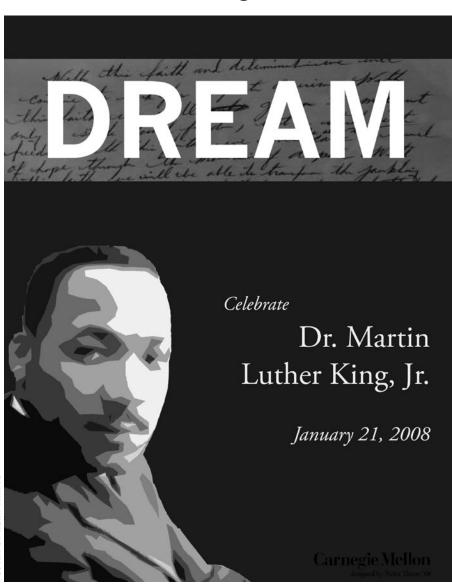


## Carnegie Mellon

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# Martin Luther King Jr. Celebration To Explore Environmental Justice



■ Abby Houck

Carnegie Mellon's annual celebration of the life and work of Martin Luther King Jr. will be held Monday, Jan. 21. Classes scheduled after 12:30 p.m. are canceled to encourage participation in a series of events at the University Center (UC).

Many of this year's events focus on environmental justice, which examines how corporate and government policies disproportionately impact disadvantaged and minority communities.

"Our goal with this year's celebration is to move beyond some of the common correlations made with Dr. King's work," said Director of Multicultural and Diversity Initiatives M. Shernell Smith. "At the end of his legacy, Dr. King was looking not just at issues of race, but he also became more broadly concerned about social justice. Environmental justice is social justice."

The celebration begins at noon with a community collage and choral tribute to King in Kirr Commons on the first floor of the UC. Carnegie Mellon President Jared Cohon will then present his "State of Diversity Address" at 12:30 p.m. in McConomy Auditorium.

The Martin Luther King Jr. Writing Awards, sponsored by the Creative Writ-

ing Department, will be presented to local high school students and Carnegie Mellon students at 1:30 p.m. in Rangos Hall. Winners will read narratives and poems regarding their personal experiences with racial difference and discrimination.

Professor of Creative Writing Terrance Hayes and Yona Harvey, a guest lecturer in the English Department, provided contestants with a variety of prompts, one of which encouraged students to interview their parents, grandparents or community members to come to a better personal understanding of environmental justice.

"Interviewing relatives allows young people to hear from someone they trust how much landscapes change for better or worse in the span of a lifetime," said Harvey. "A student might write a fascinating work, for example, if he or she were to learn that a neighborhood was once a dairy farm and is now a suburban housing development. Or, in an urban setting, a student might discover how a church was preserved (or left to deteriorate) after a fire or, less dramatically, after the simple passage of time."

This year's Community Conversation, a panel discussion among Carnegie

CONTINUED ON PAGE SEVEN

## Art Project Reunites Gloves, People In Pittsburgh

■ Eric Sloss

We have all come across them throughout the winter; lonely lost gloves — lumps of cotton, wool or leather — that lay on the sidewalk or on the bus stop seat. Until now, most were lost to their owners forever.

Jennifer Gooch, a graduate student in the School of Art, has created a way for those of us who find those lost gloves to return them to their rightful owners. Gooch has created the Web site onecoldhand.com, where she posts pictures of the lost gloves she collects, with a description and location of where each was found.

Gooch says the project creates a humorous yet bittersweet solution for an everyday loss. Documents and photos of abandoned gloves are showcased on the Web site in the hopes that their owners will reclaim them.

"People respond differently when finding lost gloves. Some will leave them while others pick them up or throw them away," said Gooch, who thinks that picking up someone's forgotten glove is also an act of kindness. "For me, collecting and saving the lost gloves becomes



School of Art MFA candidate
Jennifer Gooch is working on
a project to collect gloves
found in the Pittsburgh area,
with the hopes of reuniting
them with their mates. She
gives glove collectors the
sticker shown here to leave at
the glove's location so that an
owner will know where his or
her glove can be found.

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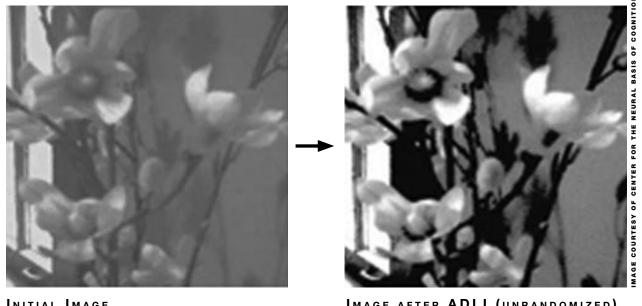
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## Sniff...Sniff...What's That Smell?

Mellon College of Science Researchers Uncover Brain's Mechanism For Identifying Aromas



INITIAL IMAGE

IMAGE AFTER ADLI (UNRANDOMIZED)

A BLURRY IMAGE PROCESSED WITH A COMPUTER MODEL OF ACTIVITY-DEPENDENT LATERAL INHIBITION APPEARS MUCH CLEARER, ILLUSTRATING THE MECHANISM OF DYNAMIC CONNECTIVITY EXPLAINED BY NATHAN URBAN, associate professor of biological sciences in the Mellon College of Science, and colleagues.

#### ■ Jocelyn Duffy

Have you ever entered a room and noticed a pleasant smell? Then after taking a second whiff, realized the smell was floral? And after a third sniff, you knew that the smell was roses? Researchers from the Center for the Neural Basis of Cognition, a joint project of Carnegie Mellon and the University of Pittsburgh, have for the first time described the mechanism in the brain that makes this refining of the senses possible. The researchers, who include Associate

Professor of Biological Sciences Nathan Urban and Biological Sciences graduate student Vikrant Kapoor are calling the mechanism "dynamic connectivity."

Urban and his colleagues explain the mechanism in a paper published in Nature showing how neuronal circuits are rewired "on the fly," allowing the brain to quickly sort through stimuli to determine exactly what is being sensed.

"If you think of the brain like a computer, then the connections between neurons are like the software that the brain is running. Our work shows that this biological software is changed rapidly as a function of the kind of input that the system receives," said Urban.

In order to understand dynamic connectivity, the researchers looked at a process called lateral inhibition. In lateral inhibition, a stimulus such as an odor is encountered, causing many neurons to fire. When many neurons fire simultaneously, the signals can be difficult for the brain to interpret. During lateral inhibition, the stimulated neurons send "cease-fire" messages to the neighboring neurons, reducing the "noise" and making it easier for the brain to precisely identify a stimulus. This process also facilitates accurate recognition of stimuli in many sensory areas of the brain.

For the current study, Urban and colleagues specifically examined the process of lateral inhibition in an area of the brain called the olfactory bulb, which is responsible for processing scents. Until now, scientists thought that the connections made by the neurons in the olfactory bulb were dictated by anatomy and could only change slowly.

However, the researchers found that the connections are, in fact, not set but rather able to change dynamically in response to specific patterns of stimuli.

In their experiments, they found that when excitatory neurons in the olfactory bulb fire in a correlated fashion, this

"BY UNDERSTANDING HOW THE BRAIN DOES THIS, WE CAN THEN APPLY THIS MECHANISM TO OTHER PROBLEMS FACED BY THE BRAIN."

- Associate Professor of

BIOLOGICAL SCIENCES NATHAN URBAN

determines how they are functionally connected.

The results showed that dynamic connectivity allows lateral inhibition to be enhanced when a large number of neurons initially respond to a stimulus, filtering out noise from other neurons. By filtering out the noise, the stimulus can be more clearly recognized and separated from other similar stimuli.

"By understanding how the brain does this, we can then apply this mechanism to other problems faced by the brain," Urban said. The researchers were able to convert the principle into an algorithm and use computer modeling to show the applicability of the mechanism in other areas of the brain where similar inhibitory connections are widespread.

The model illustrates how dynamic connectivity makes it easier to identify and discriminate between stimuli by enhancing the contrast, or sharpness, of the stimuli, independent of the spatial patterns of the active neurons. For example, as illustrated in the image above, the researchers applied the algorithm to a blurry picture and the picture appeared refined and in sharper contrast.

## GE Leader Sheds Light on Business World at CEO Forum



GENERAL ELECTRIC CHAIRMAN AND CHIEF EXECUTIVE OFFICER JEFFREY IMMELT (RIGHT) RECENTLY VISITED CARNEGIE MELLON FOR A USA TODAY CEO FORUM IN WHICH HE DISCUSSED TOPICS RANGING FROM GLOBALIZATION AND ENVIRONMENTAL SUSTAINABILITY TO THE SUBPRIME MORTGAGE MESS AND THE HOLLYWOOD WRITERS' STRIKE. HE ALSO EXPRESSED HOPE FOR THE FUTURE OF BUSINESS.

"I am so optimistic about the talent I see," he said of the STUDENTS GRADUATING FROM COLLEGE AND BUSINESS SCHOOLS.

USA TODAY SENIOR MEDIA REPORTER DAVID LIEBERMAN (LEFT) CONDUCTED THE INTERVIEW, AND ATTENDEES GOT THE OPPORTUNITY TO ASK IMMELT QUESTIONS AS WELL.

The event, which took more than a year to bring together, was SPEARHEADED BY JARED ITKOWITZ. A JUNIOR TEPPER SCHOOL STUDENT MAJORING IN BUSINESS AND CHINESE STUDIES. ITKOWITZ, THE STUDENT SENATE CHAIR, REACHED OUT TO USA TODAY AND WORKED WITH OTHER MEMBERS OF THE SENATE TO PERSUADE THE NEWSPAPER TO BRING ITS CEO FORUM TO CARNEGIE MELLON.

## Universal Library Project Reaches Important Milestone

#### ■ Byron Spice

The challenges of assembling a digital library of a million books are manifold, not the least of which is knowing when you're finished.

Since 2002, Michael Shamos, professor of computer science, has overseen the Million Book Project, a sprawling, international effort to scan a million books and make them available online for free. He and his colleagues bided their time in announcing the project to the world, however, opting to wait until the total of scanned books had reached the goal of one million.

"It kind of crept up on us," Shamos admitted at a news media briefing Nov. 27. "By the time we actually sat down and counted, it was already up to 1.5 million."

At the current rate of scanning, the total number of books scanned was projected to reach 1.65 million by the end of 2007, but the new entries will require post-processing at the sites, so they won't be added to — and therefore accessible from — the portal until sometime this year, Shamos added.

Losing track of the number of books scanned isn't hard to do when more than 1,000 people are scanning at 50 sites across China, India and Egypt at a rate of about 7,000 books a day. Only this past fall, in fact, did it become possible to access all of the volumes through a single Web portal, www.ulib.org.

The completion of the Million Book Project is a significant milestone, said Raj Reddy, professor of computer sci-



SCANNING CENTERS, SUCH AS THIS ONE IN ALEXANDRIA, EGYPT, PLAY A VITAL ROLE IN CARNEGIE MELLON'S UNIVERSAL LIBRARY PROJECT. MORE THAN 7,000 BOOKS ARE SCANNED EVERY DAY BY HUMAN OPERATORS, WHO ARE ALSO RESPONSIBLE FOR OPTIMAL CHARACTER RECOGNITION TASKS. TO DATE, MORE THAN 1.5 MILLION BOOKS IN 20 LANGUAGES HAVE BEEN SCANNED AND STORED IN THE ONLINE LIBRARY.

ence and robotics, who created the Million Book Project as well as the larger concept of a Universal Library.

"Anyone who can get on the Internet now has access to a collection of books the size of a large university library," Reddy said. "This project brings us closer to the ideal of the Universal Library: making all published works available to anyone, anytime, in any language. The economic barriers to the distribution of knowledge are falling."

The project includes not only Carnegie Mellon, but also Zhejiang University in China, the Indian Institute of Science in India and the Library at Alexandria in Egypt. Google, Microsoft and the Internet Archive all have launched their own book digitization projects, but the Million Book Project represents the world's largest, university-based digital library of freely accessible books.

Securing financing was an early obstacle. No U.S. governmental agency wanted to pay for such an undertaking, though the National Science Foundation did grant \$3.5 million to do research on how to grow and manage a large digital library and to develop the necessary search tools and translation engines for making digital books available on the Internet.

Much of that money, Shamos said, was spent on scanning equipment that

was shipped to India and China, where scanning could be performed more economically. Also, India and China were willing to provide the equivalent of \$10 million each for the project.

Finding the books was another hurdle. Some libraries, including the Carnegie Mellon libraries and the Carnegie Library of Pittsburgh, were willing to pack up books in shipping containers and send them off to other countries for scanning.

"In some cases," Shamos said,
"philanthropic persons bought entire
collections of libraries that were closing
their doors," including 125,000 books
from a defunct Kansas City library.

In many cases, having scanning centers overseas was an advantage for obtaining books. "Our partners in other countries have access to materials that we could not conceivably have access to, like books in various Indian languages," Shamos said. China alone provided more than a million books for the project and the Library at Alexandria has made Arabic books available for scanning. More than 20 languages are represented among the 1.5 million books, a little more than 1 percent of all of the world's books.

Though the project has surpassed one million books, the participants have no intention of stopping now and are looking to expand to all countries and eventually every language. "It is now our goal to scan 10 million books," said Wen Gao, a professor at Peking University and one of the leaders in Chinese book scanning.

#### RECAPTCHA PROJECT RACKING UP IMPRESSIVE STATS

#### ■ Byron Spice

The number of books digitized by the Million Book Project is colossal, but so are some of the numbers coming out of Carnegie Mellon's other digitization effort, the reCAPTCHA Project.

The use of reCAPTCHA puzzles to translate printed text into a machine-readable form began in May when Luis von Ahn, assistant professor of computer science, launched the project. Since then, the millions of people who solve reCAPTCHA puzzles each day to register for email accounts, buy tickets online or make comments on blogs have translated more than 400,000,000 words that had stumped automated optical character recognition (OCR) systems.

Here are some more numbers:

1,000,000,000: Number of reCAPTCHA puzzles that are displayed

- though not necessarily solved – each month. Von Ahn says the project has fed the puzzles to users reliably and without any down time.
4,000,000: Number of reCAPTCHA puzzles solved each day. Each word is translated several times before the system is confident that the translation is correct.

30 percent: Error rate of OCR systems when translating text from the 1860s.

1 percent: Error rate of reCAPTCHA for translating 1860s text.
10,000+: Number of sites now using reCAPTCHAs as part of their security system. Facebook, Twitter, Last.fm, Bebo and the U.S. Patent and Trademark Office are among the users. Usage crosses party lines, with both Democrats and Republicans employing them.

150: Number of new sites that begin using reCAPTCHAs each day.0: Number of imitators.

# Event Celebrates Boss' Urban Challenge Victory

A CAMPUS-WIDE CELEBRATION OF THE TARTAN RACING BOSS SUV'S \$2 MILLION FIRST-PLACE FINISH IN THE DARPA URBAN CHALLENGE ROBOTIC VEHICLE RACE WAS HELD LAST MONTH IN RANGOS BALLROOM IN THE UNIVERSITY CENTER. MEMBERS OF THE CAMPUS COMMUNITY, REPRESENTATIVES OF SPONSOR ORGANIZATIONS AND LOCAL ELECTED OFFICIALS ATTENDED THE EVENT.

Shown here are (clockwise, beginning with man in winter Jacket) Dave Ferguson, an Intel Research Pittsburgh research scientist, Michael Darms, Continental AG engineer, and Michael Taylor, Caterpillar engineer, all of whom are embedded with team; Tartan Racing Team Leader William "Red" Whittaker: Brad Kriel and Sam Kherat of Caterpillar; and GM Engineer Jim Nickolaou.



# Heinz School's Institute for Social Innovation Focuses on Emerging Trend of Social Enterprise

#### ■ Kelli McElhinny

Some nonprofit organizations create forprofit subsidiaries to generate revenue that supplements — and sometimes replaces — support from traditional funding sources like foundations. Such endeavors represent the convergence of the social and business sectors that has become known as social enterprise.

Corporations wanting to affect change are becoming social innovators as well, going beyond their traditional and incubation, we foster innovation and entrepreneurship not only among our students but in our local and global partner organizations as well."

The institute's first major project, for the 2006-07 academic year, was establishing a social entrepreneurship and innovation concentration option for Heinz School master's students. The concentration requires students to complete 48 units from a list of electives that includes existing Heinz School courses,

"WE CAN REALLY DO A LOT IN TERMS OF INFORMING THE WORK
OF ORGANIZATIONS DRIVEN BY A SOCIAL MISSION AND DEVELOPING
TOOLS AND BLUEPRINTS." — ISI DIRECTOR ALAN FRIEDMAN

philanthropic methods and seeking out opportunities to sell their products and services in a way that will help to reach humanitarian goals along with earnings targets.

With an array of programming including classroom instruction, project courses and guest faculty members, Carnegie Mellon's Institute for Social Innovation (ISI), housed within the Heinz School, is preparing future social sector leaders to thrive in this emerging entrepreneurial environment.

"The Institute for Social Innovation was founded with social change agents in mind," said ISI Director Alan Friedman. "Through education, collaboration such as Nonprofit Marketing, along with relevant classes in the Tepper School of Business, the School of Design and the School of Computer Science.

This year, the institute has expanded its efforts, introducing new courses, such as the microfinance and social enterprise incubator mini-courses listed for the spring semester. The ISI also has brought the field's leaders, such as Indian social activist Sandeep Pandey and social enterprise pioneer Jerr Boschee, to campus for lectures and other programs. Pandey taught a three-day course on building organizations that drive scalable and sustainable social change.

The ISI has emphasized project

work for its students as well. Last semester, a team of 13 students worked with the Manchester Bidwell Corporation (MBC), a local nonprofit that is widely regarded as an exemplar of social entrepreneurship, to develop the organization's national replication strategy.

"I couldn't have asked for a better result," said the course's instructor, Al Mercer, who is an adjunct faculty member at Carnegie Mellon. Mercer noted that MBC leadership intended to act on the students' recommendations quickly as the organization continues to expand its nationwide presence.

Kedar Kamalapurkar, who led a five-student team developing a strategic plan for the Veterans Leadership Project, valued the experience of applying the knowledge he gained in the classroom.

"Anytime you go from learning from a book to putting the principles to use in a real-life situation, you have to make some adjustments," said Kamalapurkar, a first-year public policy and management student. "I think the classroom instruction was vital. That knowledge helped us prepare for the hiccups we encountered along the way."

This semester, students will work with MetLife on strategies to help the company do its part to curtail global warming — and potentially cut down on the extreme weather events that may make its product unaffordable — by

making its many real estate holdings greener.

Also this month, the institute is launching a social enterprise business plan competition, modeled after similar forprofit startup contests. The winners will receive more than \$20,000 in seed funding to launch their ventures, Friedman said.

The competition, as well as new social innovation fellowships, are made possible with corporate and alumni support. The institute is also practicing what it preaches, in terms of balancing earned and contributed income, by exploring options in executive education.

As the ISI continues to evolve, establishing a solid research foundation will be a top priority.

"There is a lot of anecdotal evidence, but not a lot of quantitative evaluation of social impact, measuring social return on investment or research into organizational structures," Friedman said. "We can really do a lot in terms of informing the work of organizations driven by a social mission and developing tools and blueprints."

Friedman also noted his hope to engage more faculty from schools and departments throughout the university in the institute's work.

"I'm planning to convene a group of faculty from the Heinz School and beyond to really dig in to opportunities to position Carnegie Mellon as a thought leader in this field," he said.

# World Peace Through Video Games? Research To Study Gamers' Approaches to Middle East Conflict Resolution

#### ■ Jonathan Potts

Maybe a video game can save the world.

Sound far-fetched? Perhaps. But
Cleotilde Gonzalez thinks that video
games have a lot to teach us about
problem-solving and how players' biases
influence what they do when confronted
with one of the most intractable problems of all

Gonzalez, director of the university's Dynamic Decision Making Laboratory, is using the PeaceMaker video game — which calls on players to resolve the Israeli-Palestinian conflict — to study how a person's background and knowledge of the conflict influences how they negotiate a solution. Gonzalez is conducting her research at Carnegie Mellon in Pittsburgh, Carnegie Mellon in Qatar and through the Peres Center for Peace in Israel, where as many as 10,000 Israeli and Palestinian youth will participate in the study.

Impact Games, the Carnegie Mellon spin-off that produces PeaceMaker, has helped Gonzalez modify the game so that it can collect data – essentially, recording every decision that players

make in attempting to win the game.

"We are building a story of the strategies that students take in the game," said Gonzalez, an associate research professor in the Department of Social and Decision Sciences.

In PeaceMaker, each player assumes the role of the Israeli or Palestinian leader and is presented with a scenario in which multiple and interrelated choices are made in a constantly changing environment. Gonzalez said that while many people have studied sequential decision making, research has rarely focused on this kind of realistic, dynamic decision making.

"To this point I have mostly studied individual decision makers that play with 'nature' rather than with another smart partner. In PeaceMaker, the actions depend on the reactions of the other side, and a two-state solution is the only way to win this game," Gonzalez said.

"The incentives to win the game are not purely dependent on your own wellbeing but on the well-being of your partner, too. The incentives of the players in this game may interact in complex ways and further depend on the knowledge and beliefs that you bring to the game," she said.

With funding from the Lounsberry Foundation, Gonzalez is working with Kiron Skinner, director of the International Relations Program, and Laurie Eisenberg, associate teaching professor of history, who teaches a course titled "The Arab-Israeli Condition: War and Peace." Students in the class play the game at the beginning of the semester and again at the end of the course. Eisenberg and Gonzalez have developed questions to gauge the students' familiarity with the conflict.

Gonzalez will track how students' views change over the course of the semester and how this influences their game play. She wants to know, among other things, whether understanding both sides of the story helps players resolve the conflict successfully.

"We see this project as a first step in advancing our research in applying decision science and simulation techniques to real-life social and political dilemmas. Our findings stand to improve training services in crisis management and



THIS SCREEN CAPTURE WAS TAKEN FROM THE PEACEMAKER VIDEO GAME, WHICH WILL BE USED TO STUDY PLAYERS APPROACHES TO RESOLVING THE ISRAELI-PALESTINIAN CONFLICT.

conflict resolution," Gonzalez said.

Gonzalez will also conduct a similar study with students at Carnegie Mellon's campus at Education City in Doha, Qatar, and she also hopes to include students at the other American campuses at Education City. At the Peres Center in Israel, a study will be run through the center's IT Peace Projects Department. Israeli and Palestinian youth will participate in a series of workshops in which each child will play PeaceMaker as both the Israeli prime minister and the Palestinian leader.

# Q&A with Gloria Hill: Pursuing a Lifelong Dedication to Education

#### ■ Andrea L. Zrimsek

Gloria Hill, assistant vice provost for education at the Qatar Campus, has been dedicated to education at Carnegie Mellon for more than three decades.

Recently, she was selected to receive the Educational Leadership Award, presented at the Black Engineer of the Year Awards (BEYA) Conference, which will be held Feb. 14–16 in Baltimore. The prestigious BEYA recognizes contributions to engineering education and research by African Americans.

This award recognizes Hill's outstanding work with engineering and other undergraduate minority students, both as an advisor to individual students and as the designer of various programs. During her tenure, Hill was instrumental in the success of the CMAP program, now known as the Carnegie Mellon Advising Resource Center, which helps pre-college and undergraduate black, Hispanic and Native American students with unique cultural perspectives achieve their academic, personal and career goals and, ultimately, become leaders in their profession and communities. Hill's efforts also include the Summer Academy of Mathematics and Science and the Qatar Summer College Preview, among other programs. Since 2004, Hill has been working as the assistant vice provost for education for the Qatar Campus. She is based in Pittsburgh but travels to Doha several times a year.

## Q. How did you develop your passion for education?

Education has always been important in my family. My mom was the oldest of seven kids, three of whom are college grads. My grandmother's sisters put mother through college by running a hotel. Then my mom helped the others go to college.

My mom died when I was 19, and I often reflect on how much she was able to instill in me in those 19 years. She taught me the value of education, the value of doing a good job and doing more than the minimum. She always said anyone will do what is required, so you have to do more than what's required. That became my academic ethic. If a paper needed six sources, I used 10.

Because of my mother, there was never a question of *if* I was going to college, the question was *where* was I going to go. After graduating from Ohio University, I taught in public schools for three years then did my master's and doctoral work at the University of Pittsburgh before landing at Carnegie Mellon to pursue a career in higher education.

What I enjoy most about being in education is seeing the growth and change in students. They grow so much in four years. To see it happening and play a tiny part in that change is very rewarding.

#### Q. What is your role as Assistant Vice Provost for Education for the Qatar Campus?

My job is very dynamic and changes all the time. I serve as the main link between the two campuses, seeing to it that the level of education in Qatar is on par with that in Pittsburgh. I also work with students on academic and personal development.

When I'm in Doha, I do some advising, sit in on classes, establish plans for assessments, do workshops and support projects that connect the two campuses. Unfortunately, I don't get to spend as much time with students as I'd like.

I work closely with John Robertson, assistant dean for Academic Affairs in Qatar, on selecting course assistants from Pittsburgh to teach in Doha. I also coordinate student visits to Pittsburgh and chaperone events.

This year I took on a new task of organizing the first Summer College Preview Program in Doha. The intensive three-week college preparatory program is for academically-talented high school students who want a preview of what it's like at a top American university. This program, which is one of many outreach programs in Doha, gives students a sense of their own potential. It stretches them in ways they've never been stretched, exposes them to new things and forces them out of their comfort zone.

# Q. How important is it for Carnegie Mellon to continue its mission of taking its educational programs to students around the world?

The Carnegie Mellon education has the potential in other parts of the world that it has here in Pittsburgh in that it trains students how to be thinkers, problem solvers and innovators.

We teach them how to be daring, engaging and how not to be intimidated by things that seem huge. Students walk away with content, knowledge and skills but also develop a way of approaching problems, issues and challenges in a way that is transferable wherever they are and to whatever they do.

Our approach to education is tremendously valuable and transportable. Carnegie Mellon is going to have a huge impact on the world as it continues to venture out to other parts of the world.

#### Q. You began your career at Carnegie Mellon working at CMAP and providing academic support for minority students. How does that experience help you in Qatar, where the student body is extremely diverse?

Students who are different from everyone else face different challenges. In terms of developing a relationship, I approach each student as a unique



GLORIA HILL HAS BEEN THE ASSISTANT VICE PROVOST FOR EDUCATION FOR CARNEGIE MELLON QATAR SINCE 2004. SHE WILL RECEIVE THE PRESTIGIOUS EDUCATIONAL LEADERSHIP AWARD AT THE BLACK ENGINEER OF THE YEAR AWARDS CONFERENCE IN FEBRUARY.

person and don't make broad assumptions about who people are. My success goes with trying to understand who each student is, his or her fears, hopes and dreams. That's my approach to students regardless of where they are.

When a student comes in and sits down, it's a blank slate. I try to find out about their school, family, parents and upbringing, and that's how I get to know students and handle the diversity. Each student brings his or her own unique life experience to the table. Once you learn about it, you can figure out how best to work with and support them.

When you're in a situation where there are not a lot of other people who have your same life experiences, it can be challenging. Simple things like finding food you like, a church and things that are important to your being can be daunting. I have tremendous admiration for international students. It takes a lot for a person to go to another country to study. That goes for students who come to Pittsburgh as well as students who go to Doha.

# Q. How do you encourage students, staff and faculty in Pittsburgh to consider opportunities in Doha, and those in Doha to come to Pittsburgh?

I think about how different it is now, compared to 2004 when the campus first opened. In 2004, one of my responsibilities was to communicate to people in Pittsburgh what is happening in Doha. I used to do a lot of presentations, but as more and more people have gone to Doha and had really good experiences, it's been less difficult to convince people to go.

The best thing I can do is encourage people who have gone to Doha – or those in Doha who have come to Pittsburgh – to share their experiences. When students, staff and faculty share their experiences, they get people interested. People get excited when they hear about the excitement. A lot of people tell me they are interested in going to Doha, but they just need to find a way to make it possible. Once you get them there, they're hooked.

#### Q. What are some things about Carnegie Mellon Qatar or Doha that most people in Pittsburgh don't know?

Unless you go to Doha and the Middle East, it's hard to really grasp what it's like. People are always surprised when I show them pictures and they see modern skyscrapers and malls. A lot of people still think it's all desert and camels.

Qatar is very diverse. Of the one million people, only about 200,000 are Qatari. The rest are from all over the world — not just the Middle East. When you meet someone you never know where they are from or what they bring to the table

Doha is also very progressive and open to new ideas. Its location makes it easy to travel to many destinations in a short period of time.

Most people would be surprised to know that there are seasons in Qatar. It's not always sweltering hot. The seasonal swings aren't as big as they are in Pittsburgh, but they do exist. Another surprising thing about Doha is that it's very safe. I tell people all the time that, as a woman, I often feel safer in Qatar than I do in the U.S.

FIVE

# Engineering Graduate Students Win National Letter-Writing Contest

#### ■ Chriss Swaney

In the past 50 years, global climate researchers have found that the planet's capacity to absorb dangerous carbon-dioxide gas through soil and sea chemistry has steadily declined. Because these natural sponges may no longer be able to blot up atmospheric spills of CO2, a social challenge has been issued by a team of dedicated Carnegie Mellon students.

Graduate engineering students
Shahzeen Attari, Ines Margarida Lima
de Azevedo, Benjamin Flath and
Constantine Samaras recently entered
a national letter-writing competition to
bring more awareness to global climate
issues. The four students won first
place in the contest, which was called
"Tomorrow's Energy Ambassadors,
Managers and Scholars".

The contest, sponsored by Johnson Controls Inc., asked students to demonstrate their awareness of important energy and sustainability issues in a letter challenging the current field of presidential candidates to clarify their own positions on these topics. The students' winning letter appeared as a full-page ad Nov. 20, 2007, in the Pittsburgh and Washington regional editions of USA Today.

"We challenged the students at more than 200 member schools of the Association for the Advancement of Sustainability in Higher Education to draft an open letter to the field of 2008 presidential candidates," said



ENGINEERING GRADUATE STUDENTS (L TO R) BENJAMIN FLATH, CONSTANTINE SAMARAS, INES MARGARIDA LIMA DE AZEVEDO AND SHAHZEEN ATTARI RECENTLY WON A PRESTIGIOUS LETTER-WRITING CONTEST ON SUSTAINABILITY ISSUES. DAVID DZOMBAK (FAR RIGHT), A PROFESSOR OF CIVIL AND ENVIRONMENTAL ENGINEERING AT CARNEGIE MELLON AND FACULTY DIRECTOR OF THE STEINBRENNER INSTITUTE FOR ENVIRONMENTAL EDUCATION AND RESEARCH WAS THE TEAM'S FACULTY LIAISON.

Controls. The team also will receive a \$2,500 grant from Johnson Controls and will be invited guests at the 2008 Energy Efficiency Forum, June 10–11 at the National Press Club in Washington

"We were ecstatic that our team won," said Attari a doctoral candidate in engineering and public policy and civil and environmental engineering from Dubai, the United Arab Emirates. "Our key message is that this country a doctoral candidate in engineering and public policy from Lisbon, Portugal, and Samaras, a doctoral candidate in engineering and public policy and civil and environmental engineering from Annapolis, Md.

David A. Dzombak, the Walter J. Blenko Sr. Professor of Environmental Engineering and faculty director of the Steinbrenner Institute for Environmental Education and Research, said the Carnegie Mellon student team has made some insightful observations about what the current crop of presidential hopefuls should be addressing when it comes to America's environmental and energy policies.

"This team of students from different departments, but engaged in interdisciplinary environmental research through the Green Design Institute, demonstrates the importance of bringing multiple perspectives to the complex nexus of environment, energy and policy," said Dzombak, the team's faculty liaison.

Editors from Newsweek, Industry Week, Environmental Design & Construction, Sustainable Facility, Mission Critical (formerly Energy and Power Management) and Greener World Media judged the top 10 entries which came from Boston University, Duke University, Georgia Institute of Technology, Purdue University, University of South Carolina, University of Arkansas, University of Cincinnati, University of Montana and the University of Nevada-Las Vegas, in addition to Carnegie Mellon.

#### EXCERPTS FROM THE WINNING LETTER

"In order to move the nation toward a less carbon-intensive system, it is imperative that you detail your plans to transition the country to an economically competitive and environmentally sustainable energy future."

"Our policies at home will have a strong cascading effect on international energy and carbon policies. You need to encourage green globalization in order to curb emissions and provide energy to the rapidly growing world population. America is positioned to lead on this front and change the course of the future. As president, your next four years are crucial in shaping the evolution of humanity. The world is yearning for an alternative and sustainable solution."

Clay Nesler, vice president of global energy and sustainability at Johnson Controls, a global leader in integrating technologies and products to create smart environments.

"The letter from Carnegie Mellon students, in particular, demonstrates that this generation is both inspired and impatient. We congratulate them for outlining an informed and timely query to the candidates," he added.

In addition to having its letter published in USA Today, the team will receive a \$10,000 check for the school's scholarship fund from Johnson needs strong leadership to direct us toward a sustainable energy solution that incorporates environmental and social impacts. The United States also can influence other countries, enabling a systematic change that promotes clean energy, conservation and efficiency," Attari said. "We want to make a difference in the world."

"I wasn't expecting it. We put a lot of time and effort into the letter and it paid off," said Flath, a master's degree student in civil and environmental engineering from Scotch Plains, N.J. Other team members included Azevedo,

### Chem-E-Car Team Takes Second



CARNEGIE MELLON'S CHEM-E-CAR TEAM FINISHED SECOND OUT OF 30 TEAMS IN A COMPETITION HELD AT THE AMERICAN INSTITUTE OF CHEMICAL ENGINEERS NATIONAL MEETING IN SALT LAKE CITY. THE TEAM'S CAR WAS POWERED BY SAFE CHEMICAL REACTIONS AND FELL JUST 4-1/2 INCHES SHORT OF THE DISTANCE OF 67 FEET.

# MLK Day is Jan. 21 CONTINUED FROM PAGE ONE

Mellon faculty members and leaders from Pittsburgh nonprofit organizations, will be held at 2:30 p.m. in McConomy Auditorium. This year's topic is the impact environmental justice issues have on regional and global scales.

At 4:30 p.m., students, faculty, staff and community members will gather in the Purnell Center for the Arts lobby to begin a candlelight procession to symbolically honor Dr. King's work for civil rights. The procession will end in Rangos Hall in time for the keynote address and student speakers.

Michael Eric Dyson, an author,

professor and ordained Baptist minister, will present the keynote address, titled "Martin Luther King for the 21st Century: Hip Hop, Environmental Justice and The State of Black America," at 5 p.m. in Rangos Hall. Dyson is the author of 15 books, including "Come Hell or High Water: Hurricane Katrina and the Color of Disaster" and "The True Martin Luther King Jr." Dyson is a University



MICHAEL ERIC DYSON WILL BE THE KEYNOTE SPEAKER HIGHLIGHTING CARNEGIE MELLON'S JAN. 21 CELEBRA-TION OF MARTIN LUTHER KING, JR. OTHER EVENTS INCLUDE CHILDREN'S PROGRAMS, PRESENTATION OF THE MARTIN LUTHER KING JR. WRITING AWARDS AND A CANDLELIGHT VIGIL.

> Professor at Georgetown University, where he teaches theology, English and African-American studies.

All programs are sponsored by the Office of the President and Student Affairs. For more information on the celebration, contact Assistant Dean of Student Affairs Anne Witchner at 412-268-4886 or aw0w@andrew.cmu.edu.

### MARTIN LUTHER KING JR. CELEBRATION SCHEDULE OF EVENTS

The following is the schedule of events for the Martin Luther King Jr. Celebration. All events will be held in the University Center.

Community Collage and Choral Tribute to Dr. King Noon-12:30 p.m.

Kirr Commons, First Floor

12:30-1:30 p.m. State of Diversity Address

Jared Cohon, Carnegie Mellon President

McConomy Auditorium

Ongoing Exhibits and Activities 12:30-4:30 p.m.

> Artwork by fourth-grade students at Linden Academy will be on display in the Art Gallery. Documentary films will play in the first- and second-floor lobby areas, and Martin Luther King Jr. books will be available at the University

Store and on the first floor of Hunt Library.

12:30-4:30 p.m. Martin Luther King Jr. Day of Service Projects

McKenna Peter Wright Room

1:30-2:30 p.m. Martin Luther King Jr. Writing Awards Presentation

and Readings, Rangos Hall

2-3 p.m. Children's Programs Art Gallery, First Floor

Scott Kuechenmeister-Hall of Carnegie Mellon's Interfaith Council will present a puppet show.

Community Conversation: Environmental Justice

McConomy Auditorium

4:30-5 p.m. Candlelight Procession

Procession begins in the Purnell Center lobby

5-6:30 p.m. "Martin Luther King for the 21st Century: Hip Hop,

> Environmental Justice and The State of Black America" Keynote address and reception with Michael Eric Dyson

and Student Speakers, Rangos Hall

## **Upcoming Events**

#### **Special Events**

Martin Luther King Jr. Day Celebration Jan. 21, Noon - 6 p.m., University Center (see schedule above for details)

#### **Learning and Development Classes**

For more information and to complete the required registration form, visit: https://acis. as.cmu.edu/gale2/servlet/HRLearn2

#### HR Employee Module (HREM) Training

HREM is used to enter employee appointment, salary, demographic and biographic information.

Presenter: Toni Betsill, HR Systems Help Desk Analyst

Jan. 10, 9 a.m. - Noon, Whitfield Hall Feb. 12, 9 a.m. - Noon. Whitfield Hall

#### **Buyer Introductory Training**

This program will educate buyers on the university purchasing policy and their responsibilities and obligations when purchasing on behalf of the university. Presenter: Jean Smarto Jan. 15, 9 - 11:30 a.m., Club Room, Whitfield Hall

#### Procurement Card Training

The program will review the policies and procedures to use when purchasing goods/ services with the procurement card on behalf of the university. Presenter: April Bell

Jan. 15, 9 a.m. - Noon, Hearth Room, Whitfield Hall

Feb. 7, 1:30 - 4:30 p.m., Hearth Room, Whitfield Hall

#### Talent Management System (TMS) **Position Module Training**

The TMS is used to enter and edit position descriptions and post job openings to the Careers@ Carnegie Mellon employment opportunities Web site. Presenter: Toni Betsill, HR Systems Help Desk

Jan. 16, 9 a.m. - Noon, Hearth Room, Whitfield Hall

#### **Leadership and Communication Styles** Using the Myers Briggs Step II

Presenter: Lola Mason, manager of Organizational Development

Jan. 17, 9 a.m. - Noon, McKenna/Peter/Wright, University Center

#### **Event Planning**

Presenter: Jennifer Logan, University Advancement Jan. 23, 9 - 10:30 a.m., McKenna/Peter/Wright, University Center

#### **Conflict Management**

Presenter: Freida Williams, HR Services Rep Jan. 24, 9 a.m. - Noon, Connan Room, University Center

#### **Global Human Resources Information** Technology Brown Bag Presenter: Toni Betsill, HR Systems Help Desk

Analyst Jan. 30, Noon - 1:30 p.m., Rangos 2,

Feb 5, Noon - 1:30 p.m., Rangos 1, University

#### **Communicating Through Dialogue**

Presenter: Ron Placone, director of Learning and Feb. 5, 9 a.m. - Noon, McKenna/Peter/Wright,

University Center

#### **Positive Life Practices**

Presenter: Lola Mason, manager of Organizational Development Feb. 6, 9 a.m. - Noon, McKenna/Peter/Wright, University Center

#### **Using Visuals in PowerPoint**

2:30-3:40 p.m.

Presenter: David Holzemer, e-learning and business training specialist Feb. 13, Noon - 1:30 p.m., Connan Room, University Center

#### Lectures

#### **University Lecture Series**

"Innovations in Funding and Access to the Arts" Risë Wilson, founder of The Laundromat Project. Jan. 24, 4:30 p.m., Kresge Theatre, College of Fine Arts Buildina

#### "The Social and Ethical Impact of **Automated Decision Support Designs**"

M.L. (Missy) Cummings, assistant professor, MIT Jan. 31, 4:30 p.m., Adamson Wing, Baker Hall

#### "The Accidental President"

President Jared L. Cohon Feb. 4, 4:30 p.m., Rangos 1 & 2, University Center

This lecture is part of the Journey series featuring personal reflections by Carnegie Mellon

#### "From Vienna to America: A Modern-Day Odyssey"

Author Sophie Freud, granddaughter of Sigmund Freud and mother of Herbert A. Simon Professor of Economics and Psychology George Loewenstein Feb. 7, 4:30 p.m., Adamson Wing, Baker Hall

#### "What is Open Access to Research?"

Peter Suber, research professor of philosophy, Earlham College, and senior researcher at the Scholarly Publishing and Academic Resources Feb. 11, 4:30 p.m., Adamson Wing, Baker Hall

This lecture is part of the Authors' Rights & Wrongs Series

#### "Love's Death Toll: Female Suicide in Shakespearean Tragedy"

Deirdre O'Rourke, Theatre Arts graduate student, University of Pittsburgh Feb. 14, 4:30 p.m. Adamson Wing, Baker Hall 136A

#### **Venture Capital Brown Bag Lecture** Series "Starting a Company"

Sean Sebastian, Partner, Birchmere Ventures Feb. 5, 12:30 p.m., Rangos 3, University Center

#### **Sports**

#### Men's Basketball

All games at Skibo Gymnasium Jan. 13, 1 p.m. vs. Lycoming Jan. 18, 8 p.m., vs. Brandeis Jan. 20, Noon, vs. NYU Feb. 1, 8 p.m., vs. Chicago Feb. 3, Noon, vs. Washington

#### Women's Basketball

All games at Skibo Gymnasium Jan. 14. 7 p.m., vs. Bethany Jan. 18, 6 p.m., vs. Brandeis Jan. 20, 2 p.m., vs. NYU Feb. 1, 6 p.m., vs. Chicago Feb. 3, 2 p.m., vs. Washington

#### **Swimming & Diving**

Jan. 19, 1 p.m., vs. Allegheny Feb. 1, Women's Invitational (Time TBA) Feb. 9, Time Trials (Time TBA)

For more events, visit http://my.cmu.edu/site/events/

# Carnegie Mellon EMS Saves Lives

#### ■ Abby Houck

Imagine this scenario: You are working late one evening, and you hear the sound of someone falling outside of your office. You run into the hallway and see your colleague on the floor, not breathing. In addition to calling 911, you can call University Police at 412-268-2323 to quickly reach Carnegie Mellon's own on-campus Emergency Medical Service (EMS).

Piyush Gupta, executive director of Carnegie Mellon EMS, said that members are typically on the scene within two to three minutes of a call, because they are students who are familiar with the layout of campus. Carnegie Mellon EMS works in partnership with University Police, City of Pittsburgh EMS, the Pittsburgh Bureau of Police and the Pittsburgh Fire Bureau.

Established in 1984, Carnegie Mellon EMS was one of the first collegiate EMS groups in the nation. It is used as a model by other universities interested in creating their own EMS groups, and members attend National Collegiate EMS Foundation conferences each year. Most current members are students; however, faculty, staff and alumni are welcome to join.

Operations manager Maria Emerson said many collegiate EMS groups have a paid, full-time director. However, Carnegie Mellon is unique because its volunteer members handle emergency calls, training, finances and purchasing.

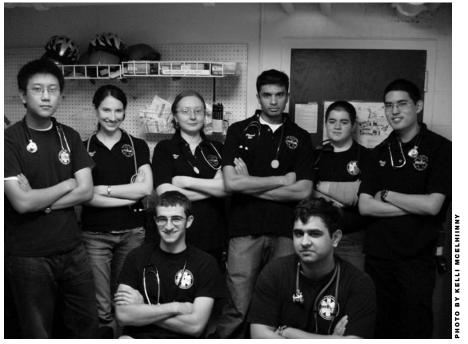
Carnegie Mellon EMS generally responds to a call or two per day. Last year, it responded to more than 350 calls. An internal quality assurance board reviews every call the group handles.

"We've experienced almost everything that an off-campus EMS service would handle," Gupta said. "Over the past few years, we have treated everything from an architecture student who accidentally cut himself with an X-ACTO knife to saving three individuals who went into cardiac arrest."

New members are required to attend a weekend of training to learn about operating procedures and to become certified in CPR and First Aid. There are three levels of membership: precepting members, medical members and crew chiefs. Precepting members observe procedures and practice skills under the supervision of a more experienced member. Medical members are allowed to be the first individuals at an emergency scene. Crew chiefs are certified emergency medical technicians who are responsible for all activities during their shifts. At least one crew chief must be on duty to consider Carnegie Mellon EMS active.

Carnegie Mellon EMS has successfully increased its membership over the past several years. A large membership base is beneficial to the organization, because service is provided 24 hours a day, seven days each week throughout the academic year. Service also is provided on breaks when staffing levels are sufficient. This year, Carnegie Mellon EMS had so many applicants that it had to create an interviewing process, and only half of all applicants were admitted. EMS members meet monthly as a group, although many students build friendships while practicing skills or watching television together in the EMS office throughout the week.

Although Carnegie Mellon EMS responds to emergency situations, it also provides training courses to on- and off-campus groups. Each semester, Carnegie



Bernard Kung, Maria Emerson, Alex Tsarenko, Piyush Gupta, Claire Wittich, and Kevin Chang (standing, L to R), and Adam Borochoff (seated at left) and Vamsee Pillalamarri are members of Carnegie Mellon's emergency medical services team.

Mellon EMS offers low-cost CPR and First Aid classes on campus. Gupta said Girl Scouts and University of Pittsburgh nursing students also have taken classes offered by Carnegie Mellon EMS.

In addition, Carnegie Mellon EMS provides a standby service to on-campus events like concerts and Spring Carnival. Carnegie Mellon EMS operates out of a trailer close to student booths at carnival during midway hours, because calls during the event account for more than 10 percent of its annual activity. Many alumni who were part of Carnegie Mellon EMS use the carnival trailer as an opportunity for an informal reunion.

With opportunities to develop leadership, communication and crisis management skills, it's no surprise that the Carnegie Mellon EMS experience has influenced students' career choices.

"I started my freshman year as an engineering major and switched to biological sciences because of my experience with EMS," said Kevin Chang, a crew chief who plans to attend medical school after graduation.

Not all EMS members plan to pursue a career in health care. Emerson is planning to enter the field of computer science, but she also wants to continue volunteering with an EMS squad following graduation.

More information regarding Carnegie Mellon EMS can be found at www.cmuems.org/ or by calling the organization's business line at 412-268-1025.

## Lost Gloves Are Focus of Art Project CONTINUED FROM PAGE ONE



GOOCH'S PROJECT HAS ATTRACTED A GREAT DEAL OF ATTENTION FROM THE MEDIA. HERE, SHE IS INTERVIEWED IN HER STUDIO BY WTAE-TV FOR A STORY ON THE FIRST GLOVE REUNION.

a token for the possibility of reunion and a metaphor for the cycle of loss and gain."

Gooch is also interested in how people use the Internet to connect with each other. The Web site uses a blogging system with various tags, such as places found, finders' names and colors. Gooch encourages people to participate in reuniting lost gloves. Directions for doing so can be found on her Web site.

Gooch grew up in the suburbs of Dallas. After graduating from the University of Texas at Arlington, she began pursuing a master's degree in studio art at Carnegie Mellon. Her portfolio is online at www. jennifergooch.com.

Gooch says the onecoldhand project reveals an optimistic perspective of the human condition

because it anticipates that someone might be kind enough to pick up a lost glove and return it and, hopefully, meet a new friend in the process.

The process seems to be working. Recently, Sarah Altmeyer, a staff member in the Intelligent Workplace, lost a leather glove she brought from Germany.

Altmeyer did not know that Ally Reeves, another graduate student in the School of Art, had found the glove and passed it along to Gooch for her project. After seeing local media reports about the Web site, Altmeyer logged on and discovered her lost glove was lost no more.

On Dec. 5, Gooch made her first match, reuniting Altmeyer with her glove and giving her a chance to meet Reeves.

# NTERNATIONAL DISPATCHES

#### Senior Information Systems Projects Span the Globe

This past fall, six senior information systems students learned just how challenging it can be to work in a team environment – particularly when half of their team members were located on a different continent. Students from the College of Humanities & Social Sciences and Singapore Management University (SMU) collaborated on two projects that provided the opportunity to assist real clients in India and Singapore.

Jeria Quesenberry served as a faculty advisor to the team working with Sparsh-life, a nonprofit organization that provides healthcare options to disadvantaged women and children in India. Sparshlife founder Sreyashi Dey asked students to redesign the organization's Web site to evoke a stronger emotional connection from visitors. The Web site, www.sparshlife.org, is the organization's primary tool for communicating with potential sponsors, doctors and clients. Carnegie Mellon students Sterling Rice and Clinton Loo participated on the Sparshlife team.

Another team of Carnegie Mellon and SMU students worked with an airline industry consulting firm to develop a more user-friendly interface for KrisWorld, an in-flight entertainment system used by Singapore Airlines. Carnegie Mellon students Harry Cheung, Korina Loumidi, Lisa Shi and Jacob Wilcock contributed to this project.

"The students were presented with a nebulous problem," said faculty advisor Raja Sooriamurthi. "They were simply asked, 'Can you make the in-flight entertainment system better?'"

But what does "better" mean?

To answer this question, students conducted extensive research on traveler preferences to determine the strengths and weaknesses of the original KrisWorld interface. In addition to providing airline passengers with access to movies, music and television shows, the new interface offers customized travel information and the ability to order food. The team also completed extensive user tests to ensure that individuals from all cultural backgrounds could easily navigate the touch-screen system.

Faculty members and students agree that working on international teams adds a valuable dimension of global experience to the capstone project. Teams learn to overcome a variety of challenges associated with communicating with people they may never meet and producing solutions for use in places they may not have an opportunity to visit.

"We want to keep a steady stream of projects engaging Carnegie Mellon students with individuals from outside the country," said Randy Weinberg, director of the Information Systems Program.

#### Two H&SS Faculty Earn Fulbrights

Steve Awodey, associate professor of philosophy, and John Soluri, associate professor of history, have received prestigious Fulbright Scholarships.

The Fulbright Program, sponsored by the U.S. State Department, is America's flagship international education exchange program. Fulbright recipients are selected on the basis of academic or professional achievement and leadership in their fields.

Awodey is among a group of scholars collaborating to produce German and English versions of the collected works of German-American philosopher Rudolf Carnap. Awodey is among the editors of the English text, and he is spending five months at the Institute for Philosophy at the Friedrich-Schiller Universität Jena in Jena, Germany, coordinating the production of the texts. His scholarship began in September and runs through February. Soluri will teach and do research from August to December 2008 at the University of Chile in Santiago. His research will focus broadly on the environmental history of southern Chile and Argentina, focusing particularly on human-animal relations over a 200-year period.

#### Carnegie Mellon Qatar Holds Second CS4Qatar

Computer science teachers from high schools all over Qatar recently attended the second CS4Qatar. The two-day professional development workshop, offered by the Computer Science faculty at Carnegie Mellon in Qatar, is designed for educators in Qatar who want to broaden their horizons in the ever-expanding and broad-reaching field of computer science.

"With the success of the first CS4Qatar program held last June, it is wonderful to see so many teachers wanting to come back for more: more information, more teaching tips, more computer science education," says Mark Stehlik, assistant dean for undergraduate education in the School of Computer Science, who taught the courses. "Computer science is a fascinating field and to see so many of Qatar's educators wanting to explore it ever deeper is very rewarding. It will only help move Qatar further and further along the computing superhighway."

The workshop, which is part of a series of outreach events held by Carnegie Mellon Qatar, included seminars on algorithms and Java Graphics.

"The workshop was very successful and added a great value for us. Not only did we tap into interesting problem-solving methods, but we were also encouraged to come up with new and creative ideas using Java in graphics. The workshop was well organized, and the time was managed very well," says Amal Abdulhadi, head of the ICT Department at the Al-Bayan Educational Complex for Girls.

CS4Qatar is a derivative of the Computer Science for High Schools (CS4HS) program here in Pittsburgh. The first CS4Qatar in June had nearly 100 participants.

#### Carnegie Mellon Qatar Women's Basketball Team Wins Tournament in Bahrain

The Carnegie Mellon Qatar women's basketball team captured first place in the Royal College of Surgeons in Ireland Intercollegiate Basketball Tournament in Bahrain. The seven students on the team connected for free throws, sunk lay-ups, captured rebounds and had numerous assists during the two-day tournament.

Carnegie Mellon team members were Megan Larcom (Tepper '10), Reem Al Muftah (Tepper '10), Urmila Rosario (Tepper '11), Maha Mahmoud (Tepper '09), Salma Kayali (Tepper '09), Benazir Anis (Tepper '11) and Dana Hadan (Tepper '09).

Schools in the tournament included: Carnegie Mellon in Qatar, Georgetown University in Qatar, New York Institute of Technology (Bahrain), Virginia Commonwealth University in Qatar and Royal College of Surgeons in Ireland (Bahrain).

#### CyLab Japan Notes Student, Alumni Achievements

A paper co-written by Hirokazu Sasamato, a student in the 2008 class of the Master of Science in Information Technology-Information Security (MSIT-IS) program in Kobe, Japan, and MSIT-IS alumnus Eiji Hayashi has been accepted for this year's Association for Computing Machinery's Computer-Human Interaction Conference (ACM HCI 2008), which will be held in April in Florence, Italy. The paper, titled "Undercover: Authentication Usable in Front of Prying Eyes," is among just 22 percent of submissions that were accepted for ACM CHI 2008. The research resulted from Sasamoto's master's project, which was conducted under the supervision of Hayashi and Information Networking Institute Systems Scientist Nicolas Christin.

Also from CyLab Japan, the master's project of Mika Sashikata, a 2007 MSIT-IS graduate, has resulted in a Japanese version of Carnegie Mellon's PrivacyFinder being available to the public. The Japanese version of PrivacyFinder is available at http://jp.privacyfinder.org, and it handles Japanese queries and takes into account the specifics of Japanese privacy laws and certifications.

#### Carnegie Mellon Adelaide Students Graduate

Students from a wide range of countries, such as Burkina Faso, Maldives and Swaziland, recently graduated from the Master of Science in Public Policy and Management (MSPPM) and Master of Science in Information Technology (MSIT) programs at Carnegie Mellon in Adelaide. A total of 13 students completed the MSPPM program, while six graduated from the MSIT program. Many of the students plan to return to their home countries to put their newly acquired knowledge to use, such as Mantoa Tseuoa, who worked at the Bureau of Statistics in Lesotho before attending Carnegie Mellon Adelaide.

"My year at Carnegie Mellon has enhanced my statistical and economic skills and equipped me with new skills in public policy and management," Tseuoa said. "I am looking forward to contributing to quality work with the tools I've acquired whilst at Carnegie Mellon, when I return home to Lesotho."

#### Tepper at Carnegie Mellon in Qatar Launches Executive Education Series

The Tepper School of Business at Carnegie Mellon in Qatar recently held the first of seven planned Executive Education modules for senior leaders at Qatargas. The comprehensive executive leadership program follows months of close collaboration between Qatargas and Carnegie Mellon to develop the intensive, high-level program.

Qatargas chose to partner with the Tepper School at Carnegie Mellon's campus in Qatar because of the school's leading reputation and its ranking among the top business schools in the United States, according to Ghanim Al-Kuwari, Qatargas Chief Operating Officer-Administration.

The Executive Education program for Qatargas will run through 2008 and will include modules on topics that include global competitiveness, smart value creation, team collaboration, strategic cost management, leadership networks and international business building.

# Campus Police Celebrate "True Meaning" of Christmas

#### ■ Bruce Gerson

Giving is better than receiving. And this Christmas, several needy families got everything they wished for thanks to several giving souls at Carnegie Mellon.

For the third consecutive year, the small group of campus police officers, security and parking personnel played the role of Santa's helpers to come to the aid of three disadvantaged families associated with Northern Home Care Services, a government-funded social services agency in Sharpsburg.

Using proceeds from the campus police station's vending machines, the group, which was nominated for a 2007 Andy Award, went on a shopping spree and purchased \$500 worth of gifts per family, plus a \$100 Giant Eagle gift certificate. The gifts were ordinary items the families needed and requested, such as socks and pajamas, rather than XBox, Playstation or Wii video-gaming systems

Keith Pudlowski, formerly a parking security officer and representative for the Carnegie Mellon Campus Police Association, and his wife, Marge, began helping families associated with Northern Home Care Services five years ago and brought the project to campus.

"The idea is to help people in need. It puts the holiday season into perspective and gives us the true meaning of Christmas," Pudlowski said.

Security Officer Paul Stellitano agrees. "We're a community-oriented police department, and this gives us a great feeling to reach out into the community every year," he said.

A few days before Christmas, the group took the Carnegie Mellon shuttle bus to deliver the gifts. On the return trip to campus, "there wasn't a dry eye on the bus," Stellitano said. "Giving is truly better than receiving."

In addition to Stellitano and the Pudlowskis, the "elves" include Cele Herbig, Heather Ausburn, Jim Heverly, Bill & Mary Klawinski, Jackie Merranko, Sue Prevuznik and Jeff Varchetto.

As participation in this worthwhile volunteer effort continues to grow, the elves have big plans for 2008. They hope to hold fundraisers to supplement



MARY SCHOENECKER, FROM NORTHERN HOME CARE CARNEGIE MELLON SER-VICES (FAR RIGHT), JOINED CAMPUS POLICE OFFICERS AND SECURITY AND PARKING PERSONNEL AT A GIFT-WRAPPING SESSION LAST MONTH. THE GROUP DONATED THE PRESENTS TO THREE FAMILIES ASSOCIATED WITH THE SHARPSBURG-BASED AGENCY.

the income from the vending machines. Stellitano said they may also try to acquire items to raffle off from the Steelers, Penguins and Pirates.

## News Briefs

#### Biological Sciences Chosen For Unique HHMI Program

The Mellon College of Science's Department of Biological Sciences is one of 12 programs selected by the Howard Hughes Medical Institute (HHMI) to be part of the Phage Genomics Research Initiative, the first major effort from HHMI's Science Education Alliance (SEA). Beginning in the fall 2008 semester, approximately 20 Carnegie Mellon freshmen selected from several of the university's colleges will begin a two-semester genomics course, which HHMI is calling a "nationwide science experiment," that intends to teach college students how to approach science problems creatively, while encouraging them to pursue further study and careers in science.

Jonathan Jarvik and Javier Lopez, associate professors of biological sciences, will lead the course at Carnegie Mellon.

The students will isolate bacteriophages from local soil samples, characterize
their structure by electron microscopy, clone
and sequence their DNA, and use computational methods to analyze the genomes
and compare them with those isolated by
groups at other participating institutions.
Ideally, the SEA students' work will result
in the complete genome characterization
of multiple new bacteriophages each year
and potentially impact human health and
the environment. Ultimately, the findings will
be published in scientific journals with the
students listed as co-authors.

#### Morgan to Speak at Environmental Teach-In

Carnegie Mellon's M. Granger Morgan will help kick off Focus The Nation, one of the largest teach-in events in U.S. history. Morgan, head of the Department of Engineering and Public Policy, will give a keynote speech at 7:30 p.m., Wednesday, Jan. 30 in McConomy Auditorium. Morgan's presentation will be followed by a national webcast produced by the National Wildlife Federation, featuring other leading climate experts from Stanford University and the Ella Baker Center in Oakland, Calif.

In addition to the national webcast, Carnegie Mellon students have teamed up with the University of Pittsburgh, Duquesne University, LaRoche College and Chatham University to invite local, regional and national political leaders to a Green Democracy political forum slated for Feb. 1. Program details are still being developed for a variety of Focus The Nation activities. For more information about Focus The Nation, please visit www.focusthenation.org or call 412-268-6421.

#### McNulty Tabbed To Lead Government Relations

Tim McNulty became the new associate vice president for government relations at Carnegie Mellon, on Jan. 1, succeeding Maureen McFalls, who retired from the university after seven years of leading the university's first government relations program.

McNulty, who had been associate provost for strategic technology initiatives at the university since 2003, will direct Carnegie Mellon's Office of Government Relations, which acts as an advocate for the university on the federal, state and local levels. He came to Carnegie Mellon after eight years in the administrations of former Pennsylvania

Governors Tom Ridge and Mark Schweiker. While working in state government, McNulty held several senior positions in the Department of Community and Economic Development and the Governor's Office. He was engaged in projects ranging from the re-opening of the Philadelphia Shipyard and the creation of the Digital and Life Sciences Greenhouses, to a free community college tuition program for unemployed Pennsylvanians.

#### Delay, Cancellation Information Available During Severe Weather

In the event of severe weather, members of the university community should tune in to KDKA-TV, WTAE-TV, WPXI-TV, KDKA-Radio (1020 AM) or KQV-Radio (1410 AM) 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 School and the Tepper School of Business. Announcements will also be recorded on the Carnegie Mellon main switchboard (412-268-2000) and posted on the Web (www.cmu.edu), Web Portal (my.cmu.edu) and the official.cmunews and cmu.misc.news bulletin boards. 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. Essential employees from the departments of Facilities Management Services, University Police, Computing Services and Dining Services, are to report for work. Supervisors should identify and brief essential personnel regarding their responsibilities during severe weather.

## Carnegie Mellon Rises in London Times Rankings

Carnegie Mellon was recently ranked 20th among the World's Top 200 Universities and 12th among U.S. schools by The London Times' 2007 Higher Education Supplement. Last year, the university was ranked 35th. Carnegie Mellon also ranked 7th in the Top 50 Universities for Technology category, 28th in the Top 50 Universities for Social Sciences category and 50th in the Top 50 Universities for Natural Sciences category.

In other recent rankings, Carnegie Mellon ranked first in the Information Technology /Information Systems category and second in the Cognitive Science, Business, Operations Research and Public Administration categories in The Chronicle of Higher Education and Academic Analytics Faculty Scholarly Productivity Index. The index is based on the number of times faculty papers have been cited, how many books and journal articles have been published, federal grant dollars awarded and honors and awards.

#### NREC Awarded \$14.4 Million U.S. Army Contract

Carnegie Mellon's National Robotics Engineering Center (NREC), part of the Robotics Institute in the School of Computer Science, has won a \$14.4 million contract to develop an advanced, autonomous, unmanned ground vehicle (UGV) for the US Army Tank-Automotive Research, Development and Engineering Center (TARDEC).

The TARDEC contract funds NREC to build an updated version of the successful "Crusher" UGV the center unveiled in 2006 as part of the Autonomous Platform Demonstrator (APD) program. Additionally, TARDEC plans to add to the contract, on a work directive basis, additional effort for

# Program Collects School Supplies for Afghan Students



CARNEGIE MELLON MECHANICAL ENGINEERING STUDENTS AND STUDENTS FROM THE AQUINAS ACADEMY HELPED COLLECT SCHOOL SUPPLIES FOR AFGHAN CHILDREN. THE SOCIETY OF THE PROW LED THE PROGRAM, KOMAK BARE TEFLANI (WHICH IN THE DARI LANGUAGE MEANS "HELP THE CHILDREN"), TO HELP CARNEGIE MELLON NAVAY ROTC ALUMS NOW SERVING IN AFGHANISTAN TO OBTAIN BASIC SCHOOL SUPPLIES FOR AFGHAN CHILDREN.

Students from the Aquinas Academy collected more than 1,200 pencils, 1,900 crayons, 3,800 sheets of writing paper and more than 500 pens for the Afghan children. Volunteers including the Pirate Parrot packed more than 10 boxes of school supplies.

# Engineering Students, Alums, Police Give "Toys for Tots"



CARNEGIE MELLON MECHANICAL ENGINEERING STUDENTS, ALONG WITH UNIVERSITY POLICE, COLLECTED MORE THAN \$2,000 WORTH OF CHRISTMAS TOYS FOR THE 2007 "TOYS FOR TOTS" CAMPAIGN. "TOYS FOR TOTS" WAS ESTABLISHED IN 1947 BY THE U.S. MARINE CORPS TO HELP LESS FORTUNATE CHILDREN DURING THE HOLIDAY SEASON. A CARAVAN OF ANTIQUE CARS, SPEARHEADED BY 1948 ENGINEERING ALUM HAROLD HALL, WERE LOADED WITH THE UNWRAPPED GIFTS.

NREC engineers to develop an Unmanned Ground Vehicle (UGV) end-to-end control architecture and demonstrate the viability of autonomous UGV operations in a relevant environment as part of the Robotic Vehicle Control Architecture (RVCA) program.

## Keep Your New Year's Resolution To Get Fit

Carnegie Mellon faculty and staff who want to get in shape in 2008 can take advantage of a variety of the university's wellness offerings to help them achieve their goals. Faculty and staff can take advantage of a brand new fitness offering beginning Jan. 21 - free personal training services provided by a University of Pittsburgh intern in collaboration with Carnegie Mellon Fitness in Athletics. The personal training will take place through a combination of in-person sessions and follow-up by email and phone. Anyone interested in this service should subscribe to the fitness d-list for more details. To be added to the fitness d-list, which also provides up-to-date fitness information and changes of activities on campus, email pls@andrew or dm5d@andrew.

Human Resources offers free fitness classes at Whitfield Hall that start at 5:15 p.m. and include aerobics and Pilates, among other activities. Carnegie Mellon also has a walking club that meets daily at 12:10 at the Forbes Avenue entrance to Hamburg Hall and walks for approximately 30 minutes. They even have an indoor route for inclement weather.

Faculty and staff have nutrition resources at their disposal as well. A Weight Watchers At Work meeting is held on campus at noon every Tuesday, and the fee is a little more than \$10/week, which is a discount on the rate charged at Weight Watchers centers. Additionally, faculty and

staff members can make appointments for consultations with the Student Health Services' nutritionist to work on developing better eating habits.

More information on Carnegie Mellon's fitness and nutrition benefits can be found on the Web at http://hr.web.cmu.edu/current/benefits/healthy/fitness/.

#### Tepper, H&SS Faculty Members Named McCandless Chairs

Carnegie Mellon has awarded the Anna Loomis McCandless Professorship to Bahar Biller, an assistant professor of manufacturing and operations management in the Tepper School of Business, and the Estella Loomis McCandless Professorship to Brooke Feeney, an associate professor of psychology in the College of Humanities and Social Sciences. The professorships are given every three years to two junior faculty members who have shown great promise in their fields.

Biller's work focuses on the development of new simulation methodology with impact on the design of global supply chains, operational risk modeling and queueing theory, while Feeney leads the Relationships Laboratory at Carnegie Mellon, where she has conducted studies that speak to the importance of relationships and investigate relationship dynamics, their predictors and their consequences.

#### Pausch Gets Book Deal, Wins Computer Science Education Award

Hyperion has announced plans to publish a book based on Randy Pausch's "Really Achieving Your Childhood Dreams" lecture that has garnered much media attention for the professor of computer science who is battling terminal pancreatic cancer. In a deal that is reportedly worth nearly \$7 million, the book is scheduled to be published this spring. It will be written with Wall Street Journal reporter and Carnegie Mellon alumnus Jeff Zaslow.

Pausch also has won the 2007 Karl V. Karlstrom Outstanding Educator Award from the Association for Computing Machinery (ACM). The award recognizes his innovative efforts to teach computer science in ways that are accessible and fun.

In making him the first Carnegie Mellon professor to receive the highly competitive Karlstrom Award, which includes a \$5,000 prize, the ACM cited Pausch for his "outstanding creative contributions to the art of teaching and mentoring and for the innovative Alice programming environment with which novices can create interactive 3D experiences." Pausch co-founded the Entertainment Technology Center.

Pausch has also been named a 2007 ACM Fellow and is the winner of the 2007 ACM Special Interest Group on Computer Science Education (SIGCSE) Award for Outstanding Contributions to Computer Science Education.

#### Algorithm Identifies Top 100 News Blogs

Even the most dedicated news hounds would find it impossible to peruse every Web site at their disposal. So, Carnegie Mellon faculty member Carlos Guestrin has devised a tool that helps surfers be savvier — and more efficient — in tracking down the latest news.

Using a problem-solving method called the Cascades algorithm, which balances the cost of collecting information with the need for collecting the information early and close to its source, Guestrin, an assistant professor of computer science and machine learning, and his students compiled a list of the best 100 blogs to read to find the biggest news on the Web as early as possible.

The list is available at the Web site www.blogcascades.org, and it includes well-known blogs such as Instapundit, as well as those that are more obscure. The resource listing can be further narrowed to postings as well, for Web users with even less time available for browsing.

Guestrin's team is also exploring the Cascades algorithm's usefulness for quickly detecting contamination in water supplies.

## Tepper Student Named McGowan Scholar

Tepper Student Named McGowan Scholar Matthew J. Hawryluk, a second-year MBA student at the Tepper School of Business, was named the William G. McGowan Scholar for the 2007–2008 academic year. Hawryluk, who also holds a doctorate in cell biology and biochemistry, is focusing his MBA training on entrepreneurship, particularly in the area of life sciences. A co-founder of a medical device company of which he continues to serve as its chief technical officer, Hawryluk helped revise Tepper's Biotech Track curriculum to make it more relevant to students with science backgrounds.

The scholarship, provided by the William G. McGowan Charitable Fund, is named after William G. McGowan, who organized MCI Communications Corp. in 1968, and helped to create a competitive telecommunications market. a McGowan Scholar, Hawryluk will receive an \$18,000 tuition credit.

### ECTURE SPOTLIGHT: SOCIAL ENTREPRENEUR TO DISCUSS ARTS INITIATIVES

#### ■ Kelli McElhinny

For most people, there's nothing artistic about a laundromat, but Risë Wilson saw more potential in her local coin-op. She acted on her vision by launching The Laundromat Project (TLP), which created a thriving community art center among the building's washers and dryers.

Wilson will discuss her experience with the project in a lecture titled "Innovations in Funding and Access to the Arts" at 4:30 p.m., Thursday Jan. 24 in the Kresge Theater in the College

### COHON **EXPLORES** PRESIDENTIAL PATH IN TALK

■ Kelli McElhinny

Some future university leaders may plot out their paths with that ultimate goal in mind as they launch their careers, but Carnegie Mellon President Jared L. Cohon wasn't one of

In the next installment of the university's "Journeys" lecture series, Cohon will discuss his personal route to university leadership and how his experiences along the way shaped his ascent. Cohon's lecture, titled "The Accidental President," will take place at 4:30 p.m., Monday, Feb. 4 in Rangos 1 and 2 in the University Center.

Cohon, who in July began his third five-year term as Carnegie Mellon's president, will explore the challenges inherent in attempts to plan every aspect of one's career or life. He will also talk about how he pursued each leg of his own journey for its own value and the importance of setting goals that prepare people to take advantage of opportunities as they arise.

Journeys, a series of talks in which faculty members discuss how their everyday actions, decisions and challenges have influenced the course of their lives, is a part of the University Lecture Series. More information on the series and its previous lectures is available at http://cmu.edu/uls/journeys/.

of Fine Arts Building. The lecture highlights a two-day slate of speaking engagements and workshops in which Wilson will share her insights into social entrepreneurship.

TLP is a textbook example of social entrepreneurship, an emerging trend in which nonprofit organizations start revenue-generating, mission-consistent ventures that provide them with a sustained funding stream. In the case of Wilson's brainchild, the quarters from the laundromat support the arts initiatives that share its space.

A veteran of for-profit and nonprofit arts organizations, Wilson realized that a

variety of geographical, conceptual and financial barriers were preventing many of her neighbors in Brooklyn's Bedford-Stuyvesant area from experiencing the arts. By bringing accessible public art projects to a community hub, TLP can reach individuals from wide-ranging demographic groups. The project, which also has a Harlem location, not only features installations created by local artists of color, it also offers instruction that helps community members to develop their own artistic talents.

Wilson believes that participation in cultural organizations spills over into the civic sphere as well. TLP's art projects often incorporate themes of social awareness, and other programming addresses the various challenges faced by the community.



Wно: Risë Wilson

WHEN: 4:30 p.m., Thursday, Jan. 24

WHERE: Kresge Theater, College of Fine Arts Building

Echoing Green, an organization which supports nascent social ventures, awarded Wilson one of its prestigious fellowships in 2004, providing her with seed funding and technical support for TLP. Wilson, who earned a master of arts in Africana Studies from NYU, also teaches at the Parsons School of Design.

The lecture is being presented by Carnegie Mellon's Institute for Social Innovation (ISI), a program of the Heinz School. The ISI fosters social entrepre-

neurship by offering instruction and project and internship experience to students, and by collaborating with local nonprofits and incubating social change startups, in addition to other activities.

For more information on the ISI, please see the story on page four or visit the Web site: www.heinz.cmu.edu/socialinnovation.

Read about what's going on at Carnegie Mellon in the Upcoming Events on page seven.

# Happy Anniversary, Intelligent Workplace!

ARCHITECTURE PROFESSOR VOLKER HARTKOPF POINTS OUT THE FEATURES OF THE "BUILDING AS A POWER PLANT" RESEARCH PROJECT TO VISITORS of Carnegie Mellon's Robert L. Preger INTELLIGENT WORKPLACE (IW). THE PROJECT IS A SIX-STORY, 65,000-SQUARE-FOOT BUILDING THAT WILL POWER ITSELF THROUGH A VARIETY OF METHODS AND RENEWABLE ENERGY SOURCES.

THE IW CELEBRATED ITS 10TH ANNIVERSARY LAST MONTH WITH A TWO-DAY CONFERENCE FOCUSED ON THE FUTURE OF ENERGY GENERATION AND THE BUILT ENVIRONMENT, WITH A SPECIAL EMPHASIS ON ENERGY CONSERVATION, RENEWABLE ENERGY AND ITS IMPACT ON HEALTH AND PRODUCTIVITY.

THE ADVANCED BUILDING SYSTEMS Integration Consortium, which is the first PRIVATE-PUBLIC PARTNERSHIP IN THE BUILDING INDUSTRY THAT BRINGS TOGETHER ACADEMIA. INDUSTRY AND GOVERNMENT TO ADDRESS THE ENORMOUS IMPACT BUILDINGS HAVE ON THE ENVIRONMENT, COMMEMORATED ITS 20TH ANNIVERSARY AT THE CONFERENCE AS WELL.

