users.

Acker was presented with the Rush Award Jan. 31 at the ACMS gala at the Westin Convention Center Hotel in Pittsburgh. Attending the ceremony were her two grown children from California. "That was just an extra, unexpected pleasure associated with the award," she

The Piper recently caught up with Acker to talk about her work and Prevention Point Pittsburgh.

#### What led you to want to increase prevention services for drug users?

I have been interested in issues of drug



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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 Student Affairs, Carnegie Mellon University, 5000 Forbes Avenue, Pittsburgh, PA 15213, telephone 412-268-2057.

Carnegie Mellon University nuisilishes an appulate approach

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 412-268-2323. The security report is available through the World Wide Web at www.cmu.edu/police/.

Obtain general information about Carnegie Mellon University by calling 412-268-2000.

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use and drug addiction; it was the subject of my dissertation research as a historian of medicine. I was interested in sexually transmitted diseases. In the 1890s, as in the 1990s, there was a time of concern regarding the intersection of drug use, mostly alcoholism, and the spread of syphilis and gonorrhea. The intersection of drugs and sexually transmitted diseases is kind of a history that I've become interested in.

In California, where I was in graduate school in the late '80s and early '90s, there was a bill that would have allowed individual health departments to establish needle exchanges. It was the first time that I had heard about the concept. It just made complete sense from a public health perspective. In other words, you have an infectious disease, you know how it spreads from one body to another, and then you interrupt that transmission. The then-governor of California, Pete Wilson, vetoed the bill. I then expected to be one of a group of people who lived in the county who would rise up in righteousness and start a needle exchange. It turned out I was the only one. But I got support from some folks in other counties, and I started out simply walking the streets with a backpack full of syringes and condoms and so forth. Ultimately that developed into a county-funded program that still exists.

When I came to Pittsburgh in 1994 to start my job at Carnegie Mellon I went looking for the needle exchange, and there wasn't one. But I kept asking people and I was introduced to a man named James Crow who had been trying to get one started and together we started PPP in 1995.

#### How many needle exchanges are there in the United States?

I don't have the current figures, but as little as a few years ago, it was in the range of 130 or so. The legal status is a real patchwork. We live in Pennsylvania where there are exactly two legal needle exchanges — one in Philadelphia and one here. Both are legal because local authorities declared a state of emergency to suspend enforcement of the paraphernalia laws in order to allow needle exchange.

Across the border in New York you are in an entirely different territory. The state of New York has legalized needle exchange. The state of New York funds needle exchange. So across the country there are places where it still struggles and there are places where it's become absolutely a normal part of public health departments.

#### What are some of PPP's current projects?

First it was just about getting the supplies out there. Then in the late '90s we added prevention case management, having a staff person who works with

our participants in meeting other needs that they have, including getting into drug treatment. Needle exchange turns out to be a really important source of referrals for drug treatment.

Three years ago or so we added a drug overdose prevention project. In recent years, overdose deaths in Allegheny County outnumbered automobile deaths and homicides combined. Our program has had one of the country's innovative programs in overdose death prevention by being one of the first to do trainings in jail. We started overdose prevention training in the Allegheny County jail with the support of the then-warden Calvin Lightfoot.

We were also an early adopter of Narcan distribution. Narcan is technically called an opiate antagonist, and it reverses an overdose to an opiate drug like heroin. It's a safe drug, it has no side effects and it does not make anybody high. It is just an outstanding tool in the treating of overdoses.

For the future, we're eager to expand our services. We meet a tiny, tiny part of the need in Allegheny County, and we'd like to expand.

#### What is your research focus?

In my book, "Creating the American Junkie," I examine the lives of individual drug users in the 1910s and 1920s and tried to understand the context in which they were using drugs. I found that my work with injection drug users gave me a lot of understanding that I was able to use and helped interpret what I was see-



ASSOCIATE HISTORY PROFESSOR CAROLINE ACKER RECEIVED THE 2008 BENJAMIN RUSH INDIVIDUAL PUBLIC HEALTH AWARD.

of a movement called harm reduction, which takes a different kind of an approach to thinking about drug use and about drug users. It takes seriously that drug users are human beings with aspirations, with families, with a range of roles in their lives. And examining the impact of drug policy in the past might help us better devise drug policies that both help us get better control over problematic drug use and do a better job in helping people who become involved in drugs and want to change.

#### As a society, what lessons do we need to learn from looking at medical history?

Our society needs to think carefully about our readiness to embrace the latest and new technologies. Certainly there have been dramatic and important

FOR MORE INFORMATION OR TO DONATE TO PREVENTION POINT PITTSBURGH, VISIT WWW.PPPGH.ORG, OR CONTACT EXECUTIVE DIRECTOR RENEE COX AT RENEE@PPPGH.ORG, 412-247-3404 or 907 West Street, Fifth floor, Pittsburgh PA 15221.

ing in historical records about morphine and heroin users. I became so interested in the history of the hypodermic syringe that I am working on a history of it as a medical instrument and as an instrument for the non-medical use of drugs. I'm also working on a book on how the needle exchange emerged in three cities, Pittsburgh, Philadelphia and San Francisco.

#### What's needed in the future for drug policies?

Historically, I think we need to look very hard at the consequences of drug policy on people's lives. American drug policy has most heavily relied on enforcement and incarceration. The emphasis on treatment has been much slower. The needle exchange has grown up in the context

breakthroughs in our understanding of disease and how to treat it. But I think our emphasis has been too strongly on research and the development of expensive new technologies and not enough on the humanistic care of patients.

If we study the careers and lives, for example, of physicians in the late 19th and early 20th century, at a time when the bacteriological revolution was transforming what was understood about disease, leaders in American medicine were embracing new technologies in modern medicine. But, at the same time, they were very concerned that something critical in the doctor/ patient relationship would be lost if medicine was reduced to the diagnosis on the basis of laboratory findings.

### Green and Gold

### CARNEGIE MELLON CAFÉ EARNS LEED GOLD RATING

#### ■ Bruce Gerson

The Carnegie Mellon Café is golden because it's green. So says the U.S. Green Building Council, which recently awarded the renovated dining facility a Gold Leadership in Energy and Environmental Design (LEED) certificate for its energy efficiency, sustainability and use of green design principles.

Formerly known as the Highlander Cafeteria, renovations to the café on the east side of Resnik House began in fall 2005 and were completed in summer 2006. Greg George, an architect with Pfaffmann + Associates PC, the Pittsburgh firm that designed the café renovations, said a variety of green design strategies contributed to the Gold level LEED rating. These range from the use of sustainable materials, improving the interior air quality, making energy efficiency enhancements, providing greater access to daylight and views, and upgrading the building's overall systems.

"We took the existing infrastructure and made it more environmentally beneficial," George said.

For example, the lighting system on the second floor of the café, which houses exercise equipment such as bicycles and weight machines, employs occupancy sensors that turn the lights on and off depending on whether anyone is there. Similarly, first-floor sensors regulate the levels of artificial lighting by measuring the amount of daylight entering the room. The lights dim when there's plenty of natural light and con-

versely become brighter as night falls.

The heating and cooling systems also have become "smarter." Rather than an entire space being controlled by a single thermostat, the air can now be tempered in multiple areas or "zones" as needed. George said this provides efficiencies where a single space, such as the octagonal main café area, has multiple exposures to the sun. In a similar way, new carbon dioxide sensors have been added that sense the number of occupants in a room and can provide more fresh air to the space as necessary.

George said a highlight of the 9,400-square-foot cafeteria makeover was the removal of the original five-foot wide brick piers within the atrium on the first floor, which has "enhanced the social quality of the space."

"You now have a 360-degree view outside and better interior sight lines," he said. This also allowed the natural daylight entering the multi-story atrium to better serve the space.

The Carnegie Mellon Café is the seventh university structure to be certified by the U.S. Green Building Council and the second to earn a Gold rating. It joins Stever House and Henderson House residence halls, the Posner Center, the Collaborative Innovation Center, and 300 and 407 South Craig Street. Other projects awaiting certification are the Intelligent Workplace, the Doherty Hall Phase II renovation, the 2005 Solar Decathlon House near Donner Hall and the School of Computer Science Complex now under construction.



Renovations to the former Highlander Cafeteria include a number of green design strategies, such as a smart lighting system that measures natural light levels in a room.

### COLOR THEM GREEN

Carnegie Mellon Café — LEED Gold 2008

407 South Craig - LEED Silver 2007

300 South Craig - LEED Silver 2007

Collaborative Innovation Center — LEED Gold Core and Shell 2006

**The Posner Center** — LEED Bronze 2005

Henderson House — LEED Silver 2004

Stever House — LEED Silver 2003

# piperrivia

**Congratulations to the December Trivia winners** Chris Conte, Kristi Ries and Tracy Farbacher for knowing Stephen and Scott Schwartz assisted with the recent "Bubble Boy" reading.

**For this month's Piper Trivia question,** the Carnegie Mellon Café recently earned a Gold Leadership in Energy and Environmental Design (LEED) certificate. Six other structures on campus have been certified by the U.S. Green Building Council, including Stever House, the country's first "green" residence hall. For whom was Stever House named? And what was its original name?

The Piper staff will give away a \$25 gift card to the bookstore to the first four people who can correctly identify the building's original name and for whom it was renamed. Send your answers to bg02@andrew.cmu.edu with "February Trivia" in the subject line. The winners' names will be published in the following issue. Previous winners are ineligible.

## 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 and WPXI-TV for official university announcements regarding delays, cancellation of classes and/or office closings. Unless otherwise noted, the cancellation of classes will include evening classes at the Heinz College and the Tepper

School of Business. Announcements will be recorded on the Carnegie Mellon main switchboard (412-268-2000) and posted on the Web at www.cmu. edu, Web Portal (my.cmu.edu) and the official.cmu-news and cmu.misc.news bulletin boards. To subscribe to the boards, visit www.cmu.edu/computing/doc/email/webmail/bboards.html.

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, Housing and Dining Services, may be required to report for work. Supervisors should identify and brief essential personnel regarding their responsibilities during severe weather.

### Policy Shapers Continued from page one

Skinner is one of several faculty members who shared some of their words of wisdom, which they will continue to promote during various meetings in Washington, D.C.

Baruch Fischhoff chairs the Food and Drug Administration's Risk and Communication Advisory Committee and is a member of the Department of Homeland Security Science and Technology Advisory Committee and the Environmental Protection Agency (EPA) Scientific Advisory Board. The Howard Heinz Professor in Social and Decision Sciences and Engineering and Public Policy wants Obama to rely on citizens in the effort of change.

"I think the American people are up to it, and they want to participate in rebuilding our country," Fischhoff said.

M. Granger Morgan chairs the EPA's Science Advisory Board. The Lord Chair Professor in Engineering said that carbon dioxide emissions also need to be addressed.

"To stabilize concentrations, we're going to have to reduce emissions by something like 80 percent or more," Morgan said. "There's no single technology or strategy that can achieve that, it's going to take a portfolio of pretty much everything we've got."

Others concentrated on energy. University Professor Lester Lave, a member of the EPA's Science Advisory Board since 1986, recommends a higher gas tax that could be paid for by removing the payroll tax on the first \$15,000 to \$20,000 worth of income for individuals.

"We can't just talk in pious terms about greater energy efficiency," said Lave, the Harry B. and James H. Higgins Professor of Economics. "We need higher [gas] prices, but we can also take our tax revenue and circulate it in the economy so it winds up doing net good."

Obama's comment of returning science to a more prominent role resonates with David J. Farber, a chief technologist at the Federal Communications Commission from 2000 to 2001. The Distinguished Career Professor of Computer Science and Public Policy said more money should be spent on university research not only to advance science and technology today



STUDENTS, STAFF AND FACULTY GATHERED IN McCONOMY AUDITORIUM TO WATCH THE INAUGURATION OF PRESIDENT BARACK OBAMA.

Marvin Goodfriend, professor of economics and chairman of the Gailliot Center for Public Policy, served as

successful that the federal funding of the interstate highway system was in the 1950s in laying the groundwork for a strong national economy," Goodfriend said. "And there are many, many ways in which the federal government can use its low borrowing costs today to repair and improve the nation's infrastructure for the next few decades."

Skinner said the most important advice she has for the president is that the United States will play an important role in the world during the 21st Century, and there is an expectation for government to act morally.

"There's no other nation on Earth where people expect such exceptional behavior," Skinner said. "But I deeply suspect he already knows that this is the American Century."

### TO VIEW VIDEOTAPED INTERVIEWS WITH PROFESSORS, VISIT WWW.CMU.EDU/NEWS/NEWS-NOTES/PIPER/INDEX.SHTML

but in the future.

"It's critical that you have the best teaching for the next generation of scientists and engineers. If you don't have that, you will not be able to maintain the U.S. position in the field,"

Farber also said that it is time to take a fresh look at the Internet and start with "a clean slate."

"The Internet is getting old," Farber said. "It was designed as a research experiment, and it has suffered from all sort of first generation types of design."

senior vice president and policy advisor and director of research for the Federal Reserve Bank of Richmond from 1993 through 2005.

He urged the new president to be a "free-trader" by supporting open trade with as many countries as possible. He also praised Obama's pursuit of infrastructure projects.

"I think that's an excellent idea. For anyone who drives around the United States understands that the country's bridges, roads and tunnels are in need of repair, and we all understand how

# **Upcoming Events**

### **University Lecture Series**

"Taking over: how the hip-hop generation changed the world"

Jeff Chang, hip-hop author and performer 4:30 p.m., Tuesday, Feb. 10 Adamson Wing, Baker Hall 136A

#### "How can the new administration succeed in Afghanistan?'

Abdulkader Sinno, assistant professor of political science and Middle Eastern studies, Indiana University, Bloomington Co-sponsored by the Muslim Students Association and the Arab Student Organization

5 p.m., Thursday, Feb. 12 Adamson Wing, 136A Baker Hall

#### "Chasing Justice"

Kerry Max Cook, author 4:30 p.m., Thursday, Feb. 19 Adamson Wing, 136A Baker Hall

#### "Creating Healthy Neighborhoods by Connecting Farmers, Institutions and Consumers"

David Eson, Isidore Foods Monday, F Adamson Wing, 136A Baker Hall

#### Journeys: "My Journey with America"

Daniel Resnick, Emeritus Professor of History; director, Center for the History of the University 4:30 p.m., Thursday, March 19 Adamson Wing, 136A Baker Hall

#### "Technologies of Surveillance: Tracking People as Economic Subjects"

Kenneth Lipartito, Florida International University 4:30 p.m., Monday, March 30 Adamson Wing, 136A Baker Hall

#### **Additional Lectures**

#### "The Virtues of Realism?: Gender in/and the Postcolonial Novel"

Sangeeta Ray, associate professor of English, University of Maryland, College Park 4:30 p.m., Tuesday, Feb. 10 Margaret Morrison Carnegie Hall (MMCH) 103,

#### **School of Architecture Lecture Series**

Sarah Dunn, Urban Lab, Archeworks Co-sponsored by the Heinz Architectural Center 6:30 p.m., Monday, Feb. 16 Carnegie Museum of Art Theater

#### **Heinz College Lecture**

Bill Ivev. director of the Curb Center for Art. Enterprise and Public Policy, Vanderbilt University, speaks on cultural policy and builds a case for a Cultural Bill of Rights.

Co-sponsored by the Center for Arts Management and Technology & the Heinz College. Noon, Wednesday, Feb. 11 Hamburg Hall 1000

### Afro-Brazilian Civil Rights Movements, 1945-present"

George Reid Andrews, Distinguished Professor of History, University of Pittsburgh 5 p.m., Friday, Feb. 20 Steinberg Auditorium, Baker Hall

#### Global Problems, Global Solutions Conference

Friday-Saturday, Feb. 20-21 www.cmu.edu/uls/images/global-invitation.12.pdf

#### "Doing business in a way that is good for people, the planet and profits"

James E. Rogers, president, CEO and chairman of the board, Duke Energy Co-sponsored by the Steinbrenner Institute, the

Department of Civil & Environmental Engineering and The Shaw Group 4:30 p.m., Thursday, Feb. 26

Adamson Wing, 136A Baker Hall

#### **School of Architecture Lecture Series** Fernando Romero, LAR/Laboratory of **Architecture**

Sponsored by the Heinz Architectural Center 6:30 p.m., Friday, Feb. 27 Carnegie Museum of Art Theater

#### **Realisms: The Humanities Center Lectures** "The Antinomies of Realism"

Fredric Jameson, William A. Lane, Jr., Professor of Comparative Literature and Romance Studies, Duke University, and Schaffer Visiting Scholar, Carnegie Mellon

4:30 p.m., Monday, March 16 MMCH 103, Breed Hall

#### Steinbrenner Institute Environmental **Distinguished Lecture Series**

"Achieving Sustainability: The Tipping Point" William A. Wallace, Wallace Futures Group 4:30 p.m., Tuesday, March 24 Adamson Wing, 136A Baker Hall

#### **Realisms: The Humanities Center Lectures** "An Almost Unknown Masterpiece: Cecco del Caravaggio's The Resurrection"

Michael Fried, J. R. Herbert Boone Chair in the Humanities, Johns Hopkins University 5 p.m., Tuesday, March 31 Adamson Wing, 136A Baker Hall

#### **Special Events**

#### Carnegie Mellon Leadership Symposium "Leading Today and Tomorrow"

Thursday, March 12 University Center

Learning and Development presents the Carnegie Mellon Leadership Symposium, a free, all-day event providing leaders and managers with the strategies, information and resources to achieve their organizational goals. A keynote address will be given by Denise Rousseau, the H. J. Heinz II Professor of Organization Behavior.

Register at www.cmu.edu/hr/learning/leadership/ symposium/index.html

### **Dickson Prize Lecture**

#### "The Mysteries of Algorithms"

engineering and computer science at the University of California, Berkeley, and research scientist at the International Computer Science Institute in

4:30 p.m., Wednesday, March 25 McConomy Auditorium

## Welcome to Bug Camp!

### CARNEGIE MELLON KICKS OFF BETA TEST OF ALICE 3

#### Anne Watzman

Some three dozen educators leaned expectantly over their computers in a Wean Hall cluster one January afternoon as Computer Science Associate Teaching Professor Wanda Dann stood up to greet

"Welcome to bug camp!" she exclaimed, to kick off a two-day workshop that marked the start of the long-awaited beta test of Alice 3. Dann directs the Alice project, in coordination with lead developer Dennis Cosgrove. Today, she said, approximately 15 percent of U.S. colleges and universities use Alice to teach computer programming.

The innovative programming environment teaches students to program Alice and Java software while having fun creating 3D animations, stories and video games. It features a drag-and-drop interface and includes easy-to-program objects and scenes. It was the key research project of the late Randy Pausch, Carnegie Mellon's dynamic professor of computer science, human-computer interaction and design who devoted 10 years of his career to its development. It is open source software, provided free to the public by Carnegie Mellon.

Alice 3 incorporates characters, animated motions and other art assets from "The Sims," TM one of the best selling PC video games of all time. The Sims assets, donated to the university by Electronic Arts Inc., transform the more rudimentary characters and animations of Alice 2.0, currently in use, into sophisticated content that any gamer can recognize. The challenge is to integrate the sophisticated and diverse Sims with the original Alice characters and enable students to make the leap from programming in Alice to programming in Java.

The educators attending the workshop from colleges, universities and high schools in the United States, Canada and the United Kingdom and nearly 1,000 students will use the beta version of Alice 3 from January through May. They'll report bugs to the Alice team to help prepare the system for public release. The bug reporting will go through a Web site on Sun



ALICE PROJECT DIRECTOR WANDA DANN AND DON SLATER, COMPUTER SCIENCE ASSOCIATE TEACHING PROFESSOR, WORK WITH Stacey Armstrong of Texas during a beta-test program of Alice 3.

Microsystems' server. Sun will provide technical assistance in globalizing the software to provide versions suitable for use in other countries and cultures. The Alice team is using NetBeans IDE, Sun's interactive developmental environment, to enable students to program in Java from Alice.

"Sun has offered us much technical expertise to make Alice 3 a reality," Dann said. "We hope there'll be a public release in early summer but it's dependent on bug

In addition to small colleges and high schools, Alice users include faculty at large institutions like the universities of Alabama, Arkansas, Mississippi and North Carolina. Some, like Duke University, use it for introductory programs for students not majoring in computer science or for outreach to high schools in their local

"I love the 'head fake' that is Alice," enthused Leslie Spivey, associate professor at Edison Community College in Piqua, Ohio, and an Alice user since 2005. "Many of my beginning students do not realize that they are generating program code until the third or fourth week of class.

They think they are just learning about programming structures. They are just building worlds and having fun. It takes a lot of the scariness away from the idea of coding a program."

Mel Hoffert, a teacher at Sycamore High School in suburban Cincinnati, has been teaching an entry-level animation course with Alice for the past five years and said the computer animation class has grown from 100 students to 225.

"We've been using it from the moment we saw it," Hoffert said. "Alice has been a winner for us. We love her."

Gordon Eccleston teaches at the Robert Gordon University School of Computing in Aberdeen in northeastern Scotland and attended the workshop by videoconference. He noted that in addition to using Alice in all of their introductory computing courses, they also deliver Alice workshops to students between the ages of 12 and 16 and have been promoting the use of Alice as a teaching language/ environment in the high schools in northeast Scotland.

Eugene Lemon teaches at Ralph J. Bunche High School, a continuing school for dropouts in Oakland, Calif., where

Alice is the only elective. "Our students love Alice," he said. "They come to school because they like the class." He described a student who hadn't been to school for two years because he was in jail suddenly having a perfect attendance record because he was so intrigued with Alice.

"In the three or four years that we've been using Alice, we've seen our students change," Lemon said. "Many have been touched by Randy Pausch and his last lecture." One student wrote to Lemon, "We learn Alice, and the dream lives on in us."

Dann was pleased with the results of the workshop.

"We're off to a terrific start," she said. "The beta testers brought about a dozen different kinds of laptops with at least four different operating systems to the workshop. We were thrilled that we were able to install Alice 3 on all the laptops."

# New Smoking Policy Being Phased In

#### Bruce Gerson

The new smoking policy on campus, which permits smoking only in outdoor designated areas, will be phased in over the next several months, according to an email announcement from Anita Barkin, director of Student Health Services, and Madelyn Miller, director of Environmental Health &

This is to allow more time for a diverse, 18-member, university-wide committee to research and recommend potential designated smoking zones and to allow feedback on the potential sites from the university community.

"Once the committee completes a proposed list of designated smoking areas, a campus-wide survey created by Institutional Research & Analysis will be conducted to gather your feedback and input on which areas would

work best," Barkin and Miller wrote in their email to the campus community.

In the meantime, smokers are being asked not to smoke in several smoke-free zones. These zones include the Cut, the Hamerschlag Mall, the Children's School and tennis courts, the Cyert Center and its adjacent playground, and areas around athletic facilities, including Gesling Stadium and the intramural field. No

penalties or fines will be assessed during the phase-in period.

Until the official designated smoking areas are established, smoking will be permitted in accordance with the university's previous policy. Outside of the above-mentioned smoke-free zones, smoking will be permitted 20 feet away from a building entrance or air intake vent. Cigarette butts should be properly disposed of in approved containers.

# Cultural Awareness Filters Through Curriculum

#### ■ Amy Pavlak

Carnegie Mellon is a global university with programs around the world, an international campus community, and an undergraduate curriculum that fosters worldly thinking.

In support of Carnegie Mellon's global curriculum, eight new courses were recently added to help students compete in an international marketplace. At least one of the global classes is offered by each of the university's six undergraduate colleges. The initiative was funded by Carnegie Mellon President Jared L. Cohon through his Academic Leadership Award from the Carnegie Corporation.

In the Mellon College of Science (MCS) Amy L. Burkert, assistant dean for the Health Professions Program and Educational Initiatives, and Eric Grotzinger, associate dean of Undergraduate Affairs, are teaching Biotechnology Impacting Our Selves, Societies and Sphere. Called BIOS3 for short, the course is designed to help students gain an appreciation of the social and cultural contexts that are involved in HIV/AIDS and other international health issues and the impact they can have at individual, societal and global levels. Burkert and Grotzinger wanted the course to expose non-science students, from art majors to computer science majors, to meaningful science as well as to provide context for science majors.

To do this, they designed BIOS3 with some basic principles in mind: teach students

the core science, help them make sense of their new knowledge using a global perspective and encourage them to take personal action. Students are trained to apply this framework to tackle global biotechnology issues, including stem cell research, genetically modified foods, the emerging tuberculosis epidemic and HIV/AIDS.

Burkert and Grotzinger not only bring in guest speakers from local volunteer organizations, like Prevention Point Pittsburgh and the Pittsburgh AIDS Task Force, but they enable students to speak firsthand with doctors working with HIV+ patients in Zambia and Kenya via SKYPE, an Internet-based phone. Interacting with doctors working in Africa and in Pittsburgh and patients living with HIV is a profound and eye-opening experience for many students.

"Seeing statistics in an article isn't anything compared with someone telling you about their experiences. It reminds you of why you are studying what you're studying," says Akshay Goel, a computer science major and pre-med student.

"The BIOS3 course is a true model of teaching a course for science literacy with integrity to the scientific principles and concepts, but also framing these in the context of societal and global issues so that students learn deeply and develop appreciation for the implications of science in society," said Indira Nair, vice provost for education.

### Additional Global Courses

Working in tandem with the Global Faculty Group, the faculty members who teach the courses will assess their progress and revise the curriculum as needed. Other global courses being offered include:

- Global Systems and Project Management an information systems course in which students from Pittsburgh work collaboratively with students from Singapore Management University
- Disastrous Encounters a history course examining natural and man-made disasters through time and taught at Carnegie Mellon's Pittsburgh and Qatar campuses
- Health, Development and Human Rights a philosophy course in which students consider the ethics of global poverty and its implications for health and development
- Technology for Developing Communities a course taught by computer science, robotics and history faculty, examining how technology can combat global poverty
- International Collaborative Construction Management an engineering course that studies the life cycle of construction projects around the world
- **Mapping Urbanism** a course taught by architecture faculty that examines global cities and urban culture
- Finance Course a business course in development, that will be tied to the Tepper School's Management Game class managing simulated companies and involving students from international universities, including one in Mexico

# It's a Shoe In CONTINUED FROM PAGE ONE

(StuCo), a program established in 2001 that gives students an opportunity to teach subjects not currently part of the university's offerings. A student committee and faculty advisory board review course proposals and interview potential student instructors. Both instructors and students enrolled in StuCo courses receive credit toward graduation requirements on a pass/fail basis.

Chorng and Curtis recognized that an unconventional course topic called for creative approaches to evaluate student progress. For the Sneakerology 101 midterm, the instructors challenged students to design their ideal sneakers. The projects reflected the diversity of students' interests, skills and majors. For example, a design major created a futuristic Batman-themed sneaker with advanced graphic design software. A creative writing major made a free-hand drawing of a sneaker distinguished by a thick patch of hair hanging from the toe box. The "Beard Series" and its fictional history sent the class into fits of laughter. "It was based on famous writers like Ernest Hemingway and others with beards," Chorng explained.

Chorng and Curtis chose hip-hop legend Bobbito Garcia's "Where'd You Get Those?" as the textbook for Sneakerology 101. Garcia, former host of ESPN's "It's The Shoes," has interviewed NBA superstars, hip-hop artists

and sneaker collectors around the world. The author will discuss his book as part of the University Lecture Series at 4:30 p.m., Monday, April 6 in the Adamson Wing, 136A Baker Hall.

In lieu of a final exam, Chorng and Curtis called on the entire class to organize Kicksburgh, a community celebration of sneaker culture. Five Pittsburgh-area collectors exhibited their top 10 pairs of sneakers, local boutiques sold vintage shoes and a DJ played hip-hop music as breakdancers and graffiti artists showcased their talents. Attendees were asked to donate a pair of used sneakers. The class sent donations to Soles4Souls, a nonprofit organization that provides shoes to victims of natural disasters in third-world countries.



ELLIOTT CURTIS AND JESSE CHORNG TURNED THEIR LOVE OF SNEAKERS INTO A STU-DENT COLLEGE (STUCO) CLASS WITH A TREMENDOUS FOLLOWING IN ITS SECOND YEAR.

Sneakerology 101 in its quarterly Education Life section.

# ONLINE: WWW.CMU.EDU/NEWS/NEWS-NOTES/PIPER/MULTIMEDIA/SNEAKEROLOGY.MOV

Kicksburgh 2009 will be Wednesday, April 15 in Skibo Gymnasium.

Buzz about Sneakerology 101 began to extend beyond Carnegie Mellon's campus in early March 2008. Urban culture blog hypebeast posted a story about the class, and it was subsequently picked up by hundreds of bloggers. In addition, popular sneaker enthusiast magazines like SLAM and BOUNCE reported on Chorng and Curtis's creation. Most recently, The New York Times featured

The popularity of Sneakerology 101 also led to unique internship opportunities for the two students. Chorng, an economics major, completed a business development internship for VICE magazine and its online video channel, VBS. TV. He plans to put his creativity and communication skills to work following graduation as he pursues a master's degree in tangible media and interactive design.

Curtis, a social and decision sciences major and guard for the men's basketball team, served as Reebok's Heritage Archive intern last summer.

He organized vintage clothing and footwear displays from 1986 to 1994 and interacted with the company's product design, development and marketing teams. The Reebok internship and his work with a Boston-area children's shoe company solidified his career aspirations. "I'd love to get into product and brand management, hopefully fashion or footwear related," he said.

Wherever their career paths take them, this duo has left a footprint on Carnegie Mellon.

## When They Talk, People Listen

### Tepper Economists Sought For Comment During Economic Turmoil

The cruciverbalists that design The New York Times crossword puzzle tapped into a timely theme for their edition on Saturday, Nov. 21. In the midst of the financial crisis surrounding Wall Street, puzzle solvers were challenged with four clues that completed "a quote by economist Allan Meltzer." Put together, a statement was formed that has become quite familiar within the Carnegie Mellon community, "Capitalism without failure is like religion without sin."

It's not every day that an economist gets quoted in a crossword puzzle. However, it is not surprising to find the words and wisdom of Meltzer, the Allan H. Meltzer University Professor of political economy at the Tepper School of Business, within the pages of The New York Times, or any other major publication.

Since the inception of the current financial crisis, the faculty at the Tepper School has increasingly become a "go to" resource for information and analy-

sis. During the fourth-quarter of 2008, economists from the Tepper School were quoted in the news regarding the financial crisis at a rate of nearly one new story per day. When you consider the number of times these stories have been reprinted and rebroadcast by multiple publications and media outlets throughout North America and the World, the exposure is impressive.

This level of media attention stands to reason — faculty members at Tepper have a long tradition of providing council to presidential administrations, federal agencies, elected officials and financial entities worldwide. The real-world experience that they bring to the table is a benefit to Tepper students.

the book "The History of the Federal Reserve, Part I," Marvin Goodfriend served as vice president and policy advisor for the Federal Reserve Bank of Richmond (1993-2005). The professor of economics Harry B. and James H. Higgins

and chairman of the Gailliot Center for Public Policy is included in numerous newspapers and magazine stories, and Goodfriend has made several appearances on Bloomberg Television and Fox Business News.

Chester Spatt, the Kenneth B. and Pamela R. Dunn Professor of Finance and director of the Center for Financial Markets, served as chief economist and director of economic analysis for the U.S. Securities and Exchange Commission from 2004 to 2007. He has provided insight for numerous articles on economic policy and concepts such as "short selling" for newspapers ranging from the Los Angeles Times to the Wall Street Journal. He also has provided insight for In addition to Meltzer, who authored Pittsburgh radio news audiences with live appearances on KDKA-TV and KQV Newsradio.

> In 2008, Time magazine quoted University Professor Lester Lave, the

Professor of Economics, director of the Carnegie Mellon Green Design Initiative and co-director of the Carnegie Mellon Electricity Industry Center, regarding the Pittsburgh region and how the region's history has put it in a better position do deal with the current recession and housing market disruption. The story generated additional news coverage on broadcast TV and radio throughout the tri-state area.

In all, nearly a dozen of the faculty have been quoted by or have participated in live interviews with major media outlets regarding the current financial crisis. This trend is expected to continue as the debate over bailouts and bankruptcies continues to rage and journalists, as well as policy makers, look to the Tepper School faculty as a valued source for information.

To borrow a phrase from EF Hutton, Co., a former brokerage firm, "When Tepper economists talk, people listen."

### WHAT THEY SAID IN THE NEWS

■ Mark Burd

Tepper economists have been in the spotlight as national and regional news agencies try to explain to the public what has been happening to the economy in recent months. Here's just a sampling of what some of the professors have said:

- · Allan Meltzer, professor of economics and a former adviser to President Ronald Reagan, told Reuters "The more we send money to prevent failures, the more we'll have future failures," in a Jan. 16 article.
- Marvin Goodfriend, professor of economics and chairman of the Gailliot Center for Public Policy, told the Wall Street Journal on Dec. 10 that that Fed-issued bonds could put the Fed at odds with the Treasury at a time when it is already issuing mountains of debt itself. "These would be very close cousins to existing Treasury bills. They would be competing in the same market to federal debt."
- On Nov. 25, the Los Angeles Times quoted University Professor Lester Lave, the Harry B
- and James H. Higgins Professor of Economics, as saying that lower gas prices could make SUVs more attractive to vehicle buyers. "Americans might go back to their old habits," Lave said, "and we would be shooting ourselves not in the foot but a little higher up."
- · Peter Boatwright, associate professor of marketing, was quoted in a Pittsburgh Post-Gazette article on Nov. 11 that people should spend judiciously. "If nobody spends, we're only going to get worse," he said.

# **Executive Compensation**

### WOMEN GET BETTER PAY, SAME PROMOTION RATES AS MEN, STUDY SAYS

Mark Burd

Female executives who break through the "glass ceiling" in corporate America are rewarded with higher overall compensation than their male counterparts and benefit from the same rate of promotion, according to new research from the Tepper School of Business. However, the study found that the number of females in top executive positions remains a mere fraction of business leadership overall largely due to the tendency of women to leave the workforce earlier than men.

The findings, gleaned from tracking the career paths and compensation of more than 16,000 executives over a 14-year period, identified that female executives actually earned a total of about \$100,000 more per year than men of the same age, educational background and job experience. On average, total compensation for all of the executives — about 5 percent of whom were female — was about \$2.46 million, including nearly \$461,000 in salary and bonuses. The average age was 53 and approximately 23 percent of the executives studied — men and women held an MBA.

However, women within the overall sample were, on average, younger and less experienced than males at the executive level and more prevalent at the lower executive levels. For example, only 2 percent of executives at the CEO, president or chairman level were female, while women represented nearly 6 percent of CFOs or vice presidents.

"Women aren't climbing as many rungs on the executive ladder because they are more likely than males to retire earlier or switch careers," said Robert A. Miller, professor of economics and strategy at the Tepper School and one of the study's co-authors. "Although women may still be likely to face gender discrimination through unpleasant work environments or tougher, less rewarding assignments, our results find that there does appear to be equal pay and equal opportunity for women if they stay in the workforce and get to the executive level."

#### A snapshot of executive pay and career progression

Miller and his colleagues compiled comprehensive data representing 60 different job titles at more than 1,800 companies between 1992 and 2006 using Standard & Poor's ExecuComp database and Marquis' "Who's Who." Grouping the executives into seven different ranks based on titles, the study analyzed trends in promotion rates and total compensation — including salary, bonus, stock options, retirement schemes and other information — for both men and women.

The study indicates that job turnover and tenure as well as education are better overall indicators of compensation rather than gender. In terms of compensation, an executive's history of career turnover and the presence of an MBA or other advanced degree tend to have the greatest impact. In fact, Ph.D. and MBA graduates earned a total of about \$300,000 more per year than executives with only an undergraduate degree and a total of \$686,793 more per year than those with just a professional certification.

### Honored Fellows

### FACULTY MEMBERS RECEIVE NATIONAL RECOGNITION

WATTS HUMPHREY

ROB RUTENBAR

■ Jocelyn Duffy

#### **Three Named ACM Fellows**

Watts Humphrey, Rob Rutenbar and Tuomas Sandholm have been named fellows of the Association for Computing Machinery (ACM) in recognition of their exceptional contributions to the computing field. An ACM Fellow is the organization's most prestigious member category. It recognizes the top 1 percent of ACM members for their outstanding accomplishments in computing and information technology and/or outstanding service to ACM and the larger computing community.

Humphrey, a fellow of the Software Engineering Institute (SEI), was honored for his contributions to the software engineering process. Since joining the SEI in 1987, Humphrey has developed the basis for the Capability Maturity Model for Software (SW-CMM), which became the generally accepted standard for assessing and improving the software processes worldwide. The SW-CMM led to the Capability Maturity Model Integration (CMMI) Product Suite, which was released in 2002.

Rutenbar, a professor of electrical and computer engineering, was cited for his contributions to computer-aided design tools for mixed-signal integrated circuits.

Sandholm, a computer science professor, was named a fellow for his contributions to combinatorial auctions and mechanism design. Sandholm focuses his research on electronic commerce, and he has developed the fastest algorithms for matching supply and demand, which can now be expressed in significantly more detail than before. He is the founder, chairman and chief scientist of CombineNet, a company that helps Fortune 1000 organizations save money and time on procurement.



Tuomas Sandholm

The ACM is the world's largest educational and scientific computing society. ACM will formally recognize the 2008 fellows at its annual Awards Banquet on June 27 in San Diego.

# Nancy Monda Wins Barbara Lazarus Award

■ Bruce Gerson

President Jared L. Cohon presented Nancy Monda, business manager for the Modern Languages Department, with the 2009-10 Barbara Lazarus Award for Culture and Climate during Martin Luther King Jr. Day activities Monday, Jan. 19.

"Colleagues adore Nancy, who recognizes and embraces the value of diversity in the department, college and university," Cohon said.

"I'm truly humbled and honored to receive this award," Monda said. "I thank Dick Tucker (the Paul Mellon University Professor of Modern Languages) for nominating me and I thank him and Susan Polansky (teaching professor of Hispanic studies and head of Modern Languages) for the climate and culture they've established in the

department."

The award, named in memory of the late Associate Provost for Academic Affairs and founder of the university's Undergraduate Research Program, is presented annually to an individual or group that has demonstrated extraordinary leadership and made substantial contributions to improving the culture and climate in the university community, with an emphasis on graduate students and junior faculty.

A member of the university community from 1984 to 2003, Lazarus was a nationally and internationally known scholar and activist, who worked tirelessly for the equity of women in the workplace, and the well-being of graduate students and junior faculty at Carnegie Mellon.

#### Four Elected AAAS Fellows

Four Carnegie Mellon faculty members have been awarded the distinction of Fellow by the American Association for the Advancement of Science (AAAS), an honor bestowed upon AAAS members by their peers. This year, 486 members have been awarded this honor in recognition of their distinguished efforts to advance science or its applications.

Tom M. Mitchell, the Fredkin Professor of Artificial Intelligence and Machine Learning and head of the School of Computer Science's Machine Learning Department, was named a



TOM M. MITCHELL



Eswaran Subrahamanian



MICHAEL WIDOM



John Woolford

fellow for his distinguished contributions to machine learning.

Eswaran Subrahmanian, research professor in the Carnegie Institute of Technology's Institute for Complex Engineered Systems, was cited for his distinguished contributions to design theory and methodology and its implications for design support systems, and for bridging theory, practice and education in engineering design.

Michael Widom, professor of physics at the Mellon College of Science (MCS), was recognized for elucidating the thermodynamic and dynamic features of complex metallic alloys, especially quasicrystals, by developing and applying theoretical paradigms that are sophisticated and innovative.

John L. Woolford, professor and acting head of the Department of Biological Sciences at MCS, was elected a fellow for identifying the roles of ribosomal proteins and trans-acting factors in the eukaryotic ribosome assembly pathway, using genetic and proteomic approaches in yeast.

The new fellows will be presented with an official certificate and a gold and blue (representing science and engineering, respectively) rosette pin Feb. 14, at the 2009 AAAS Annual Meeting in Chicago.

## The Mentalists



LESLEY STAHL OF "60 MINUTES" VISITED CAMPUS LAST FALL TO REPORT ON THE "THOUGHT IDENTIFICATION" EXPERIMENTS OF COMPUTER SCIENTIST TOM M. MITCHELL AND COGNITIVE NEUROSCIENTIST MARCEL JUST. THE CBS-TV NEWS PROGRAM AIRED A SEGMENT IN JANUARY REGARDING THEIR WORK TO DEVELOP COMPUTER ALGORITHMS THAT CAN INTERPRET BRAIN SCANS PRODUCED BY FUNCTIONAL MAGNETIC RESONANCE IMAGING, OR FMRI. FOR A VIDEO OF THE REPORT AND AN EXTENDED STORY, SEE WWW.CBSNEWS.COM/VIDEO/WATCH/?ID=4691784.

### **Smart Crowd**

### PREDICTION MARKET SITE BETS ON OPENING DAY FOR SCS COMPLEX

#### ■ Byron Spice

Now that the windows are being installed in the School of Computer Science Complex, the thoughts of SCS students, faculty and staff have turned to when they will move into their new quarters.

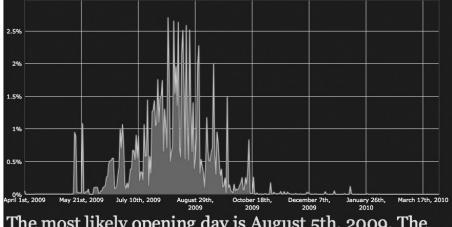
The official completion date is sometime in July and the new Gates Center for Computer Science and Hillman Center for Future-Generation Technologies are supposed to be occupied in the fall semester.

But some people who pass by the construction site each day, or peer at it from their office windows, apparently are a bit more skeptical. Their collective judgment, as of mid-January, is that the chances are less than 50-50 that the buildings will be open in time for fall classes.

At least, that's the prognostication derived from the Gates Hillman Prediction Market, http://whenwillwemove.com/, an online prediction market created by Abe Othman, a Ph.D. student in computer science.

The opening date considered most likely by the market can fluctuate wildly — in the course of one day of trading in mid-October, it shifted from Sept. 1, 2009, to Sept. 26, 2009 — but the possibility of opening prior to fall semester generally has hovered around the 50 percent mark.

Prediction markets attempt to tap the wisdom of crowds by allowing people to place bets on particular events or



The most likely opening day is August 5th, 2009. The median opening day is August 12th, 2009.

A SCREENSHOT OF THE GATES HILLMAN PREDICTION MARKET SHOWS THE MOST LIKELY OPENING DAY AS AUG. 5, 2009 AND THE MEDIAN OPENING DAY AS AUG. 12, 2009. THE PROJECT IS BASED ON THE IDEA THAT THE WISDOM OF CROWDS CAN PREDICT PARTICULAR EVENTS OR IDEAS. THE DATES CAN FLUCTUATE DAILY.

ideas. Parimutual betting on horse races, where the odds vary depending on betting behavior, is one example. A famous prediction market is the Iowa Electronic Markets, which has accurately predicted the outcome of presidential elections with just a 1.33 percent error rate in vote total since 1988; on Nov. 3, the market predicted a 53.5/46.5 percentage split favoring Barack Obama, compared to the actual 52.7/46.0 split.

"There is a lot of wisdom embedded in those bets," Othman said.

Some businesses, including Yahoo!, Google and Microsoft, have begun using prediction markets to allow their employees to weigh in on proposed products or services.

Othman's faculty adviser, Tuomas

Sandholm, studies electronic commerce, automated negotiation and game theory, among other topics. Anticipating that prediction markets would be a growing part of his own research, Othman decided to create his own prediction market.

"I could have created a market about anything, but the opening of the SCS Complex is something that everyone cares about," Othman said. Certainly it's something that he thinks about as he walks past the construction site each day enroute to his windowless office in the bowels of Wean Hall.

The market is free and open to participation by anyone with an Andrew ID. Thus far about 170 people have registered. Each initially received 20 tickets

that could be used to bet on the most likely opening date – or against dates considered unlikely. Yahoo! kicked in for some iPods and other prizes for those holding the most tickets once a temporary occupancy permit is finally issued. If the buildings receive occupancy permits on different days, the market will be determined by the date when the majority of the Gates Center opens.

Traditional prediction markets yield odds on a particular event or idea. The Gates Hillman market differs by giving a complete distribution of the probabilities the market assigns to opening on any day of the year. This provides greater insight into the dynamics of the market and what bets are driving the prediction.

Guy Blelloch, professor of computer science and head of the SCS building committee, said the market's skepticism of the official schedule is probably healthy. Erection of the steel, for instance, took about a month longer than planned. "But I've been impressed by how well (the construction crews) have done," he said, noting a plan is in place to get the work back on schedule. "I'm confident it will be complete before the prediction market says."

Some psychology may be at work in the market, Othman said. For someone with a lousy office who is waiting to move into the SCS Complex, placing a bet on a very late opening — say, in 2010 — might be a hedge against risk. The payoff of an accurate prediction would be great, he noted. "But if it opens earlier, you would be happy to lose."

# Goalkeeper's Artwork Featured at the NCAA Convention

#### ■ Mark Fisher

Women's soccer sophomore goalkeeper Anya Rosen was one of 12 student-athletes from Division I, II and III institutions around the country to be featured in the 2009 Winter edition of Champion Magazine published by the NCAA. The sophomore's creative artwork also was displayed in an art show this week at the NCAA national convention. The show was held in Washington, D.C. in January.

"Anya has accomplished a lot on the field in her two years at Carnegie Mellon," commented Head Soccer Coach Sue Willard. "I am equally or even more proud of what she has done off the field in the art studio because of the challenges she has overcome to succeed in both areas."

Rosen, a fine arts major, is a two-time All-University Athletic Association (UAA) member who earned UAA Rookie of the Year honors a year ago. Rosen recorded all eight Tartan shutouts in 2008 and had a 0.78 goals against average.

Read about Anya's feature artwork and artist statement as well as the other student-athletes that are featured online at www.NCAAChampion Magazine.com.



IWORK COURTES

Anya Rosen was one of 12 student-athletes from Division I, II and III institutions around the country to be featured in the 2009 Winter edition of Champion Magazine published by the NCAA.

### Lockheed Partners With ETC To Enhance Engineering Concepts



Don Marinelli, executive producer of the ENTERTAINMENT TECHNOLOGY CENTER (ETC), THIRD FROM LEFT, RECEIVES A CHECK FOR \$640,000 FROM LOCKHEED MARTIN INFORMATION SYSTEMS & GLOBAL Services to fund research and development PROJECTS FOR THE WORLDWIDE SECURITY COMPANY. Surrounding Marinelli, from Left, are Lockheed Martin employees Nicole O'Neill, R&D leader IN IMMERSIVE TECHNOLOGIES; DAVID PUSTAI, LABS PROGRAM MANAGER; JAMES F. BURKE JR., CHIEF technology officer; and Nafiz Karabudak and MARK H. WELLS OF CORPORATE RESEARCH. LOCKHEED Martin wants to use immersive technologies DEVELOPED AT THE ETC, SUCH AS ITS SYNTHETIC INTERVIEW TECHNOLOGY, TO ENHANCE OMEGA, A SUITE OF ENTERPRISE PLANNING, MANAGEMENT, OPTIMIZATION AND INTEGRATION CAPABILITIES THAT HELP ENGINEERS REACT TO A VAST ARRAY OF SECURITY CHALLENGES. ALSO ATTENDING THE CHECK PRESENTATION WERE ETC STUDENTS, MANY OF WHOM WILL WORK ON LOCKHEED

### Recyclemania Highlights Green Practices CONTINUED FROM PAGE FOUR

fall began composting waste from daily prep activities as well as post-consumer waste from Schatz dining hall and catering services.

Chris Baierbach, general manager for Parkhurst, said there has been

food composting process by collecting 400 to 800 pounds of food daily. Waste is picked up six days a week at the University Center by AgRecycle and is taken to their food composting facility in Washington County. The composted

ONLINE: PEEK BEHIND THE SCENES AT THE UNIVERSITY'S COMPOSTING PROGRAM WWW.CMU.EDU/NEWS/NEWS-NOTES/PIPER/MULTIMEDIA/COMPOSTING.MOV



a reduction in the amount of waste produced in Schatz since the program started.

Environmental Coordinator Barbara Kviz said that Parkhurst is doing a fabulous job of supporting the university food is used by regional landscapers.

"The goal of RecycleMania is not only to recycle the materials we generate but to raise awareness about generating less waste," Kviz said. "I would like to see Carnegie Mellon be a leader in the competition for the waste minimization category."

Sustainable Earth President Austin Redwood said recycling is easier when people make conscious decisions about purchasing, such as not buying bottled water.

"Start thinking of where recyclables
— or any waste items, for that matter
— come from: plastic bottles come
from oil, paper and cardboard from
trees, aluminum cans from mountains,"

Redwood said. "When we use too much of those things without recycling them, they become scarce, prices rise and everyone's unhappy. When gas prices rose, everyone complained about the price, yet people still went out and purchased water or sodas in plastic bottles, only to throw them away without even thinking of recycling them."

# News Briefs

### CIT Serves Up Fundraiser

Staff and faculty in the College of Engineering (CIT) are seeking recipes for the CIT Staff and Faculty Cookbook, a fundraising project started by Christina Cowan and staff members at the Institute for Complex Engineered Systems that will benefit the National Pancreas Foundation. The cookbook will include favorite recipes from Carnegie Mellon faculty and staff. Proceeds from the sale of the book (\$10) will be donated to the National Pancreas Foundation for pancreatic research. If you'd like to submit a recipe for the book and reserve a copy, see: www.ices.cmu.edu/cookbookproject/

### Lack of Sleep May Cause Colds, Study Says

According to a new Carnegie Mellon study, people who sleep fewer than seven hours a night are nearly three times as likely to get a cold than people who average eight or more hours of sleep. If your sleep is interrupted, the news is even worse. Study subjects who missed out on shuteye for as little as 8 percent of the time they were laying in bed were five-

and-a-half times more likely to get the sniffles than those who slept throughout the night.

"Although sleep's relationship with the immune system is well-documented, this is the first evidence that even relatively minor sleep disturbances can influence the body's reaction to cold viruses," said Sheldon Cohen, the Robert E. Doherty Professor of Psychology and lead author of the study.

#### GigaPan Most Read Tech Story of 2008

The Times of London's "Times Online" reports that the story on Carnegie Mellon's Gigapan Camera System was the most widely read technology story they covered in 2008. The GigaPan story beat out articles on the large hadron collider, invisibility devices and the Indian Space Agency's newly developed rival to Google Earth.

The Gigapan Camera System is a low-cost robotic device that enables any digital camera to shoot breathtaking, multi-billion pixel panoramas that can be navigated in depths through the Internet. It was developed by Associate Robotics Professor Illah Nourbakhsh and Randy Sargent, a project scientist at Carnegie Mellon's Silicon Valley campus, in

collaboration with scientists at NASA's Ames Research Center. The system is currently in beta tests for commercial release.

For more on the GigaPan system, see: www.gigapan.org.

#### **SEI Staff Publishes Books**

Four members of the technical staff at the Software Engineering Institute (SEI) have written a book, titled "The Method Framework for Engineering System Architectures," recently published by Auerbach Publications. It argues that there is no one best way to engineer the architectures of software-intensive systems and provides a repository of reusable method components that architects can use to select, tailor and integrate these method components to produce appropriate, project-specific architecture engineering methods. The book's authors are SEI's Donald Firesmith. Peter Capell. Tom Merendino and Charles Hammons; Dietrich Falkenthal, MITRE; and DeWitt Latimer (CIT '02, SCS '01, '97), U.S. Air Force.

Tony Lattanze, an associate teaching professor at the SEI, recently published his new software engineering book "Architecting Software Intensive Systems: A Practitioners Guide."

#### Junior Participates in Federal Service Program

Nia Austin, a junior cognitive science major in the College of Humanities and Social Sciences, is one of 15 students across the country participating in the Partnership for Public Service's first Federal Service Student Ambassador Program.

The Partnership for Public Service, a Washington, D.C.-based nonprofit organization, works to help the federal government by inspiring young students to serve and by transforming the way government works. "The partnership has learned from our research that students in college are generally interested in working for the federal government, but lack the knowledge to actually find and apply for those jobs and internships," said Caroline Pettit, associate manager of education and outreach at the Partnership for Public Service.

Last summer, Austin completed a co-op within the federal government's intelligence community and applied for the Student Ambassador Program. Since then, Austin has held focus groups at Carnegie Mellon and made presentations to career-oriented student organizations.

### ABCs, 123s Add Up to 40

#### ■ Heidi Opdyke

The Children's School's 40th anniversary celebration in Rangos Hall included music by the "Boilermaker Jazz Band," led by Paul Consentino, whose children attended the Children's School. The event attracted hundreds of past and current staff, alumni and their families.

wide variety of activities provided by the Pittsburgh Zoo and PPG Aquarium, the Pittsburgh Center for the Arts and the Children's Museum of Pittsburgh. In addition, everyone enjoyed Children's School favorites, including apple-scented play dough, spin art, singing with Mr.

# To view a slideshow of the event, visit Piper+ at www.cmu.edu/news/news-notes/piper/index.shtml

City Council President Doug Shields, presented an official proclamation to the Children's School Director Sharon Carver declaring Dec. 18, "Children's School Day" in the City of Pittsburgh. The school received a commendation from President George W. Bush.

Guests had opportunities to do a

and Mrs. Bird and dancing with Miss McMichael. Parkhurst Dining Services provided hors d'oeuvres and apple cider, and Leed's donated portfolios with the Children's School logo as party favors. As a memento of the event, guests added their family's name to an apple for the quilt made by Lorrie Cranor.



CHILDREN'S SCHOOL DIRECTOR SHARON CARVER PRESENTS FORMER DIRECTOR

ANN BALDWIN TAYLOR WITH A COLLAGE OF PHOTOGRAPHS DURING THE CENTER'S

40TH ANNIVERSARY CELEBRATION.

#### **Violin Professor Honored**



Cyrus Forough, professor of violin in the School of Music, has been recognized for his contributions to classical music. The World Academy of Arts, Literature and Media (WAALM) recently honored Forough with a 2008 Persian Golden Lioness Award.

The awards are given to a few individuals each year who are nominated, studied and selected by an international panel representing the arts, literature and media. The Persian Golden Lioness awards are the most prestigious international Persian cultural awards. Forough received the Persian

Golden Lioness Award at a ceremony in London.

"I'm very proud of my heritage as an Iranian-American and am deeply honored by my selection for this award," Forough said. Noted for his "fiery intensity" and "poetic vision," Forough is a laureate of the Tchaikovsky International Competition and a first-prize winner of the Milwaukee Symphony Violin Competition. He has toured extensively in recital and with orchestras throughout four continents.

In addition to teaching at Carnegie Mellon, Forough serves as chair of the String Division, and is professor of violin at Roosevelt University and The Music Institute of Chicago Academy for gifted students. He also has taught and performed at summer festivals worldwide at venues including the Meadowmount School of Music, the Cleveland Institute, the Indiana University String Academy in Bloomington, the Glenn Gould School of the Toronto Royal Conservatory of Music, and the Chateau de Champs in Paris, among many others. His students have secured elite honors with many capturing awards in national and international competitions.



# Dieting With Dollars Makes Sense \$\$\$ COULD HELP WITH WEIGHT LOSS

■ Melissa Silmore (TPR '85)

Have trouble counting calories? Try counting dollars instead. A new study conducted by Carnegie Mellon Professor George Loewenstein and Kevin Volpp of the University of Pennsylvania, found that dieters lost more weight when cash incentives were part of the plan.

The behavioral economics study, just published in the Journal of the American Medical Association, placed adult dieters into three groups. One group entered a daily lottery and received winnings only if they reached their targeted weight levels. A second group invested their own money, but lost it if they didn't meet their goals. The third group was given no monetary incentive at all.

#### The goal: lose a pound a week over 16 weeks.

The results were striking. The mean weight loss for both incentive groups was more than 13 pounds — with about half the participants reaching the 16-pound goal. But the mean weight loss for the control group was only 4 pounds.

In addition to losing weight, there was some money earned. The lottery group averaged \$272 in earnings and the group that invested their own money averaged \$378.

While both incentive groups gained some of their weight back over the next seven months, they did not return to their original weights.

Obesity in this country has reached alarming proportions and falls just behind smoking as a preventable cause of death. The researchers believe that a contributing factor is the increased emphasis people place on immediate gratification, like the enjoyment of eating, rather than on more delayed benefits, such as improved health.

"The key to successful weight loss, whether you use money rewards or not, is to weigh yourself every day and to have daily weight targets that decrease each day by a tiny amount," Loewenstein said. "If you have a larger weekly target, you'll wait to the end of the week to start dieting seriously, and it's awfully difficult to lose a lot of weight in a single day."

# Elsevier Grand Challenge Finalists Design Image Indexer Project

Anne Watzman

A Carnegie Mellon team of experts in computational biology and machine learning is among four finalists in the inaugural Elsevier Grand Challenge on Knowledge Enhancement in the Life Sciences, a contest designed to encourage development of tools dealing with the ever increasing amount of online life sciences information.

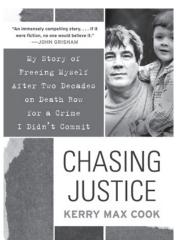
Their entry, the Structured Literature Image Finder (SLIF), is based on a project called the Subcellular Location Image Finder that seeks out fluorescence microscope images in online journal articles, and indexes them according to cell line, proteins visualized and resolution. The images then can be accessed via a Web database.

The team's system is the first to extract information from both text and images in biological journal articles. Its continued development is supported by a grant from the National Institutes of Health.

The seven member SLIF team includes leaders Robert F. Murphy, the Ray and Stephanie Lane professor of computational biology, biological sciences, biomedical engineering and machine learning; William Cohen, associate professor of machine learning; Eric Xing, assistant professor in machine learning, language technologies and computer science; graduate students Amr Ahmed, Andrew Arnold, Luis Pedro Coelho and Josh Kangas; and research programmer Saboor Sheikh.

The contest winner will be announced during a public symposium at "Experimental Biology 2009," which takes place April 18-22 in New Orleans. First place will be awarded \$35,000 and second will receive \$15,000.

### LECTURE SPOTLIGHT: EXONERATED AUTHOR ADVOCATES LEGAL REFORMS



■ Heidi Opdyke

The University Lecture Series has updated and enhanced its Web site http://www.cmu.edu/uls/ with information about the spring lectures.

Among the upcoming talks is author Kerry Max Cook, whose book "Chasing Justice" chronicles his struggles of spending 20 years in prison for a crime he did not commit.

Cook was born in Stuttgart, Germany, into an Army family, and spent much of his youth on Army bases. He returned to the United States with his family in 1972 to live in Texas. At age 19, he was arrested and wrongly convicted in the 1977 WHO: KERRY MAX COOK, AUTHOR OF "CHASING JUSTICE"

WHAT: UNIVERSITY LECTURE SERIES

WHEN: 4:30 P.M., FEB. 19

WHERE: ADAMSON WING, 136A BAKER HALL

rape and murder of 21-year-old Linda Jo Edwards. He was cleared of all charges in 1999. Cook's struggle for freedom is said to be one of the worst cases of police and prosecutorial misconduct in American history.

After gaining freedom Cook has been an outspoken advocate for legal reform. He appeared in the critically acclaimed play "The Exonerated," based in part on his story.

# Carnegie Mellon Among "Most Diverse Campuses in America"

#### ■ Heidi Opdyke

President Jared L. Cohon touted gains in creating a more diverse student population in the past 10 years during his annual state of diversity speech as part of Martin Luther King Jr. Day activities Monday, Jan. 19.

"The majority of students at Carnegie Mellon are not white. That is a source of pride in this university and a source of strength in this university," Cohon said. "This is why students seek us out, because students realize that this campus is one of the most diverse campuses in America and the most diverse among the elite universities."

In 1999, 46 percent of undergraduate students were white and 37 percent of students were of color or were international students. Today, the numbers are 39 percent, and 49 percent, respectively. Retention rates from the freshman to the sophomore year have risen for all students in the past decade.

One spot for improvement, the president said, is that the numbers of students who are domestic minorities, such as African Americans, Hispanics and Native Americans, are too low.

"The pool for which we are compet-



Students from the Children's School watch a performance of "World Neighborhood," presented by the Holden Puppers as part of Martin Luther King Jr. Day activities.

ing is also too small. In America there are simply too few minority students who have high enough SAT scores and do well enough in schools to be admissible to universities like Carnegie Mellon."

Cohon said one way to help address this problem is to increase the pipeline of available students. He praised the university's Summer Academy for Math and Science, which brings about 100 minority students to campus each summer. Cohon said the program has

achieved great results and noted that one recent participant attended MIT and is now at Carnegie Mellon pursuing a graduate degree.

Among staff, while gains have been made with more women being hired into top administrative posts, the number of minority faculty and staff across the university remains low except in the lowest level of staff jobs.

"There's also a challenge in attracting and retaining women on the faculty,

especially in science and technology related fields," he said.

Cohon said the Diversity Advisory Council will revise the current diversity statement for the university to reflect how the campus has changed since

For more data on Carnegie Mellon's diversity efforts, download the full diversity report at http://www.cmu.edu/diversity-guide/overview/diversity-advisory-council/report-data.html.



# "Winds of Orbis" a Finalist for Independent Games Festival Award

■ Bruce Gerson

"Winds of Orbis," an exercise-centered video game developed by a graduate student team at the Entertainment Technology Center is one of 10 finalists in the Student Showcase competition at this year's Independent Games Festival (IGF).

The action-adventure video game combines the Nintendo Wii Remote and Nunchuk with a Dance Pad, enabling players to use their whole bodies as they battle onscreen enemies and avoid virtual obstacles.

The five current team members — producer Garth Deangelis, Zikun Fan, Ryan Hipple, Bard McKinley and Seth Sivak — will be attending the IGF at the Moscone Convention Center in San Francisco on March 23-27, where "Winds" and other IGF finalist games will be exhibited. The ETC team will compete for the overall Best Student Game prize, which includes a trophy and \$2,500 cash to be awarded March 25. Former ETC students Sean Kwon and Nate Morgan are previous members of the "Winds" team.

The 10 finalists were selected from 145 entries from three continents. The University of Southern California, DigiPen Institute of Technology in Seattle and Denmark's National Academy of Digital, Interactive Entertainment are among the other finalists.

The IGF was created in 1998 as a showcase for independent game developers — the game equivalent of the Sundance Film Festival — and includes a prestigious award competition for professional developers.