



Carnegie Mellon

- 4 INTROSPECTIVE PROGRAMS ENHANCE FIRST-YEAR EXPERIENCE
- 5 SLAVICK NAMED ARTIST OF THE YEAR, DISPLAYS WORKS AT PCA
- 9 STUDENTS TEST UPDATED BRAILLE WRITING TUTOR
- 11 ROBBINS SPREADS MESSAGE OF UNITY

Heading for a High Note



COURTESY OF BILLY PRICE

Homecoming, Kickoff Look To The Future

■ Heidi Opdyke

As alumni return to campus to remember the past and reacquaint themselves with the university as it is today, Dave Bohan, associate vice president for advancement and executive director of the capital campaign, hopes they also look to the future.

“Alumni come back to reconnect with classmates, see former faculty and get a sense of today’s Carnegie Mellon,” Bohan said, “but we also want to show them about where the university is going.”

Bohan is looking forward to “Celebrate Our Future: Carnegie Mellon’s Capital Campaign Kickoff” on Friday, Oct. 24, which promises to be a blast.

CONTINUED ON PAGE THREE

BILLY PRICE IS ONE OF THE PERFORMERS WITH A CARNEGIE MELLON CONNECTION WHO WILL BE AT THE CAPITAL CAMPAIGN KICKOFF AT 8 P.M. FRIDAY, OCT. 24. AS PART OF HOMECOMING, ALL STUDENTS, FACULTY AND STAFF ARE INVITED TO ATTEND THE PARTY AND SHOULD REGISTER AT WWW.CMU.EDU/BTHERE.

Candidates McCain, Obama Need Wide Voter Appeal, Skinner Says



PHOTO ILLUSTRATION: STEPHEN CHABASSOL

■ Kelli McElhinny

In less than a month, millions of Americans will head to the polls in a historic election featuring the first African-American atop a major party’s ticket and just the second female vice presidential candidate in U.S. history. The latest polls indicate that the race is likely to be a close one, so building a broad-based coalition of voters will be essential to winning the presidency.

According to Associate Professor of Social and Decision Sciences Kiron

Skinner, the Republicans and Democrats will need to attract voters outside of their traditional constituencies. Pundits regularly spout off a list of groups expected to be key voters — women, Catholics, Latinos and youth, just to name a few.

Engaging nontraditional voters, however, doesn’t mean that the parties’ bases can be ignored or taken for granted.

CONTINUED ON PAGE SIX

PUBLISHER
Teresa Thomas

EDITOR
Bruce Gerson

MANAGING EDITOR
Heidi Opdyke

WRITERS
Catherine Davidson
Jocelyn Duffy
Abby Houck
Kelli McElhinny
Abby Ross
Eric Sloss
Byron Spice
Chriss Swaney
Ken Walters
Andrea L. Zrimsek

DESIGNER
Melissa Stoebe
Communications Design Group

PHOTOGRAPHY
Ken Andreyo
Communications Design Group

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

Carnegie Mellon University does not discriminate and Carnegie Mellon University is required not to discriminate in admission, employment, or administration of its programs or activities on the basis of race, color, national origin, sex or handicap in violation of Title VI of the Civil Rights Act of 1964, Title IX of the Educational Amendments of 1972 and Section 504 of the Rehabilitation Act of 1973 or other federal, state, or local laws or executive orders.

In addition, Carnegie Mellon University does not discriminate in admission, employment or administration of its programs on the basis of religion, creed, ancestry, belief, age, veteran status, sexual orientation or gender identity. Carnegie Mellon does not discriminate in violation of federal, state, or local laws or executive orders. However, in the judgment of the Carnegie Mellon Human Relations Commission, the Presidential Executive Order directing the Department of Defense to follow a policy of, "Don't ask, don't tell, don't pursue," excludes openly gay, lesbian and bisexual students from receiving ROTC scholarships or serving in the military. Nevertheless, all ROTC classes at Carnegie Mellon University are available to all students.

Inquiries concerning application of these statements should be directed to the Provost, Carnegie Mellon University, 5000 Forbes Avenue, Pittsburgh, PA 15213, telephone 412-268-6684 or the Vice President for Student Affairs, Carnegie Mellon University, 5000 Forbes Avenue, Pittsburgh, PA 15213, telephone 412-268-2057.

Carnegie Mellon University publishes an annual campus security report describing the university's security, alcohol and drug, and sexual assault policies and containing statistics about the number and type of crimes committed on the campus during the preceding three years. You can obtain a copy by contacting the Carnegie Mellon Police Department at 412-268-2323. The security report is available through the World Wide Web at www.cmu.edu/police/statistics.htm.

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

Produced for Media Relations by the Communications Design Group, September 2008, 09-150.

Q&A With Dave Bohan: Why Campus Should 'B There' For the Upcoming Capital Campaign

■ Heidi Opdyke

Dave Bohan is the associate vice president for advancement and the executive director of the Capital Campaign. He is responsible for leading the university's campaign planning and implementation efforts, both financial and non-financial. The university will publicly announce the campaign on Friday, Oct. 24 at "Celebrate Our Future: Carnegie Mellon's Capital Campaign Kickoff" at Homecoming 2008.

Why is Carnegie Mellon in a campaign?

For more than a century, Carnegie Mellon has been the setting for education and research that address the world's urgent needs. Our evolution is an outgrowth of a set of beliefs and practices that prize teamwork and interdisciplinary collaboration, a tireless work ethic, creativity and imagination, reasoned risk-taking and a commitment to solving problems. We choose not to study everything, but where we focus, we excel.

Today, this legacy has created a global university that is extraordinarily attuned to the needs of the world in the 21st century. Yet there is much we cannot do, programs we cannot launch, and students we cannot fully assist because we do not yet have the resources that match our energy and potential.

The campaign will put this extraordinary university on a stronger financial foundation, and it will create the future strength for supporting this community as we achieve our growing aspirations in education and research.

What are the goals for the campaign?

The goals are twofold — fund-raising and growing the community of university advocates.

Our financial goal for this campaign is one of historic proportions for Carnegie Mellon, with an emphasis on growing the university's endowment. Simply put, endowment fuels our innovative education, programs and research endeavors. Endowment growth is vital because it ensures that we have the capital to invest in new promising endeavors, in faculty and in students. Our goal is to raise at least 50 percent of the overall campaign goal through endowment gifts.

When comparing endowment benchmark strength, our closest peers have a 3:1 advantage or better in endowment per student. For those schools, this translates to a much higher percentage of total operating budget that is funded through endowment draw. In fiscal year 2008, our endowment distributions provided 5.6 percent of the university's total operating expenses. This compares to an average of 15.6 percent for universities with an endowment of more than \$1 billion*, and higher for many in our peer group. This means that our competitors are



DAVE BOHAN

able to invest substantially more of their endowment income into faculty, students and infrastructure improvements. It also gives them flexible dollars — the kind that one can draw from to fuel big bet ideas with huge potential.

The campaign will address this gap by strengthening our endowment muscle, giving us the resources to keep leading edge research moving forward and to delve into new areas; to attract and retain the best faculty; to create new and innovative teaching methods; and to offer competitive financial aid and other forms of support for students.

In addition to endowment support, the campaign is seeking current use (expendable) funding to support existing programs, to seed new initiatives and to fund facilities and equipment needs. Finally, the campaign is aimed toward

est partners to seek lead financial support and to test campaign themes, messages and goals. A key date for the campaign is Oct. 24, 2008, when we publicly announce our campaign. At that time, we will have raised more than \$540 million in commitments and cash. The public phase of the campaign will continue for five years until June 30, 2013. During the public phase, we will have a series of events on campus and in key regions of alumni concentration in the United States and the world. We will also support activities to recognize those who have supported the campaign through philanthropy and volunteerism.

What are the focus areas of the campaign? Can gifts be designated to a particular project or program?

The campaign focus areas are broken down into four basic elements:

FACULTY AND STAFF ARE CRITICAL PARTNERS IN OUR EFFORTS BECAUSE THEIR GIFTS, AT ANY AND EVERY LEVEL, ARE AN ENDORSEMENT FOR CARNEGIE MELLON AND ITS MISSION.

growing the involvement, knowledge and advocacy of the entire Carnegie Mellon community, including alumni, faculty, staff, students, parents and friends.

Where we are today is a result of the contributions of generations of alumni, faculty and staff. For those who have not been involved with the university over the years, we invite them to learn about today's Carnegie Mellon and to become re-engaged. For those who have been supporters of the university through their participation in events, volunteerism, gifts and advocacy, we thank them and ask them to continue their support and to consider something extra for the campaign.

*source: *Commonfund Benchmarks Study 2008 – Educational Endowments*

When did the campaign begin? What are the big dates to keep in mind?

The "quiet" phase of our campaign started in July 2003. At that time, we reached out to our trustees, key alumni and close-

1. Retaining and Enhancing World Class Faculty, which includes new faculty chairs, start-up funds for new faculty, gifts for research and academic pursuits.
2. Supporting a New Generation of Student Innovators, which includes financial aid scholarships, fellowships for graduate students, student leadership initiatives, campus programs and athletics.
3. Leading Breakthrough Innovations, which includes unrestricted support, innovation funds, university and college-based annual funds, and support for university libraries.
4. Renewing Campus, which includes funds for new research and learning spaces and amenities to enhance student life, as well as funds for updating/renovating current physical and technological resources.

Within each of these, there exist opportunities for endowed and current use

CONTINUED ON PAGE THREE

Homecoming Highlights

For a complete list of events, please visit, www.cmu.edu/homecoming

Thursday, Oct. 23

Alumni Faculty & Staff Reception
11:30 a.m.-1:30 p.m.

Homecoming Comedian

(Look for an announcement soon!)
Co-Sponsored by AB Comedy, 8 p.m.

Friday, Oct. 24

Alumni Awards Ceremony

Outstanding contributions by alumni, faculty and students to Carnegie Mellon and the world at large will be honored by the Alumni Association, 5:30 p.m.

Saturday, Oct. 25

President's Address & Future of the University
10-11:30 a.m.

All Campus Tailgate Lunch

Noon-2 p.m.

Carnegie Mellon Tartans vs. Wittenberg University Tigers

Free concessions complements of the Alumni Association, 2 p.m.

CONTINUED FROM PAGE TWO

(expendable) gifts, and donors can designate gifts to projects and initiatives that have been identified for the university, colleges, schools and departments.

We are also breaking down faculty, student, program and infrastructure gift opportunities in many of the areas of research and education identified through the university's strategic planning process. These include areas such as energy and sustainability; human health and quality of life; next generation computing and communications; global society and economy; innovative education; and artistic inquiry.

Just as important as gifts to specific projects, the campaign seeks gifts that can be used to seize new opportunities in education and research, and to marshal resources to continue funding essential programs. These opportunities are funded through unrestricted giving, annual funds and innovation funds at the university, college and school levels, and support for our libraries.

Why should people give to the Carnegie Mellon campaign?

When you give to the campaign, you are investing in your university, enabling us to fuel innovation in strategic new areas, to maintain essential funding in existing programs and to create an environment where faculty, staff and students thrive. Every dollar gets us closer to discovering or creating something new; to solving the next real world problem; and to providing knowledge that enables students to succeed and innovate in the world.

The impact donors have here exceeds what they could have elsewhere because we are able to do more by harnessing novel, sometime unlikely, combinations of talent and resources to solve major scientific, technological and societal challenges and by minimizing the barriers or red tape that stand in the way of innovation.

Who has already committed to helping this campaign be a success? How can faculty and staff contribute to the success of the campaign?

We have already received significant "lead" gifts to the campaign, many of which have been groundbreaking in their reach and impact, from individuals such as David and Marlene Tepper, John and Claire Bertucci, Ray and Stephanie Lane, Bruce and Astrid McWilliams, and many other individuals; from foundations such as the Bill and Melinda Gates Foundation, the Richard King Mellon Foundation, the Heinz Endowments, the Henry L. Hillman Foundation, and the Gordon and Betty Moore Foundation; and from corporations such as Google, Electronic Arts and General Motors. We have also received gifts at every level from alumni, parents, faculty, staff and students who believe in this university, realize its needs and support its trajectory.

Faculty and staff are critical partners in our efforts because their gifts, at

any and every level, are an endorsement for Carnegie Mellon and its mission.

So many alumni keep in touch with the faculty and staff who served as advisors, mentors and friends while students here, so the actions of our campus community are viewed as a barometer that we are on the right course.

Why should I make an additional pledge to the campaign if I am already contributing?

If you are already contributing, thank you, thank you, thank you! During this campaign, where we are attempting to meet critical short- and long-term university needs and maintain a strong momentum going forward, we ask that you consider a special or incremental gift in an area at the university that is most meaningful to you. Every dollar counts, and strong participation from faculty and staff conveys a powerful message to our extended Carnegie Mellon community. For example, the FY08 faculty and staff giving was \$448,663. If every member of the faculty and staff established or increased their giving by \$5 per month, this would result in an additional \$250,000** of support this year alone, and for the five years remaining in the campaign, this would amount to gifts of more than \$1.25 million**.

** 2007-08 Factbook — 4,207 FT Faculty/Staff employees

Where can people go to find information about the campaign?

On Oct. 24, 2008, when we launch the public phase of the campaign, we will launch a Web site (www.cmu.edu/campaign) that will provide information about the campaign and how you can support it. The site will tell the stories of donors, volunteers and those who they have impacted through their involvement and philanthropy. The campaign Web site will provide information about regional events in the United States (including key areas of alumni concentration, such as New York City, San Francisco/Silicon Valley and Washington, D.C.) and around the world. Campaign events will feature topical discussions of the work of Carnegie Mellon faculty and alumni, as well as a celebration of our future as an innovative university. Carnegie Mellon Today magazine will feature the campaign in its October issue, and campaign news will appear in every issue during the campaign. In addition, we will make every effort to keep the campus informed about the campaign in various campus publications, including the Piper, communications and events.

One way to learn about and be part of the campaign is to attend the campaign kickoff on campus Friday, Oct. 24, from 8 to 11 p.m. Everyone is invited to an exciting evening that will feature free food, great exhibits, Carnegie Mellon-bred bands, alumni who are featured actors in television and movies, and a special pyrotechnic display. Look for "B There" posters and announcements for more details. Register online at www.cmu.edu/bthere.

Festivities Center on School's Future

CONTINUED FROM PAGE ONE

Zachary Quinto (CFA'99) from the NBC series "Heroes" and Aaron Staton (CFA'04) from the AMC series "Mad Men" will serve as emcees for the kickoff party. As well, the River City Brass Band, Cellofourte, Idiot Boyfriend, the Billy Price Band and the winner of the student "Battle of the Bands," all groups with Carnegie Mellon connections, will play. The night will end with fireworks and an after-party for young alumni.

"Homecoming this year promises to be the best in recent years. Over the past four years we have been progressively enriching the program with more open classes, educational sessions and student interaction," said Judy Cole, associate vice president and director of alumni relations. "And this year's program more than ever reflects the exciting future of Carnegie Mellon University. It is not to be missed!"

Prior to the kickoff celebration will be the Alumni Awards ceremony, in which 19 individuals will be recognized for professional achievement and service to the university. The Alumni Service winners are Elizabeth (Betsy) Atkins Rogers (MM'68) and Shirley Herman Townsend (MM'51). Alumni Achievement winners are Dennis M. Dimiduk (E'84,'89), Margaret C. (Peggy) Eisenhower (A'83), Brian P. Gill (HS'90), Pradeep S. Sindhu (S'83,'84) and David VandeLinde (E'64,'65,'68). Gary J. Gates (HNZ'00), Catherine A. (Cat) Mazza (A'99) and Richard W. Pell (A'99) will be honored recent alumni. Faculty Service honors go to James Daniels, and Gordon H. and Pamela P. Lewis (A'74,'80). Current students being honored for service are Mohammed Abu Zeinab (TPR'09), Georges J. Diabes (S'09) and Dhruv Mathur (HS'09).

Chip Ganassi (HA'08), owner of Chip Ganassi Racing with Felix Sabates, will be recognized as an honorary alumnus. His racing empire includes 11 drivers that represent six different countries and seven series championships, three Indianapolis 500 championships, five Rolex 24 at Daytona overall championships and more than 130 wins. He has treated Tartan Racing throughout its history like one of his own professional teams, helping set a world-class standard with advice, mentoring and sponsorship of Tartan Racing's "Boss," an automated SUV, which won the \$2 million DARPA Grand Challenge in California last November.

Joseph C. and Molly Walton (HA'08) who from the beginning have worked as energetically for Tartan Racing as any team member, championing its importance to the region's future and to the local business and foundation communities, also will be recognized as honorary alumni.

At 10 a.m. on Saturday, President Jared Cohon will offer his address on the future of the university, and an all-campus tailgate lunch starts at noon. Two o'clock is kickoff for the Carnegie Mellon Tartans vs. Wittenberg University Tigers, which will be videotaped for a Sunday, Oct. 26, broadcast on ESPN. The time has not yet been determined.

The Student Homecoming Committee has been instrumental in shaping the student Homecoming experience, and the members are excited about the opportunities to interact with alumni while bringing students from across the university together to celebrate.

"The students have an enthusiasm and dedication to the university that will be infectious throughout the weekend," said Heather Andring, associate director of On-Campus Programs.

For a complete listing of events, visit www.cmu.edu/homecoming.

Scotty To Debut at Game



PHOTO BY KEN ANDREYO

HIGHLAND AMBASSADORS (FROM LEFT) JAKE MOHIN, NISHA PHATAK, LYDIA REMINGTON AND MANASI PATIL MET SCOTTY, CARNEGIE MELLON'S FIRST LIVE MASCOT, FOR THE FIRST TIME IN SEPTEMBER. SCOTTY, A GIFT FROM COMEDIAN BILL COSBY, WILL MAKE HER OFFICIAL DEBUT AT THE HOMECOMING FOOTBALL GAME. THE HIGHLAND AMBASSADORS WILL BE RESPONSIBLE FOR ACCOMPANYING SCOTTY DURING OFFICIAL APPEARANCES. CIVIL AND ENVIRONMENTAL ENGINEERING PROFESSOR LARRY CARTWRIGHT HAS BEEN TRAINING SCOTTY SINCE SHE ARRIVED ON CAMPUS THIS PAST SUMMER.

Introspective Programs Enhance the First-Year Experience

■ Abby Houck

There's something exciting about starting with a "clean slate."

First-year students arrived on campus in August with few, if any, individuals knowing their past experiences or the labels peers previously used to describe them.

"College is a time for students to explore and clarify their own values," said John Hannon, director of Student Development.

Toward that end, the Student Affairs team has added a series of spirituality and self-reflective programs to its offerings. Student Affairs leaders designed these programs after attending a conference on "Spirituality in Higher Education," based on a national, longitudinal research study led by Alexander Astin of UCLA. The study extends beyond involvement in organized religion and indicates that a search for purpose and meaning has become central to the college student experience.

Randy Pausch's "The Last Lecture" became an integral part of this year's Student Affairs programming as a bonding experience for entering students. Although common reading was considered in past years, "identifying a book that cut across all disciplines had been difficult,"

Hannon said. More than 100 faculty and staff members facilitated discussions with students grouped by residence hall floors. Orientation staff agreed that the talks were a turning point for students in feeling connected with their house communities.

The Big Questions series, a pilot project in three house communities last year, is another program designed to strengthen bonds. It provides a forum for self-reflection and building relationships with faculty outside of the classroom.

Susan Bassett, director of Athletics and Physical Education, met with Morewood Gardens residents last fall. Her appreciation for interacting with students from many disciplines was a common sentiment among facilitators.

"Getting to know a group of students unrelated to athletics was a great experience," she said. Bassett's group discussed themes from children's books that had made an impact on the students' lives. Together, they read books such as "The Little Prince" and "Horton Hears A Who!"

Kunal Ghosh, assistant head for undergraduate affairs in the Physics Department, met with an all-male wing from Stever House. Although Big Questions was only planned for the fall semester,

his group became so engaged that discussions continued throughout the spring. Ghosh recalls his first interaction with the group on the second day of orientation. It was meant to be a short meet-and-greet, but the students eagerly launched into a discussion about whether or not torture of humans is justified in particular circumstances, a challenging topic for students who had barely unpacked their belongings. The group continued to propose and prioritize topics that interested them, including "What is love?" and "What makes a man in today's world?"

One of Ghosh's students was Joshua Debner, now a sophomore electrical and computer engineering major and resident assistant. It was reassuring for Debner to know that his peers were committed to supporting one another. He said Big Questions helped him to understand "the community needs you just as much as you need the community."

This summer, Debner initiated a similar discussion group in his hometown of Southington, Conn. About 10 to 12 of his friends joined in the first meeting. At one point the group had grown to 20 participants.

"People were curious," he said. "They didn't realize how addicting Big Questions could be."

This year Big Questions has been implemented in all first-year residences, and a trial series is being held in a building primarily housing upperclassmen. Instead of meeting by floor, residents are invited to join discussions on three different evenings in each building. During the spring and summer, Professor Patricia Carpenter of the Psychology Department worked with Student Development to create a set of best practices and provided a forum for faculty to prepare for Big Questions facilitator roles.

Although Student Affairs has created distinct programs for first-year students to make meaning from their experiences, the division is committed to offering a variety of opportunities to upperclassmen and graduate students. Student Affairs facilitates ongoing interaction among faith-based organizations on campus through the Interfaith Council. In addition, Carnegie Mellon's second annual Spiritual Development Month will take place in November concluding with a campus-wide Thanksgiving Celebration.

More information on upcoming spirituality and self-exploration programs is available at www.studentaffairs.cmu.edu/student-development/spirituality/index.html.

Future Leaders Wanted

Do you have the skills, drive and commitment to the university to be the next senior leader at Carnegie Mellon? If you think so, then the new Carnegie Mellon Leadership Academy may be right for you.

The intensive yearlong staff development program, which debuts in 2009, is intended to prepare talented and dedicated staff for positions of senior leadership to guide the university into the future. The program includes classroom instruction and participation in a strategic team project.

Classes will be taught by professors and professionals from the Tepper School of Business, the Heinz School of Public Policy and Management, and Human Resources' Learning and Development program. Topics range from Leadership Style and Collaborative Problem-Solving to Managerial Communications, Higher Education Finance and Legal and Ethical Issues in Higher Education.

The pilot program, a joint effort between the Tepper School and Human Resources, will include a team project focusing on a key issue facing the university, such as global competitiveness, human capital development and financial stability/cost management.

Applications are being accepted from Oct. 15 through Nov. 30. Up to 20 participants will be chosen. Eligible staff must be at a job grade 61 to 65 (formerly known as 10 to 12), have a bachelor's degree and one-year work experience at Carnegie Mellon, or have an associate's degree and three years of experience at the university. Applicants must possess a proven commitment to the university and a strong desire for professional advancement.

Applicants must provide a 250-word letter of interest and two letters of recommendation — one from a direct manager and a second from a department head or higher. The selection committee consists of Cheri Hays, director of the President's Office and secretary to the Board of Trustees; Professor Pradeep Khosla, dean of the College of Engineering; Deborah Moon, vice president and chief financial officer; Michael Murphy, vice president for Campus Affairs; and Ronald Placone, assistant vice president for Learning and Development.

For more information, visit www.cmu.edu/hr/leadership-academy/index.html.

Upcoming Events

Lectures

Robert Behrman, Ph.D. student in the Department of Engineering and Public Policy
"Understanding Conditions in Iraq After the Surge"

4:30 p.m., Monday, Oct. 13
Adamson Wing, 136A Baker Hall

Steve Robbins, a nationally known speaker, professor, writer and consultant

"Unintentional Intolerance"
4:30 p.m., Thursday, Oct. 16
McConomy Auditorium

Frank Wu, author of "Yellow: Race in America Beyond Black and White"

"Asian Americans and the Changing Face of our Nation"

5 p.m., Tuesday, Oct. 21
Giant Eagle Auditorium, Baker Hall

Bill Reinert, national manager of Advanced Technology for Toyota Motor Sales, USA

"Mobility in the 21st Century: Challenges and Promises"

4:30 p.m., Monday, Oct. 27
Adamson Wing, 136A Baker Hall

Mary Catherine Bateson, the Robinson Professor Emerita at George Mason University

Journeys Series: "The Changing Shapes of Lives"

4:30 p.m., Thursday, Oct. 30
McConomy Auditorium

Special Events

Campus Community Blood Drive

If you would like to donate, please see www.centralbloodbank.org, select "make an appointment" and enter our sponsor code, CU190006. Walk-ins are welcome.
10 a.m.-4 p.m., Wednesday, Oct. 22
West Wing Lounge

Celebration of the 25th Anniversary of Field Robotics Center & Red Whittaker's 60th Birthday

Robotics Institute Seminar
3:30 p.m., Friday, Oct. 24, location TBA
A reception will follow at 4:30 p.m. at the Robotics Institute High Bay.

2008 Benefits & Fitness Fair

Talk to healthcare and fitness vendors, discuss benefit options, pick up freebies, enter great raffles, and receive free flu vaccinations and health screenings.

11 a.m.-4 p.m., Wednesday, Nov. 5
Rangos Ballroom, UC

Arts

Carnegie Mellon Guitar Ensemble

James Ferla, conductor
8 p.m., Wednesday, Oct. 15
Alumni Concert Hall

Carnegie Mellon Philharmonic

Juan Pablo Izquierdo, guest conductor
8 p.m., Tuesday, Oct. 21
Soldiers and Sailors Hall
\$5 general admission, free for Carnegie Mellon students with ID

Carnegie Mellon Opera Production

Coronation of Poppea
Wednesday-Saturday, Oct. 22-25
Philip Chosky Theater
For tickets, call the box office at 412-268-2407

Carnegie Mellon Philharmonic

David Loebel, guest conductor
Emma Steele, violin
8 p.m., Friday, Oct. 31
Carnegie Music Hall (Oakland)
\$5 general admission, free for Carnegie Mellon students with ID

Exhibition: Pancrace Bessa and the Golden Age of French Botanical Illustration

A selection of watercolors and prints by the French botanical artist Pancrace Bessa (1772-1846). Bessa painted flowers and fruits for some of the most important collections and botanical publications of the early 19th century, taught painting and exhibited at the Paris Salon.

Through Dec. 19
The Hunt Institute, Hunt Library
For further information:
<http://huntbot.andrew.cmu.edu>

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

Slavick Receives Artist of The Year Award, Displays Work at the PCA

■ Eric Sloss

In times of war it is not uncommon to hear military vernacular in everyday language and in the media, symptoms of a disturbed cultural consciousness in times of strife.

Reflecting this phenomenon, the military term “R & R,” meaning rest and recuperation, provides inspiration for the latest exhibition by Susanne Slavick, the Pittsburgh Center for the Arts (PCA) 2008 Artist of the Year and the Andrew



SUSANNE SLAVICK

W. Mellon Professor of Art at Carnegie Mellon. Showing now through Nov. 2 at the PCA, “R&R&R”

expands its founding acronym, using words such as regret, recover and renew in “hopes to pose questions about the complicity ... or miraculous recovery from self-inflicted destruction.”

“Susanne was selected as the Artist of the Year because of her outstanding work as an artist and educator,” said Laura Domencic, executive director of the PCA. “The committee recognized her strong impact on future generations of artists through her teaching in the Pittsburgh community. What made her stand out was the high level of quality and poetic nature of her paintings; her art is powerful and articulate.”

The exhibition is presented in six different rooms filled with more than 60 pieces in a journey through visions of architectural wreckage. Overlaid with Arabesque imagery in gouache paint, the ruins are transformed into cultural

criticism that “recognizes, rues or reconstitutes.” In the prints, rebar is exposed through cracks of concrete and bulging structure, evoking the wreckage of a bomb site and testifying to the violence that remains suspended in the still of the aftermath.

All the works in the show were painted during the last two years and, with the exception of three of the works on paper, they all premiere in this exhibition.

“At the start of my sabbatical and upon learning of this award, I knew I wanted to begin a new body of work and experiment with different imagery and processes,” Slavick said. “Since much of my work has always responded to socio-political conditions, it was not a big leap to address the many ongoing conflicts in which we are embroiled. Given that so much of the information about these conflicts is transmitted through the media, I turned to media images, primarily on the Internet.”

The photographs are appropriated from various online sources, including mainstream news reports, soldiers’ blogs, military Web sites and other photographic collections.

The combination of gouache and digital print photography was new to Slavick, as was the technology to alter images.

“I wanted to contrast the mechanical and electronic nature of these images and their inherent contradictory effects



PHOTO BY ERIC SLOSS

THE MILITARY TERM “R & R” SERVES AS INSPIRATION FOR SUSANNE SLAVICK’S LATEST EXHIBITION. SLAVICK WAS NAMED ARTIST OF THE YEAR BY THE PITTSBURGH CENTER FOR THE ARTS.

with the immediacy of the hand-made. The gouache elements are drawn from the art and architecture from the Islamic world, reminding us of the affirmative and creative impulses of a culture many see only as aggressive, fanatical and even evil,” Slavick said.

Throughout the exhibition, the images and imposed paintings evolve to create novel interactions. In the first room the gouache paint seamlessly merges with the matte gray prints. In the second room the digital prints are less restrained, increasingly stark and mournful, the painting less aggressive. In rooms four, five and six beautifully colored birds, ornamented camels, bright flowers and other extravagances superimpose prints of bombed buildings, desert scenes or abandoned machinery.

Slavick is not the only Carnegie Mellon professor who has been honored as Artist of the Year. Samuel Rosenberg, former head of the Department of Art in

“R&R&R”

Sept. 12 – Nov. 2
PCA Galleries
6300 Fifth Ave
Pittsburgh, PA 15232
412-361-0873

Mondays: CLOSED
Tuesday-Saturday: 10 a.m.–5 p.m.
Sunday: noon –5 p.m.

Suggested donation: \$5.
Free for PCA members.

Carnegie Mellon’s College of Fine Arts, became the first in 1950. Since then, eight faculty have been honored as Artist of the Year, including Robert Lepper, Herbert Olds, Patricia Bellan-Gillen, James Duesing and Clayton Merrell. Slavick’s appointment is a great honor and a chance to celebrate the School of Art’s continued influence on the cultural identity of the city of Pittsburgh.

Energy Charges CEO Forum



PHOTO BY KEN ANDREYO

AT LEFT, ARIS CANDRIS, PRESIDENT AND CHIEF EXECUTIVE OFFICER OF WESTINGHOUSE ELECTRIC COMPANY, LISTENS AS MURRY S. GERBER, CHAIRMAN AND CHIEF EXECUTIVE OFFICER OF EQUITABLE RESOURCES, EXPLAINS A POINT DURING THE “DRIVERS AND IMPEDIMENTS TO THE DEVELOPMENT OF ENERGY TECHNOLOGY” DISCUSSION AT A CEO FORUM ON INNOVATION IN LATE SEPTEMBER AT THE HELEN WAYNE RAUH STUDIO THEATER. THE UNIVERSITY AND THE PITTSBURGH TECHNOLOGY COUNCIL HOSTED CARLOS GUTIERREZ, AT RIGHT, U.S. SECRETARY OF COMMERCE, AND AREA BUSINESS LEADERS FOR THE PUBLIC FORUM.

Andy Awards

OUTSTANDING STAFF RECOGNIZED FOR ACHIEVEMENTS

More than 100 staff members were nominated for The 2008 Andy Awards — named for Andrew Carnegie and Andrew Mellon — which pay tribute to the spirit of teamwork and dedication embodied by university staff. The following individuals were recognized for their contributions, outstanding performance and commitment to excellence:

- Outstanding Dedication** – Judy Hallinen, director, Leonard Gelfand Center for Service Learning and Outreach
- Outstanding Commitment to Students** – Stephen G. Pajewski, associate director of the Information Systems Program and an advisor to IS students
- Outstanding Innovation** – Linda Schmidt, manager of the process and system improvement initiative, Human Resources
- Outstanding Culture** – Liz Fox, assistant dean for research in the College of Fine Arts
- Outstanding University Citizenship** – Brenda Peyser, associate dean of the Heinz School

For a complete list of nominees, visit www.cmu.edu/andyawards.

The following people were recognized for 30 years of service:

- Rosemarie Commisso**, assistant business manager, Philosophy
- Joseph Devine**, associate dean for undergraduate studies, H&SS
- Bonnie Domagala**, software systems engineer, Advancement Information Services (University Advancement)

- Margaret Kinsky**, business manager, English
- Dennis Marous**, executive assistant, Computer Science Department
- Robert McDivett**, Unix System administrator, SCS computing facility
- Maragaret Nasta**, senior scientist, Center for Advanced Fuel Technology
- William Pingitore**, undergrad lab facilities supervisor, Materials Science & Engineering
- Marc Portnoff**, manager and senior scientist, Center for Advanced Fuel Technology
- David Purta**, director and senior scientist, Center for Advanced Fuel Technology
- Richard Schaeffer**, director of finance, Tepper School of Business
- Lui Sha**, visiting scientist, SEI ASP Navy Team
- Gary Thomas**, manager, Photography and Graphic Services

Five people were recognized as being with the university for 35 years:

- Alan Guisewite**, webmaster/special projects assistant, Robotics Finance & Administration
- Janice Hart**, director, Saturday Pre-college Art Programs
- Marian Kovalchik**, assistant department head for finance, Electrical & Computer Engineering
- Annie Kurpiewski**, undergraduate admission & student aid
- Betty Pursh**, manager, Telecommunications (Comp Services)

Joseph Greenaway of Campus Design and Facility Development was recognized as having worked for Carnegie Mellon for 40 years.

Tigger Tales



PHOTO BY KEN ANDREYO

STUFFED TIGGERS WITH KERCHIEFS THAT SAID "YOU HAVE TO DECIDE — RANDY PAUSCH" WERE PLACED ON CHAIRS IN RANGOS BALLROOM FOR THOSE ATTENDING THE LATE SEPTEMBER MEMORIAL SERVICE FOR CARNEGIE MELLON PROFESSOR AND ALUMNUS RANDY PAUSCH, WHO DIED JULY 25 OF PANCREATIC CANCER. MORE THAN 500 ATTENDED THE SERVICE TO HEAR FRIENDS AND COLLEAGUES SHARE SOME OF THE FOND MEMORIES AND RECOLLECTIONS THEY HAVE OF RANDY, WHO IN HIS FAMOUS "LAST LECTURE" SAID, "YOU JUST HAVE TO DECIDE IF YOU'RE A TIGGER OR AN EYORE." TO SEE A VIDEO OF THE ENTIRE SERVICE, WWW.YOUTUBE.COM/WATCH?V=G BXWO200kBY.

Candidates Need Wide Appeal

CONTINUED FROM PAGE ONE

"Yes, the candidates must play up their policy stances that will help them reach out to potential crossover voters," said Skinner, the author of "The Strategy of Campaigning: Lessons from Ronald Reagan and Boris Yeltsin." "At the same time, though, they need to reassure party stalwarts that their concerns and beliefs aren't being abandoned." She notes that approach led Reagan to his landslide victory in 1980.

One way in which the Republican candidate, Sen. John McCain, has tried to broaden his appeal is by distinguishing himself from George W. Bush, and Skinner says that he has been largely successful in his efforts to distance himself.

In his primary races and even since he became the presumptive nominee, McCain had another battle to fight. He had to overcome the challenge of engaging a Republican base that was not particularly enthralled by him when it first became clear that he would be atop the Republican ticket in November. With the introduction of Alaska Governor Sarah Palin as his running mate, he seems to have injected the Republicans with a healthy dose of energy.

"Just a few months ago, this sort of excitement for the Republican ticket among hard-core Republicans might have been unexpected," Skinner said. "Yet, McCain continues to emphasize his maverick reputation in order to appeal to voters who find themselves closer to the center of the political spectrum as well."

Skinner also suggests that this year's election may have ramifications for the Republicans that reach well beyond the party's ability to maintain the presidency for another four or eight years.

On the Democratic side of the campaign, Sen. Barack Obama initially showed the capacity for coalition-building among diverse constituencies during his groundbreaking march to the party's nod. Recent developments, such as Palin's appeal to middle-class women, along with Obama's continued struggles to win over working class voters that dogged him even in his race against Sen. Hillary Clinton, could confine his appeal to a narrower swath of the electorate.

Obama's core message of change may need to be reinvigorated as well. The McCain campaign has begun to play up the ticket's efforts to reform its party in addition to the system, essentially co-opting Obama's main theme.

"Obama will need to find some way to take back the change mantra if he hopes to have as much success in the general election as he did during the primary season," Skinner said.

She also notes that, in some ways obvious and others less so, race plays an interesting role in this campaign. Not only does Obama have the opportunity to make history because of his race, this watershed campaign also encourages the Republicans to reflect on their own appeal — or lack thereof — to minorities, specifically the African-Americans who supported them in large numbers until the 1960s.

So with all of her expert analysis, does Skinner have any predictions on the outcome that she'd like to share?

"I wouldn't give either candidate a clear edge at this point, but I do expect the numbers to be close. I will be glued to my television on Nov. 4, just like much of the rest of the country."

Academy of Interactive Arts & Sciences Establishes Pausch Scholarship

■ Byron Spice

Lisa Brown, a first-year graduate student at the Entertainment Technology Center, is one of four recipients of the Randy Pausch Scholarship Fund established by the Academy of Interactive Arts & Sciences (AIAS). The academy plans to award the scholarship annually.

"The academy has established a scholarship that will advance the game industry by supporting students interested in taking game design and development to the next level," said Drew Davidson, program director for ETC Pittsburgh. "Randy excelled at challenging students to innovate as they worked together on interdisciplinary teams to create engaging interactive experiences. The recipients of this scholarship have already shown that they've accepted this challenge and it will be interesting to see how they exceed expectations."

Brown, from Louisville, Ky., plans to use her background in traditional art, comic art, computer science, theater and animation to create games for interactive museum exhibits.

"I'm extremely honored to be chosen for this scholarship. It is because of Randy Pausch and the Entertainment Technology Center that I am able to

advance in the world of game design at all, and I hope to live up to that honor," she said.

Other winners are Diana Hughes of the University of Southern California, Garrick Williams, of West Virginia University and Jason Williams of Memphis, Tenn., an online student of the University of Advancing Technology.

"It makes sense that the academy's first scholarship honors Dr. Randy Pausch who is an inspiration to people who want to be involved in making great games," said Joseph Olin, AIAS president. "We hope these scholarships may help the next Will Wright (creator of The Sims) or Mike Morhaime (president of Blizzard Entertainment) get their start."

Rich Hilleman, academy board member from Electronic Arts, suggested a scholarship fund be created to honor the late Randy Pausch to further the education of students in school for game design, development and production.

"This new effort is a wonderful opportunity for the video game industry to support its future by providing a foundation in academics," Hilleman said.

"I am thrilled that we could help put this scholarship together for deserving students who are up to the challenge."

Pixar's President Accepts First Randy Pausch Prize

■ Byron Spice



COURTESY OF DISNEY/PIXAR

ED CATMULL, PRESIDENT OF WALT DISNEY AND PIXAR ANIMATION STUDIOS, PRESENTED THE FIRST PAUSCH LECTURE AS PART OF THE RANDY PAUSCH PRIZE.

Ed Catmull, president of Walt Disney and Pixar Animation Studios, accepted the first Randy Pausch Prize from the Entertainment Technology Center (ETC) and presented the keynote address at the 7th International Conference on Entertainment Computing (ICEC).

The award, which the ETC plans to present annually, honors entertainment industry experts who embody the interdisciplinary spirit of Pausch.

Catmull co-founded Pixar, which has produced such films as "Toy Story," "The Incredibles" and "Wall-E," and created two other leading centers of computer graphics research — the computer graphics laboratory at the New York Institute of Technology and the computer division of Lucasfilm Ltd.

Recipients of the Pausch Prize, which includes a \$2,500 cash award, will give a lecture at Carnegie Mellon. Catmull presented the Pausch lecture Sept. 26 in McConomy Auditorium, which served as the keynote address for the ICEC, the largest and most prestigious conference for entertainment computing.

Teresa Heinz To Host Panel on Climate Change, Energy Policy



PHOTO BY KEN ANDREYO

TERESA HEINZ

Teresa Heinz will be on campus later this month to host a panel discussion that aims to give the next U.S. president some advice on global warming and energy policy.

The conversation, moderated by Moira Gunn, host of National Public Radio's "Tech Nation" and "BioTech Nation," will include Harvard University Professor John Holdren, Carnegie Mellon professors Lee Branstetter and M. Granger Morgan, and Melissa Young, a second-year student in the Heinz School's Master of Public Policy and Management Program and recipient of the school's Otto Davis Scholarship.

The discussion, open to the campus community, will be held at 5 p.m., Monday, Oct. 20 at the Mellon Institute Auditorium, 4400 Fifth Avenue. Attendees must use the Bellefield Avenue entrance and RSVP to Kristin Niceswanger at 412-268-6066 or kristinn@andrew.cmu.edu by Oct. 14.

The participants will give their

perspectives on climate change and energy policy and the resulting impact on economic growth and technological innovation. The discussion will focus on bold and critical recommendations for John McCain and Barack Obama.

Holdren is the Teresa and John Heinz Professor of Environmental Policy and director of the Program on Science, Technology and Public Policy at Harvard's Kennedy School of Government. He is also president and director of the non-profit Woods Hole Research Center and the recipient of the 7th annual Heinz Award for Public Policy.

Branstetter is an associate professor of economics and public policy at the Heinz School who holds a joint appointment in the Department of Social and Decision Sciences in the College of Humanities and Social Sciences.

Morgan, an expert on energy efficiency and the environment, is the Lord Chair Professor in Engineering and head of the Engineering and Public Policy Department. He also holds appointments in the Electrical and Computer Engineering Department and at the Heinz School.

Heinz is recognized as a premier environmental leader and advocate on behalf of women's health and economic security. She is chair of The Heinz Endowments and the Heinz Family Philanthropies. With her husband, Sen. John Kerry of Massachusetts, she is co-author of "This Moment on Earth: Today's New Environmentalists and Their Vision for the Future." She established the Heinz Awards in 1993 to honor and sustain the legacy of her late husband, U.S. Sen. John Heinz, for whom the Heinz School is named.

Editors Secure Ideas From CyLab Fellowship



PHOTO BY KEN ANDREYO

PICTURED FROM LEFT TO RIGHT ARE JOSH FISCHMAN, SENIOR EDITOR OF SCIENCE AND TECHNOLOGY AT THE CHRONICLE OF HIGHER EDUCATION, CIT DEAN PRADEEP K. KHOSLA AND MICHAEL S. MIMOSO, EDITOR OF INFORMATION SECURITY MAGAZINE.

■ Chriss Swaney

CyLab hosted two top journalists for its second annual media fellowship program.

Michael S. Mimoso, editor of Information Security Magazine, and Josh Fischman, senior editor of science and technology for The Chronicle of Higher Education, met informally with researchers.

Their interviews spanned topics ranging from next generation secure networks to secure home computing. They also learned about research under way to improve software and hardware technology for mobile devices.

Carnegie Mellon CyLab is a university-wide, multidisciplinary initiative involving more than 200 faculty, students and staff at Carnegie Mellon that builds on more than two decades of the university's leadership in information technology. CyLab works closely with the CERT® Program, a leading, internationally recognized center for Internet security expertise.

Scaffolding Could Improve Bone Rebuilding Methods

■ Jocelyn Duffy

A group of university scientists, including Newell Washburn, Krzysztof Matyjaszewski and Jeffrey Hollinger, have developed a new scaffolding for bone regeneration. The scaffolding, made of hyaluronic hydrogels, promotes cell proliferation, differentiation and mineralization of pre-osteoblast cells in vitro. Preliminary findings were presented at the national meeting of the American Chemical Society in Philadelphia.

The scaffolding has the potential to improve on traditional methods of repairing damaged bone tissue. For example, now when a person has a bone fracture that fails to heal, physicians repair the bone using demineralized bone matrix obtained from cadavers. This material is limited in supply, and because it comes from a human donor it carries a risk of transmitting viruses to the recipient. According to Washburn, assistant professor of chemistry and biomedical engineering, a synthetic matrix like the one the Carnegie Mellon researchers created could provide a safer and perhaps more effective alternative.

Green Catalysts Could Help Clean Up Environmental Problems

Researchers are learning more and more about Iron Tetra-Amido Macrocyclic Ligands (Fe-TAMLs), the green catalysts developed by Carnegie Mellon's Terry Collins. And by gaining a better understanding of how these catalysts work, Collins believes they may have the potential to be even more effective than previously proven.

"By knowing the mechanics of the chemical reactions caused by the Fe-TAMLs, we can now begin to fine tune the catalysts to optimize their performance," said Collins, the Thomas Lord Professor of Chemistry and director of Carnegie Mellon's Institute for Green Science.

Fe-TAMLs are the first highly effective mimics of peroxidase enzymes. When partnered with hydrogen peroxide they are able to convert a variety of harmful pollutants into less toxic substances, potentially providing clean and safe alternatives to existing industrial practices and providing ways to remediate pressing environmental problems that currently lack solutions.

Big Foot

INDUSTRIES' CARBON FOOTPRINTS ARE LARGER THAN THEY SEEM

■ Chriss Swaney

University researchers are urging companies to embrace new methods for following the trail of carbon emissions, which are responsible for much of the world's global warming threats.

Because there is no universally accepted way of calculating someone's carbon footprint, dozens of carbon calculators have sprung up on the Internet in the past few years creating confusion and inaccurate information. In addition, accepted frameworks for tracking industry carbon emissions rely on "tiers" of increasingly broad scope. Tier one generally includes emissions by the company's own activities, such as burning gasoline in fleet vehicles or natural gas in its facilities. The second tier boundary expands to include emissions from

electricity and steam purchased by the company. Tier three includes all other emissions, including the entire supply chain of goods and services.

In practice, most companies reporting their greenhouse gas emissions opt to use only tier one or the tier two boundary. To put the implications of this boundary decision into context, researchers H. Scott Matthews, Chris T. Hendrickson and Christopher L. Weber have developed a new method that estimates the amount of greenhouse gas emissions across all tiers of the entire supply chain for industries.

The researchers urge industry to use comprehensive screening tools, such as the Web site, www.eiolca.net, they helped to develop.

Allegheny River Draws Trio for Three-Day Rafting Trip



COURTESY OF CHRIS HARRISON

CHRIS HARRISON, MIDDLE, BRYAN PENDLETON AND JULIA SCHWARZ TEST THEIR RAFT, "JOY WILLING," ON THE MONONGAHELA BEFORE BEGINNING A THREE-DAY FLOAT DOWN THE ALLEGHENY RIVER.

■ Bruce Gerson

Chris Harrison is a computer scientist by trade, but a river historian — and somewhat of a riverboat gambler — at heart. This summer, the second-year Ph.D. student enjoyed an electrifying “pseudo-authentic” experience that he says, “put the icing on the cake” of his first year at Carnegie Mellon.

Harrison and fellow Human-Computer Interaction Institute (HCII) doctoral student Bryan Pendleton and visiting University of Washington undergraduate Julia Schwarz, spent three days and two nights floating 35 miles down the Allegheny River — from Warren, Pa., to Tionesta, Pa., along the Allegheny National Forest — on a makeshift raft.

“The Allegheny is really a spectacular river,” said Harrison, whose motivation for the trip stemmed from his desire to travel down the Hudson River to Manhattan during his days as an NYU

undergrad. “The area is very hilly and there are many bluffs and islands along the way. And the fortunes of Pittsburgh are really tied to the fortunes of the Allegheny, much like New York is tied to the Hudson. A lot of wood, oil and coal still come down the river. One of the reasons Pittsburgh was founded where it was, is because of the Allegheny.”

The raft was built in Pendleton’s garage using scrap wood, \$13 worth of 2x4s, screws and four 55-gallon plastic barrels recycled from industry. They named the raft “Joy Willing,” because if it were not for Pendleton’s wife, Joylette, approving the trip, it wouldn’t have happened, Harrison said.

“The raft was small. It was like three people locked in a bathroom for three days. It was essentially a small floating platform,” Harrison said.

Once the raft was built, Harrison applied for a permit from the Pennsylvania

Fish and Boat Commission. The application form called for the make, model and year of the vessel.

“Make ... I’m like ‘me.’ Year: 2008. ID number, not applicable. They were sufficiently suspicious that they made me staple my Carnegie Mellon business card to the application,” Harrison said.

With permit in tow the three adventurers hoisted the raft onto Harrison’s VW Golf hatchback and headed to the Monongahela River near Kennywood Park for a test. As barges and large vessels passed them, they discovered the barrels were taking in water and had to be resealed.

After a second trial, the crew embarked for their launch in Warren. The VW’s load included a stove, two tents, food and other camping gear.

“We went all-out on the food. We had chicken fajitas, guacamole and Indian curry. We cooked sausage and pancakes. We lived like kings,” he said.

A thunderstorm greeted them soon after their launch, and obstacles such as shallow water, rocks, tree limbs, downed logs and rapids hindered the journey.

“Being caught in a thunderstorm before we’d even quite figured out how to fully navigate the boat really made for a memorable experience,” Pendleton said.

There were times when they weren’t sure the raft would survive.

“It was pretty terrifying. Lightning was hitting all around us. The surface of the water was shimmering,” Harrison recalled. “We heard the thunder and saw

the lightning strike at the same time. It was, literally, hundreds of feet away.”

But there were serene times as well. At nightfall they cooked and camped on one of the river’s many islands and posted real-time updates of their trip on www.alleghenyrafters.com.

“This was a unique experience. We made our own adventure,” Harrison said. “Once at night we cooked on a little

Trip Video highlights:

www.youtube.com/watch?v=q2M9vk1AIIA

Julia Schwarz’s blog: <http://julenkaschwarz.blogspot.com/2008/08/rafting-allegheny-day-1-8708.html>

Trip’s photo gallery:

<http://picasaweb.google.com/alleghenyrafters/AlleghenyRafting#slideshow/>

sandbar-like peninsula. The stars and hills around us were amazing. It was probably one of the most beautiful areas of Pennsylvania I’ve seen.”

“I was able to see a side of Pittsburgh that I had missed,” said Schwarz, a visiting researcher at the HCII. “I got to see bald eagles, the Milky Way and tons of bugs skipping across the water. I got to experience torrential rain and terrifying thunderstorms, but also was able to experience Huckleberry Finn-esque moments on the raft.”

So, what’s next for the three adventurers?

“Next summer it would be fun to continue from where we left off,” Harrison said smiling. “There’s another 135 miles before you reach the first lock and it becomes more commercial.”

That’s if Joy’s willing, of course.

Back to School’s a Hike for EPP Doctoral Student

■ Bruce Gerson

Stephen Rose may be the only person who will be able to tell his children that he walked 880 miles to school and not be lying.

This summer, the first-year Ph.D. student in engineering and public policy hiked his way to Carnegie Mellon from his home in Greenville, S.C. The Eagle Scout and his 40-pound backpack made the grueling trip in seven weeks and three days.

“These are the sorts of trips that you can only do when you’re between jobs, because you’ll never be able to get enough vacation time to do something like this,” said Rose, who left his home and job as a mechanical engineer for General Electric on June 14 and arrived in Pittsburgh on Aug. 4.

The precedent for the trip was a cross-country bicycle ride he took from his parents’ home in San Fran-



COURTESY OF STEPHEN ROSE

STEPHEN ROSE HIKED 880 MILES STARTING FROM SOUTH CAROLINA TO GET TO SCHOOL ON TIME.

cisco to South Carolina. That ride came in between earning his master’s degree at Georgia Tech and his job designing wind turbines for GE.

Like any good Boy Scout, Rose did his homework to prepare for the excursion. He bought guidebooks and maps to help him navigate the Mountains-to-Sea trail in North Carolina; the Appala-

chian Trail through Tennessee and parts of Virginia; the Allegheny Trail through Virginia and West Virginia; the Great Allegheny Passage from Ohiopyle, Pa., to nearby McKeesport; and finally from McKeesport to campus. A GPS transmitter enabled friends and family to

track his progress.

“Although they couldn’t talk to me and I couldn’t talk to them, I knew they were watching,” Rose said.

Unlike any good Boy Scout, he started his journey in brand new boots.

“It was dumb. The first week I had a lot of blisters. I lost some feeling in my toes, which has mostly come back

now,” he said.

Rose hiked 20 miles daily for six days a week, which took eight to 10 hours a day. His normal routine had him up by 6:30 a.m. and hiking by 7:30 or 8 a.m. He often slept at designated campsites and at backpackers’ hostels, where beds, showers and laundry facilities were available. Nearby the hostels were restaurants and grocery stores, where he bought rice, pasta, tuna in foil packets, peanuts, raisins, M&Ms and pop tarts.

“In West Virginia I suspected there would be stretches where I wouldn’t be able to buy anything,” he said. He mailed care packages to post offices along his route with requests that they be held for his arrival. “So, I showed up, showed my ID and got my box of food. It was like Christmas morning,” he said.

CONTINUED ON PAGE NINE

Signs of Progress



PHOTO BY HEIDI OPDYKE



PHOTO BY HEIDI OPDYKE

WORKERS SECURE A BEAM, SIGNED EARLIER BY THE CAMPUS COMMUNITY, DURING A “TOPPING OFF” CEREMONY FOR THE SCHOOL OF COMPUTER SCIENCE (SCS) COMPLEX. RANDY BRYANT, DEAN OF SCS, DESCRIBED BEING “TOTALLY DAZZLED” BY THE STRUCTURE. HE CALLED IT “ONE OF THE GREATEST ACADEMIC BUILDINGS IN THE WHOLE COUNTRY.” AT LEFT, BRYANT SIGNS THE BEAM AS SEVERAL MEMBERS OF THE SCS BUILDING COMMITTEE, GUY BLELLOCH (CHAIR), PROFESSOR OF COMPUTER SCIENCE; CARLOS GUESTRIN, ASSISTANT PROFESSOR OF MACHINE LEARNING; AND JIM SKEES, DIRECTOR OF BUILDING FACILITIES, WAIT THEIR TURN.

Students Test Updated Braille Writing Tutor in Bangalore

■ Byron Spice

Learning how to write in Braille is usually difficult and tiresome work for blind children, so Carnegie Mellon students are continuing to develop a low-cost, low-power, high-tech tutoring device that makes the task easier and fun.

The Braille Writing Tutor, a device that provides audible feedback as students work, was developed by Carnegie Mellon’s TechBridgeWorld group and field-tested at the Mathru School for the Blind in Bangalore, India, in 2006.

This summer, an improved version was tested in Bangalore by four students — Saurabh Sanghvi, an electrical and computer engineering major in Pittsburgh, Kaleem Rahman and Aysha Siddique, computer science majors in Qatar, and Ermine Teves, a business administration graduate in Pittsburgh. Microsoft Research India provided support for the field test.

In the United States and much of the developed world, “Brailers” — stand-alone keyboards with Braille output — have displaced the traditional slate and stylus method, in which students create the raised dimples that make up Braille letters by turning the paper over and writing the letters backward. But a large majority of the more than 160 million visually impaired people worldwide live in developing nations, where computers can be uncommon and the failure to learn to read and write in Braille makes illiteracy a significant challenge.

The solution that Nidhi Kalra and Tom Lauwers, Ph.D. students in robotics, created in 2005 was the Braille

Writing Tutor, a device that could sense the impressions being made as the students wrote in Braille and provide immediate, audible feedback — either identifying each letter or each word. Kalra pursued the project after an email exchange with teachers at the Mathru school where she discovered that learning how to write in Braille was difficult for their students.

Sanghvi said the new features intend to expand the tutor’s use beyond introductory work. Among the enhancements is a game feature that the developers hope will entice older students with still-shaky writing skills to use the tutor.

“This experience was incredible,” Sanghvi said. “You actually get to see the end user and directly see that you’re making an impact.”

Participants in the TechBridgeWorld program, which challenges students to use innovative technologies to improve the lives of people in underserved areas of the world, continue to enhance the Braille tutor, adding such languages as Arabic, French and Chinese, and expanding the program to the Sefula School for the Visually Impaired in Mongu, Zambia.

“The Braille tutor is certainly one of the most successful TechBridgeWorld projects to date,” said M. Bernardine Dias, assistant research professor in the Robotics Institute and the founder and director of TechBridgeWorld. “We always take promising projects and extend them in different ways so that different students become involved, but this will be the first project to cross continents.”

Jump in Youth Suicide Rates Triggers Professor’s Concern

■ Kelli McElhinny

Statistics Professor Joel Greenhouse examined national youth suicide data from 2005 — the most recent year for which the numbers are available — and his findings strongly suggest that the information could portend a public health crisis.

After more than a decade of steady decline, the suicide rate among 10- to 20-year-olds jumped by 14 percent between 2003 and 2004. That one-year change did not necessarily indicate a broader trend, Greenhouse says, but the evidence presents cause for concern.

While the 2005 rate dropped off slightly from the previous year, it remained higher than what was predicted based on the trends that emerged in a regression analysis of adolescent suicide rates from 1996 to 2003.

“This development is quite troubling, particularly after such a long period of time during which the teen suicide rate dropped consistently,”

Greenhouse said. He and Jeff Bridge of The Research Institute at Nationwide Children’s Hospital co-authored the study published in the Sept. 3 issue of the *Journal of the American Medical Association*.

According to the researchers, a number of developments, such as the influence of Internet social networks and increases in suicide among U.S. troops, could be influencing this alarming trend. Additionally, higher rates of untreated depression in the wake of recent “black box” warnings on antidepressants required by the Federal Drug Administration in 2004, may factor in as well.

“Whatever the explanation,” Greenhouse warned, “we now need to consider the possibility that the increase is an indicator of an emerging public health crisis. The need for effective interventions to reduce pediatric suicides must be addressed nationally.”

Student Hikes 800 Miles CONTINUED FROM PAGE EIGHT

After a strenuous six days of hiking, which during one week included four days of “miserable” rain, he took a break on the seventh day.

“Generally I was in a town buying groceries, washing clothes, sending postcards, sending email to friends from a computer if there was a library and just getting ready for next week,” he said. “It was great having all these wondrous luxurious things available to me, like perishable food — ice cream was a major motivator — a shower and clean clothes. Inevitably my trips into towns always coincided with good weather. It was a busy day. I just wasn’t hiking, which was wonderful.”

Rose said he had to slow down a bit near the end of the journey. The property manager’s office for his apartment wouldn’t be open on the weekend, so he adjusted his pace to arrive at his new digs on Monday.

These days his hike to campus from his apartment between Lawrenceville and Bloomfield is much less demanding.

“I usually ride a bike or take the bus,” Rose admitted. “It takes too long to walk when you have to be at class at 9 o’clock.”

Monster Trucks

CATERPILLAR, ROBOTICS INSTITUTE TO AUTOMATE MINING VEHICLE

■ Byron Spice

The eyes of competitors and spectators grew wide at last year's Defense Advanced Research Project Agency (DARPA) Urban Challenge in Victorville, Calif., whenever they latched onto Oshkosh Truck's entry in the race of robotic vehicles. Based on a military truck known as the Medium Tactical Vehicle Replacement, the robot, Terramax, was a 15-ton behemoth.

Even a Chevy Tahoe, the full-size SUV that Carnegie Mellon's Tartan Racing used for its winning entry, looked puny by comparison. But the autonomous vehicles that Robotics Institute researchers are now developing with Caterpillar Inc. ultimately could make Terramax look diminutive.

Researchers at the Robotics Institute's National Robotics Engineering Center (NREC) in Lawrenceville will be working with Caterpillar's Pittsburgh Automation Center to develop autonomous versions of the large haul trucks Caterpillar builds for mining operations by 2010.

"We've assembled a great team of people from across the institute who are excited to play a major role in deliver-

ing this groundbreaking capability," said Tony Stentz, the principal investigator and associate director of the NREC.

The researchers will adapt more than a decade's worth of research into self-driving vehicles for use with Peoria, Ill.-based Caterpillar's two largest trucks, each with payload capacities of 240 tons or more. The technologies include perception, planning and autonomous software architectures originally developed for DARPA's UGCV-PerceptOR (UPI) autonomous vehicle program, as well as the Urban Challenge. Caterpillar is a prominent sponsor of Tartan Racing.

This is the first major project resulting from a three-year master agreement for sponsored research signed last year by the university and Caterpillar.

"This project is one of many allowing researchers and engineers from the National Robotics Engineering Center and Caterpillar to create innovative solutions for differentiated Cat products and services, with increased speed to market," said Sam Kherat, manager of the Pittsburgh Automation Center, located at Washington's Landing.

reCAPTCHAs Transcribe Four Million Words Daily

■ Byron Spice

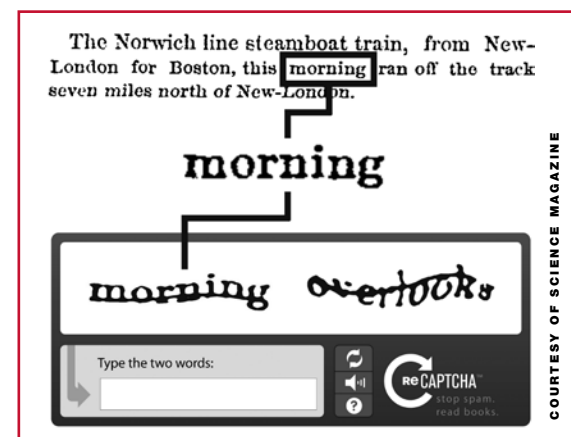
Thanks to the reCAPTCHA project launched by Carnegie Mellon computer scientists millions of computer users collectively transcribe the equivalent of 160 books a day with 99 percent accuracy, without even knowing it.

They can work so prodigiously because researchers led by Luis von Ahn, assistant professor of computer science, have taken the distorted-letter puzzles called CAPTCHAs that are widely used to protect Web sites and given them a second purpose — digitizing books produced prior to the computer age.

The reCAPTCHA puzzles use images of words from old texts that optical character recognition (OCR) systems have had trouble reading. When a computer user takes a few seconds to solve the reCAPTCHA puzzle, they help turn those printed words into machine-readable text. The Internet Archive and The New York Times now use reCAPTCHA for digitizing books and newspapers, respectively.

As von Ahn and his colleagues reported in the Sept. 12 issue of the journal *Science*, the reCAPTCHA system is used by thousands of Web sites worldwide. In the first year of operation, more than 1.2 billion reCAPTCHAs were solved and more than 440 million words were deciphered — the equivalent of 17,600 books.

The rate of transcription is increasing as the number of sites using reCAPTCHAs grows, von Ahn said. "More than four million words are being transcribed every day," he said. "It would take more than 1,500 people working 40 hours a week at a rate of 60 words a minute to match our weekly output."



NEWS BRIEFS

Symposium Honors Jones

Distinguished speakers will recognize the accomplishments of the late Beth Jones at a Memorial Symposium at 4:30 p.m. on Wednesday, Oct. 15 in the Rangos Ballroom at the University Center.

Jones, the Dr. Frederick A. Schwertz Distinguished Professor of Life Sciences, University Professor and Howard Hughes Medical Institute Professor, was an accomplished geneticist and pioneer of lab-based undergraduate education in the biological sciences at Carnegie Mellon. She died June 11.

The speakers include Aaron P. Mitchell, a professor in the Department of Biological Sciences at Carnegie Mellon; Peter J. Bruns, vice president of grants and special programs, Howard Hughes Medical Institute; Christine Guthrie, professor of biochemistry and biophysics, University of California, San Francisco; David Botstein, director, Lewis-Sigler Institute for Integrative Genomics; and Anthony B. Evnin professor of genomics, Princeton University.

Contact Jennifer Sciuolo at 412-268-1810 for more information.

Scheier Reappointed Head of Psychology

Psychology Professor Michael F. Scheier has been appointed to a second five-year term as head of the Department of Psychology in the College of Humanities and Social Sciences (H&SS). He has been head of the department since 2003.

In addition to expanding in terms of faculty and research projects under Scheier's



leadership, the department established an infant research cluster that explores variations in critical early childhood development milestones.

Scheier is a leading researcher in the field of health psychology, particularly in the exploration of optimism's influence on health outcomes. He also has explored the psychological factors of coping with serious illnesses. He is a co-director of the Pittsburgh Mind-Body Center.

Rent a Rower To Help Athletic Club

The Carnegie Mellon Rowing Club is available to assist with a variety of chores. Whether you have trash to tame, dirt to dig or mountains to move, the rowing crew is at your service. Renting a rower is \$14 an hour per person. Shifts are flexible, but if you live farther than a reasonable 10- to 15-minute walk from campus, transportation assistance is requested. For more information, email fundraising@tartancrew.org.

Pileggi To Receive Aristotle Award

Larry Pileggi will receive the Aristotle Award for innovative teaching from the Semiconductor Research Corporation at the 2008 TechCon Conference. The conference will be rescheduled following cleanup from Hurricane Ike.

Pileggi, the Tanoto Professor of Electrical

and Computer Engineering at Carnegie Mellon, was recognized for outstanding research and for developing students whose accomplishments reflect his innovative teaching abilities.

He has been a pioneer in developing various aspects of digital and analog design for the competitive semiconductor industry. In addition to this latest accolade, Pileggi received the 2007 Richard A. Newton GRSC Industrial Impact Award from the MARCO/DARPA Gigascale Research Center.



School of Music, PSO To Present Vienna Days

The School of Music will partner with the Pittsburgh Symphony Orchestra (PSO) to present Vienna Days, a series of performances and lectures featuring Austrian ensembles and Viennese music during the 2008-09 season to welcome new PSO music director Manfred Honeck of Austria.

Noel Zahler, head of the School of Music, worked with Larry Tamburri, president of the PSO, and the PSO's artistic administration on this project, the first exclusive partnership between the two entities.

"I'm very pleased to bring the School of Music and the PSO together on this special project, which will serve to celebrate Mr. Honeck's inaugural year and enhance the local cultural landscape," Zahler said.

Ganger Earns HP Award

Greg Ganger was one of 33 recipients worldwide to receive a 2008 HP Innovation Research Award, which is designed to encourage open collaboration with HP labs resulting in mutually beneficial, high-impact research.

Ganger, a professor of electrical and computer engineering and director of the Parallel Data Lab at Carnegie Mellon, will collaborate with HP labs on a research initiative focused on data storage infrastructure issues. Ganger is the author of the winning proposal, titled "Toward Scalable Self-Storage."



Wang To Lead Biomedical Engineering

Yu-Li Wang has been named the head of the growing Biomedical Engineering Department. Wang, whose appointment began Aug. 1, succeeds Todd Przybycien who has returned to the faculty after serving five years as

department head.



Wang received his Ph.D. in biophysics from Harvard University in 1980 and has been a professor in the Department of Physiology at the University of

Massachusetts Medical School in Worcester, Mass., since 1997. His research focuses on mechanical forces and interactions within cells.

LECTURE SPOTLIGHT: ROBBINS SPREADS MESSAGE OF UNITY: “UNINTENTIONAL INTOLERANCE” TOUCHES ON UNCONSCIOUS BIASES

■ Heidi Opdyke

Could we be making “bad” decisions and engaging in exclusive behavior without knowing? The answer is, “yes.” Steve Robbins explores the “hows” and “whys” surrounding unintentional intolerance in his interactive, humorous and eye-opening presentation.

Robbins coined the phrase “unintentional intolerance” to describe how well-meaning people and organizations may hold unconscious biases that affect decision-making and lead to exclusive behavior. As part of the University Lecture Series, at 4:30 p.m. on Thursday, Oct. 16 in McConomy Auditorium Robbins brings a powerful message, explaining the causes of unintentional intolerance and offering solutions for a more inclusive, open-minded organization.

“What he talks about is for everybody; it appeals to everybody and it’s very experiential. Through his stories he is able to make you feel the different biases that we all have,” said Lola Ma-

son, director of organizational development for Human Resources. Mason and Barbara Smith, chief human resources officer, heard Robbins speak at a conference in Baltimore and realized the message was important for the university.

Robbins’s presentation is shaped by his own life story, which spurred him to explore how and why unintentional intolerance occurs. In 1970, at age 5, Robbins immigrated with his mother to the United States from Vietnam. They faced anti-war and anti-Vietnamese sentiment as they struggled with poverty and discrimination in Los Angeles. This experience has provided him with an insightful perspective on issues of diversity, inclusion and cultural competency.

He uses an approach that does not blame or point fingers, but rather challenges individuals and organizations to be more open-minded about inclusion and to value people for their unique gifts, abilities and experiences. Many organizations and companies use

Robbins’s book, “What If? Short Stories to Spark Diversity Dialogue,” to start conversations about inclusion and diversity.

Mason said she hopes all members of the campus community, from students to staff and faculty, will come to hear him speak.

“It’s important for people to realize that we do have these biases, and that we need to talk about them,” Mason said. “It’s through dialogue that we begin to see and understand one another.”

Robbins received a bachelor’s degree in communication from Calvin College and a master’s and Ph.D. in communication from Michigan State University. He resides with his wife and four children in Grand Rapids, Mich.



PHOTO COURTESY OF STEVE ROBBINS

WHO: Steve Robbins

WHEN: 4:30 p.m., Thursday, Oct. 16

WHERE: McConomy Auditorium

What’s in the Big Box Now?



PHOTO BY J. CHRISTENSEN

ARTIST AND RESEARCHER JULIA CHRISTENSEN VISITED COMMUNITIES TO SEE HOW GROUPS USED BUILDINGS ABANDONED BY RETAIL GIANTS.

■ Eric Sloss

Almost every community across America has one, a big box store such as Target, Kmart, Lowes, Best Buy, Sam’s Club, Costco, Petco or Home Depot. What if that big box store becomes abandoned?

Artist and researcher Julia Christensen traveled the United States in search of communities who decided to change the fate of these deserted spaces after watching her hometown of Bardstown, Ky., see the expansion of a Wal-Mart twice in 30 years.

“The first site was razed to make way for a new courthouse building,” Christensen said. “I thought it was a remarkable reuse of space, and began researching how the buildings themselves were being reused.”

What she discovered was a number of creative and entrepreneurial communities that reused these spaces to become a

public asset. Former corporate real estate sites have been reborn as community centers, megachurches, schools, flea markets and more.

In her research, she maintained a focus on the communities, rather than the corporations, to keep her work centered on the people with big ideas.

“I hope to shine a light on the creativity and resourcefulness of towns everywhere, while also bringing attention to this major issue that our country is facing: empty big boxes littering the landscape,” she said.

Christensen will discuss her research, exhibition at the Miller Gallery (through Nov. 23) and new book, “Big Box Reuse,” from 4:30 to 6 p.m., Thursday, Nov. 13 as part of the University Lecture Series. Her talk at the Miller Gallery will coincide with the November release of her book, published by MIT Press.

New Logo Uses Arabic Influence

■ Andrea L. Zrimsek

Carnegie Mellon University in Qatar has unveiled a new logo. The new art features the Arabic script in a larger font and emphasizes the Carnegie Mellon wordmark.



larger font and emphasizes the Carnegie Mellon wordmark.

“We wanted to make the Arabic more prominent and at the same time highlight our global branding,” says D. Murry Evans, director of marketing and public relations at Carnegie Mellon Qatar.

The Arabic type was changed to a modified version of the classical Arabic calligraphy called Kufi. Perfected during the 8th Century, Kufi has a geometric construction with long horizontal lines and wide letters.

For even more visual impact, the words Carnegie Mellon remain in red, while the rest of the logo is shades of gray. The word campus was eliminated from the logo because the whole of Education City is considered a campus, with Carnegie Mellon one part of it.

Carnegie Mellon Qatar worked with Hend Zainal, a VCU graduate, graphic designer and former employee, to design the logo. Zainal created the unique Kufi script and new look after receiving input from faculty, staff and students.

Carnegie Mellon Qatar Holds Community Iftar for Ramadan

■ Andrea L. Zrimsek

Students, staff, faculty and alumni from Carnegie Mellon Qatar gathered for a Community Iftar Thursday, Sept. 11. Iftar is the evening meal for breaking the daily fast during the Islamic holy month of Ramadan.

Student Affairs organize an annual Iftar to bring together the growing Doha community. More than 375 people attended the buffet in the spacious atrium of the new Carnegie Mellon building in Education City.

“This is the only time throughout the year that all faculty and staff — along with their families — and students sit down together to enjoy a meal,” says Dave Stanfield, director of Student Activities. “Since family is so important in this culture, the students really like having the opportunity to meet the families of their professors.”

Iftar occurs just after Maghrib (sunset) time. Traditionally, a date is the first item consumed to break the fast. Though fasting is not required of non-Muslims during Ramadan, everyone at Carnegie Mellon Qatar was encouraged to do so for the day of the Iftar to experience the Islamic tradition.

Tartans on TV

The Carnegie Mellon football game at Allegheny College on Oct. 11 was televised live on Fox SportsNet Pittsburgh from Frank B. Fuhrer Field in Meadville, Pa. This year's homecoming game against the Wittenberg University Tigers will be videotaped and broadcast nationally at 2 p.m. Sunday, Oct. 26 on ESPNU. When was the last time the Tartans were on live TV?

The Piper staff will give away a \$25 gift card to the bookstore to the first four people who can correctly identify the last time the Tartans appeared on live TV, the opponent and the final score of that game. Send your answers to bg02@andrew.cmu.edu with "October Trivia" in the subject line. The winners' names will be published in the following issue.

The Piper trivia question is sponsored by Carnegie Mellon Internal Communications.



PHOTO ILLUSTRATION BY ABBY ROSS

piper TRIVIA

Freshman Relishes Role as New York Times Cruciverbalist

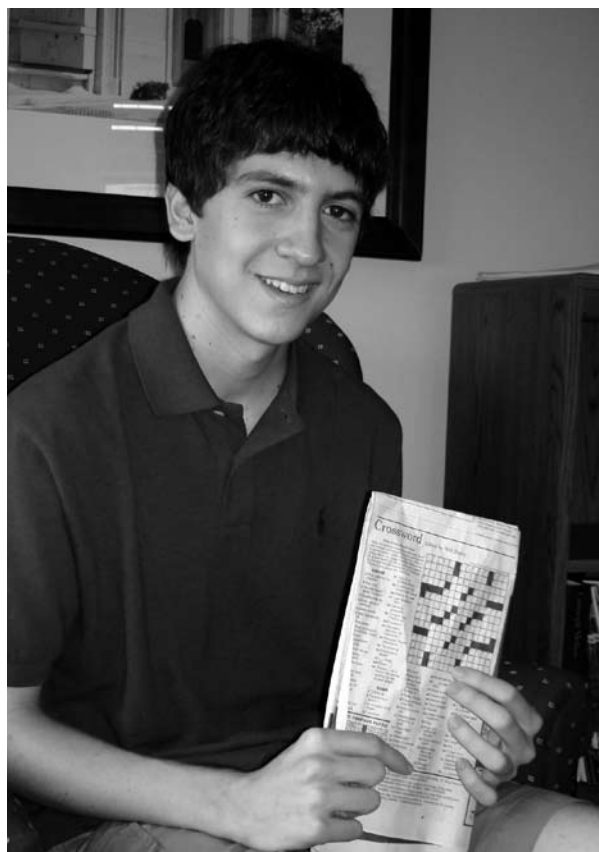
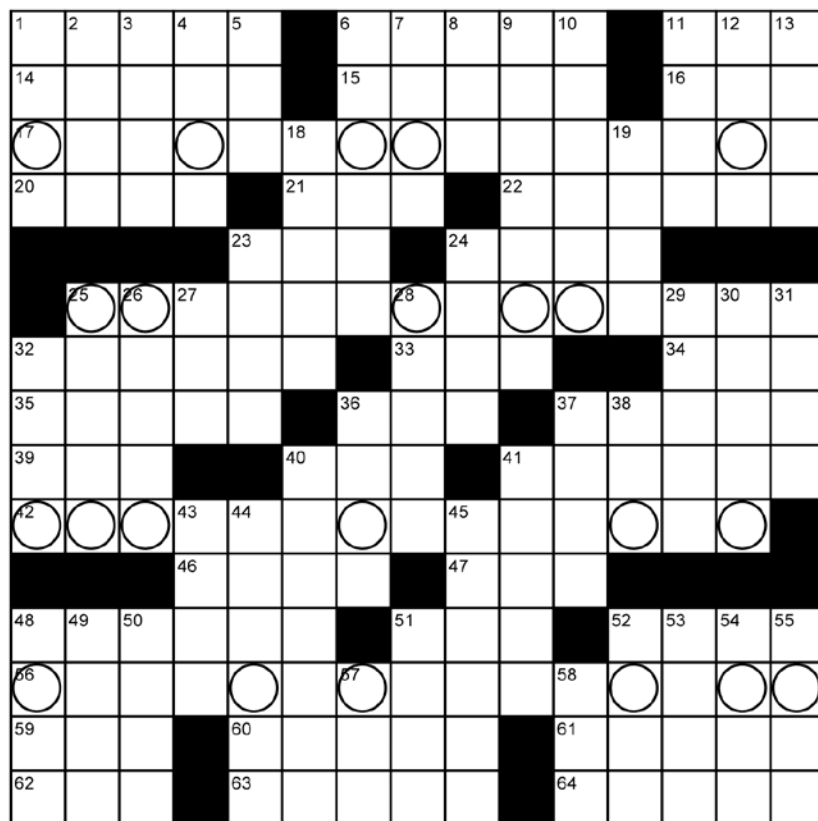


PHOTO BY HEIDI OPDYKE

LUCAS GAVIOTIS WHITESTONE HAS A WAY WITH WORDS. THE COMPUTER SCIENCE FRESHMAN PUBLISHED A CROSSWORD PUZZLE IN THE NEW YORK TIMES ON WEDNESDAY, SEPT. 10. "IT'S JUST A HOBBY OF MINE THAT ESCALATED FAR GREATER THAN I'D EVER IMAGINED," WHITESTONE SAID. HE HAS BEEN DABBING AS A PUZZLEMAKER FOR ABOUT TWO YEARS. WHILE WHITESTONE WAS FEATURED DURING A WEEK WITH PUZZLEMAKERS UNDER THE AGE OF 20, HIS FOURTH ATTEMPT WITH THE NEW YORK TIMES WAS ACCEPTED BEFORE CROSSWORD EDITOR WILL SHORTZ KNEW HIS AGE. USA TODAY HAS PUBLISHED TWO CREATIONS BY THE NEW YORK CITY NATIVE AS WELL. "MAKING PUZZLES IS SOMETHING I ENJOY DOING, AND I PROBABLY WILL CONTINUE IT," WHITESTONE SAID.

NY Times, Wed, Sep 10, 2008 Lucas Gaviotis Whitestone / Will Shortz



© 2008, The New York Times

REPRINTED WITH PERMISSION

- 7. Atticus Finch portrayer ... or something finches do
- 8. Tattoo, slangily
- 9. It may be heard in a herd
- 10. Item on a to-do list
- 11. Pennsylvania university, for short
- 12. "Piano Man" singer
- 13. "Absolutely!"
- 18. Sheet of cookies
- 19. "Gotta hand ___ ya ..."
- 23. Menaces to hobbits
- 24. ___ the Impaler
- 25. Brunch serving
- 26. "___ la vista, baby!"
- 27. Article in Arles
- 28. Freeze over
- 29. Lawman Earp
- 30. "Inconceivable!"
- 31. Plaintiff
- 32. Letters on some invitations
- 36. Ergo
- 37. Actor and songwriter Novello
- 38. Turner who led a revolt
- 40. Nation where Wolof and French are spoken
- 41. Obtuse's opposite
- 43. Become squishy, like chocolate
- 44. Emotional
- 45. Secret Service eyewear
- 48. It may be heard in a tunnel
- 49. Bit of bridal wear
- 50. First word of "The Raven"
- 51. Dallas team, to fans
- 52. Survey
- 53. Cause of a wince
- 54. "Or ___!"
- 55. A fawn is a young one
- 57. Brazilian vacation destination
- 58. ___ Lanka

ACROSS

- 1. Easy catch for an infielder
- 6. Jazz (up)
- 11. Slumber party attire, for short
- 14. Greeted the day
- 15. Voice above a baritone
- 16. Debtor's note
- 17. 1966 Beatles #1 hit
- 20. Pub brews
- 21. Object of Indiana Jones's first quest
- 22. Military engagement
- 23. Non-Rx
- 24. Blow off steam
- 25. Louisville landmark
- 32. Not the main bank
- 33. Stanford rival, familiarly
- 34. Thou, today
- 35. "Oui" and "si"
- 36. Danson of "Cheers"
- 37. Floored
- 39. Select, with "for"
- 40. Moo ___ pork
- 41. Icon in an Internet forum
- 42. Command Kirk never really gave
- 46. Billions of years
- 47. Lew Wallace's "Ben-___"
- 48. Develop gradually
- 51. It might say "Welcome"
- 52. Floored it
- 56. Standard degrees for scientists?

- 59. Hawaiian Punch alternative
- 60. Too trusting
- 61. Employee's desire
- 62. ___ Miss
- 63. Sheen
- 64. Private ... or a hint to the words spelled by the circled letters

DOWN

- 1. "Come to ___"
- 2. Face-to-face exam
- 3. Successor of St. Peter
- 4. Functions
- 5. For each
- 6. Pasta has it