



Carnegie Mellon University

A Presidential Tribute



PHOTO BY TIM KAULEN

ON MARCH 29, STUDENT LEADERS PAINTED THE FENCE TO HONOR AND THANK PRESIDENT JARED L. COHON (RIGHT). FROM LEFT, ARE STUDENT BODY PRESIDENT WILL WEINER (DC'13), STUDENT BODY VICE PRESIDENT MEELA DUDLEY (DC'13) AND BRAD SHERBURNE (A'13). WEINER CALLED THE FENCE "A SYMBOL OF THE VOICE OF STUDENTS," AND SAID IT WAS AN APPROPRIATE WAY TO CAPTURE THE THANKS OF THE THOUSANDS OF STUDENTS WHOSE LIVES PRESIDENT COHON HAS TOUCHED DURING HIS TENURE. READ REFLECTIONS OF PRESIDENT COHON AND HIS WIFE, MAUREEN, ON THEIR TIME AS CARNEGIE MELLON'S FIRST COUPLE, STARTING ON PAGE 5.

Educators Extraordinaire

Celebration Honors Top Teachers

■ Piper Staff

Give them an A+.

Faculty and staff who have achieved university-wide acclaim for their exceptional contributions to Carnegie Mellon education programs, effective and enthusiastic classroom teaching, compassionate and influential advising, and profound impact on others will be honored at a Celebration of Education beginning at 4:30 p.m., Tuesday, April 30 in Rangos 1 and 2 of the University Center. The events are free and open to the public.

The Celebration of Education

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\$30M Gift Galvanizes CMU's Energy Innovation Efforts

■ Chriss Swaney

Carnegie Mellon has received a \$30 million gift from the Richard King Mellon Foundation to dramatically expand its strategic initiative to address energy research, education and innovation.

The gift — the largest private foundation grant in CMU's history — will propel the Wilton E. Scott Institute for Energy Innovation to coordinate university-wide activities with the overall goals of improving energy efficiency and developing new, clean, affordable and sustainable energy sources.

"We are deeply grateful to the Richard King Mellon Foundation for this generous gift," said CMU President Jared L. Cohon. "Developing sustainable energy solutions is of fundamental importance for America and the world, and this gift will play a key role in helping the university and the Scott Institute

solve some of our most important energy challenges."

Funds from the gift will be used to support various energy research projects, faculty and student recruitment and construction of the Sherman and Joyce Bowie Scott Hall, which will house the Scott Institute. The gift follows the

Richard King Mellon Foundation's previous record-setting \$25 million grant to CMU in 2007 to fund life sciences initiatives.

Supporting teams of CMU engineers, scientists, economists, architects, policy specialists and others, the institute

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consists of five main awards: the Ryan Award and the Gelfand Award, presented annually, and the Doherty Award, the Academic Advising Award and the Barbara Lazarus Award, given every other year.

In addition to the awards noted above, five up-and-coming junior faculty members will receive Wimmer Faculty Fellowships, faculty will receive College Teaching Awards and graduate students will be presented with the Graduate Student Teaching and Graduate Student Service awards.

Robert E. Doherty Award for Sustained Contributions to Excellence in Education

The stats speak for themselves.

For more than four decades John Lehoczky has been a nationally recognized statistician at Carnegie Mellon, where he has served in key leadership roles, helping to raise the Statistics Department to national prominence, creating new programs and elevating the humanities at CMU.

To recognize his impact, Lehoczky, dean of the Marianna Brown Dietrich College of Humanities and Social Sciences and the Thomas Lord University Professor of Statistics and Mathematical Sciences, is the recipient of this year's Robert E. Doherty Award for Sustained Contributions to Excellence in Education.

"John Lehoczky epitomizes the essence of the Doherty Award," said Joseph E. Devine, Dietrich College associate dean. "He has played a critical role in making his department, college



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CELEBRATION of EDUCATION

College Teaching Awards

Below are this year's recipients.

CARNEGIE INSTITUTE OF TECHNOLOGY

Benjamin Richard Teare Jr. Teaching Award
Lawrence Pileggi
Tanoto Professor, Department of Electrical & Computer Engineering

C. Fred Higgs III
Professor, Department of Mechanical Engineering

COLLEGE OF FINE ARTS

Henry Hornbostel Teaching Award
Joseph S. Mannino
Professor, School of Art

DIETRICH COLLEGE OF HUMANITIES & SOCIAL SCIENCES

Elliott Dunlap Smith Award for Teaching and Educational Service
Rebecca Nugent
Associate Teaching Professor, Department of Statistics

H. JOHN HEINZ III COLLEGE

Martcia Wade Teaching Award
Silvia Borzutzky
Teaching Professor of Political Science and International Relations

MELLON COLLEGE OF SCIENCE

Julius Ashkin Teaching Award
Giovanni Leoni
Professor, Department of Mathematical Sciences

Richard Moore Education Award

Gregg Franklin
Professor, Department of Physics

SCHOOL OF COMPUTER SCIENCE

Herbert A. Simon Award for Teaching Excellence
David G. Andersen
Associate Professor, Department of Computer Science

TEPPER SCHOOL OF BUSINESS

Gerald L. Thompson Teaching Award in the B.S. Business Administration Program
Brandy Aven
Assistant Professor of Organizational Behavior and Theory

Richard M. Cyert Teaching Award in the B.S. Economics Program

Laurence Ales
Assistant Professor of Economics

MBA George Leland Bach Excellence in Teaching Award

Jeffrey R. Williams
Professor of Business Strategy

GRADUATE STUDENT TEACHING AWARD

Julie Bowman
Department of English

GRADUATE STUDENT SERVICE AWARD

Matthew L. Beckler
Department of Electrical & Computer Engineering

Wimmer Faculty Fellows

These fellowships are made possible by a grant from the Wimmer Family Foundation and are designed for junior faculty members interested in enhancing their teaching through concentrated work designing or redesigning a course, innovating new materials or exploring a new pedagogical approach. Fellows work in close collaboration with Eberly Center colleagues and receive a stipend to acknowledge the work it takes to improve one's effectiveness as an educator.

Below are the 2012-2013 fellows:

Emma Brunskill
Assistant Professor, Department of Computer Science

Aditya S. Khair
Assistant Professor, Department of Chemical Engineering

Fatma Kiliç-Karzan
Assistant Professor of Operations Research, Tepper School of Business

Karen R. Thickman
Assistant Teaching Professor, Ray and Stephanie Lane Center for Computational Biology

Christopher N. Warren
Assistant Professor, Department of English

and university a better place for both faculty and students. And, he has done this with selflessness and humility — always looking for the best possible way to serve, support and celebrate our students, faculty and institution."

In applying his research on stochastic modeling to problems in finance, Lehoczky led the creation of the university's master's degree program in computational finance (MSCF). The joint program between the departments of Statistics and Mathematical Sciences, the Tepper School of Business and the Heinz College is ranked No. 1 in the U.S.

"John's contributions have been the most important," wrote Steve Shreve, MSCF co-founder and professor of mathematical sciences. "If John had not been involved, the program would not exist."

As Statistics Department head from 1984-1995, Lehoczky helped the undergraduate program achieve national recognition. In 2000, he became dean of the Dietrich College and turned his focus to strengthening the humanities departments, which he believed was essential



JOHN LEHOCZKY (LEFT) IS PICTURED WITH BILL DIETRICH IN 2011, WHEN DIETRICH'S \$265 MILLION GIFT TO THE UNIVERSITY WAS ANNOUNCED. AS PART OF THAT GIFT, THE COLLEGE OF HUMANITIES & SOCIAL SCIENCES WAS RENAMED THE MARIANNA BROWN DIETRICH COLLEGE OF HUMANITIES & SOCIAL SCIENCES, AFTER DIETRICH'S MOTHER.

for Carnegie Mellon to realize its full potential.

He launched an ambitious Humanities Initiative, which led to the Human-

ities Scholars Program, the Humanities Center and the Center for the Arts in Society, all of which are endowed.

Lehoczky worked to advance brain science research and has been a strong advocate for developing CMU international programs, such as the Center for International Relations and Politics. He continues to help attract and retain world-class faculty and bolster the college's pioneering role in cognitive science, decision sciences and philosophy. All the while, he continues to teach and conduct research.

The William H. and Frances S. Ryan Award for Meritorious Teaching

Eric Grotzinger calls it "The Mackey Effect."

That's how he explains why majors and non-majors alike pack a mathematics lecture hall; why the best young "mathletes" come to Carnegie Mellon; and why the number of math majors at CMU has nearly doubled in the past 10 years.



PHOTO BY TIM KAULEN
JOHN MACKEY SHARES A PASSION FOR TEACHING MATHEMATICS WITH MAJORS AND NON-MAJORS ALIKE.

Grotzinger, associate dean for undergraduate affairs at the Mellon College of Science, coined the term in honor of John Mackey, teaching professor and associate head of the Mathematical Sciences Department and this year's winner of the William H. and Frances S. Ryan Award for Meritorious Teaching.

While many factors have contributed to the department's recent successes, many believe that it's no coincidence that the number of students taking math courses and choosing to major in math have skyrocketed since Mackey joined the CMU faculty in 2003.

"John is a phenomenon in the classroom, a caring mentor and a relentless advocate for quality undergraduate education," said Tom Bohman, the Alexander M. Knaster (E'80) Professor and head of the Mathematical Sciences Department.

Mackey was singled out by his nominators for his enthusiasm for math and teaching, and his dedication to all students. He helps any student that might be struggling in a math class, not just the ones he teaches. He also spends countless hours recruiting the best mathematical minds to come to CMU and advising the Math Club.

Mackey helped to reinvent the first-year Concepts of Mathematics course, which is now often referred to simply as "Concepts with Mackey." Under his direction, the course, which is intended to be the introductory math course for mathematical sciences, computer science and electrical and computer engineering majors, is now a sought-after elective for students of all majors. Mackey's classes, large and small, often have waiting lists and rarely have an empty seat.

"John is overflowing with passion for mathematics, and this passion simply bleeds into anyone who has the pleasure of taking a class with him," said Douglas Sterling (S'11). "He just makes math fun."

The Award for Outstanding Contributions to Academic Advising and Mentoring

Ty Walton, director of the Carnegie Mellon Advising Resource Center (CMARC), is an innovator who

embraces change, calling upon herself and her staff to play many roles including advocate, mentor, adviser, career consultant, personal counselor and life coach.

The university is recognizing her contributions with this year's Award for Outstanding Contributions to Academic Advising and Mentoring.

Walton has spent more than 25 years at CMU advising students, leading programs and being an active force in increasing the yield, retention and graduation rates of underrepresented minority students.

Since 2000, Walton has directed the Summer Academy for Mathematics and Science, which aims to make "good students excellent." More than 1,000 high school juniors and seniors have attended the program. While many of SAMS graduates have enrolled at CMU, others have gained admission to Ivy League schools and other top-ranked research universities.

When it comes to advising undergraduate students, former advisees and student workers have described Walton as giving tough love and someone who "fixes broken spirits."

"She is the glue that holds CMARC together and the first-aid kit to students who have been discouraged, put down and are emotionally distraught," one alumnus wrote.

Colleagues see her influence as well, and say that she engages students in such a way that they take ownership of their



PHOTO BY KEN ANDREVO
TY WALTON HAS BEEN A MENTOR FOR HUNDREDS OF CARNEGIE MELLON STUDENTS FOR MORE THAN 25 YEARS.

development while at the university.

"I don't see Ty as an undergraduate adviser, rather a lifetime adviser, due to the longevity of the relationships as well as the sustained commitment on her part. There are many students that meet Ty as a young student and still call her for advice as a seasoned professional," said Damian Dourado, who worked with Walton before becoming manager for Pre-College Programs at Carnegie Mellon in Qatar.

Rea Freeland, associate dean for special projects at the Mellon College of Science, said that she admired Walton's ability to retain details about so many interactions with students.

"CMARC is a wonderfully welcoming space where it's easy to stop by, hang out and see 'Ms. Ty,'" Freeland wrote.

Mark Gelfand Service Award for Education Outreach

Natalie Ozeas (A'60, '69) has a deep love for listening to music and sharing it with others, and through her work at Carnegie Mellon she has discovered how to do that in a pretty big way.

Ozeas created the CMU Urban Music Education Program, which annually reaches about 400 Pittsburgh Public Schools and Wilkinsburg School District students in grades 4 through 12, helping these students find an appreciation for music that's relevant to them.

For this reason, Ozeas, a professor of music education and director of Graduate Studies for the School of Music, is the recipient of the Mark Gelfand Service Award for Education Outreach.

Through the program, students get to dabble in the classics and learn to rap as well. Some students even performed on stage during a fall 2012 concert at Carnegie Music Hall with the Carnegie Mellon School of Music Wind Ensemble. Side-by-side, they played Michael Jackson's "Thriller" on wind instruments.

Ozeas isn't surprised by the program's success. She believed in it from its inception, which originally was a professional development program for teachers but grew to include the children when teachers saw how they responded to learning about music. Many have seen a "profound difference" in their students because of it.

"The pride which I see emanating

from my students when they are able to perform songs and create music is both encouraging and incredible," said nominator Adrienne Davis Kelly of Pittsburgh's Minadeo School, part of the Pittsburgh Public Schools. "Beyond any doubt, this has fostered confidence within these students."

Similar letters and accolades poured in for Ozeas — including nominations from other educators, colleagues in the School of Music, foundation representatives, the College of Fine Arts administration and countless others. Her work is noble, though she admits it's not always easy. It is, however, always rewarding ... and it boils down to a simple focus, she said.

"Our goal is to make music accessible to children in all schools, and we want them to relate to the music they hear in their own households and neighborhoods."



PHOTO BY PAM WIGLEY
NATALIE OZEAS IS PICTURED WITH STEPHEN STORY, CMU ASSOCIATE CONDUCTOR OF THE CARNEGIE MELLON WIND ENSEMBLE, DURING A SIDE-BY-SIDE CONCERT AS PART OF THE URBAN MUSIC EDUCATION PROGRAM.



WE CROSSED THE \$1B MARK.

WE CONNECTED WITH MORE ALUMNI THAN EVER.

WE HELPED GROW CMU'S GLOBAL VISIBILITY.

THANKS TO ALL OF YOU — NEARLY 50,000 ALUMNI, FACULTY, STUDENTS, PARENTS AND STAFF — WHO SUPPORTED THE INSPIRE INNOVATION CAMPAIGN, WE ARE IN THE HOMESTRETCH OF AN HISTORIC EFFORT THAT'S ALREADY IMPACTING EVERYTHING FROM NEW RESEARCH FACILITIES TO FACULTY AND STUDENT SUPPORT.

BUT WE'RE NOT DONE YET. HELP US CONTINUE THE CELEBRATION AS WE PREPARE TO CROSS THE CAMPAIGN FINISH LINE IN JUNE.

Building Blocks

Guiding Campus Development to the West and Northwest

■ Bruce Gerson

With an eye toward the west and northwest of the Pittsburgh campus, Carnegie Mellon's Simonds Commission has drafted 10 guidelines for future growth and development.

The principles, authored by the 14-member committee of trustees, faculty and senior administrators chaired by university trustee J. Lea Hillman Simonds and Vice President for Campus Affairs Michael Murphy, will guide new projects and renovations to CMU properties to the west of Morewood Avenue along Forbes and Fifth avenues, and to the north on Craig Street and its Henry, Winthrop and Filmore street arteries.

These parcels include the recently acquired Catholic Diocese structures across from Central Catholic High School.

Murphy said the principles are an extension of the recently adopted Pittsburgh Campus Master Plan, guided by Ralph Horgan and Bob Reppe, associate vice provost and director of design for Campus Design and Facility Development, respectively, and would be used to guide development in other areas of campus as well.

The 10 principles, which will be up for adoption by the Board of Trustees at its May meeting, cover the areas of building, community context, space and movement.



CRAIG STREET IS AMONG LOCATIONS EYED FOR FUTURE UNIVERSITY GROWTH AND DEVELOPMENT.

Building

Architecture: Building and landscape design should be innovative and contemporary, yet reflect the culture, history, and sensibilities of the university; facilitate student, faculty and staff interactions; increase connectivity; and enhance campus life.

Safety and Security: Design standards and guidelines should embrace the university's overarching values of openness, engagement, collaboration and community while promoting the safety and security of building occupants and visitors.

Sustainability: The highest level of environmental practices should be integral to the design, construction and management of all structures and open spaces,

consistent with the university's sustainable and green practices.

Community Context

Mixed-Use: In high public access areas that include street fronts, sidewalks and pedestrian arteries, such as Craig Street, visibility and easy access to commercial and cultural activity should be most prominent, with residential, administrative, academic and research uses "above and behind."

Neighborhood Compatibility: Urban design principles must be embraced to complement the neighborhoods and the campus.

Space

Edges, Entrances and Their Connections: Architecture and landscape, rather than signage alone, should allow for subtle yet iconic demarcations to define campus boundaries.

Open Space: Open spaces should increase connectivity within the campus and to adjacent areas and enhance cultural life, offering opportunities for individual reflection, casual conversation, recreation and academic and student life activities.

Public Art: Engaging public art reflecting the diverse culture of the university and region should be incorporated into all new building projects and renovations.

Movement

Multi-Modal Transportation: New building projects should promote campus and community circulation and engagement, and connect campus and non-campus entities. Where possible, pedestrian, bicycle and public transit pathways should take precedence.

Universal Design: All facilities and open spaces should be accessible to all potential users in compliance with ADA codes and in support of the university's commitment to an open and inclusive community.

"Mixed-Use and Neighborhood Compatibility were the two most compelling principles, although also ones in which there was a great deal of consen-

sus among committee members," Murphy said. "You want the street front to be urban and vital, you want it to include lots of food and retail shops. You want residential and administrative units above and behind. You don't want those functions on the street front because they don't have that kind of vitality."

Murphy said one of the most interesting discussions the committee engaged in was on Edges, Entrances and Their Connections. He said as opposed to large signage, the committee felt that landscaping, lighting, streetlight banners, custom sidewalks and iconic CMU images such as the thistle would better serve as campus markers.

"You want the campus to feel porous. Still, you want people who come onto campus to feel that they're in a special place," Murphy said.

Task Forces

In addition to creating the 10 guidelines for future development, the Simonds Commission has formed ongoing task forces to focus on four specific components to campus development to the west and in the northwest quadrant.

Horgan leads the CMU-affiliated Hotel and Conference Center Task Force. A feasibility study is underway with potential locations identified along the north side of Forbes near Craig and on Craig itself.

Reppe chairs the Forbes Avenue Traffic Flows Task Force. The task force has developed a recommendation to transform Forbes into three lanes — one lane in each direction with a left turning lane at intersections — between Margaret Morrison Street and Craig. Additional pedestrian crossings and traffic lights, wider sidewalks, and dedicated bike lanes also are recommended. This concept was first introduced during discussions surrounding the Pittsburgh Campus Master Plan.

The Craig Street Task Force, chaired by Murphy, will work with Craig Street property and business owners and CMU's Remaking Cities Institute to develop a plan to further revitalize the mixed-use corridor, specifically the north end of Craig toward Fifth.

The Community Partners Task Force, led by Vice President and General Counsel Mary Jo Dively, met with the Carnegie Libraries, Carnegie Museums, Central Catholic High School, the Parks Conservancy, Phipps Conservatory, the University of Pittsburgh, UPMC, WQED and the city to gauge existing relationships and partnerships, which are seen as universally strong. The work of this task force will continue within the existing Community Partners standing committee, chaired by Jennifer Meccariello Layman.

Murphy said he looks forward to the opportunities for the evolution of the campus to be guided by the work of the Simonds Commission, which he praised for its diligence, insightfulness, vision and passion for the university.

Eberly Center Merges with OTE

■ Piper Staff

It seems like a perfect match.

The Eberly Center for Teaching Excellence and the Office of Technology for Education are coming together to form the Eberly Center for Teaching Excellence and Educational Innovation. The new center will be directed by Marsha Lovett.

With expertise in pedagogy and technology, the combined unit will be well positioned to support Carnegie Mellon faculty and graduate students' educational practice needs.

"As the center's director, Lovett's disciplinary training in cognitive science, her many connections to CMU faculty and departments, and her years of experience researching and applying educational technology make her especially well-suited to this expanded leadership role," wrote Provost and Executive Vice President Mark Kamlet and Vice Provost for Education Amy Burkert in a recent letter.

The new configuration will support CMU programs, faculty and graduate students in the following areas:

- Course design and re-design, including the planning of courses/programs online;

- Ongoing teaching support, including teaching with technology;
- Identifying effective educational technologies and designing learning experiences to meet teaching and learning needs;
- Incorporating new instructional strategies;
- Trouble-shooting teaching/learning problems;
- Applying learning science research to the current context;
- Offering faculty and graduate student workshops, including incoming faculty orientation;
- Collecting and disseminating best practices for education;
- Learning management system administration and support.

The Eberly Center will continue to work in close collaboration with the Open Learning Initiative, Academic Technology Services, faculty in the Learning Sciences and other related units to advance work at the interface of education and technology.

For more information, visit www.cmu.edu/teaching.

ROCKET MAN

President Jared L. Cohon Reflects on His Time, Priorities at Carnegie Mellon



HARRY GIGLIO PHOTOGRAPHY

CARNEGIE MELLON'S EIGHTH PRESIDENT, JARED L. COHON, IS READY TO STEP DOWN FROM WHAT HE CALLS "THE BEST JOB IN THE WORLD."

■ Piper Staff

Jared L. Cohon had visions of being a rock star touring Europe after having played drums with a band in Baltimore. But instead, he became a rocket man, catapulting Carnegie Mellon forward more than any president before him. He's driven the university upward on all strategic fronts. And he's taken Carnegie Mellon to the world.

How did he manage to pull it all together? By fostering the university's collaborative, problem-solving culture, he said, qualities that align well with his leadership style.

"I tell people I've got the best job in the world, and when I say that, I mean it," Cohon said in a recent interview. "Being a president of any university is a great honor and a great privilege, but especially being president of this university because of that culture — that can-do, problem-solving, let's-get-on-with-it, attitude.

"The lack of pretense and arrogance, the humility that goes with it; and the spirit of cooperation and collaboration are not anything that

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Family First for Carnegie Mellon's First Lady

■ Piper Staff

Carnegie Mellon's first lady is devoted to family: her own, the university and her clients.

"What I hope people will say about Jerry and me, is that we made everybody feel welcome to the university and made them feel a part of it," Maureen Cohon said in a recent interview.

"I really love the school, I love the people. I just feel so much a part of a big family."

High school sweethearts, the Cohons have been married more than 46 years.

"Jerry has always been a professor, and we always worked together on entertaining people and having students

and faculty over. This has been an extension of what we've always done, working together," she said.

President Jared L. Cohon is very appreciative of all that his wife has done for him.

"She's been a wonderful first lady. She made a point of being visible early on, engaging with student groups, faculty and administrative spouses. I think she's been greatly appreciated by the community.

"It goes without saying that for a president to serve 16 years and still be married to the same spouse is a pretty powerful statement about how supportive the spouse was," he said. "There's

CONTINUED ON PAGE NINE



HARRY GIGLIO PHOTOGRAPHY

MAUREEN COHON SAID PEOPLE SHE HAS MET THROUGH CMU HAVE CHANGED HER OUTLOOK ON LIFE.

President Cohon Reflects

CONTINUED FROM PAGE FIVE

I brought to the university, although they align nicely with my own personality. I feel like I've been the right president for Carnegie Mellon because I feel personally the cultural values that the institution has."

And while he isn't looking to cement a legacy, when pushed, he has one in mind.

"I guess I would like people to remember me for my personal qualities and think of them positively," he said. "From a true legacy point of view, it's fun to be audacious when you can talk about a future so far in the future that no one will remember what you said. But I would like that for people in 2050, when Carnegie Mellon is finally allowed in the top 10 of the U.S. News and World Report ranking, for some to say, 'Gee, I wonder when we really started to move into the top 10?' And they'll look back and say, 'it was during the Cohon era.' That's my fantasy with regard to our globalization program. That's going to be our secret sauce."

During the first years of his administration, Cohon was part of an intensive planning effort that set the framework and the roadmap to success for the years to come.

Education for Leadership

In 2000, Cohon told the Pittsburgh Post-Gazette that "I want to see at least one president of the United States in the 21st century be a Carnegie Mellon graduate. And I think given our international character and our international aspirations, I'd like to see the head of state in other countries also be Carnegie Mellon graduates."

So far, that hasn't happened, nor has an alumnus been a member of the U.S. Congress, but Cohon remains optimistic.

"Only time will tell, but surely we will see more of our alumni in those kinds of leadership positions," he said.

The student body has changed during his tenure. Previously students were admitted who knew exactly what they wanted to do and were admitted based on SAT scores, grade-point average and a pre-determined career choice.

"We changed that in 2000 to intentionally attract students with broader interests — more non-academic interests and achievements — and there's no question that it made a difference right away.



HER HIGHNESS SHEIKHA MOZAH BINT NASSER AL-MISSNED AND CMU PRESIDENT JARED L. COHON CUT THE CEREMONIAL RIBBON AT THE GRAND OPENING OF CARNEGIE MELLON'S BUILDING IN EDUCATION CITY IN 2009.

"The students today are certainly every bit as capable academically as the students back then, but they bring something else as well. This is all in the name of graduating students who are more likely to become CEOs and leaders."

Student satisfaction has continued to rise in part because of the re-emphasis of undergraduate education that started under Cohon's predecessor, Robert Mehrbani.

"We just continued that. We've had exceptional leadership in the Student Affairs Division." Cohon singled out past dean and current Vice President Michael Murphy, previous Vice President Bill Elliott and current Dean Gina Casalegno. "They've just done a great job, I think, in improving the undergraduate experience in every way."

The student body has grown. For undergraduates, the growth has been modest and is up 20 percent since the start of his tenure.

"We were responding to explosive growth in the applicant pool," Cohon explained.

Graduate programs also have seen explosive growth.

"That was largely the result of individual decisions by departments and colleges to expand master's programs. Both because of the opportunities and demands for master's education and also as a way to generate revenues for the units," he said.

"The Ph.D. programs have grown very significantly. That has been strategic and was very clearly identified in the strategic plan as an area where we needed to grow. We felt a strong need to do that because the growth of research programs is very closely tied to the reputation and prestige of the university."

Globalization

CMU's faculty, students and alumni have created 15 degree programs in 14 countries. Each of the campuses and educational programs has its own flavor and focus.

The Board of Trustees, led by Vice Chair Kears Pollock, set up guiding principles to determine when an international program could be pursued. They include making sure that it is self-sustainable, that CMU has the sole responsibility for academic content and admissions, and that faculty members are willing to be a part of any agreement.

"Our willingness to be flexible, to adapt to local situations, without compromising our standards has been a key to our success," Cohon said.

One of those successes is the Information and Communication Technologies Institute (ICTI) between Carnegie

start transforming themselves, and it has put them on a path toward becoming world-class research universities. They never used to work together. They barely talked to each other. Now, they're sharing courses and degree programs."

Another success Cohon noted is that the Portuguese universities had never previously worked with industry, and now more than 80 companies are involved with the program.

Carnegie Mellon in Qatar is the sole undergraduate program outside of Pittsburgh.

"The Arab world is one that is both an opportunity and a challenge for America and for Western institutions," he said. "So the potential for impact is especially great there."

Cohon credits Provost and Executive Vice President Mark Kamlet for his tireless work in creating opportunities. He recalled a recent phone call when Kamlet mentioned running to Buenos Aires, Argentina, for a quick business meeting.

"He is extraordinary in every way including his capacity for work and travel. He is amazing. And it's not just capacity, it's his brilliance and his creativity in making and putting into action our institutional culture," he said.

Cohon, as well, spends a lot of time traveling. So much so, he has logged more airline miles than he cares to think about. Despite all of the trips to outlying Carnegie Mellon locations and visiting alumni, he's made a concerted effort to be visible in Pittsburgh.

Judith Rodin, former president of the University of Pennsylvania and Cohon's provost when he was a dean at Yale, advised him early on to strike a balance.

"OUR WILLINGNESS TO BE FLEXIBLE TO ADAPT TO LOCAL SITUATIONS WITHOUT COMPROMISING OUR STANDARDS HAS BEEN A KEY TO OUR SUCCESS."

Mellon and Portugal. Starting in 2006, CMU's collaboration with the Portuguese Ministry of Science, Technology and Higher Education has involved professors, researchers and students from six colleges, eight departments, and six research centers and institutes at Carnegie Mellon, and a large consortium of Portuguese research and education institutions, including 12 higher education institutions, four associate laboratories, one applied research institute and two governmental agencies. The collaboration has been so successful that CMU is now in its second five-year agreement.

"In particular, our program has helped the universities in Portugal to

"She was right about that need to be everywhere at once, and it also reflects the sort of pull-and-tug of the multiple constituencies you're responsible for," he said.

Research

Cohon said the biggest win for Carnegie Mellon in research during his tenure has come in the life sciences.

"We've seen the most growth there, and that was one of our strategic priorities and where, early on, we really emphasized our strategic investments. We doubled the faculty and almost tripled the amount of sponsored research. New departments were

created; it's been a great success."

Within biotechnology, National Institutes for Health (NIH) funding increased from \$10.8 million in 1997 to \$24.8 million in 2011. During that same time period, Ph.D. students increased from 45 to 210. Two departments have been added: Biomedical Engineering and the Lane Center for Computational Biology. Eight research centers also have been included, some of which are joint efforts with the University of Pittsburgh, such as the Quality of Life Technology Center.

The university also has expanded in the fields of information technology, the environment, physics — especially cosmology — entertainment technology, energy and other areas linking to computer science.

"It's notable, you know, the best school of computer science, is *still* the best school of computer science. It's a hard thing to sustain over such a long period of time, and it's because of their willingness to be innovative and take advantage of opportunities."

Cohon credits the success in research funding to faculty and philanthropy.

University Libraries. Recent efforts included startups Conflict Kitchen and the Waffle Shop.

"The humanities have done very well during this period; they were a priority. We didn't do as much in those areas as we did in the others, but progress was made, and I think there's a lot to be proud of."

Community/Regional Success

Vartan Gregorian, president of the Carnegie Corp. and previously president of Brown University and the New York City Libraries, offered Cohon advice before he arrived in Pittsburgh.

"He said to me, 'Jerry, never forget that Carnegie Mellon and Pittsburgh are both great, but neither knows it.' He was right about that. I was surprised the degree to which he was correct," Cohon said.

Cohon has served as a cheerleader for the institution and the region.

One of the most successful collaborations has been between Carnegie Mellon and the University of Pittsburgh.

to see, where they became an anchor for the Pittsburgh economy that employs thousands of people," he said. "If we have a couple of companies achieve that, it would make it easier for the ones behind. Sort of the Silicon Valley effect."

It's a chicken-and-egg problem. Pittsburgh has many of the ingredients it needs: great technology, innovative entrepreneurs and initial venture capital funding. The human capital needs some improving, he said. For example, the pool of applicants of experienced sales and distribution professionals needs to be larger.

"In Silicon Valley you've got 5,000 who've had experience as a vice president for sales for a small company. We don't have that," Cohon said.

The other problem is that successful companies are getting to a point where they get acquired by bigger companies, largely in Silicon Valley.

"Thankfully, most of the time that company keeps the startup here so we don't entirely lose the people or the economic activity," he said. "But they don't become big companies, nor do they become the kind of wealth generators that this region needs to have."

Financial Strength

Coming from Yale, which in 2012 had an endowment of \$19 billion, Cohon said he knew that CMU's endowment would be one of the greatest challenges.

"I wish someone would have told me exactly what the stock markets were going to do for the next 16 years, and we would have invested accordingly. That we didn't do better really is a source of regret for me; it's the thing that bothers me most," he said.

"Increasing the endowment also requires more fundraising and in this arena we've been very successful. Robbee Kosak has built a great Advancement organization, which has translated into success for the Inspire Innovation Campaign."

As the campaign nears its end on June 30, \$1.16 billion has been raised so far (as of April 1).

Presidents serve as chief fundraisers for the university, and Cohon said he enjoyed getting to interact with people and building relationships.

"These aren't just any people. They're mostly Carnegie Mellon alumni, successful people and interesting. They are good people, and it's been fun and gratifying to get to know them," he said.

In 2004, Bill Gates visited Carnegie Mellon for the first time. During that visit, Cohon had exactly eight minutes to request a donation from the richest man in the world at that time. It was the first time they met.

"I think the most important thing I said to him was 'Bill, I can well imagine that every university president in the world wants to ask you for money, and many of them probably have. And one of the things you have to think about is if I give a gift to Carnegie Mellon how do I say no to this long list of other universities?'" Cohon said.

"He said, 'You're right, I do have to think about that.' I said, 'well, I have an answer for you. We are the only leading university in computer science that you haven't made a gift to. And there's no other university in our league.' He said, 'You're right.'"

In the end, the Bill & Melinda
CONTINUED ON PAGE EIGHT



BILL DIETRICH TALKS TO COHON DURING AN EVENT CELEBRATING HIS RECORD-BREAKING GIFT TO CARNEGIE MELLON IN 2011. COHON SAID DIETRICH SPENT THE LAST 20 YEARS OF HIS LIFE GROWING ASSETS TO GIVE AWAY. "HOW CAN YOU DO ANYTHING BUT LOVE A GUY LIKE THAT?"



ONLINE

SHARE STORIES AND VIEW AN INTERACTIVE TIMELINE
OF THE COHON ERA: WWW.CMU.EDU/TIMELINE.

"It was entirely the result of faculty efforts and their excellence, creativity, collaboration," Cohon said. "But the kinds of funds you need to start up something, you can only really get through philanthropy, and getting that is a result of a partnership between the faculty and the deans and the university administration."

Because of anticipated federal research cutbacks, new funding opportunities are becoming increasingly complex.

The National Science Foundation (NSF) has yet to make their cuts as a result of sequestration but they will likely translate into 1,000 fewer grants to be awarded this fiscal year.

"We get more than our proportional share of grants because of the quality of our faculty and how hard they work. But cuts are cuts, and less is less. I worry especially about the impact of this on the new, young faculty who are just starting out and trying to build a program. They already feel a lot of pressure. The success rates for federal grants, even before the cuts, is already too low. The NSF is around 20 percent, I think, and the NIH is lower than that. So that's tough odds even when you're as good as our faculty are."

Cohon was quick to note the arts and humanities as well. The Center for Arts in Society was established in 2000, which had nearly 60 faculty members involved from nine departments and the

Cohon calls Pitt's Chancellor Mark Nordenberg a good friend.

"He was wonderful in reaching out to me, even before I got here, to start building the relationship, and we had this shared commitment to working together for the good of both universities and the good of the region. We did a lot together, both in research and education but also in terms of economic development, joining forces to contribute to the city."

Another major change for Carnegie Mellon was its technology transfer policy, which ramped up the number of companies created, and led to an increase in jobs by streamlining the process and making it less burdensome for inventors and entrepreneurs. Plus, building the Robert Mehrabian Collaborative Innovative Center created what Cohon called a "magnet for tech companies that have come here."

The success of spinoff companies from the university has been tremendous. In the last 15 years, more than 300 companies have been created by Carnegie Mellon faculty and alumni with help from the university's start-up-supporting ecosystem. But it isn't enough yet.

"Many of them have been successful to a substantial extent but none has been the big success that we would like

President Cohon Reflects CONTINUED FROM PAGE SEVEN

Gates Foundation gave \$20 million for the Gates Center for Computer Science.

Another gift that stands out in Cohon's mind is that of Bill Dietrich, who he said was fun, interesting and unique.

"He was really focused on growing his assets as much as possible so he could give it all away," Cohon said. "And how can you do anything but love a guy like that? That's what he devoted the last 20 years of his life to."

Around Christmas time in 2010, Cohon visited Dietrich, a member of CMU's Board of Trustees, while he was in hospice care.

"I went to see him — just to see him — but I figured he must be close to the end, and I wanted to be sure I had a chance to say thank you and goodbye. I walked into his room, and there's Bill looking really good. He was much too thin, but other than that good color, typical Bill energy," Cohon said.

"I said 'Hi, Bill,' and I sat down. And he gives me a folder. I wasn't there for a business meeting. And he starts taking me through all of the details of his remarkable gift," Cohon said. "Now, I had an inkling of this because Bill had made known many years before his intention to give his money away, and that Carnegie Mellon would be a substantial beneficiary."

But what he hadn't known was just how large the gift, a record-breaking \$265 million fund, would be, or how much money Dietrich had accumulated.

"It was astonishing. And I didn't know quite how to feel," he said. "I mean obviously this is a wonderful thing for the university but I went there to say goodbye to someone I liked to think of as a friend. He's one of our great sup-

porters and advisers. And I didn't want him to think I was there to find out about money. It was totally out of the blue."

Public Perception

Cohon credits the late Randy Pausch, the renowned computer science professor who co-founded the Entertainment Technology Center, for helping push the university into the public spotlight with his inspirational "Last Lecture."

"Randy was a wonderful person," said Cohon, who felt devastated when Pausch told him about being diagnosed with pancreatic cancer.

Pausch delivered his Last Lecture in 2007, which has been viewed by more than 15 million people on YouTube. Until his death in 2008 he worked tirelessly to promote the university.

"He had an impact on me as a person and an impact on the university that was huge. We'll never be able to quantify it, but I believe that the increase in our applicant pool has at least some of the Pausch effect in it. Maybe even the retention rate. But it certainly made Carnegie Mellon known to a wider audience than it had been before.

Which, of course, was entirely Randy's intention."

The book based on the lecture and co-written by Jeffrey Zaslow (DC'80), allowed the legacy to continue. Zaslow returned to campus annually to discuss the book with incoming freshmen. He died in 2012 in a car accident.

"Jeff, in a way, kept alive the Randy phenomenon. But he created his own, as he had his own special personality," he said.

While Pausch's story is a powerful example, the university has many more stories to share.

During his tenure, University Advancement has increased its marketing and media relations presence.

"Our colleagues are actively



PRESIDENT COHON ALONG WITH JAI PAUSCH (CENTER) AND HER FAMILY PUNCHED A CEREMONIAL BUTTON TO LIGHT THE RANDY PAUSCH MEMORIAL BRIDGE AT HOMECOMING IN 2009.

PHOTO BY TIM KAULEN

involved in keeping key media outlets aware of what Carnegie Mellon has done and is doing and can provide to them in the way of experts. That's been very proactive, and it's paid off. But the story is a better one, or a more compelling one, or there's more to it, if nothing else," Cohon

field so I can be an effective contributor," he said. "I really don't know where I'm going to go because I haven't had the time to think about it. And it's getting late."

He is considering visiting campuses that are strong in his field for two or

"RANDY PAUSCH HAD AN IMPACT ON ME AS A PERSON. AND AN IMPACT ON THE UNIVERSITY THAT WAS HUGE. WE'LL NEVER BE ABLE TO QUANTIFY IT."

said.

"For one thing, our global footprint is itself a story and puts us in many other countries within reach of, or of interest to, their media outlets. We're bigger, we do more research. We've had a lot of notable breakthroughs and achievements like the DARPA grand challenges, for example. And all of the neat robotics things we do and the work in life sciences, national book awards for poetry, Nobel prizes. All of those things."

Moving Forward

In the year to come, Cohon's schedule will be a little different. He'll be taking a sabbatical before joining the departments of Civil & Environmental Engineering and Engineering & Public Policy.

"A sabbatical is a very welcome thing. It will be very valuable for me in getting myself back up to speed in my

three weeks at a time to see what they are doing.

"A sabbatical is also a good idea because it gets me off campus while Subra [Suresh] is getting established. I will be very supportive of him and do whatever he wants me to do, but he doesn't need me sitting in an office on campus."

As far as advice for the president-elect, Cohon doesn't think he'll need it.

"He's shown great instincts already, including by asking for advice," he said. "He and I have a lot of conversations yet to come about the university."

The fact is, Cohon said, the university is already on a good trajectory.

"I happened to leap on the rocket 16 years ago, and now, I'm going to leap off and Subra will leap on it. I think that presidents are capable of making course corrections to some extent, but the university has a real head of steam up. It did when I came, and it still does. I think



FILE PHOTO

CARNEGIE MELLON IS A FAMILY AFFAIR FOR THE COHONS. THEIR SON-IN-LAW JOSH DUNNER (DC'99, HNZ'00), LEFT, AND DAUGHTER HALLIE (HNZ'00) ARE ALUMNI.

Family First for Carnegie Mellon's First Lady

CONTINUED FROM PAGE FIVE

little question that I'm here today in large part because of her."

Mrs. Cohon said her role as first lady has influenced her life, and the people she has met have opened her to new ideas.

"You'd think, by the time you're 50, you kind of know a little bit about everything, but I've learned a lot," she said.

Open Invitation

Shortly after her husband was named the university's eighth president, she asked then-Chairman of the Board Tom McConomy what was expected of her.

"He said to me: 'You can do anything that you want to,'" she said. "And that has been great advice. Fortunately, I like to do a lot of things."

Those words have become her motto, and she passed them along to Mary Suresh, who will serve as CMU's next first lady.

"She's very interested in what's going on and what she can do for the university," Mrs. Cohon said. "I think she'll be fabulous. She's very pleasant to be around, and every-

body will enjoy getting to know her. I will be pleased if I can help her in any way."

One of Mrs. Cohon's initiatives was to create a program for spouses and partners of trustees and deans. Twice a year, the partners would visit campus during trustee meetings to attend lectures and to see the work of faculty and students.

"The partners love it," she said. "I remember from our first program, a couple of the partners were so intrigued about what they saw that they were willing to support the faculty in some way.

"The trustee partners have become a family. The trustees grumble that their partners know more about Carnegie Mellon than they do."

In addition to the Partners Program, Mrs. Cohon invites seniors to the President's residence annually. In recent years, two shifts were needed to accommodate the 300-400 students who have attended.

"I think it's important that the seniors have some time with the president and to see the president's home," she said.

Mrs. Cohon also has served as the honorary president of the Carnegie Mellon Women's Association, a group that provides awards for graduating senior women. She has hosted a reception at the president's home each fall and

said she has enjoyed seeing the membership grow.

Mrs. Cohon has at times attended and hosted more than 100 events a year for the Carnegie Mellon community. Guests have included famous alumni or movie stars filming on campus such as Ted Danson and Michael Douglas, respectively.

"We have also met Nobel Prize winners and many other special people," she said. "These events are all wonderful."

But she hasn't attended every major event. Despite U.S. President Barack Obama visiting campus four times, she has never been to an appearance.

"I didn't want to take a ticket from faculty, staff or students," she said. "But I've seen him a lot on TV!"

Power of Attorney

Away from campus, Mrs. Cohon works as an attorney for Buchanan Ingersoll & Rooney on non-traditional family law, working to protect the rights of gay, lesbian and other unmarried couples.

She first became aware there was a need for this type of representation when CMU was discussing domestic partner benefits for faculty and staff in the late 1990s, something now in place.

She spent eight months researching the topic and possibilities about the potential of adding the specialty to the firm's offerings. Then-chairman and CEO Tom Vankirk told her to go for it.

"And he said, 'We're Buchanan Ingersoll, we're cutting edge and it's the right thing to do.' I still feel emotion when I tell that story," she said.

At the beginning, there were just a handful of clients and attorneys. Today, the firm has more than 40 attorneys working with the clients nationwide, and more than 200 clients in the Pittsburgh area.

"In the beginning it seemed like every client brought in something that we hadn't dealt with before. So we have lawyers who focus in all areas," she said. "The first case used attorneys who worked in estate planning, property and family law. That was my first experience in putting the practice into effect. And it was a big eye opener. As clients came in, we found so many different ways of making sure they were protected."

On the Homefront

Despite the demands on their time, their own family has never been far from their daily lives. Their daughter, Hallie (HNZ'00), earned a CMU master's degree, married another CMU graduate, Josh Dunner (DC'99, HNZ'00), and they became parents to Nathan, 9, and Solomon, 5. The family lives in Regent Square.

"I think we play a big part in their lives, and that's also been very important to us," Mrs. Cohon said. "Our grandchildren are very proud that my husband is president of Carnegie Mellon."

A highlight for the boys was when the entire family traveled to India. The subcontinent holds a special place for them since President Cohon has worked on water problems there for more than 30 years. With Carnegie Mellon's significant Indian student population, the country became even more important.

Mrs. Cohon recalled that on her first trip to India she soon found magic in the people.

"The Indian donors and alumni really embraced us. The spouses would take me to their special places. I really feel I have friends in India," she said.

In the coming year, family experiences will continue as President and Mrs. Cohon take a sabbatical.

"Everybody's been saying, 'Oh gosh, are you sure you want to stay home with him?' I do, definitely. We get along very well!" she said.



FILE PHOTO

PRESIDENT AND MRS. COHON HAVE HOSTED GRADUATING SENIORS AT THEIR RESIDENCE SINCE THE BEGINNING OF THEIR TENURE.

AT RIGHT, THE COHONS GREETED ACTOR MICHAEL DOUGLAS AND DIRECTOR CHRIS HANSON DURING THE FILMING OF "WONDER BOYS" ON THE PITTSBURGH CAMPUS. THE MOVIE WAS RELEASED IN 2000.



FILE PHOTO

Awards Ceremony Has a Familiar Feel for Winning Drama Students

■ Pam Wigley

A School of Drama grad and current student recently received national awards for sound achievement and costume design during a ceremony in Milwaukee, but the lighting and visual effects made them feel right at home.



ERIK T. LAWSON



ALBULENA BOROVCI

Erik T. Lawson, who received his master's degree last May, received the Robert E. Cohen Sound Achievement Award. Costume designer Albulena Borovci, who will receive her master's degree this May, was the winner of the Zelma H. Weisfeld Costume Design & Technology Award.

The awards were presented by the United States Institute for Theatre Technology (USITT) for Young Designers & Technicians in the Performing Arts during its annual Conference & Stage Expo in Milwaukee.

What made Milwaukee feel more like CMU's Chosky Theatre perhaps,



ALBULENA BOROVCI DESIGNED COSTUMES FOR LAST FALL'S PRODUCTION OF "THE RIVALS."

was that this year's ceremony featured a multimedia production that included lighting and visual effects coordinated by 18 School of Drama students and several faculty, led by Tina Shackelford.

Shackelford, an assistant professor of stage management, said one difficulty was that not all the students who worked on the project could be at the conference as several were in rehearsals for on-campus productions that week.

"It's an interesting challenge to work on an event that you are not going to be able to see," Shackelford said.

"But it's definitely something they will encounter in the world — planning an event when you can't just walk into the space and say, 'Yes, that light here and this table there.'"

Lawson, a Littleton, Colo., native who works as a sound designer in New York City, was nominated by Associate Professor of Sound Design Joe Pino. Lawson submitted examples of his work at CMU, including productions of "The Alice Project," "A Midsummer Night's Dream" and "Suddenly, Last Summer." He also has composed sound designs

for the Cincinnati Playhouse in the Park, Pittsburgh Irish & Classical Theatre, and New York's Incubator Arts Project and the Undergroundzero Festival.

Borovci, a native of Kosovo, was nominated by Design Professor Susan Tsu. She submitted costume designs from CMU productions, including those she did for the fall 2012 production of the 1775 British comedy "The Rivals." A reviewer for the Pittsburgh City Paper wrote, "Albulena Borovci's costumes are drop-dead gorgeous; the ladies' gowns suggest magnificent ships in full sail."

NEWS BRIEFS

Sloan Names Four Research Fellows

The Alfred P. Sloan Foundation has selected four Carnegie Mellon faculty members — David Brumley, Gautam Iyer, Seyoung Kim and Rachel Mandelbaum — to receive prestigious Sloan Research Fellowships for showing great potential to advance knowledge in their fields. Each fellow will receive a two-year, \$50,000 grant to pursue his or her research.

The Carnegie Mellon recipients are among 124 scientists nationwide receiving the award this year.



DAVID BRUMLEY

Brumley, the Gerard G. Elia Career Development Professor in the Department of Electrical and Computer Engineering, was honored for his work in computer science. His pioneering research focuses on the techniques, principles and algorithms for finding flaws in software that hackers use to break into systems. His goal is to make computer software and systems safe, and to push the boundaries to improve cyber security.

Iyer, an assistant professor of mathematical sciences and a member of the Center for Nonlinear Analysis,



GAUTAM IYER

studies incompressible fluids, diffusive transport, mixing, liquid crystals and coagulation. His research could help advance the understanding of mathematical models that will allow for the simulation of a variety of phenomena,



SEYOUNG KIM

including physical and chemical processes. Kim, an assistant professor in the Lane Center for Computational Biology, focuses on computational genomics, population genetics and statistical machine learning. She is interested in developing statistical machine learning tools for analyzing large-scale genomic data and investigating biological systems of various organisms and disease processes using these tools.

Mandelbaum, an assistant professor of physics and a member of the Bruce and Astrid McWilliams Center for Cosmology, conducts research on weak gravitational lensing, a cosmological tool that can be used to study the distribution of both dark and ordinary matter in the universe. Mandelbaum participates in large astronomical and spectroscopic imaging surveys including the Sloan Digital Sky Survey III, the Large Synoptic Survey Telescope and the Hyper Suprime-Cam at the Subaru Telescope.



RACHEL MANDELBAUM

CMU Partners With Alcoa for Recycling Initiative

Carnegie Mellon has received 75 recycling bins from the Alcoa Foundation Recycling Bin Grant Program, an effort to help schools boost their recycling results during the eight-week RecycleMania Tournament, and expand their recycling efforts throughout the year.

Alcoa Foundation has partnered with national nonprofit Keep America Beautiful and the College & University Recycling Coalition to provide more than 11,500 recycling bins to 35 U.S. colleges and universities.

RecycleMania is a friendly competition that aims to change behavior about recycling and raise awareness about waste reduction programs on college campuses.

Undergrads To Switch to Google Email, Calendar

Computing Services has announced that beginning this fall all Pittsburgh undergraduate students will transition to Google for their email and calendar functions. Google Apps is easy to use and familiar to many in the campus community. Google Apps provides:

- Email — 25GB of email storage (@andrew.cmu.edu email addresses);
- Calendar;
- Contacts — integrated CMU directory;
- Drive — 5GB of file storage;
- Documents — Sheets, Docs, Slides.

More information will be provided in the coming months. Read more at www.cmu.edu/computing/google/. Direct questions or comments to the Computing Services Help Center at 412-268-HELP or advisor@andrew.cmu.edu.

Pittsburgh Celebrates Lori Holt

The City of Pittsburgh declared Tuesday, March 19 "Dr. Lori Holt Day" to recognize her for winning the prestigious National Academy of Sciences Troland Research Award.

The honor is given annually to two psychology researchers under the age of 40 to recognize extraordinary scientific achievement and to further promote empirical research on the relationship between consciousness and the physical world.

Holt, who is being honored for "studies advancing our understanding of the sensory and cognitive processes that are fundamental to the perception of speech," will receive the award on April 29 in Washington, D.C.

Turing Winners Have CMU Ties

The winners of the 2012 Turing Award, MIT's Shafi Goldwasser and Silvio Micali, have significant ties to Carnegie Mellon.

Both earned doctorates in computer science at the University of California, Berkeley, where each was advised by Manuel Blum,

Professional Day in Qatar Helps Students Kick-start Careers

■ Piper Staff

Carnegie Mellon Qatar's 7th annual Professional Day recently highlighted a yearlong of career development efforts for students.

Carnegie Mellon Qatar's continuous commitment to prepare students for the workplace stretches from résumé building to fashion tips. The cmBA business fashion show showcased formal business outfits designed to help students impress potential employers.

During the year, many alumni returned to the university to help current students transform their education into professional success.

Dana Haidan (TPR'09), head of corporate social responsibility at Vodafone Qatar, spoke to students about the importance of participating in extracurricular activities. Hamad International Airport's Zaid Haque (DC'12) briefed potential employees on professional branding, and Shahriar Haque (CS'10), a software engineer at GE, mentored aspiring computer scientists on trending subjects in the industry.



NEARLY 50 COMPANIES FROM INDUSTRIES AS VARIED AS CONSUMER GOODS, DIGITAL MEDIA AND HEALTH CARE CAME TO CARNEGIE MELLON QATAR IN LATE MARCH TO RECRUIT THE UNIVERSITY'S TALENTED STUDENTS.



IMAGES COURTESY OF CARNEGIE MELLON IN QATAR

CARNEGIE MELLON QATAR'S CMBA FASHION SHOW, ORGANIZED BY BUSINESS ADMINISTRATION STUDENTS, HELPS STUDENTS TO PREPARE FOR THE PROFESSIONAL REALM. ASMAHAN GHALY, A SOPHOMORE IN BUSINESS, HELPS DEMONSTRATE THAT FIRST IMPRESSIONS MATTER.

now a CMU professor of computer science and himself a Turing laureate.

Micali has been a frequent lecturer at CMU and maintains close ties to the ALADDIN/Theory Group. Goldwasser earned her bachelor's degree in mathematics at CMU in 1979. The Turing Award is considered to be the Nobel Prize of computer science.

Chien Ho Awarded Gold Medal

Chien Ho, the Alumni Professor of Biological Sciences in the Mellon College of Science and director of the Pittsburgh NMR Center for Biomedical Research, has been awarded the 2013 Gold Medal of the International Society for Magnetic Resonance in Medicine (ISMRM) for his major research contributions to the field of magnetic resonance in biomedical sciences.

The ISMRM is a multidisciplinary nonprofit association that promotes the innovation, development and application of magnetic resonance techniques in medicine and biology throughout the world. Ho will receive the award on April 22 at the society's annual meeting in Salt Lake City.

Anderson Awarded for Lifetime Achievement

John R. Anderson, whose human thought and cognition research has revolutionized how we learn, has been selected to receive the Association for Psychological Science's (APS) William James Lifetime Achievement Award for Basic Research.

The award, APS's highest honor, recognizes Anderson's profound impact on the field of psychological science and his significant intellectual contributions to the basic science of psychology. His work combines cognitive psychology and computer science to understand how the brain works, how people learn and how computer-based instructional systems can be used as educational aids.

In the 1990s, Anderson led a team that created an intelligent computer tutor to teach algebra to high school students. The program actually thought like a teenager and was so successful that a spinoff company, Carnegie Learning, developed computer tutors as a commercial product. To date, more than half a million students in 2,600 schools around the U.S. have used the tutoring software.

Merger Boosts Entrepreneurship Efforts

Carnegie Mellon is bolstering its leadership in turning university research and ideas into commercial enterprises by establishing the Carnegie Mellon Center for Innovation and Entrepreneurship (CIE), which merges the strengths of Project Olympus and the Donald H. Jones Center for Entrepreneurship.

The CIE will be led jointly by Lenore Blum, founding director of Project Olympus and professor of computer science, and Dave Mawhinney, executive director of the Don Jones Center and assistant teaching professor of entrepreneurship.

The CIE has three goals:

- Defining CMU as the "destination of choice" for individuals interested in entrepreneurship;
- Fostering an "inside-out" approach of creating winning commercial ventures from cutting-edge research; and
- Developing an extensive, vibrant network of alumni entrepreneurs.

With financial support from the McCune Foundation's Big Idea program, the CIE will continue the successful programs of the Don Jones Center and Project Olympus, including seasonal Show & Tell events, the Open Field Entrepreneurs Fund, incubator space for fledgling companies, entrepreneurship workshops and business competitions.

The Center for Innovation and Entrepreneurship is part of Carnegie Mellon's Greenlighting Startups initiative, which employs the university's "inside-out" approach to speed advances from the lab to the marketplace. More than 300 businesses have been launched from Carnegie Mellon in the last 15 years, thanks in part to its innovative tech-transfer process that ensures no university interference with startup operations.

Zollman Receives Early Career Award

Kevin Zollman has received a Faculty Early Career Development (CAREER) Award from the National Science Foundation (NSF) for his project "Incentives, Diversity and Scientific Problem Choice."

Zollman, an associate professor of philosophy in the Dietrich College of Humanities and Social Sciences, will use the five-year, \$400,000 award to investigate the economics of science to further understand the relationship between scientists and the incentives they face to secure funding, publish papers and receive promotions.

He will connect existing studies that use an economic methodology to understand problem choice in order to explore the effects of incentives in science. The results of his work will include tools developed to help scientific policymakers evaluate the effect of different incentive systems.

Majidi Awarded Young Investigator Grant

Carmel Majidi was awarded a three-year, \$360,000 grant through the Air Force Office of Scientific Research Young (AFOSR) Investigator Program for his work to improve electronic power sources and sensors for air vehicles and flight suits.

Majidi, an assistant professor of mechanical engineering and a principal researcher in CMU's Soft Machines Lab, works in the area of soft robotics, which focuses on creating new robotic structures, blending together organic chemistry, soft materials science and robotics.

He reports that the next generation of autonomous robots, medical devices and electronics will include systems that are not rigid and can adapt their functions to the changing demands of their operator and the environment.

Cookie vs. Creme:

Creative Challenge Provides a Twist for Research Robot

■ Melissa Silmore

The Robotics Institute's Home Exploring Robot Butler, better known as HERB, is feeling pretty sweet these days. He's starring in a YouTube video that is part of Oreo's ongoing "Cookie vs. Creme" ad campaign.

In the video, HERB, a two-armed, mobile robot, twists an Oreo apart and scrapes off what it terms "the precious creme."

Oreo's ongoing, tongue-in-cheek "Cookie vs. Creme" campaign launched with a Super Bowl commercial last February. It has continued through a series of YouTube videos featuring unique "Oreo Separator" machines. HERB is the only actual research robot that could handle this challenge. The rest were made for the challenge.

Michael Illick, of Oreo's ad agency Wieden+Kennedy and co-director of the spot said, "One of the immediate go-tos



was Carnegie Mellon University's HERB ... a perfect choice."

In his daily life, HERB is happy to help researchers in the Personal Robotics Lab.

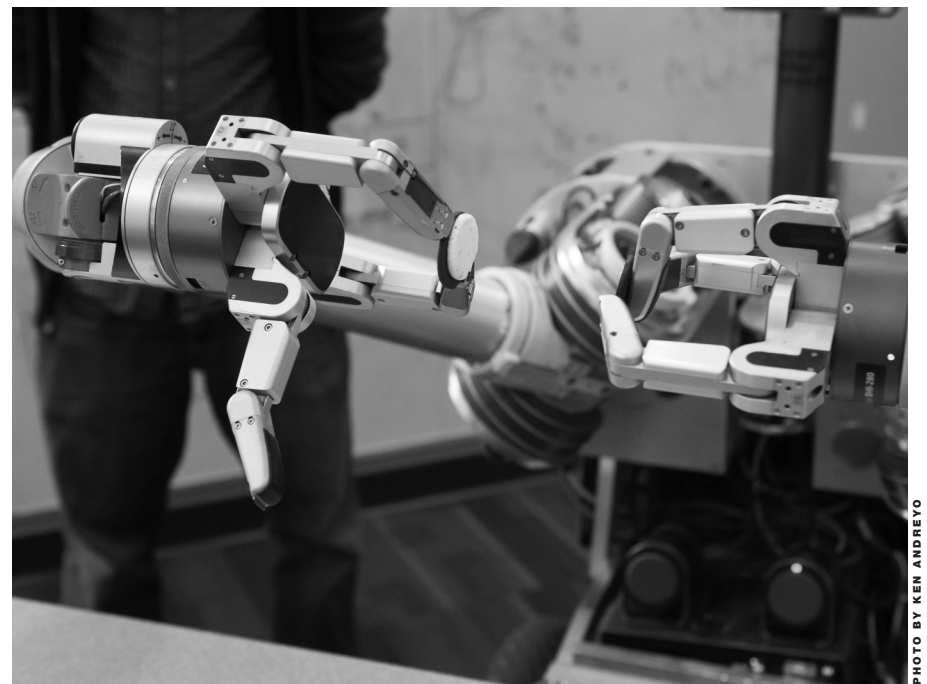
He serves as a testbed in developing algorithms that allow robots to perform useful manipulation tasks amid the realistic clutter of indoor space.

"We're focusing on trying to get HERB to do the kinds of tasks that a caregiver would do for you in the home — that's the goal,"

explained Siddhartha Srinivasa, director of the lab and associate professor in Carnegie Mellon's Robotics Institute.

"But it's quite fascinating to adapt the technologies for something as fun as separating the cookie from the creme."

Naturally nervous to be starring in his first YouTube commercial, HERB needed a little help from his family at



A CHALLENGE BY OREO RECENTLY EXPANDED THE SKILL SETS OF RESEARCH ROBOT HERB, WHO CAN NOW TWIST A COOKIE APART AND SCRAPE OFF THE CREAMY FILLING.

the lab in mastering the tiny creme-filled cookies, the smallest object he's ever handled.

Despite the challenge, HERB seemed to love the attention, with scores of folks fussing over him and lining up to watch his performance.

HERB is a Quality of Life Technology Center (QoLT) project, a National Science Foundation Engineering Research Center dedicated to developing intelligent systems for everyday, independent living. The center is jointly operated by Carnegie Mellon and the University of Pittsburgh.



THE YOUTUBE AD CAMPAIGN VIDEO, A HUMOROUS BEHIND-THE-SCENES VIDEO AND MORE CAN BE FOUND AT WWW.CMU.EDU/HERB-ROBOT/.

Innovation City CMU Promotes Technology, Fun at SXSW Event

■ Piper Staff

The party may have been in Austin, Texas, but it was all about Pittsburgh.

The H. John Heinz III College, the Human-Computer Interaction Institute (HCII), and the Entertainment Technology Center (ETC) along with the Pittsburgh Technology Council (PTC) showcased CMU students, local tech firms and entertainment ventures at Innovation City, a party that was part of the South By Southwest Interactive (SXSW) festival.

"It's exciting to live and work in Pittsburgh right now," said Heinz College's director of online strategy Brad Stephenson, who worked with PTC officials to plan the event. "There is so much happening here — from startups to the arts to the film industry to community development. The city's star is rising on a global scale, and CMU is obviously

a big part of that."

CMU often has a presence at SXSW. The Master of Entertainment Industry Management (MEIM) program sends first-year students to the festival. The opportunity allows students to hear speakers, interact with alumni working in the field and participate in panel discussions and networking events.

Ari Lightman, a distinguished service professor and director of the CIO Institute, moderated a panel on the impact big data analysis has on developing winning marketing strategies.

At the party, which was held at Meduse Lounge in downtown Austin, guests were treated to freshly made guitar picks and glasses without lenses created by the local firm Makerbot 3-D printers. Other Pittsburgh-based companies such as BodyMedia, WebKite and

Paul Michael Design offered giveaways and interactive activities, and representatives from the rustbelt innovation advocacy group RustBuilt.org were on hand to help promote the city.

"The party was a unique opportunity that showcased Heinz College's diverse programming and keen sense of forward thinking; bringing together individuals interested in film and interactive aspects of the festival," said Judy Liu (HNZ'14). "South by Southwest was a great place to network and meet new people, and I hope we continue to attend to create more awareness for Heinz College."

Supporting sponsors included AlphaLab, The Resumator and Steeltown Entertainment Project. Innovation City was funded by the Pennsylvania Department of Community & Economic Development (DCED), the Sprout Fund

and the Claude Worthington Benedum Foundation.

Presenting the innovations of Pittsburgh and CMU to the broader SXSW audience was a perfect fit for a conference where the keynote speaker was Elon Musk, known for founding SpaceX and co-founding Tesla Motors and Paypal.

"In my experience the best parties are the right mix of the seemingly wrong people, and this one definitely delivered," said CMU alumnus Fritz Myers (A'04), who attended SXSW to promote the soundtrack for his film "Sushi Girl." "I was very glad I came because it was an opportunity to talk with a lot of technical and business people who are normally outside of my sphere."

\$30 Million Gift Boosts Energy Initiative CONTINUED FROM PAGE ONE

is tackling a range of issues, including developing more efficient energy solutions that reduce carbon emissions; smart grid technology to enable the use of large amounts of variable wind and solar power; and new advanced materials and processes to produce and store energy, increase efficiency and reduce waste. The institute was launched in September 2012.

"Carnegie Mellon's work in the energy sector is distinct because it combines technology with policy-focused research," said Scott Institute Director M. Granger Morgan, the Thomas Lord Professor of Engineering and head of CMU's Department of Engineering and Public Policy. "This approach allows us to create strategies that provide incentives to the private energy sector to

advance reliable solutions with a minimal impact on the environment."

The announcement of the gift coincided with a CMU symposium on shale gas and its implications for regional manufacturing. The event featured a series of expert panel discussions, spanning industrial development, natural gas for transportation and environmental impacts. The symposium

came on the heels of the release of the Scott Institute's new policymaker's guide indicating the critical need for a government-university-industry research initiative focused on the issue of shale gas and environmental protection. CMU researchers visited Capitol Hill in March to encourage U.S. national, regional and state officials to establish the initiative.