



Carnegie Mellon

- 4 INTERNATIONAL DISPATCHES
- 9 ASK ANDREW
- 10 NEWS BRIEFS
- 12 LECTURE SPOTLIGHT

Researchers Cook-Up Robot Recipes Anyone Can Follow

■ Byron Spice

It once would have required the expertise of the entire Robotics Institute to build a robot that connects wirelessly to the Internet and can be controlled from any Web-linked computer. Now, thanks to a Carnegie Mellon research team, almost anyone can do it.

Want a robot that can keep an eye on your pet during the day and send photos to your work computer? You can build one. Want a robot that looks like a flower, with leaves that open and close based on time of day or your mood?

CONTINUED ON PAGE NINE

Hey, Hey, Hey ... It's Bill Cosby!

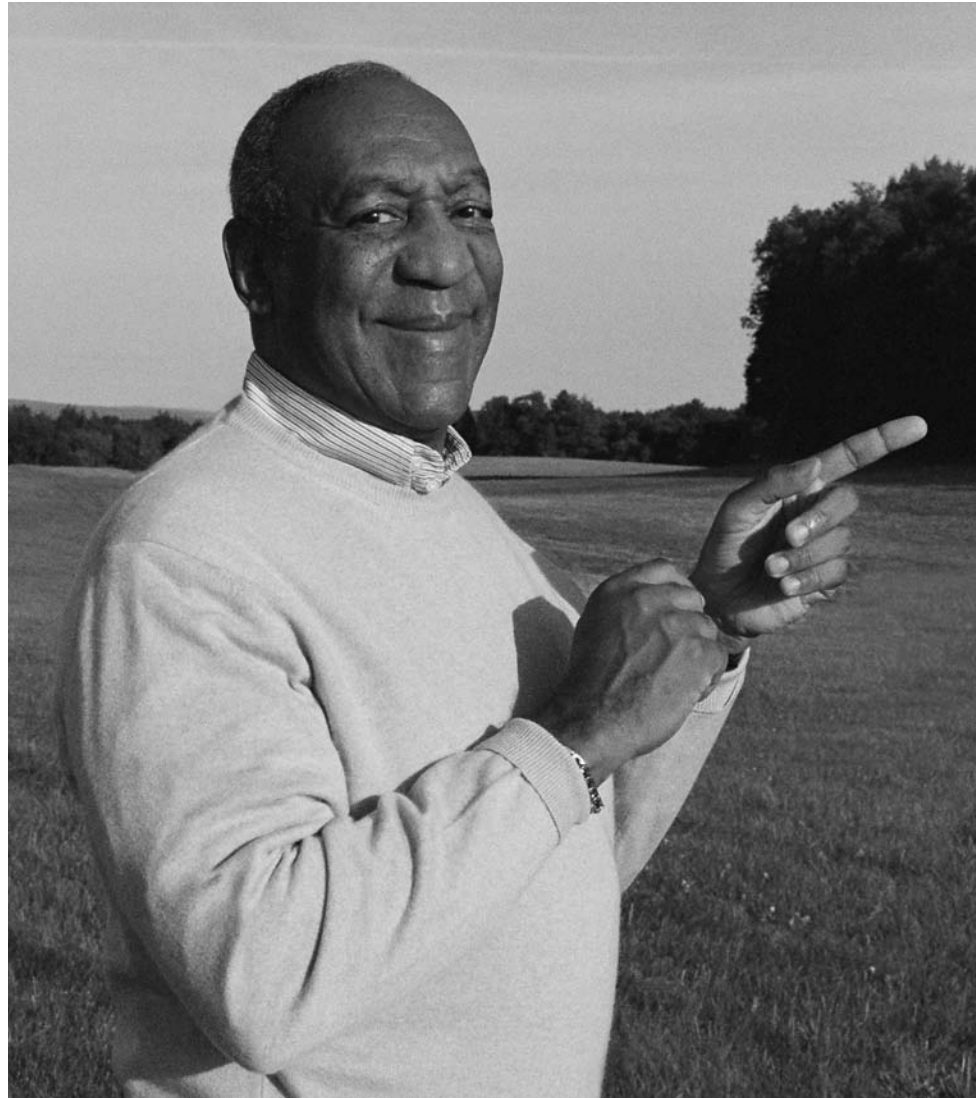


PHOTO BY ERINN

HANG ON TO YOUR MORTARBOARDS, LADIES AND GENTLEMEN, COMEDIAN BILL COSBY IS COMING TO CAMPUS! THE COMEDIAN, ACTOR AND AMERICAN ICON WILL DELIVER THE KEYNOTE ADDRESS AT CARNEGIE MELLON'S COMMENCEMENT CEREMONY ON SUNDAY, MAY 20. FOR MORE ON COSBY AND ALL THE DETAILS ABOUT COMMENCEMENT, SEE THE COMMENCEMENT PREVIEW SECTION BEGINNING ON PAGE FIVE.

Erwin Steinberg Retires After Six Decades

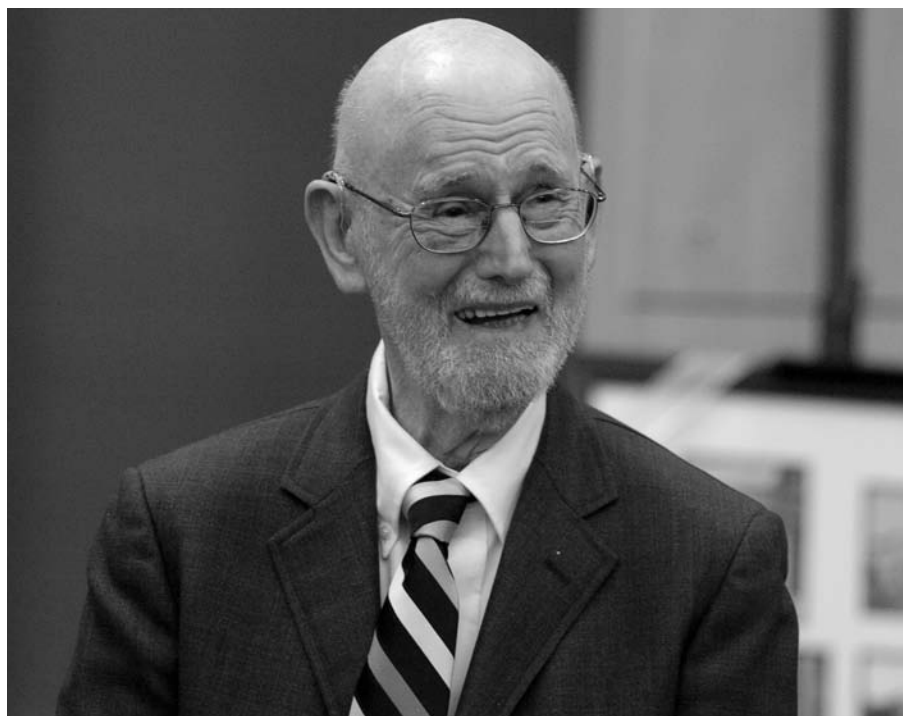


PHOTO BY KEN ANDREYO

■ Jonathan Potts

By the time he was 70, English Professor Erwin Steinberg was giving serious thought to retirement. Then Carnegie Mellon President Robert Mehrabian offered him a brand-new position: vice provost for education, with a charge to cut the university's double-digit freshman attrition rate. So Steinberg decided to stick around.

That was 16 years ago. Steinberg spent five years as vice provost then returned to the English Department, his retirement plans forgotten — until now. After 60 years, Steinberg is retiring, bringing to a close the storied career that has spanned several chapters of Carnegie Mellon history.

CONTINUED ON PAGE 11

ERWIN STEINBERG'S CAREER AT CARNEGIE MELLON HAS SPANNED 60 YEARS. HE'S SHOWN HERE AT THE MAPW 25TH ANNIVERSARY CELEBRATION THIS PAST FALL.



the PIPER

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

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Ruder Jets To Germany To Meet With Nobel Laureates

■ Chriss Swaney

Warren Ruder will be making a dream come true this summer when he meets with 15 Nobel Laureates. The Ph.D. candidate in Carnegie Mellon's Department of Biomedical Engineering was selected to attend the 57th Meeting of Nobel Laureates and Students in Lindau, Germany, July 1-6.

"I'm elated. I hope to learn lessons from the laureates, including how they approached their own research careers as younger scholars and what practices complemented their success," said Ruder, whose own research focuses

Assistant Professor of Mechanical Engineering Philip LeDuc, nominated him for two reasons. For starters, the opportunity carries great academic glory. But it also serves as an excellent platform for a young researcher to interact with some of the world's great minds.

"I'm probably as excited as Warren, because this is the first time a Carnegie Mellon student has participated in this particular program," LeDuc said.

A handful of select U.S. scholars will join an additional 450 international students to make the academic trek this

"I HOPE TO LEARN LESSONS FROM THE LAUREATES, INCLUDING HOW THEY APPROACHED THEIR OWN RESEARCH CAREERS AS YOUNGER SCHOLARS AND WHAT PRACTICES COMPLEMENTED THEIR SUCCESS."

— WARREN RUDER

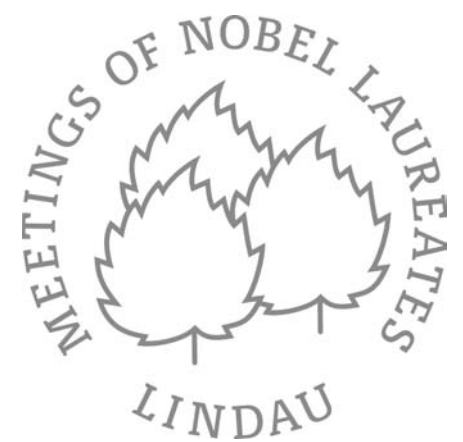
on how stem cells interpret mechanical cues during tissue integration.

The 27 year old joins 50 other members of a U.S. delegation supported by funding from the U.S. Department of Energy Office of Science, the National Science Foundation Directorate for Mathematical and Physical Sciences, the National Institutes of Health, Mars Inc. and the Oak Ridge Associated Universities (ORAU).

Ruder's advisors, Biomedical Engineering Professor Jim Antaki and

summer to the shores of beautiful Lake Constance in Lindau to participate in plenary lectures and small discussion groups with the distinguished scientists. This year, the meeting will address research related to medicine and physiology.

"It's an amazing experience, because the U.S. delegation arranges for additional interactions with the Nobel Laureates and other students attending the meetings," said Sam Held, program manager at Oakridge Institute for



Science and Education. The institute is administered by ORAU under contract with the Department of Energy to manage programs that support science education and research. Carnegie Mellon is a member institution of ORAU, a consortium of 98 major research universities.

Ruder, a second-year Ph.D. student, earned his bachelor's degree in civil and environmental engineering from the Massachusetts Institute of Technology in 2002. Between 2003 and 2005, he worked for the VA Medical Center affiliated with Harvard Medical School as a research technician in Professor Aldebaran Hofer's cell physiology lab.

"We look forward to having Warren share his wonderful experience with the entire academic community when he returns," said Indira Nair, vice provost of education and a professor of engineering and public policy. "We are so very proud of him, and we hope his experience will encourage more of our students to participate in this exceptional program."

Celebrate Earth Day, Change Your Light Bulbs

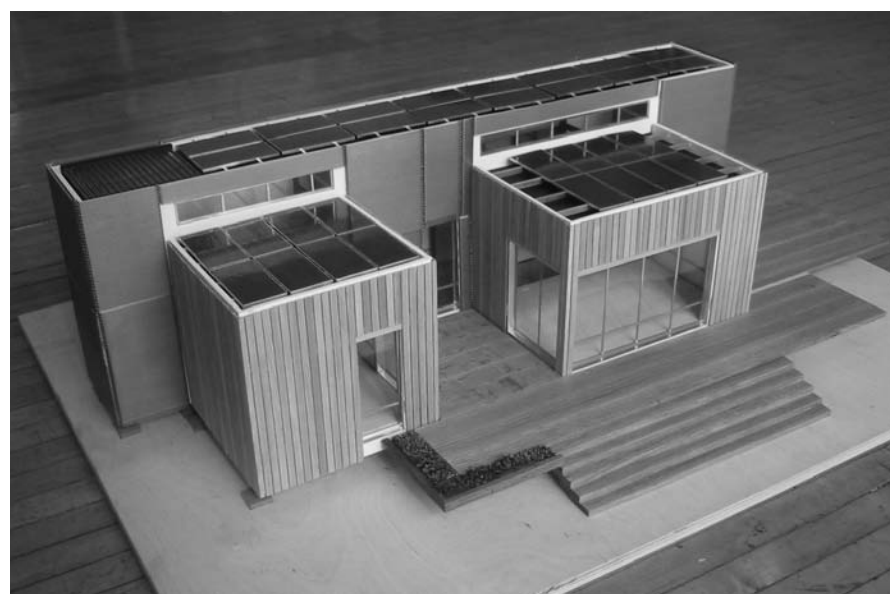
■ Eric Sloss

In today's world, there's a lot of focus on transportation and its effects on global warming. But when people around the world recently celebrated Earth Day, they should have paid some attention to their homes and offices, too.

"Buildings fundamentally impact people's lives and the health of the planet," said Steve Lee, a professor in the School of Architecture. "In the U.S., buildings use one-third of our total energy, two-thirds of our electricity, one-eighth of our water and transform land that provides valuable ecological services. Atmospheric emissions from the use of energy lead to acid rain, ground-level ozone, smog and global climate change."

The construction industry creates more than 136 million tons of building and demolition waste in the U.S. alone, amounting to approximately 2.8 pounds of waste per person, per day. Three billion tons of raw materials are used globally each year.

To address this issue, the Department of Energy created an event that challenges universities around the world



THE CARNEGIE MELLON TEAM HAS CREATED A SOLAR DECATHLON MODEL WITH A "PLUG-AND-PLAY" MODULAR SYSTEM FOR AN ADAPTABLE LIVING SPACE.

to build energy-efficient living spaces that will inspire new approaches in the building industry. The event, called the Solar Decathlon, will be held in October on the Mall in Washington, D.C.

Carnegie Mellon's entry takes a multifaceted approach, uniting students

from the schools of design, drama and art with other groups in the Pittsburgh community to create a living space that isn't just efficient — it's flexible.

The Carnegie Mellon team has created a "plug-and-play" modular system for an adaptable living space.

The team is building individual pods, centered around a larger core, that allow for easy upgrades of the space, as well as the ability to expand and rearrange. New units can be added or exchanged to allow the house to grow or be modified to meet a homeowner's changing needs. The design also creates a comfortable living environment that promotes close interactions between the occupant, the house and nature.

At the conclusion of the event, the house will become a permanent addition to the Powder Mill Nature Reserve in Ligonier, Pa., an outdoor educational center and natural field station affiliated with the Carnegie Museum of Natural History.

Though it may take years for the building industry to adopt the new approaches to construction displayed on the Mall, the Solar Decathlon is a step in the right direction. And with more and more universities from around the globe participating in the Solar Decathlon, these and other new approaches to building efficiency may hit the market sooner than anyone would think.

Rousseau Reveals Real Deals Between Employees, Employers

■ Ken Walters

Few people have more insight than Denise Rousseau when it comes to understanding the intricacies of what's said around the office water cooler. The H.J. Heinz II Professor of Organizational Behavior and Public Policy at the Heinz and Tepper schools is a world-renowned expert on how an employee's understanding of the employment relationship strongly affects work groups, firms and society. She has received the Academy of Management's George Terry Award for best management book twice, and has been widely recognized for developing the theory of the psychological contract.

What are psychological contracts and how do they influence workplace behavior?

A psychological contract is the worker's understanding of what he or she owes the company, and what that person is owed in return. We call it the "deal in the mind." And because it's psychological, it is open to all sorts of subjective interpretations.

Over time, I've come to believe the old adage, "Half the promises never kept were never made." There is a tendency for people to read into a situation what they want to see. Part of the fascinating aspects of psychological contracts is trying to help people get a more realistic understanding of what the real deal is, even while they are trying to create an arrangement in the organization that brings them benefits they really want. People want to create psychological contracts that can be kept, not just imagined.

What should graduating students be thinking about as they enter the workplace?

Two things. First, they should trust but verify. If there is something that is particularly important to you in a work situation, you don't want to read between the lines. You want to convey to your employer what you need. And don't be shy about communicating that. There's a real tendency, especially for women, not to be willing to speak up and say, "This is something that would make a big difference for me."

Second, one of the fascinating things I've found, from the employer's perspective, is that it's less what you give people when they're hired that creates a strong bond. Instead, it's what employers offer somebody once the person is on the job — when they see they have a good person and they trust them — that the employer provides something that motivates the individual in a special way. These ex-post arrangements make people think, "This is a good company and I really want to be committed to them." Because most people, if they can negotiate something when they are hired, think they received it because they deserved it. But if they negotiate while they are on the job, they feel like they're special and the company is special to recognize them, which increases



PHOTO BY KEN ANDREYO

H.J. HEINZ II PROFESSOR OF ORGANIZATIONAL BEHAVIOR AND PUBLIC POLICY DENISE ROUSSEAU SAYS STUDENTS ENTERING THE WORKFORCE SHOULD BARGAIN FOR PROFESSIONAL DEVELOPMENT OPPORTUNITIES — AND THEY SHOULDN'T BE SHY ABOUT COMMUNICATING THEIR NEEDS TO POTENTIAL EMPLOYERS.

their commitment to the workplace.

The ex-post deals matter a lot more than the initial offer, but unfortunately most employers don't realize that. They might put a lot up front, thinking they are going to get loyalty, but all that tells the employee is that they are a marketable prospect.

How would you describe the relationship between companies and their employees today?

Performance pressures are greater. Companies need to do more with less. As a result, employers have pushed more risk and uncertainty off to employees — fewer up-front guarantees, less support to help them do their jobs, a sense that job demands will increase and that people should accept that. The shift of risk onto the employee, without matching employer support, is probably the most singular feature of the last 10 years.

What advice would you give to graduating students entering the workplace now?

People bargain for a lot of things — more money, a flexible work schedule. But the one feature that people bargain for that affects their life over time and their ability to get the career and work life they want is to bargain for development. I talk with my classes a lot about the power of any kind of employee arrangement that can change your future. I think it's good to bargain for interesting work or to take a degree program at night. If the employer accepts an employee's development requests, the employer is sending a signal to the employee that he or she is important and valuable. It also provides employees with a compelling future. Because even if this job doesn't work

out, they will have more skills than they came in the door with. Over and over, our data tells us that people who have arrangements that build their skills have a benefit that keeps on giving.

What are some of the more interesting dynamics of today's workplace?

Whether or not we reward for teamwork or we reward for being an individual contributor. Organizations like to talk about teamwork, but most managers are not very good at rewarding the group as a whole, especially in the United States. It's hard sometimes to reward people for collaborating with each other, when the only way they can do their job is by being interdependent in our environment, where individual high performers have such status.

How could we change that?

One of the things we've found that helps reinforce teamwork and also really supports personal development is to send people to training together. There is a tendency to use training as a one-time event for an individual. But the more we conduct development work in the context of a group, the more people learn how to work better together and are better able to transfer their skills to the workplace.

One of the nice things about Carnegie Mellon students is that they have tons of opportunities to work together in teams. They know the dark side of working in a team, but they've also had the excitement of designing a project until the wee hours of the morning that ultimately works great. And they know they did it together. In that respect, they have something that most other universities don't offer their students.

Fantastic Four



PHOTO BY AMY PAVLAK

FOUR MELLON COLLEGE OF SCIENCE UNDERGRADUATES LEARNED IN APRIL THAT THEY'LL RECEIVE GOLDWATER SCHOLARSHIPS TO PURSUE THEIR RESEARCH. JONATHAN STAHLMAN, SAMANTHA SPATH, GREGORY NEWBY AND LAUREN THORPE (L-R) ARE FOUR OF 317 SOPHOMORES AND JUNIORS NATIONWIDE CHOSEN FROM MORE THAN 1,000 NOMINATIONS TO RECEIVE SCHOLARSHIPS THIS YEAR. COLLEGES AND UNIVERSITIES CAN SUBMIT UP TO FOUR NOMINATIONS ANNUALLY FOR THESE AWARDS, AND FOR THE FIRST TIME ALL OF CARNEGIE MELLON'S NOMINEES WERE SELECTED.



INTERNATIONAL DISPATCHES

Qatar Students Take Alternative Break in Pittsburgh Suburb

■ Sahrr Malik & Mehrunissa Anis contributed to this report

It's become tradition at Carnegie Mellon for teams of students to leave campus during spring break and assist in humanitarian efforts around the world. It's called the Alternative Break program, and this year a team of students from Qatar took part as well in a Pittsburgh suburb appropriately called Carnegie. There they helped residents and merchants continue to rebuild their community and businesses that were devastated as a result of Hurricane Ivan in 2004.

The students had to work hard and fast — they didn't have much time after leaving Doha for Amsterdam, then Detroit and finally Pittsburgh. With just a few hours to enjoy the university's Greek Sing and then a joyous trip Sunday morning to a music-filled service at Mount Ararat Baptist Church in East Liberty, they got down to three days of hard work in Carnegie.

"We worked on projects started by the Seventh Day Adventist Church," explained Sahrr Malik and Mehrunissa Anis, undergraduates in business administration. "Our liaison with the church, Andrew Clark, let us know that our first project would be right up our alley! We were to devise a business plan for the Internet café they wanted to open on Main Street. The catch was that the plan had to include plenty of computer equipment for a low budget of \$10,000. Needless to say, many hours were spent perusing Web sites to satisfy the amount and capabilities quota given to us. We did reach our goal and were able to provide Mr. Clark with a business plan that would work — and work well!"

Day two of their community service in Carnegie was the most tiring, but the most entertaining as they spent the day cleaning and painting the basement of a pizza shop.

"The pizza shop owners were a Turkish family who had opened their doors just two days before the flood hit. Shadi, the owner, told us his story and truly moved us. The devastation and loss he experienced was evident in his eyes as he spoke of the tragic event. He was so kind and grateful to us. It was inspiring to see that our service that day would make such an impact on someone. His tragic story inspired us to make sure we did the best we could," Malik and Anis said.

The students spent their last day in Pittsburgh at the Andrew Carnegie Free Library and Music Hall, where they helped to clear about 30 years worth of debris that had piled up in the adjoining theater. The team of eight students dismantled and discarded a huge



STUDENTS FROM CARNEGIE MELLON IN QATAR TRAVELED TO PITTSBURGH DURING THEIR SPRING BREAK TO PARTICIPATE IN COMMUNITY SERVICE PROGRAMS.

set of shelves, cleared rubbish from the stage area and repaired auditorium seats in the local landmark, which is in the midst of an \$8 million rehabilitation campaign.

But it wasn't all work and no play for the students. A visit to the campus had the team raving about the "old buildings, gorgeous architecture and widespread lawns." They were also in awe of the Fence, which was described to them as the "most widely painted object in the world."

Before leaving, they did what every CMU-Q student does when they visit the Pittsburgh campus — they raided the bookstore. The team also had the opportunity to see the Heinz History Center and attend a production of Riverdance at Heinz Hall.

"Overall the alternative spring break was a trip I am sure none of us will ever forget," the students said. "We have become closer as a group and were able to leave Pennsylvania knowing that we had made a difference that week."

Qatar Computer Science Faculty Create Teacher Outreach Program

CS4Qatar, a new program offered by the Computer Science faculty at Carnegie Mellon in Qatar, is tailored to reach out to technology, math and computer science teachers in local schools.

Faculty members from both Pittsburgh and Qatar will provide resources for teachers that will better allow them to teach computer science principles in a fun and relevant way. This includes helping teachers understand all of the exciting career possibilities that are available to students who go on to study computer science in college.

"We're finding that a lot of teachers don't know what computer science is," says Majid Sakr, professor of computer science in Qatar. "If we can help teachers understand what the field of computer science encompasses, they will be better equipped to educate their students and enhance computer science programs at their schools."

Sessions include "Computer Science Unplugged: How To Teach and Learn Computer Science Without Programming"; a session using Alice, an object-based, 3-D graphics authoring environment used to teach computer programming principles to students in middle and high school; and a daylong seminar on Java, an object-oriented programming language widely used in introductory programming and computer science courses.

CS4Qatar will run from Friday, June 1, through Sunday, June 3.

Osaka Mayor Visits ETC

Junichi Seki, the mayor of Osaka, Japan, visited the Entertainment Technology Center on April 26 to learn more about its programs. Seki has invited the ETC to consider offering its master's program in Osaka. While in Pittsburgh, the mayor was invited to throw out the first pitch at a Pirates baseball game. He also visited two ETC projects, including Project ER at Children's Hospital and the Living History Installation at the Carnegie Science Center. ETC currently has international partnerships in Australia and Korea.

Meeting of the Minds — Qatar Style

The Qatar Campus held its inaugural Meeting of the Minds undergraduate research symposium on April 26. Students demonstrated robots they had built, showed movies they had produced, discussed experiments and much more. Local industry experts and faculty members from other universities judged the student projects and awarded prizes to the best ones. The Meeting of the Minds has been a tradition at the Pittsburgh campus for 12 years, and this year it will take place from 10 a.m. to 5 p.m. on Wednesday, May 9, in the University Center. The Meeting of the Minds is sponsored by Carnegie Mellon's Undergraduate Research Office.

Same Books, New Numbers

■ Cindy Carroll

Engineering & Science (E&S) and Hunt libraries will be transformed this summer, as about 500,000 books will be reclassified, relabeled and reshelfed. The University Libraries are replacing the Dewey Decimal Classification system with Library of Congress Classification (LCC). LCC is already used in the Mellon Institute, Qatar and Software Engineering Institute libraries.

The massive project will begin in the E&S Library soon after commencement, and both libraries will be finished before fall classes begin.

Keeping library users informed and helping them find materials as the project unfolds are important concerns for the University Libraries. "If you use

E&S or Hunt this summer, you may encounter a certain amount of controlled chaos," said Gloriana St. Clair, dean of University Libraries. "This is a big project, and we have to expect it will be disruptive. However, we'll do everything we can to make a smooth and speedy transition. And we believe the result will be well worth any temporary inconvenience."

Reclassification will give continuity to faculty and students' library experiences, because LCC is common to almost all U.S. academic libraries. Most new books have preassigned LC numbers, which will save cataloging time and give students and faculty quicker access to new materials.



IMAGE COURTESY OF UNIVERSITY LIBRARIES

"The transition to Library of Congress Classification will provide Carnegie Mellon students and faculty with a mainstream library experience that translates easily to any academic library environment," said Associate Dean of University Libraries Erika Linke. "This is a big win for our scholars."

As if reorganizing the book collections at two libraries were not enough, Hunt and E&S libraries will undergo

some renovations this summer as well. Two group study rooms will be built at E&S and three at Hunt. Rewiring throughout the libraries will provide additional outlets for laptops.

"Over the past couple of years, we've been moving older materials to offsite storage, reclaim-

ing space that we can now give back to students," said St. Clair. "Students made their needs clear, and the university and our wonderful donors have responded. These changes will mean just as much to students as the Maggie Murph Café, if not more. I'm delighted," she said.

The libraries will distribute summer project updates via campus media, in the libraries and at www.library.cmu.edu.



American Icon Bill Cosby To Deliver Commencement Address

Giants in Education, Business, Engineering, Music To Receive Honorary Degrees

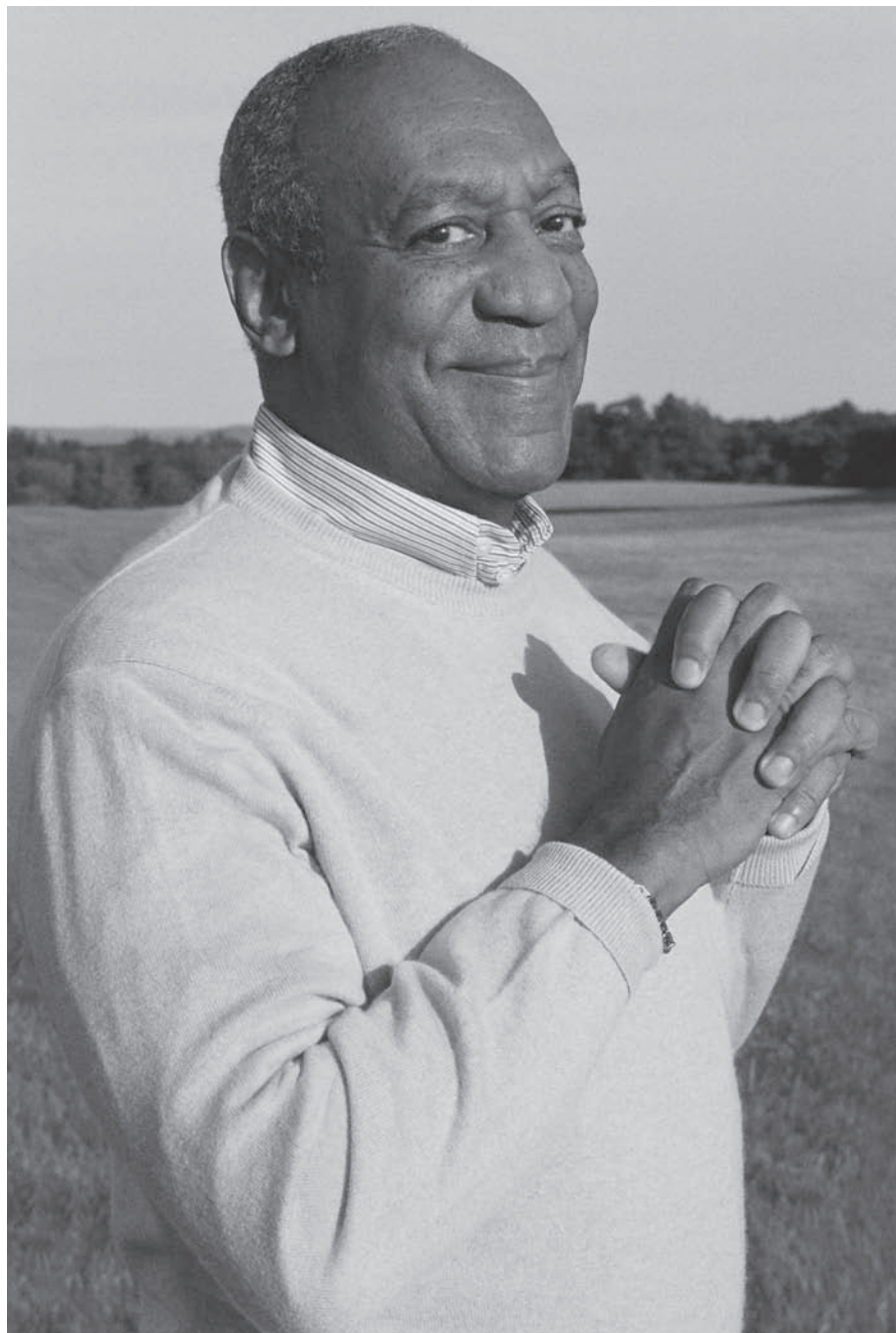


PHOTO BY ERINN

BILL COSBY, AN AWARD-WINNING COMEDIAN, ACTOR, AUTHOR AND RECORDING ARTIST, IS ALSO WELL KNOWN FOR HIS COMMITMENT TO EDUCATION.

■ Bruce Gerson

The Class of 2007 is in for a treat. Not only will they soon get their diplomas, but they'll also get a chance to hear from one of the world's funniest and most endearing comedic performers of all time. He's an American icon.

Bill Cosby, an award-winning comedian, actor, author and recording artist who's also well known for his commitment to education, will deliver the keynote address at Carnegie Mellon's 110th commencement Sunday, May 20.

"As an actor, a humorist, and a citizen, Bill Cosby has been one of America's most eloquent advocates for education and the value of developing every individual mind," said Carnegie Mellon President Jared L. Cohon. "We are delighted that he will join us to celebrate, in his inimitable style, the achievements and the promise of the class of 2007."

Born in Philadelphia, Cosby developed a love and penchant for comedy in

"IT'S ALWAYS A PLEASURE TO SEE THOSE FRESH FACES OF GRADUATES." — BILL COSBY

The main ceremony will begin at 11 a.m. in Gesling Stadium, where more than 2,100 undergraduate and graduate degrees will be conferred.

"It's always a pleasure to see those fresh faces of new graduates. It's also fun to notice the relieved smiles of the parents who are wondering, 'Are they going to be all right?' The unanswered questions are now really directed at them," Cosby said.

Cosby has won numerous awards and honors for his work. Among them are eight People's Choice Awards, eight Grammy Awards for his comedy albums and nine Emmy Awards. He was presented with the NAACP's Springarn Award in 1985, the Kennedy Center Honors Lifetime Achievement Award in 1998 and the Presidential Medal of Freedom in 2002.

his formative years. After a stint in the U.S. Navy, he earned an athletic scholarship to attend Temple University, where he played football and ran track. During his college days he honed his skills at various nightclubs and comedy clubs.

The 1960s was a breakout decade for Cosby. His storytelling comedy routines earned him his first appearance on "The Tonight Show" in 1963 and "The Mike Douglas Show" in 1964. In 1965, he landed a co-starring role alongside Robert Culp in the television series "I Spy," which broke the racial barrier in a dramatic television series. The rising star launched "The Bill Cosby Show" in 1969, and two years later he produced his first of many television specials. He also produced five best-selling albums in the '60s: "Bill Cosby is a Very

CONTINUED ON PAGE SIX

The Piper Commencement Preview

It's May, and at Carnegie Mellon that means commencement is just around the corner. The university will celebrate the honors and achievements of the Class of 2007 May 19–20, and this special pull-out section of The Piper contains all you need to know to enjoy the university's main event. You'll find an in-depth look at this year's keynote speaker, honorary degree recipients and student commencement speaker; a schedule of the weekend's events; a list of diploma ceremonies; and general logistics about commencement. If you need more information, check out the Commencement 2007 Web site at www.cmu.edu/about/commencement/index.shtml.

Scudera Tells Class of 2007 What They Want To Hear — Literally

■ Susie Cribbs

If you hope to hear a student graduation speech chocked full of clichés like “seizing the day” and “living in the moment,” senior Catherine Scudera has bad news for you: you won’t find it at Carnegie Mellon’s commencement exercises on May 20.

Instead the Science and Humanities Scholar, who will earn a degree in creative writing and psychology with a minor in religious studies, hopes to offer something new and a little different for the members of the Class of 2007. She’s going to tell them the things they literally want to hear.

“Everyone has heard the commencement speech about how you have to go on with your life, and I don’t want to do that,” Scudera said. “Instead, I’m just going to interview a bunch of people, basically asking them what they want to hear at their graduation speech: ‘What would you say if you were the speaker?’ And then I’ll just use quotes and stories from them to make up the speech. Hopefully it ends up being diverse enough that everyone says, ‘That last thing she said — that’s something I experienced here.’”

Scudera’s own experience at Carnegie Mellon might not represent that of all students, but it has certainly been rich. Academically, the Oak Hill, Va., native has focused on social psychology and supplements her classes in that field by working at the university’s Children’s School. She’s also thrived as a writer, particularly in the personal essay and screenwriting genres. In fact, she’s putting the final touches on her honors thesis — a feature-length romantic comedy screenplay she’s been developing all year under the watchful guidance of Professor of English and Creative Writing Jane Bernstein.

But Scudera’s life at Carnegie Mellon hasn’t been all work and no play. She’s the current editor of *The Carnegie Pulse*, the university’s online student newspaper, and served as an orientation counselor for two years. She’s on the board of advisors for the university’s Sexual Assault Advisors (SSA) and has been one of the forces behind the group’s efforts to offer preventative education instead of just reactive support and counseling. She’s also active in the Unitarian group on campus and participates in meditation programs and other campus religious activities. She belongs to ALLIES, which supports the gay, lesbian, bisexual and transgendered community, and served as the group’s Spring Carnival booth chair for the past three years.

This year, Scudera lives in the Neville Co-Op, a university-owned apartment complex whose residents are committed to promoting environmental awareness and sustainability, and equal-



PHOTO BY KEN ANDREVO

SCIENCE AND HUMANITIES SCHOLAR CATHERINE SCUDERA HOPES HER UNIQUE COMMENCEMENT SPEECH IS DIVERSE ENOUGH THAT ALL STUDENTS WILL FEEL SOME CONNECTION TO IT.

ity of all things — race, gender and sexuality.

“I really wanted to join the co-op, because I believe in the ideals that it espouses,” Scudera said. “It’s a great living space ... and you know that

hand, she hopes to use those talents to do good for others.

“Last summer I actually spent a couple of months in India, working in an orphanage. I loved it,” she said. “I want to keep doing things like that. It

“EVERYONE HAS HEARD THE COMMENCEMENT SPEECH ABOUT HOW YOU HAVE TO GO ON WITH YOUR LIFE, AND I DON’T WANT TO DO THAT.” — CATHERINE SCUDERA

everyone who is going to be there is for the same things you are. It’s all equality-minded, liberally minded people, which is just really nice.”

Despite all she’s accomplished in her four years at Carnegie Mellon, Scudera does admit having a few regrets.

“I wish I had taken more science and I wish that I had learned anything about business. I have a lot of very business-savvy friends who know stuff about stocks and how money works, and I’m just completely ignorant to all of that. And I’m going to graduate. I’m going to have to have a bank account that’s my own and pay the rent. I wish I were already good at those things.”

What she lacks in science and business acumen, Scudera makes up in her ability to write, help others and understand what motivates people. Once her commencement address is history and she heads back to Virginia, diploma in

was really rewarding. I don’t want to get sucked into a job or anything like that right now. I’d rather do some good for America or whoever, then go back to grad school later and figure it out from there.”

Scudera has already been accepted to a teaching fellowship in New York and to an AmeriCorps program. She’s also interviewing for a position at a charter school for underprivileged youth in Boston. While she still hasn’t decided where she’ll end up for sure come fall, she does know what she’ll miss when she leaves Carnegie Mellon behind.

“At Carnegie Mellon, there are these wonderful cultural things. And that’s something I’ll really miss — the cultural experience of Carnegie Mellon. I think if I had gone to college somewhere else, I wouldn’t have gotten this experience. I never would have seen these things.”

Cosby To Deliver Keynote

CONTINUED FROM PAGE FIVE

Funny Fellow, Right!” “Why Is There Air?” “Wonderfulness,” “To Russell, My Brother, Whom I Slept With,” and “200 M.P.H.”

Among his many other accomplishments, Cosby is perhaps best known for “The Cosby Show,” a top-rated, award-winning situation comedy co-starring Phylicia Rashad. “The Cosby Show,” in which Cosby played doctor Cliff Huxtable, enjoyed an eight-year run from 1984 to 1992 that included 135 episodes on NBC.

While his entertainment career has flourished into its fifth decade, Cosby has become a strong advocate for education. He and his wife, Camille, who both have earned Ph.D.s in education, have donated funds to a wide range of universities and delivered many commencement addresses to further emphasize the importance of learning. They believe that the best assurance for a satisfying and rewarding life begins with knowledge.

“People always say ‘You don’t need money, why are you still working?’ My answer is that it isn’t about money. That’s academic. It’s about accepting the challenges of one’s own ideas, clarifying the unanswered questions and pursuing the excitement of discovery,” Cosby said.

Cosby will also receive an honorary doctorate of humane letters from Carnegie Mellon. He’ll join five other honorary degree recipients on the commencement stage representing the fields of education, business, civil and environmental engineering, sustainability and music.

The following is a brief look at this year’s honorary class.

Helen Faison



Helen S. Faison, director of the Pittsburgh Teachers Institute — a professional development program for Pittsburgh public school teachers — will receive a doctor of humane letters. Faison was a visiting professor and chair of the Education Department at Chatham College and was an interim superintendent for Pittsburgh Public Schools.

She earned her undergraduate and graduate degrees at the University of

Pittsburgh, of which she is a trustee emerita. She belongs to many professional and civic organizations and has received many honors, including honorary degrees from Pitt and Muskingum College. Faison was one of nine African Americans profiled as “Strong Men and Women” by Dominion Corporation in its 2004 series designed to motivate students of African-American descent.

Wilton Hawkins

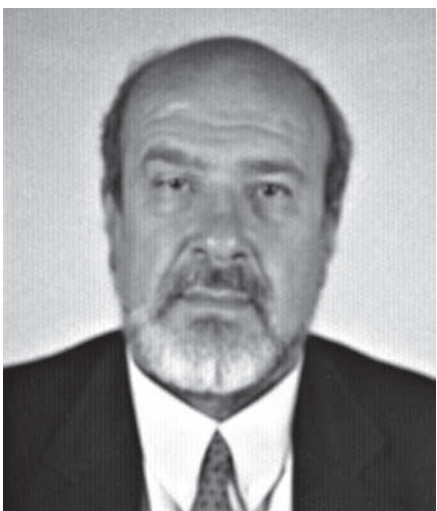


Wilton A. Hawkins (E’48), who helped develop and patent a wide range of products and processes for the aerospace, chemical, electronics and semiconductor industries, will receive a doctor of science and technology.

Founder of Chemplast, Hawkins retired in 1999 as vice president of Norton Performance Plastics Division, but continues to be active. He’s a board member of the PlasmaSol Corporation, a partner in Technology Holdings, a trustee of the Yogi Berra Museum and Learning Center on the campus of Montclair State University, a founding member of Theta Tau (the nation’s oldest professional engineering fraternity), and an emeritus life trustee at Carnegie Mellon.

He and his wife, Teddy, created the Teddy and Wilton Hawkins Distinguished Professorship in Engineering at Carnegie Mellon and they named rooms in both the University Center and the George A. Roberts Engineering Hall. Hawkins has received several honors from Carnegie Mellon, including the Distinguished Alumnus Award, the Alumni Merit Award and the Andrew Carnegie Philanthropic Award.

Paolo Lugari



Paolo Lugari, a civil and environmental engineer who transformed the harsh, barren and dangerous Gaviotas region in Colombia, South America, into a model community for social, economic and en-

vironmental sustainability, will receive a doctor of science and technology.

Lugari has molded Gaviotas into a green village using several technologies, such as hydroponic greenhouses that recycle waste from rice farms, biogas electricity generators, solar energy collectors, and water collection and purification systems that are powered by children on swings and seesaws.

Lugari has also helped to create sustainable forestry, an industry that harvests resin from pine trees and processes it in a zero-emissions factory. The product is used in eco-friendly paint and turpentine, and is an increasingly popular alternative to petroleum-based products.

The pine forest also boosts diversity, yielding a supply of drinking water that villagers bottle and sell, and serves as a sinkhole that captures 200,000 tons of carbon dioxide each year.

Gerald C. Meyers



Gerald C. Meyers (E’50, TPR’54), the former Ford Distinguished Professor of Business at the Tepper School, was an executive with American Motors, the Ford Motor Company and the Chrysler Corporation. He is now president of his own business consulting firm and professor of management and organization at the University of Michigan Ross Business School. An expert in corporate governance and crisis management, Meyers will receive a doctor of business practice.

After earning two degrees at Carnegie Mellon — a bachelor’s in engineering and a master’s in business — Meyers joined the Ford Motor Company in 1950. His next eight years were with the Chrysler Corporation, where he became director of manufacturing for all overseas plants in 1961. In 1962, he joined American Motors in Detroit and rose through the ranks to become chairman and CEO in 1977. He retired in 1984 after successfully engineering the American Motors merger with the French automotive company, Renault.

He is the author of “When It Hits The Fan: Managing The Nine Crises of Business” and co-author of “Dealers, Healers, Brutes & Saviors, Eight Winning Styles for Solving Giant Business Crises.”

Earl Wild



One of the greatest classical pianists of all time, Earl Wild (A’37) will receive a doctor of fine arts. A child prodigy, Wild was discovered to have absolute pitch at age 6, and by 14 he was the resident pianist with the Pittsburgh Symphony. At 17, he received a scholarship to

attend Carnegie Mellon and at 21 became the staff pianist for NBC in New York City.

In his 20s, Wild was the youngest and only American soloist ever engaged by the NBC Symphony. He was invited by famed maestro Arturo Toscanini to be the soloist in NBC radio’s first and only broadcast of Gershwin’s “Rhapsody in Blue.” In his later years, Wild evolved the art of the piano transcription with his vast interests in neglected works of the 19th and 20th centuries, and has been hailed as the “best transcriber of our time.”

Wild’s stellar career spans more than nine decades. He holds the distinction of performing for numerous U.S. presidents, including Herbert Hoover, Franklin D. Roosevelt, Harry Truman, Dwight Eisenhower and John F. Kennedy.

He was a visiting artist-in-residence in Carnegie Mellon’s School of Music from 1992 through 2006. In 2005, Wild performed at venues around the world in celebration of his 90th birthday.

Schedule of Events

Commencement weekend at Carnegie Mellon involves much more than the ceremony itself. Below is a list of events, ranging from department breakfasts to the “Zero-Year Reunion,” that will keep campus humming May 19–20.

Saturday, May 19

7:30–8:30 a.m.

Phi Beta Kappa Welcome Breakfast
Connan Room, University Center (UC)

8 a.m.–3 p.m., 6–8:30 p.m.

Commencement Information Area open,
Kirr Commons, UC

8:30–9:30 a.m.

Phi Beta Kappa Honor Society
Initiation Ceremony
McConomy Auditorium, UC
Caps and gowns are required.

9:30 a.m.

ROTC Commissioning Ceremony
Naval Science (Navy)
Banquet Hall, Soldiers and
Sailors Memorial Hall

10–11 a.m.

Honors Ceremonies
Seniors receiving university and college honors will be recognized and presented with honors medallions and cords, which should be worn during commencement on Sunday. Caps and gowns are not required. Locations, which vary by college, are as follows:

Bachelor of Humanities & Arts/
Bachelor of Science & Arts
Chosky Theater, Purnell Center

Carnegie Institute of Technology
Wiegand Gymnasium, UC

College of Fine Arts
Chosky Theater, Purnell Center

Humanities & Social Sciences
Rangos Hall, UC

Mellon College of Science
Wean Hall 7500

School of Computer Science
McConomy Auditorium, UC (ceremony)
and Connan Room, UC (reception)

Tepper School of Business
Posner Atrium, Posner Hall

2–6 p.m.

Diploma Ceremonies and Department
Events
(See page eight for a complete list.)

4–6 p.m.

Carnegie Mellon Advising Resource
Center Reception
Singleton Room, Roberts Hall

5–7 p.m.

Pre-Commencement Jazz Reception
Regina Gouger Miller Gallery, Purnell Center
RSVP by May 14 to
alumni-house@andrew.cmu.edu

8 p.m.

Doctor’s Candidates Hooding Ceremony
Wiegand Gym, UC
Caps and gowns required.
Reception will immediately follow in
Rangos Hall, UC.

Sunday, May 20

7–10 a.m.

Diploma Ceremonies and Department Events
(See page eight for a complete list.)

7:45–8:30 a.m.

Baccalaureate Celebration
Wright-Rogal Chapel, UC

8 a.m.–2 p.m.

Commencement Information Area open
Kirr Commons, UC

8:30–10 a.m.

School of Computer Science Breakfast
Perlis Atrium, Newell-Simon Hall
RSVP to copetas@cs.cmu.edu.

10 a.m.

Robing for faculty, degree candidates
and members of the platform group

10:30–11 a.m.

Procession of Graduates

11 a.m.

Commencement Ceremony
Gesling Stadium

12:30–4 p.m.

Diploma Ceremonies and Department Events
(See page eight for a complete list.)

9 p.m.–2 a.m.

Zero-Year Reunion for all graduating seniors
Pittsburgh Deli Company
728 Copeland Street (Shadyside)
Sponsored by Alumni Relations.

Diploma Ceremonies

Graduating students receive their diplomas at department or college ceremonies held throughout commencement weekend. Complimentary shuttle service will be provided on Sunday afternoon to diploma ceremonies taking place off campus. Written directions to off-campus sites will also be available in the Commencement Information Area. Unless otherwise indicated, the reception will follow the ceremony.

Saturday, May 19

Chemistry

Ceremony: 3 p.m., Mellon Institute Auditorium, 4400 Fifth Avenue
Reception: Mellon Institute Conference and Social Rooms

English

Ceremony: 2:30 p.m., McConomy Auditorium, UC
Reception: Schatz Dining Room, UC

Information Networking Institute

Ceremony and Reception: 5 p.m., Rodef Shalom Congregation, 4905 Fifth Avenue

Information Systems

Ceremony: 6 p.m., Philip Chosky Theatre, Purnell Center
Reception: 7:30 p.m., Purnell Center Lobby

Master of Information Systems Management & Master of Science in Information Technology

Ceremony and Reception: 2 p.m., Philip Chosky Theatre, Purnell Center

Mechanical Engineering

Ceremony and Reception: 2 p.m., Wiegand Gymnasium, UC

School of Design

Ceremony and Reception: 3 p.m., Rangos Hall, UC

Tepper Master's and Doctor's

Ceremony and Reception: 2 p.m., Soldiers and Sailors Hall, 4141 Fifth Avenue

Sunday, May 20

Bachelor of Humanities & Arts and Bachelor of Science & Arts

Ceremony: 8:30 a.m., Kresge Recital Hall, College of Fine Arts (CFA)
Reception: 9:30 a.m., Alumni Concert Hall, CFA

Biological Sciences

Ceremony: 2 p.m., Mellon Institute Auditorium, 4400 Fifth Avenue
Reception: Mellon Institute Conference and Social Rooms

Biomedical Engineering

Ceremony and Reception: 7:30 a.m., Doherty Hall 2210
(reception prior to 8 a.m. ceremony)

Business Administration

(joint ceremony with Economics)
Ceremony and Reception: 12:30 p.m., Soldiers and Sailors Memorial Hall, 4141 Fifth Avenue
(reception prior to ceremony)

Chemical Engineering

Ceremony: 12:30 p.m., Carnegie Lecture Hall, Carnegie Museum, 4400 Forbes Avenue
Reception: Hall of Architecture, Carnegie Museum

Civil & Environmental Engineering

Ceremony and Reception: 12:30 p.m., Pittsburgh Athletic Association, 4215 Fifth Avenue
(reception prior to ceremony)

Economics

(joint ceremony with Business Administration)
Ceremony and Reception: 12:30 p.m., Soldiers and Sailors Memorial Hall, 4141 Fifth Avenue
(reception prior to ceremony)

Electrical & Computer Engineering

Ceremony and Reception: 12:30 p.m., Wiegand Gymnasium, UC

Engineering & Public Policy

Ceremony and Reception: 8 a.m., Rangos Hall 2 and 3, UC

Entertainment Technology Center

Ceremony and Reception: 12:30 p.m., Heinz Field, East End Lounge, 400 Art Rooney Avenue
(reception prior to ceremony)
*Shuttle service not provided.

History

Reception: 8 a.m., Lower-Level Coffee Lounge, Baker Hall
Ceremony: 9 a.m., Giant Eagle Auditorium, Baker Hall

Materials Science & Engineering

Ceremony: 12:30 p.m., Gregg Hall, Porter Hall 100
Reception: Singleton Room and Atrium, Roberts Engineering Hall

Mathematical Sciences

Ceremony: 12:30 p.m., Doherty Hall 2315
Reception: Perlis Atrium, Newell-Simon Hall

Modern Languages

Ceremony: 8:30 a.m., Rangos Hall 1, UC
Reception: Skibo Coffeehouse, UC

Philosophy

Ceremony and Reception: 8:30 a.m., Adamson Wing, Baker Hall

Physics

Ceremony and Reception: 12:30 p.m., Wean Hall 7500

Psychology

Ceremony and Reception: 12:30 p.m., Rangos Hall, UC

School of Architecture

Ceremony: 1:30 p.m., Heinz Memorial Chapel, University of Pittsburgh
Reception: 3 p.m., Frick Fine Arts Building, University of Pittsburgh

School of Art

Ceremony: 2:30 p.m., Philip Chosky Theatre, Purnell Center
Reception: 12:30 p.m., Regina Gouger Miller Gallery, Purnell Center

School of Drama

Ceremony: 12:30 p.m., Philip Chosky Theatre, Purnell Center
Reception: Purnell Center Lobby

School of Computer Science

Ceremony and Reception: 1 p.m., Carnegie Music Hall, Carnegie Museum, 4400 Forbes Avenue

School of Music

Ceremony: 12:30 p.m., Kresge Recital Hall, CFA
Reception: Alumni Concert Hall, CFA

Social & Decision Sciences

Reception: 8 a.m., Schatz Dining Room, UC
Ceremony: 9 a.m., McConomy Auditorium, UC

Statistics

Ceremony: 12:30 p.m., Connan Room, UC
Reception: Skibo Coffeehouse, UC

Student-Defined Majors

Ceremony and Reception: 12:30 p.m., Baker Hall 154R

The Heinz School

Ceremony and Reception: 2 p.m., Rodef Shalom Congregation, 4905 Fifth Avenue

WHERE WILL THEY GO?

More than 2,000 students will receive degrees at this year's commencement, but what happens to all of them once they leave Carnegie Mellon? It's too soon to know where they're all headed, but major employers for last year's grads included:

Lockheed Martin	ExxonMobil
Schlumberger	Toyota
Johnson & Johnson	IBM
L'Oreal	Merck
Deloitte	Microsoft
Intel	

To find out where the Class of 2007 is going, read the next issue of The Piper.

COMMENCEMENT 2007 — GENERAL INFORMATION

Cap and Gown Information

Distribution:
McKenna/Peter/Wright Room, UC
Wednesday, May 16: 10 a.m.–4 p.m.
Thursday, May 17: 10 a.m.–4 p.m.
Friday, May 18: 10 a.m.–6 p.m.
Saturday, May 19: 7 a.m.–3 p.m., 6–8 p.m.
Sunday, May 20: 7:30–11 a.m.

Return:
McKenna/Peter/Wright Room, UC
Sunday, May 20: Noon–6 p.m.
Monday, May 21: 9 a.m.–6 p.m.

The Bookstore, Entropy and Art Store

Carnegie Mellon's retail stores will be open during commencement weekend to accommodate students, family and friends. Hours of operation are listed below.

Entropy

Friday, May 18: 7:30 a.m.–7 p.m.
Saturday, May 19: 9 a.m.–7 p.m.
Sunday, May 20: 8 a.m.–5 p.m.

The Bookstore

Friday, May 18: 8 a.m.–6 p.m.
Saturday, May 19: 10 a.m.–5 p.m.
Sunday, May 20: 8 a.m.–5 p.m.

Art Store

Friday, May 18: 8 a.m.–6 p.m.
Saturday, May 19: Closed
Sunday, May 20: Closed

Dining

Andy's Eatery, Si Señor and Skibo Café will offer hot and cold beverages, snacks and light meals. Hours of operation are listed below.

Andy's Eatery

Friday, May 18: 7 a.m.–3 p.m.
Saturday, May 19: Closed
Sunday, May 20: 7 a.m.–3 p.m.

Si Señor

Friday, May 18: 7 a.m.–4 p.m.
Saturday, May 19: 7 a.m.–4 p.m.
Sunday, May 20: Closed

Skibo Café

Friday, May 18: 9 a.m.–5 p.m.
Saturday, May 19: 9 a.m.–5 p.m.
Sunday, May 20: Closed

Complimentary water service will be available at various locations in the stadium during the commencement ceremony. The university will also provide complimentary coffee and tea at the Commencement Information Area in the UC. To help protect the stadium track and field surface, food, chewing gum and beverages other than water will not be permitted on the field.

Special Needs

Seating for guests with special needs and their families will be available in designated sections on the field surface. Up to three guests may sit with disabled guests. Volunteers will be stationed in these areas to assist guests with seating. A sign-language interpreter will be positioned in front of each seating section. A wheelchair-accessible ramp to the field is near the stadium entrance closest to the UC, and a seating map will be available in the Commencement Information Area. No reservations are required for this seating.

Wheelchair Rental

A limited number of wheelchairs and electric scooters will be available for rental on campus on Sunday, May 20. To ensure availability, call the Wheelchair Exchange at 412-241-5121 to reserve your rental. Two-day rates, hotel and home delivery are available.

Sky's the Limit With TeRK "Recipes"

CONTINUED FROM PAGE ONE

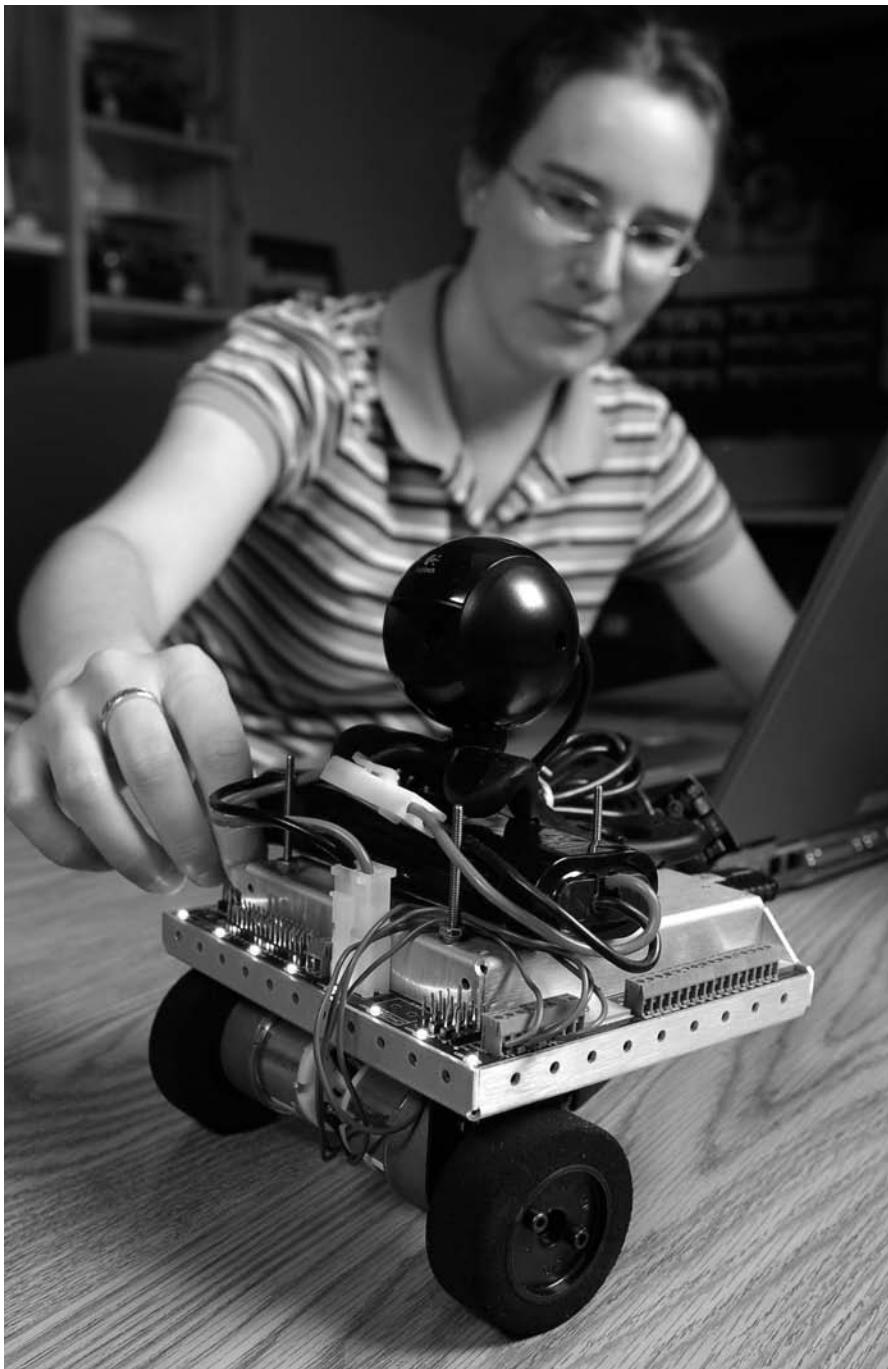


PHOTO BY KEN ANDREYO

THE QWERKBOT, SHOWN HERE WITH SENIOR RESEARCH ASSOCIATE EMILY HAMNER, IS A THREE-WHEELED ROBOT WITH A WEB CAM THAT YOU CAN BUILD BY FOLLOWING THE RECIPE.

You can build one in a day or so. Want a robot that vibrates every time it receives an RSS feed about an earthquake somewhere in the world? You can build one of those, too.

"We're hoping people notice that the sky's the limit," said Illah Nourbakhsh, associate professor of robotics. All of this is possible because of the Telepresence Robot Kit (TeRK) developed by his Community Robotics, Education and Technology Empowerment (CREATE) Lab. TeRK makes it possible to build a sophisticated robot without any prior knowledge of robotics. One hope, he said, is that TeRK could unleash the creativity of people who might not know much about robots but have great ideas about what robots can do.

TeRK isn't a complete set of parts and instructions. Rather, the CREATE Lab has concocted a number of "recipes," step-by-step instructions showing how to build robots out of commonly available parts and what tools you'll need. The recipes and the software necessary to run the robots are available for free at the TeRK Web site, www.terk.ri.cmu.edu.

The robot recipes vary. One, called a Qwerkbot, is a three-wheeled vehicle mounted with a Web cam. Another, the TeRK Flower, is a mechanical flower with six large leaves that open and close. Other recipes under development include a robotic teddy bear and a robot that can measure air and noise pollution.

"Once people have followed a recipe and become acquainted with robots, they can build on their experience," said Emily Hamner, a senior research associate in the CREATE Lab. "Not only can they customize the recipes to their liking, they can also design new robot types."

At the heart of all the TeRK robots is a unique controller called Qwerk that combines a computer with the software and electronics necessary to control the robot's motors, cameras and other devices. Qwerk, developed by the CREATE Lab and Charmed Labs of Austin, Texas, also connects the robot automatically and wirelessly to the Internet so it can be controlled by any Internet-connected computer.

"The Internet connection means the robots are much more global," Nourbakhsh said. Not only can the robot

ASK ANDREW



PHOTOS COURTESY OF UNIVERSITY ARCHIVES



THE EARLY YEARS, BEFORE THE BUGGY MODEL WAS REVOLUTIONIZED IN 1953 AND BUILT LOWER TO THE GROUND WITH A DRIVER PRONE INSIDE.

This time of year is big at Carnegie Mellon, with its annual Spring Carnival and buggy races. So here's my question: when did the buggy races start and why? S.M., University Advancement

Dear S.M.,

Buggy got its start in 1920 as the "Sweepstakes" races, which were part of the Campus Week activities. Unlike today's buggies, designed for speed and agility, the buggies of the 1920s focused more on pageantry. The original competition featured only one driver and pusher, who changed places in the middle of the competition at a pit stop where they switched rear wheels to demonstrate their mechanical prowess.

"By 1928, the competition included judging the buggies for design and engineering, and eliminating the humorous entries of early years," writes Ted Fenton in "Carnegie Mellon: A Centennial History." From that point on, the buggy races became more and more like the ones you saw a few weekends ago. Preliminary heats reduced the final races to manageable numbers; teams consisted of five pushers and one driver; and the course was changed to the present-day race up Tech Street, through Schenley Park and up Frew Street. Independent organizations were asked to join the fraternities in the 1929 competition.

From the 1930s through the 1950s, buggy designs were based on old Indy 500 cars, with a brief switch to soapbox models during World War II. Brakes became standard in 1951, but Alpha Tau Omega revolutionized buggy design in 1953, creating a model that had the driver laying prone, face forward in a buggy built low to the ground — a model that has endured more than half a century.

One other interesting tidbit about buggy's early days at Carnegie Mellon: the original women's races pitted representatives of the women's dormitories against each other. They made costumes in secret and sat astride "kiddie cars" that they propelled across campus with their feet. While these comical races have become a thing of the past, women are on par with men in today's buggy competition. Most organizations enter men's and women's teams, and a few years ago the Kappa Kappa Gamma sorority became the first one to enter a team composed completely of women — from mechanics and timers to flaggers and pushers.

be operated remotely at any location with a wireless Internet connection, but it can also send photos or video, respond to RSS feeds, or access the Internet to find information.

Building such a capable robot only five years ago would have been all but impossible, Nourbakhsh said. Using the Internet to provide telepresence on a routine basis, he explained, is practical today because of widespread broadband Internet access and the ubiquity of wireless hotspots in both public and residential settings. Qwerk itself takes advantage of technology now common in cell phones.

TeRK was developed over the past year and a half with support from Google Inc., Intel Corp. and Microsoft

Inc. In addition to Nourbakhsh and Hamner, graduate student Tom Lauwers, research programmer Christopher Bartley and design researcher Carl DiSalvo have played key roles in its development.

Even before its public release on April 25, TeRK had been in use for months in a variety of college courses, middle school classes and community outreach programs. With its broader release, Nourbakhsh hopes that TeRK will lead to more technological literacy and, ultimately, more innovation and creativity in robotics.

"We want robots that don't just subscribe to geeky notions of what robots should be," he said.

Spring Carnival Offers Delights for Kids of All Ages

■ Susie Cribbs

Once in a blue moon, the forces of nature cooperate and Carnegie Mellon's Spring Carnival is held beneath sunny skies as a mild breeze sweeps across campus.

The buggy races can be held without threat of rain (or snow!) and students can pack the midway in shorts and flip-flops. That cooperation happened this year, making "Small Things Made Large" a Spring Carnival to remember.

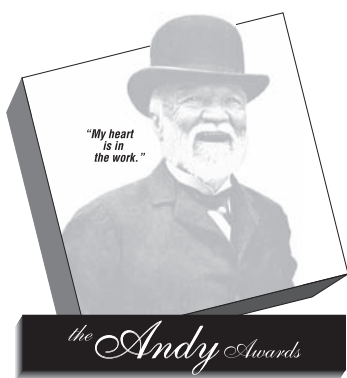
Sigma Phi Epsilon took home top honors in the fraternity booth competition for "Nintendo Games" (1), while Kappa Alpha Theta won the sorority division for their "Beehive" (2). The Asian Student Association's "Board Games" booth (3) came in on top in the independent organization category. The Midway wasn't just jammed with booths, though — kids of all ages enjoyed the games (4) and rides (5) that go along with Spring Carnival. President Cohon also made it to the festivities to officially open the Midway (6). Finally, the university's buggy races (7) went off without a hitch, with Pi Kappa Alpha's "A" team winning the men's competition, and the Student Dormitory Council's "A" team taking top honors in the women's race.

For more on Spring Carnival, see www.alumni.cmu.edu/carnival/index.html.



PHOTOS BY KEN ANDREYO AND BILL VANDERMARK

NEWS BRIEFS



Andy Award Nominations Due July 9

Nominations are being accepted for the 2007 Andy Awards, the university-wide recognition program that honors individual staff members and/or teams whose outstanding dedication and performance have had a significant impact on the university. Awards are given in five categories: dedication, innovation, commitment to students, citizenship and culture. This year the commitment to students category replaces enthusiasm. The new award honors those

who go above and beyond their job description to understand and meet the immediate and underlying needs of students. These individuals act as role models who display a positive and professional image at all times. The deadline for nominations is July 9. Awards are open to all non-faculty university employees. Nomination forms and further information are available at www.cmu.edu/andyawards/. The 2007 Andy Award ceremony will be held at noon, Sept. 21 in McConomy Auditorium.

Staff Picnic Set for May 23

President Jared L. Cohon and Provost and Senior Vice President Mark Kamlet invite all staff to the annual Staff Picnic, 11:30 a.m. to 2 p.m., Wednesday, May 23 in Wiegand Gym and Rangos Hall, University Center. The picnic is a celebration of the important contributions staff members make to the university. Those attending must present a valid Carnegie Mellon staff ID. Shuttles to and from the University Center will be provided for those working at off-campus locations.

Physics Alum Establishes Student Fellowship

Carnegie Mellon alumnus Bruce McWilliams, chairman, president and CEO of Tessera Technologies; and his wife, Astrid McWilliams, have given the Mellon College of Science (MCS) more than \$1 million to establish an endowed fund for the Astrid and Bruce McWilliams Fellowship in the Mellon College of Science. The fellowship will support MCS graduate students conducting leading-edge research in emerging fields such as nanotechnology, biophysics and cosmology. Since June 1999, McWilliams has served as chief executive officer, president and a member of the board of directors of Tessera Technologies, a leading provider of miniaturization technologies for the electronics industry. McWilliams earned his bachelor's, master's and doctor's degrees in physics at Carnegie Mellon, and he serves on the advisory board for the Department of Physics. For the inaugural year of the Astrid and Bruce McWilliams Fellowship, McCullough is matching the award with additional funds to provide full support for three recipients. The

2007 recipients are doctoral students Andrea Bervin (chemistry), Sandeep Gaan (physics) and Haifeng Gao (chemistry).

University Mourns Loss of Voice Professor, International Opera Star

Carnegie Mellon mourns the loss of Mimi Lerner, who died last month at her home after a long bout with cancer. She was 61. The award-winning international opera star was an associate professor of voice and chair of Carnegie Mellon's voice department. She was an astute teacher and classical performer who sang at some of the most prestigious opera houses in the U.S. and Europe with such companies as the Metropolitan Opera, the Theatre du Chatelet in Paris, the Netherlands Opera, the Theatre de la Monnaie and the Canadian Opera. She also performed with numerous American companies, including the Seattle Opera, the Houston Grand Opera, the Dallas Opera, the Santa Fe Opera and the Washington Opera at Kennedy Center, among others. She also worked with the symphony orchestras of Pittsburgh, San Diego, Chicago

Steinberg Retires After 60 Years

CONTINUED FROM PAGE ONE

“I told my friends I was coming to Carnegie Tech and none of them had ever heard of it. Now we are one of the leading research institutions in the country,” Steinberg said. “I don’t think anyone has gone through that kind of metamorphosis.”

In the fall, the College of Humanities and Social Sciences (H&SS) honored Steinberg, 86, by naming Baker Hall A53 the Erwin R. Steinberg Auditorium. Faculty and alumni feted Steinberg during the 25th anniversary celebration of the Master of Arts in Professional Writing (MAPW) program, which he co-founded.

“Only a handful of people in the university’s history have had as much impact as Erwin Steinberg. He not only helped to establish signature programs in the English Department, but he ensured that first-rate teaching would become one of our hallmarks,” said H&SS Dean John Lehoczky.

Steinberg was the dean of Carnegie Tech’s Margaret Morrison Carnegie College from 1960 until it closed in 1973, and he was the first dean of H&SS. The first class of H&SS students entered the university in 1969.

“That was at the height of student unrest. And that didn’t make life easy for us,” Steinberg said.

Steinberg arrived at Carnegie Mellon — then the Carnegie Institute of Technology — in 1946, fresh out of the U.S. Army Air Force. Many of his first students were World War II veterans benefiting from the GI Bill.

“A lot of these students were people who before the war never thought of themselves as college material, so college was very daunting to them,”



STEINBERG, CIRCA 1970

Steinberg said. “Some of them were older than I. As a matter of fact, one of them said something about it in class one day, and I just didn’t answer.”

“ONLY A HANDFUL OF PEOPLE IN THE UNIVERSITY’S HISTORY HAVE HAD AS MUCH IMPACT AS ERWIN STEINBERG. HE NOT ONLY HELPED TO ESTABLISH SIGNATURE PROGRAMS IN THE ENGLISH DEPARTMENT, BUT HE ENSURED THAT FIRST-RATE TEACHING WOULD BECOME ONE OF OUR HALLMARKS.” — H&SS DEAN JOHN LEHOCZKY

In 1958, at Steinberg’s urging, the English Department established an undergraduate program in technical writing, the first of its kind in the nation. He was instrumental in creating the Ph.D. program in rhetoric and the MAPW program. Both programs were in response to a federal government initiative to foster clear writing and design in public documents.

Steinberg is also a leading scholar on James Joyce and publishes on other Modernist novelists. He’s currently working on a second edition of his 1973 book “The Stream of Consciousness and Beyond in ‘Ulysses,’” and is completing a manuscript for another on “Ulysses.”

“Erwin’s retirement means losing a fixture of the English Department who defined interdisciplinary work in English spanning literature, writing, rhetorical studies and education,” said department head David Kaufer.

Steinberg was the Thomas S. Baker Professor of English and Interdisciplinary Studies from 1980 to 1993, and in 1991 he became the university’s first vice provost

for education. When he took the job, almost 16 percent of students left the university between their first and second years. When he stepped down in 1995, the attrition rate was just below 10 percent. He’s at a loss to explain his own success.

“He drew a lot of attention to teaching, and helped make that a priority,” said English Professor Linda

Flower, who helped to launch the MAPW program with Steinberg. “He made retention a public idea.”

As for his own teaching style, Steinberg admits that it hasn’t always earned him adoration. He said one student praised him in a faculty-course evaluation as the best teacher he’d had during his college career, while simultaneously adding, “He is also an SOB but that is beside the point.” (The student did not use the acronym.)

Valerie Haus, who graduated from the MAPW program in 1983, remembers Steinberg as a focused instructor, well prepared and always clear on his objectives.

“Every once in a while people will ask me what was the most important class that I took at Carnegie Mellon, and it was a technical writing course that he was teaching at the time,” said Haus, a technical writer and documentation manager who lives in Pittsburgh and runs the technical communication firm WriteSound.

“It was from Erwin that I got the concept and specifics of technical writing. They served me very well over the years.”

Steinberg lives a few blocks from campus with his wife of 52 years, Beverly. They have two sons and a grandson.

“I’ve had opportunities to become department heads elsewhere, and become a provost, but this was such an interesting place, and I did a variety of things,” Steinberg said. “I didn’t see much point in tearing my family up, and I didn’t want to give up teaching.”

“I’ve never stopped teaching since I’ve been here.”

and Rishon Le Tzion in Israel. Lerner was also director of music and cantorial soloists at Rodef Shalom Congregation in Oakland. She received her undergraduate degree in music education from Queens College and her master’s degree in voice from Carnegie Mellon. A memorial service will be held at 7:30 p.m., Sunday, May 13 in Kresge Recital Hall.

SCS Hosts Quality of Life Technology Symposium

Randal E. Bryant, dean of the School of Computer Science, hosted an on-campus regional meeting of the National Academy of Engineering on April 12. William A. Wulf, a former Carnegie Mellon computer science professor who will finish his six-year term as NAE president this summer, attended the meeting and afterward helped Bryant kick off a symposium on Quality of Life Technology. Speakers at the symposium in the University Center discussed how information and robotic technology, such as data recorders, self-driving cars and robotic arms, could enable more older people and people with disabilities to live independently longer. Also included was an

update on progress being made by the Quality of Life Technology Center, an NSF Engineering Research Center operated by Carnegie Mellon and the University of Pittsburgh.

Noel Zahler To Head School of Music

The College of Fine Arts has announced that Noel Zahler will lead the School of Music, effective July 1. Zahler succeeds Marilyn Taft Thomas, who will return to the school’s faculty after serving as interim head. Zahler comes to Carnegie Mellon from the University of Minnesota, where he directs the School of Music and teaches composition. Zahler’s compositions include a wide range of vocal, instrumental, electro-acoustic, interactive and multimedia works. The American Composers Orchestra, Arden Trio, Charleston String Quartet, Meridian String Quartet, League of Composers and other ensembles throughout the U.S., Europe and Asia have performed his compositions. Zahler has co-authored three computer software programs, and his writings on music theory and composition, artificial intelligence and music, and computer music

have appeared in various publications. He holds a Ph.D. in musical arts from Columbia University; a master’s degree from Princeton University; a certificato di perfezionamento from L’Accademia Musicale Chigiana in Siena, Italy; and a bachelor’s degree from the Aaron Copland School of Music at CUNY Queens College.

P2P System Could Speed Movie, Music Downloads

Assistant Professor of Computer Science David G. Andersen and Intel Research Pittsburgh’s Michael Kaminsky have designed a system, called Similarity-Enhanced Transfer (SET), that could significantly cut down the time involved in transferring large data files, such as movies and music, over the Internet. The peer-to-peer (P2P) file-sharing service is configured to share not only identical files, but also similar files. By identifying relevant chunks of files similar to a desired file, SET greatly increases the number of potential sources for downloads. And boosting the number of sources usually translates into faster P2P downloads.

Support the Faculty & Staff Annual Fund

The Office of Annual Giving encourages all faculty and staff to support the university by making a gift to the Annual Fund. No matter how large or small the gift may be, participation in the Faculty & Staff Annual Fund helps support student life, research projects, special programs and other university initiatives. Contributions can be directed to the Carnegie Mellon Fund, scholarships, particular colleges and departments, or to a fund that has special personal meaning. While your participation directly helps the university, it also impacts how others give. Faculty and staff participation rates are often reviewed by corporations and foundations when making their funding decisions. Visit www.cmu.edu/giving/give.shtml to make your gift online or to access a payroll deduction form. To donate by check, mail it to the Office of Annual Giving, 6 PPG Place — 14th floor, Pittsburgh, PA 15222. For more information, contact Carole Panno at 412-268-1617 or cp1g@andrew.cmu.edu.

LECTURE SPOTLIGHT: THE ADAMSON AWARDS

■ Jonathan Potts

No one wears a tuxedo or gown, and no one poses on the red carpet. But for students in the English Department, the annual Adamson Awards hold nearly as much excitement as the Oscars or the Grammys.

Started in 1981, the awards honor student writers for their work in fiction, poetry, screen writing and nonfiction. Awards include the Pauline Adamson Awards, the Academy of American Poets Prize, the Margaret Smith Cushing award and the Carnegie Mellon University Press Prize.

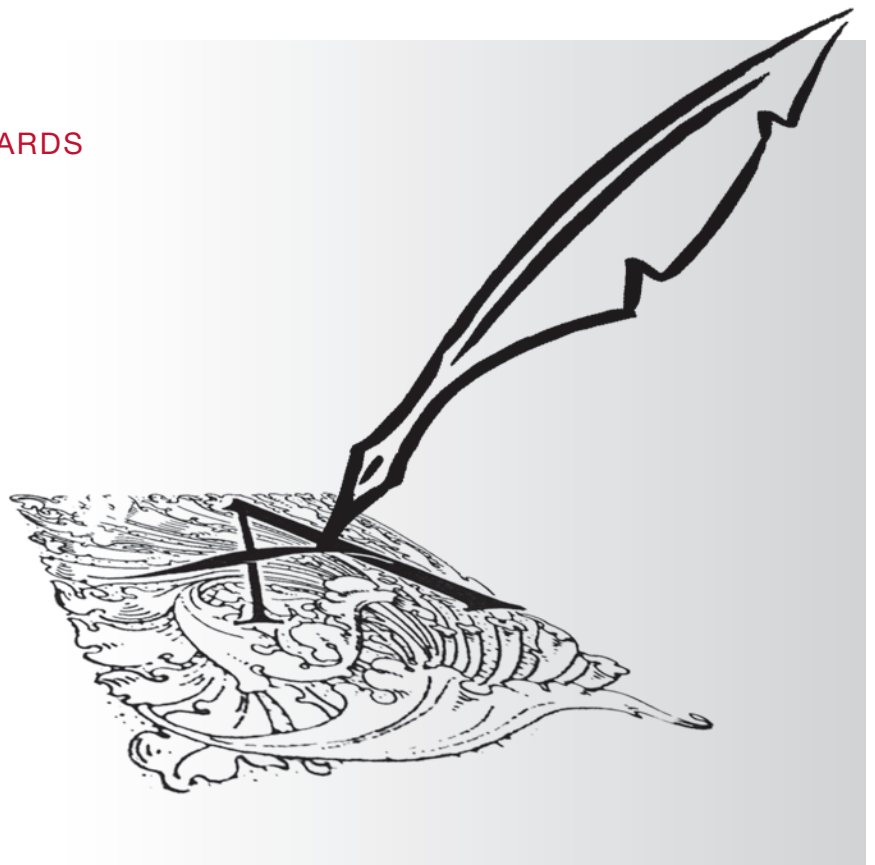
The 2007 Adamson Awards took place Friday, May 4, in the Adamson Wing of Baker Hall. This year's guest speaker was award-winning poet Elizabeth Alexander, a professor of African American Studies at Yale University. Alexander has authored four poetry collections, including "American Sublime," which was a finalist for the Pulitzer Prize. She has received two

Pushcart Prizes, a National Endowment for the Arts Fellowship, the Quantrell Award for Excellence in Undergraduate Teaching from the University of Chicago, the George Kent Award and a Guggenheim Fellowship.

The Adamson Awards were endowed by the late Clarence Adamson, a mechanical engineer and a 1915 graduate of the Carnegie Institute of Technology. Adamson endowed scholarships, the awards, a speaker series and an auditorium — the Adamson Wing — in memory of his wife, Pauline.

"He wanted to leave something to the English Department because she was a glad reader, and he wanted to do something for her," said Richard Young, professor emeritus of English and former head of the English Department.

Notable award winners have included Greg Marcks, whose first feature film, "11:14," starred Hilary Swank; Jon Parras, whose first novel, "Fire On Mount Maggiore," won the Peter Taylor Prize; and Karen Rigby, who recently



received a National Endowment for the Arts Creative Writing Fellowship in Poetry and whose first poetry collection, "Festival Bone," was published by Adastra Press.

The Adamson Awards also serve

as the capstone for the annual Adamson Visiting Writers Series, and some of the nation's premier writers have spoken at the event. Past speakers have included Raymond Carver, Tobias Wolff, Michael Cunningham and Dennis Lehane.

Carnegie Mellon West, UC Berkeley Team-Up To Tackle Software as a Service

■ Byron Spice

Definitions have a short life cycle in an industry as dynamic as the software industry. Consider that software is no longer just a product; it's increasingly a service. And service is no longer just a helpful activity, but also a type of science. Open-source software is, well, what it has always been, but industry

officials still argue whether it's a boon or an epithet.

Such was the context for "The New Software Industry: Forces at Play, Business in Motion," an April 30 conference in Mountain View, Calif., targeted at Bay Area software professionals and presented jointly by Carnegie Mellon West and the University of California, Berkeley.

Jim Morris, dean of Carnegie Mellon West, said the conference marks the beginning of a new relationship with UC Berkeley, and particularly with the Fisher IT Center at the Haas School of Business, and Berkeley's Service

Dimeff, associate dean for external relations and professional development at Carnegie Mellon West.

This inaugural conference addressed the SaaS issue with such speakers as Timothy Chou, author of the influential

"WE'RE INTERESTED IN BECOMING AN OBJECTIVE PLACE WHERE THE FUTURE OF THE INDUSTRY CAN BE DISCUSSED." — DIANE DIMEFF



TIMOTHY CHOU, AUTHOR OF THE INFLUENTIAL BOOK "THE END OF SOFTWARE," WAS ONE OF THE FEATURED SPEAKERS AT "THE NEW SOFTWARE INDUSTRY: FORCES AT PLAY, BUSINESS IN MOTION" CONFERENCE IN MOUNTAIN VIEW, CALIF.

Science, Management and Engineering program. Carnegie Mellon and Berkeley are two of the leading universities for software engineering and management, and can offer professionals an enlightened, objective forum to discuss some of the industry's biggest issues.

Software as a Service (SaaS), for instance, "is all the rage here in Silicon Valley," Morris said. Software was once released as a finished product, but now, thanks to the Internet, software producers can update and improve their software continuously. And as more software is accessed online, such as Google Office, software often isn't even purchased any more.

"The Internet has been a continually growing force, and it's changed the way we do things," Morris said. He noted that most SaaS conferences in Silicon Valley have been sponsored by vendors or consultants, who each add their own spin to the topic.

"We're interested in becoming an objective place where the future of the industry can be discussed," said Diane

book "The End of Software"; Martin Griss, associate dean for education at Carnegie Mellon West; and Adam Blum, vice president of engineering for Mobio Networks.

Paul Maglio, senior manager of service systems research at IBM Almaden Research Center, and John Zysman, a political scientist at UC Berkeley, discussed the emerging discipline of service science, while Carnegie Mellon Associate Professor of Design Shelley Evenson explained her approach to designing for service. Other speakers included Ray Lane, general partner at Kleiner Perkins Caufield & Byers and a Carnegie Mellon trustee, and Michael Cusumano of the MIT Sloan School of Management.

"Carnegie Mellon and UC Berkeley are different types of organizations that bring different expertise to the table," Dimeff said, with Carnegie Mellon's emphasis on educating software developers and Berkeley's on top-down issues of software management. "This should provide a unique format for industry discussions."