



the PIPER

CMU'S NEWS SOURCE FOR FACULTY & STAFF

5/12 ISSUE

Carnegie Mellon University

- 2 SILICON VALLEY CAMPUS CELEBRATES DECADE OF SUCCESS
- 4 QATAR ANNOUNCES CAMPUS SERVICE WINNERS
- 9 EAST HARLEM STUDENTS VISIT CMU, PITT
- 11 MECHANICAL ENGINEERING RECOGNIZED BY LEAGUE OF AMERICAN BICYCLISTS

Hats Off!



MEMBERS OF THE CARNEGIE MELLON IN QATAR CLASS OF 2012 RECEIVED THEIR DIPLOMAS AT A MAY 7 GRADUATION CEREMONY AT THE QATAR NATIONAL CONVENTION CENTRE. WITH 61 MEMBERS, THIS YEAR'S CLASS WAS THE LARGEST TO GRADUATE FROM THE DOHA CAMPUS. READ ABOUT CARNEGIE MELLON'S 115TH COMMENCEMENT ACTIVITIES IN PITTSBURGH IN A SPECIAL PULLOUT SECTION ON PAGES 5-8.

Breaking Ground

Innovative Hub To House Biomedical, Nanotechnology, Energy Research

■ Bruce Gerson

Carnegie Mellon's recently approved 10-year master plan won't be gathering dust anytime soon.

The first building to be built under the new plan is a new research facility that will house the Biomedical Engineering Department; an energy institute focused on developing technologies to improve energy production, efficiency and sustainability; and a nanotechnology fabrication lab, with space for approximately 200 faculty members, researchers and graduate students.

Scheduled to break ground in the fall and to be completed in spring of 2015, the 100,000-square-foot,

CONTINUED ON PAGE THREE

CMU in NYC

University Joins NYU Partnership

■ Teresa Thomas

Carnegie Mellon, with New York University (NYU), the Polytechnic Institute of New York (NYU-Poly), the University of Toronto, City University of New York, the University of Warwick, the Indian Institute of Technology Bombay, IBM and CISCO, among many others, will be part of the Center for Urban Science and Progress (CUSP), a second step in New York Mayor Michael R. Bloomberg's plans to build strong ties with leading research universities around the nation and the world.

Mayor Bloomberg, with leaders
CONTINUED ON PAGE TWELVE

Meeting of the Minds

Adviser Helps Undergraduates Research Their Passions

■ Abby Simmons

From an artist's lens, Elaine A. King sees the most important lesson undergraduate students can learn from conducting research is how to focus and integrate.

"At the university, we often think of conducting research in fields such as computer science, history or medicine; however, artists, too, must delve deeper into subjects or processes," she said.

King, a professor of art history and theory encourages her students to select topics of personal importance and challenges them to develop tight proposals outlining their scope of work.

She is just one of the many profes-

sors who mentor students and advise them on their undergraduate research projects. More than 450 of those projects from Carnegie Mellon's six undergraduate colleges were on display at the May 9 Meeting of the Minds in the University Center.

Last summer and fall, King advised Ashley Bravin's research project on violent sports, which was funded by the Undergraduate Research Office's Small Undergraduate Research Fellowship and Small Undergraduate Research Grant

CONTINUED ON PAGE TEN

Q&A: Griss Shares Decade of Success at Silicon Valley Campus

■ Sylvia Leong

Martin L. Griss, director of Carnegie Mellon Silicon Valley, has nearly 40 years of experience in software development, education and research. In 2009, he succeeded James Morris, founding dean of Carnegie Mellon Silicon Valley. At the time, Griss said the demand for faster, leaner and more mobile information technology would continue to grow, and it has. As the campus prepares to celebrate its 10th anniversary, the Piper caught up with Griss to talk about its developments in education and research and the impact the program has had on the technology capital of the world.



MARTIN GRISS

What are some of the major accomplishments and milestones for the campus?

In the past 10 years, we have grown dramatically. We launched the campus in 2002 with 56 students and one research project, and now we have nearly 200 students, more than 600 alumni and a thriving research program that covers many applications ranging from disaster management to mobility software. We are well connected and recognized within the Silicon Valley ecosystem with projects and students from many companies across the technology spectrum.

In your opinion, in what area has the campus made the greatest impact?

We've had several areas of impact due to our leading edge research and education.

I'd say the greatest impact has been with the graduates we produce as a direct result of our innovative teaching. We have pioneered a style of education here that is being recognized by other institutions as one of the most effective ways to learn. We avoided the traditional lecture style, favoring instead a team and project-oriented learn-by-doing methodology. Students work on authentic projects leading to skills that are immediately transferrable to the workplace. We combine strong technical academics with business and organizational skills so the students graduate as software leaders, making an impact in the Valley.

With so many graduates from our program, we can easily see our fingerprints all over the Silicon Valley.

What types of students attend? What companies or fields do the students come from?

We have full-time and part-time programs here at the Silicon Valley campus. Our full-time programs attract students worldwide, who come to our campus for graduate degrees in software engineering; software management and entrepreneurship; electrical and computer engineering; and information technology. Our part-time program primarily attracts local software professionals, but due to our remote learning capability, we also have students who participate from other locations. Many of our students come from software-intensive companies or backgrounds and from local, national and international locations.

We love seeing how our students are a true reflection of the industry that surrounds them — diverse, smart, coming from start-ups, mid-size companies and large enterprises.



THE 10TH ANNIVERSARY CELEBRATION

SATURDAY, JUNE 9, SILICON VALLEY CAMPUS,

MOFFETT FIELD, CALIF. FOR MORE INFORMATION VISIT

[HTTP://SV.CMU.EDU/10YEARS](http://sv.cmu.edu/10years)

What are some of the current research projects at Carnegie Mellon Silicon Valley?

Most of our research projects are related to the emerging mobile digital lifestyle and the web of things. Just recently, it was reported that more than 50 percent of the mobile phones in the U.S. are smartphones — this demonstrates a radical shift in how people communicate and collaborate with social media, and access the Internet, services and data. Leveraging our strengths in mobile applications, wireless sensors, machine learning, big data, cloud computing, natural language, networking and security, we are able to address a wide range of important problems that have arisen in this new age. The synergy between these areas allows us to innovate in societal areas such as disaster management, mobile education, smart buildings, energy management and health.

Where do you see the Silicon Valley campus going in the future?

As the West Coast outpost for Carnegie Mellon, we see ourselves as critical to the university's long-term goals. We have started entrepreneurship programs that are connected back to the main campus, in direct response to student feedback. We have created collaborative research and educational programs that are now thriving. I can

only anticipate that this will continue to grow, especially as we engage more with Silicon Valley.

In fact, we have expanded into a new building on campus, with plans to build even more classrooms, faculty offices, labs and student spaces. Because we are so connected in Silicon Valley and have our finger on the pulse of what the new technology trends are, we are able to quickly adapt and grow new programs and projects that connect us to the newly emerging needs.

Are some of the founding industry partners still involved, and if so in what way?

Some of our earliest partners include Ericsson, Nokia and Panasonic. With each of these companies the relationships have grown. Some of our students have been hired by these companies, and the companies continue to sponsor practicums and research projects. Interestingly enough, they came to the Silicon Valley shortly after we did, to establish their mobile and networking research centers here — the home of mobile innovation. Because of our focus on mobility research, they quickly recognized us as a key partner in their research endeavors and we have been able to grow with them. Now we have dozens of corporate partnerships, not only in mobility but in a whole variety of technology.

IT TAKES A VILLAGE

When Carnegie Mellon Silicon Valley was formed, a number of people from the university and industry helped from the outset. They include*:

Benefactors

Chuck Geschke (S'73)
Chairman & President,
Adobe Systems, Inc.

Raymond J. Lane
General Partner, Kleiner
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Microsoft Research
Represented by John
Spencer

Eric Schmidt (H'09)
Chairman and CEO,
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Sunil Wadhvani (TPR'76)
CEO and Co-Founder,
iGATE, Inc.

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Senior Researcher,
Microsoft, Telepresence
Research Group

David Coulter (TPR'71)
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Ali Kutay
Chairman, President and
CEO, AltoWeb, Inc.

Drew Perkins

Co-Founder and Chief Tech-
nology Officer, Infinera Corp.

Raj Reddy

Director, West Coast
Campus, Carnegie Mellon

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Computer
Founder, CEO, and
Chairman, Wheels of Zeus
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Adam Beguelin
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Chief Technology Officer,
Kana Communications



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PUBLISHER
Teresa Thomas

EDITOR
Bruce Gerson

MANAGING EDITOR
Heidi Opdyke

WRITERS

Jocelyn Duffy	Byron Spice
Bruce Gerson	Chriss Swaney
Sarah Nightingale	Teresa Thomas
Heidi Opdyke	Ken Walters
Shilo Rea	Pam Wigley

DESIGNER
Melissa Stoebe
Communications Design and Photography Group

PHOTOGRAPHY
Ken Andreyo
Tim Kaulen
Communications Design and Photography Group

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

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Inquiries concerning the application of and compliance with this statement should be directed to the vice president for campus affairs, Carnegie Mellon University, 5000 Forbes Avenue, Pittsburgh, PA 15213, telephone 412-268-2056.

Carnegie Mellon University publishes an annual campus security and fire safety report describing the university's security, alcohol and drug, sexual assault, and fire safety policies and containing statistics about the number and type of crimes committed on the campus and the number and cause of fires in campus residence facilities during the preceding three years. You can obtain a copy by contacting the Carnegie Mellon Police Department at 412-268-2323. The annual security and fire safety report is also available online at www.cmu.edu/police/annualreports.

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*Titles and companies as of the campus founding in 2002.

Mehrabian's Legacy Honored



JARED L. COHON (FROM LEFT), CARNEGIE MELLON'S EIGHTH PRESIDENT, ROBERT MEHRABIAN, CARNEGIE MELLON'S SEVENTH PRESIDENT, AND DONALD F. SMITH JR. (HNZ'94), PRESIDENT OF THE REGIONAL INDUSTRIAL DEVELOPMENT CORPORATION, POSE IN FRONT OF THE NEWLY RE-NAMED ROBERT MEHRABIAN COLLABORATIVE INNOVATION CENTER. CMU AND THE RIDC PARTNERED TO DEVELOP THE CENTER



DURING MEHRABIAN'S PRESIDENCY. AN OVERFLOW CROWD ON HAND FOR THE DEDICATION HEARD SPEAKERS PRAISE THE FORMER PRESIDENT FOR HIS CONTRIBUTIONS TO ECONOMIC DEVELOPMENT IN PITTSBURGH AND TO UNDERGRADUATE EDUCATION, STUDENT LIFE AND TECHNOLOGY COMMERCIALIZATION AT CMU.

Building To House Biomedical, Nanotechnology, Energy Research CONTINUED FROM PAGE ONE

\$70 million-plus building will be nestled on the hillside between Hamerschlag, Wean and Roberts Engineering halls. A four-story north wing with a glass exterior will overlook the hollow, extending toward Craig Street above exterior support columns.

The lower two floors of the north wing will consolidate Biomedical Engineering offices and laboratory spaces from multiple locations, including from the PTC Building by the Monongahela River. Energy institute offices and labs will be on the third level and the top floor, which is approximately 10,000 square feet, will be a shelled space for a future academic or research unit from the university.

To the southeast of the north wing will be a 12,000-square-foot nanofabrication facility, upgrading and nearly tripling the size of the current lab on the D-Level of Hamerschlag. The new lab will be located in what is now a parking lot between Hamerschlag and Wean halls.

As is the case in the Gates and Hillman centers, the new structure will promote openness and collaboration and provide connections to neighboring buildings and parts of campus. The north wing will have a four-story atrium space, known as "the collaboratory," which will join all four levels of the building and include workspaces furnished with comfortable furniture and white boards.

The north wing floors will connect directly to Wean Hall on multiple levels and the cleanroom on the ground floor will connect to Hamerschlag and Wean.

Exterior connections also will be part of the new developments.

The Hornbostel Mall will extend above the cleanroom between Hamerschlag and Wean halls and connect to the energy institute in the north wing. A glass pavilion will lead pedestrians down one level from the Hornbostel Mall to a small café, training area and the nanofabrication

lab. The Porter Hall side of Hamerschlag will be fitted with a new stairway leading to the Scaife Hall parking area.

"Fitting all of this program into a challenging site has been difficult," said Ralph Horgan, associate vice provost for Campus Design and Facility Development. "But with the guidance of College of Engineering Dean Pradeep Khosla and Institute for Complex Engineered Systems Director Gary Fedder we have

worked very hard to pull it all together for the users, for the college and for the university."

Through a design competition last year, CMU selected a design team led by Office 52, an architectural firm based in Portland, Ore. The team includes the Pittsburgh firm of Stantec/Burt Hill. Providing lab and engineering expertise on the design team are Jacobs Consultancy and ARUP Engineers. Office 52's

higher education clients have included Stanford, Virginia Tech and the University of Texas at Austin. Burt Hill's credits include projects at CMU, Cornell, Princeton, Penn State, Georgia, Iowa and Maryland. The firm led renovation projects to CMU's Baker and Doherty halls.

Horgan said, as with all new construction, CMU will strive to make this a sustainable building, achieving Silver LEED status at a minimum.

CITY APPROVES CMU MASTER PLAN

Pittsburgh City Council has approved Carnegie Mellon's 10-year Master Plan, a document that will guide the university's growth through 2022.

Bob Reppe, director of design for Campus Design and Facility Development, expressed thanks to the Carnegie Mellon community for their contributions to the plan.

"Input from all layers of the campus has resulted in a vision of the future of Carnegie Mellon," Reppe said. "Students, staff, faculty and administration have all contributed to the 2012 Master Plan and the plan is all the stronger as a result. Finally, the 2012 Institutional Master Plan is a result of the leadership of President Cohon and Provost Kamlet and sets an exciting course for the future of Carnegie Mellon University."

The City of Pittsburgh Zoning Code requires all universities and hospitals to submit a new master plan for approval every 10 years. The plans become a legal zoning document for any new building projects and enables projects in the plan to

proceed along a streamlined review process. The plans are intended to provide blueprints for potential projects.

Proposed Projects

The new master plan, developed over the last two years, aims to direct and enable growth of the Pittsburgh campus while keeping in mind the needs and concerns of its neighbors. While multiple building sites are identified in the plan, the actual construction program for the projects will be developed as demand and funding evolve. The proposed projects include:

A biomedical-energy-nanotechnology center (see story).

A new Tepper School of Business facility at the Forbes and Morewood parking lot site, which could bring together undergraduate students, graduate students and faculty all in one building. The new home for the Tepper School could be the first of several new projects on that site, which is thought to be a prime area for future development. This project will necessitate

significant planning for the re-use of the existing Tepper School facility, to account for the loss of parking spaces, and to accommodate Spring Carnival.

Additions to the University Center (Forbes Avenue side) and a major reconfiguration of Skibo Gym (Margaret Morrison Street side) that will expand and enhance space for athletics, fitness and recreation.

An extension to Margaret Morrison Carnegie Hall that will extend toward Donner Hall to support all of the College of Fine Arts programs.

The current Carnegie Mellon plan, approved in 2002, resulted in the creation of the Robert Mehrabian Collaborative Innovation Center; Stever House, the nation's first green dormitory; the Gates Center for Computer Science; the Hillman Center for Future Generation Technologies; and the development of the Posner Center.

The new 83-page master plan can be downloaded from the Campus Design and Facility Development website at www.cmu.edu/cdfd.

Qatar Announces Campus Service Awards

■ Sarah Nightingale

Ilker Baybars, dean of Carnegie Mellon University in Qatar, recently announced that the Doha campus's distinguished service awards have been named after Charles E. Thorpe, founding dean of the university, who served from 2004 to 2010.

This year's winners were also announced. The 2012 winners are: Eleanore Adiong, coordinator for faculty events, Outstanding Dedication to CMU; Otto Chacon, facilities manager, Outstanding Commitment to the Community; Jill Duffy, student development coordinator, Outstanding Service to Students; Carol Miller, research business manager, Outstanding Innovation Award; and Shayan NoorMohamed, senior accountant, Outstanding Newcomer Award.

In addition to these, a special Thorpe award was given to Robert T. Monroe, associate dean, who will be returning to Pittsburgh next academic year.

"We are grateful for Bob's commitment to our Qatar campus. Like Dean Thorpe, Bob's contribution will far outlive his time here. We will miss him and we wish him every success back on the main campus," Baybars said.

2012 WINNERS



ELEANORE ADIONG



OTTO CHACON



JILL DUFFY



CAROL MILLER



ROBERT T. MONROE



SHAYAN NOORMOHAMED

International Focus Draws Campuses Closer

■ Sarah Nightingale

More than 6,900 miles separate Pittsburgh from Doha. But the two campuses are much closer than you think.

Carnegie Mellon's international focus and emphasis on diversity has shrunken that gap and made others similarly insignificant.

Last month, 10 students from Doha traveled to Pittsburgh during mid-semester break as part of the university's IMPAQT (Initiating Meaningful Pittsburgh and Qatar Ties) program, founded in 2008. A week later, seven students from Pittsburgh followed them home by traveling to Doha for their own cultural experience.

For Amal Osman, a junior in business administration, this was her first visit to Pittsburgh. She said she was on a mission to "enrich student experiences on both campuses." She also visited Washington, D.C., and said traveling to the two U.S. cities shed some light on the diverse American landscape and helped her "realize how different the two cities are — in terms of people, urban design, lifestyle and much more."

Pittsburgh students had similar thinking.

William Mistiano, an international relations and politics major, became interested in visiting Doha upon hearing about IMPAQT during orientation. He applied to travel to Qatar, searching for

a chance to see what life is like for his fellow students.

"Having gone to Qatar, I have realized how much of an amazing place it is, and how great it is that Qatar Foundation is putting resources into education, which will prove invaluable in the future," Mistiano said.

Pittsburgh students visited such sites as Al Jazeera's Studios and Mathaf: Arab Museum of Modern Art, as well as participated in a Qatari cultural event, "Freej," which was put on by Carnegie Mellon's Qatar Student Association.

International Day

Carnegie Mellon Qatar recently celebrated its diverse student population, representing 39 different countries from around the world, at International Day in mid April. Performances included everything from bagpipes, to flamenco and traditional desi dance groups from the Indian subcontinent.

Jevika Shetty (TPR' 13) said she is excited to be a part of the multicultural student body at Carnegie Mellon.

"Everyone is proud of their identity and is open to share it," Shetty said. "I thank the administration at Carnegie Mellon for providing us with the opportunity to get in touch with our roots and give a true representation of our culture and heritage."

Cohon Elected to AAAS

■ Teresa Thomas

Carnegie Mellon President Jared L. Cohon has been elected to the American Academy of Arts and Sciences along with some of the world's most accomplished leaders from academia, business, public affairs, the humanities and the arts.

President Cohon is the 18th Academy member from Carnegie Mellon.

The new class will be inducted at a ceremony on Oct. 6 at the Academy's headquarters in Cambridge, Mass.

Since its founding in 1780, the Academy has elected leading "thinkers and doers" from each generation, including George Washington and Benjamin Franklin in the 18th century, Daniel Webster and Ralph Waldo Emerson in the 19th, and Albert Einstein and Winston Churchill in the 20th. The current membership includes more than 250 Nobel laureates and more than 60 Pulitzer Prize winners. A list of the new class listed by discipline can be found at: www.amacad.org/news/classlist2012.pdf.

One of the nation's most prestigious honorary societies, the Academy is also a leading center for independent policy research. Members contribute to Academy publications and studies of science and technology policy, energy and global security, social policy and American institutions, the humanities and culture, and education. Members of the 2012 class include winners of the National Medal of Science, the Lasker Award, the Pulitzer and the Shaw prizes, the Fields Medal, MacArthur and Guggenheim fellowships, the Kennedy Center Honors; Grammy, Emmy, Academy, and Tony awards; the Avery Fisher Prize, and election to the Rock and Roll Hall of Fame.





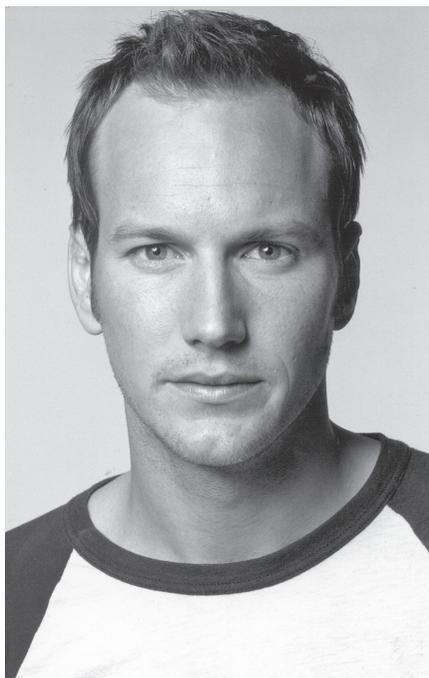
Actor, Alumnus Patrick Wilson Returns To Deliver Keynote

■ Piper Staff

Carnegie Mellon alumnus Patrick Wilson (A'95) will deliver the keynote address for CMU's 115th Commencement at 11 a.m., Sunday, May 20 in Gesling Stadium. Wilson, a critically acclaimed, award-winning actor, was most recently seen in Paramount Pictures' "Young Adult" and also starring in the CBS drama, "A Gifted Man."

"The breadth and depth of Patrick's work demonstrates to our graduating seniors that education, and perseverance beget success," said Carnegie Mellon President Jared L. Cohon. "We are grateful to have Patrick back on campus for this important occasion."

Wilson has deep roots at Carnegie Mellon. He has been a trustee of the university since 2009 and serves on its



PATRICK WILSON

Education Affairs and Enrollment Committee. His continuing dedication to the university, and his demonstrated pride as a member of the university community, have helped generate even broader awareness of Carnegie Mellon. He is married to actress Dagmara Dominczyk (A'98), who also is a Carnegie Mellon School of Drama graduate.

"I'm delighted to meet and speak with the very distinguished and accomplished class of 2012," Wilson said. "Who knows, the paths ahead might lead any one of this year's graduates back to CMU to serve as the keynote speaker at commencement someday."

Wilson began his career on the stage, receiving a Tony Award nomination for Best Actor in a Musical, as well as a Drama Desk Award nomination, for

his work in the 2002 Broadway revival of "Oklahoma!" Wilson has appeared in numerous feature films including "Little Children," "The Ledge," "The A Team," "Watchmen," "The Phantom of the Opera," "The Alamo" and "Insidious," the highest grossing horror film of 2011. He received Emmy and Golden Globe nominations for Best Supporting Actor for his work on the HBO miniseries "Angels in America." He is currently at work filming "The Conjuring," scheduled for release in 2013.

CMU's 2012 commencement ceremony will include nearly 4,000 graduates and approximately 10,000 attendees. The commencement ceremony will be webcast at www.cmu.edu/commencement.

CMU To Award Five Honorary Degrees

■ Piper Staff

It is a Carnegie Mellon tradition to award honorary degrees at commencement to exemplary leaders, whose life and work serve as an inspiration for Carnegie Mellon students, faculty and staff. The diversity of this year's candidates represents the intersection of art and technology, a university hallmark. Receiving honorary degrees will be:

Renée Fleming

Doctor of Fine Arts

Renée Fleming, famed soprano and musical ambassador, is known as 'the people's diva.' She performs in the world's greatest opera houses and concert halls, while embracing other musical genres and media forms. Her numerous honors include, among others, three Grammy Awards and 13 Grammy nominations. In service to the community, she is an advocate for literacy, a champion of the music of contemporary compos-



PHOTO BY: DECCA/ANDREW ECCLES

ers and she serves on a number of civic boards.

Fleming, who was born in Indiana, Pa., and grew up in Rochester, N.Y., sang for the Pittsburgh Opera Theater and CMU artist lecturer in voice Mildred Posvar early in her career. In recent seasons, Fleming has hosted a wide variety of television and radio broadcasts, including the Metropolitan Opera's "Live in HD" series and the PBS "Live From Lincoln Center." As a musical statesman, she has performed on distinguished international occasions that include the 2006 Nobel Peace Prize

ceremony and the 2008 Olympic Games in Beijing. Fleming was featured in the 2009 televised "We Are One: The Obama Inaugural Celebration at the Lincoln Memorial," has performed for the United States Supreme Court and the Prince of Wales at Buckingham Palace, and in 2008, she became the first woman in the 125-year history of the Metropolitan Opera to solo headline an opening night gala.

While she won the 2010 Grammy Award for Best Classical Vocal Performance for a collection of rarely heard Italian arias, Fleming has recorded music ranging from songs by indie-rock and pop artists to jazz to the movie soundtrack of "The Lord of the Rings: The Return of the King." Her 2004 book, "The Inner Voice," chronicled her path to artistic success, and was subsequently published in France, the United Kingdom, Germany, Japan and Russia.

Among her numerous awards are the Fulbright Lifetime Achievement Medal (2011); Sweden's Polar Prize (2008); the Chevalier de la Légion

d'Honneur from the French government (2005); and Honorary Membership in the Royal Academy of Music (2003). She holds honorary doctorates from the Eastman School of Music and the Juilliard School.

Temple Grandin

Doctor of Science and Technology

Temple Grandin embodies leadership and triumph over personal challenge. Despite her severe childhood autism, she has achieved great success in furthering the field of livestock handling as well as in the understanding of autism itself.

Grandin, a professor of animal science at Colorado State University, has done extensive and significant work in the field. She received a bachelor's degree in psychology from Franklin Pierce College in 1970, a master's degree in animal science from Arizona State

CONTINUED ON PAGE SIX

Defying Expectations

English Student, Classmates Write Their Own Paths Through College

■ Shilo Rea

Caroline Kessler has always wanted more than the traditional college experience. And she got it ... in just three and a half years.

Kessler, a native of Woodstock, Md., will talk about how she and her classmates are constantly redefining “typical” and “normal” when she delivers the student address at this year’s commencement.

“I was really shocked and surprised to be chosen [as the student speaker] — and very, very excited,” said Kessler, who graduated in December with a creative writing major and a religious studies minor. “I want to share the amazing experience I had at Carnegie Mellon with the people who made it so amazing — my classmates, the faculty, staff and families.”

The Dietrich College Dean’s List student has won awards for her poetry and fiction and scholarships from the Andrew Carnegie Society and English Department. She was heavily involved in extracurricular activities, founding “Ampersand,” an informal creative writing workshop open to all CMU students, writing for the Tartan, traveling to the Doha campus as part of the IMPAQT (Initiating Meaningful

Pittsburgh and Qatar Ties) program and serving as a Highland Ambassador.

Kessler did all of this — and much more — despite spending a semester abroad in India and a summer in Poland working for the Forum for Dialogue Among Nations, a nonprofit organization that promotes religious tolerance through education. She spent this spring as a communications intern in San Francisco at Net Impact, a nonprofit that works to make business more sustainable.

She said she does not consider herself to be a typical CMU student, but is there such a thing?

“We defy these explanations because this is a place for innovation, creativity, passion, resourcefulness and hard work,” she wrote. “We might come in with some of these things, but the university community — the faculty, the staff and our peers, shape our experience. This place may seem impossibly weird sometimes, full of quirky traditions like painting the Fence and bagpiping on special (and not so special) occasions. But that is of course what is so special about this place that many of us will call home now.”

One thing that surprised Kessler about her time at CMU was how close relationships can form so quickly.

“I’m going to miss the people

and sense of community,” she said. “Even when people are stressed with finals, there’s a feeling that we’re all in it together.”

Yona Harvey, director of the Department of English’s Creative Writing Program, advised Kessler on her honors thesis, a collection called “An Aquarium Made From Fish Soup: Poems.” She said the works reflect how Kessler is a talented writer, academic achiever and great at drawing people in.

“CMU is a demanding environment, and it’s easy to get lost if you’re not proactive,” Harvey said. “But Caroline entered the program and created a place immediately. More importantly, she made other students feel welcome. And that’s a very humbling thing to do. She’s a leader, but selflessly attuned to the sensitivities and talents of others.”



CAROLINE KESSLER

PHOTO BY KEN ANDREYO

Harvey also pointed out how unusual it was to have Kessler come in as a freshman and create a writing workshop instead of waiting to take the formal course offering.

“That’s a perfect example of Caroline’s leadership — thinking not only of herself, but of an entire group,” Harvey said. “She was accepted to the nationally competitive Bucknell University Seminar for Younger Poets, which will take place in June, and the Creative Writing Program will be cheering her on.”

Honorary Degree Recipients Inspire Through Their Work CONTINUED FROM PAGE FIVE

University in 1975 and a Ph.D. in animal science from the University of Illinois in 1989. She is a world leader in the design of livestock handling facilities, and has designed such facilities throughout the world. In North America, nearly half of all cattle are handled in systems of her design. Many large corporations use her objective scoring technique to assess their handling of cattle and pigs, improving animal welfare.

Grandin is known to be the world’s most accomplished autistic adult, demonstrating through her lectures, her writing and her own success the potential of those with autism. Her remarkable life has been documented in an award-winning HBO biopic, she has been featured on National Public Radio, on such television programs as “Primetime Live,” “The Today Show,” “Larry King Live,” “48 Hours” and “20/20,” and in national publications such as Time, People, Forbes, U.S. News and World Report and The New York Times. Grandin was named one of Time Magazine’s 100 most influential people of 2010.

She has been a prolific author in the



TEMPLE GRANDIN

PHOTO BY ROSALIE WINARD

animal science field, publishing several hundred industry articles, technical papers and book chapters, 63 refereed journal articles and 10 books, including “Animals in Translation,” a New York Times bestseller. She has received numerous awards from both industry and humane associations and five honorary

doctorates. She also has authored books and produced several DVDs on the subject of autism.

Grandin will serve as the keynote speaker at the Department of Psychology’s diploma ceremony.

Ruth Gruber Doctor of Humane Letters

Ruth Gruber, writer, photojournalist, diplomat and humanitarian, began early to make her mark on the world. She received her undergraduate degree from New York University



RUTH GRUBER

at age 18 and in 1930 earned a master’s degree from the University of Wisconsin. At only 19, she received a fellowship to travel to Germany for graduate study. At age 20, in 1931, she earned her Ph.D. from the University of Cologne and became the youngest person in the world at that time to earn the degree. These achievements were all the more remarkable given that she was a young, single woman in the 1930s.

Gruber returned to the U.S. as a journalist, heightening awareness of the dangers of Nazism, reporting on women’s lives under Communism and Fascism, and filing the first stories from the Siberian Arctic in 1935. During WWII, she was named special assistant to President Franklin Roosevelt’s Secretary of the Interior Harold Ickes, who sent her on a secret mission to escort 1,000 Jewish refugees to the United States on a transport hunted by Nazi seaplanes and U-boats.

Gruber has authored 19 books about current events, seven of those on Jewish history after WWII. Her book, “Destination Palestine: The Story of the Haganah Ship Exodus 1947,” was used

as source material for the bestselling book and award-winning epic film, “Exodus.” Her book, “Haven: The Dramatic Story of 1,000 World War II Refugees and How They Came to America,” was based on case histories she recorded as she accompanied the refugees on their voyage, and was the subject of a 1993 musical play, a 2000 film and 2001 CBS miniseries. She published her memoirs, “Ahead of My Time: My Early Years as a Foreign Correspondent,” in 1991 and became the subject of a 2010 documentary, “Ahead of Time.”

Gruber’s many honors include the Na’amat Golda Meir Human Rights Award and awards from the Simon Wiesenthal Center’s Museum of Tolerance. Her book, “Raquela: A Woman of Israel,” won the National Jewish Book Award in 1979. She was honored for her work by the National Coalition Against Censorship as well as by the Institute of International Education naming a chair in her honor to annually rescue scholars around the world whose lives are threatened by their Democratic ideals.

Daniel Kahneman Doctor of Business Practice

Daniel Kahneman, the 2002 Nobel Prize winner in Economic Sciences and New York Times bestselling author, is widely regarded as the world’s most influential

Schedule of Events

Commencement weekend at Carnegie Mellon involves much more than the ceremony itself. Below is a list of events that will keep campus humming May 19-20.

Saturday, May 19

8 - 9 a.m.

Phi Beta Kappa Honor Society Initiation Ceremony

McConomy Auditorium, UC
Sponsors will send invitations directly to inductees. An optional complimentary breakfast will precede the ceremony at 7 a.m., in the Connan Room, UC.

8 a.m. - 3 p.m.

Commencement Welcome Area

Wean Commons, UC

First Aid Area

Athletic Equipment Desk, UC

Cap & Gown Distribution

McKenna/Peter/Wright Room, UC

9:30 a.m.

Navy ROTC Commissioning Ceremony

Soldiers & Sailors Memorial Hall (off campus)
4141 Fifth Ave., Pittsburgh, PA 15213

10 - 11 a.m.

Honors Ceremonies

Various locations across campus.

11:30 a.m. - 1:30 p.m.

Human-Computer Interaction Undergraduate Presentation

A presentation for HCI graduates to their families and peers will take place in Room 136A, Adamson Wing, Baker Hall. RSVP to indras@cs.cmu.edu.

Noon - 8:30 p.m.

Diploma Ceremonies and Department Events

Specific times and locations are listed on page 8.

4 - 6 p.m.

CMU Graduate Jazz Reception

Tartans Pavilion, Resnik House
The CMU Alumni Association will host a reception for all graduates and their families. RSVPs were due by May 11.

5 - 7 p.m.

Carnegie Mellon Advising Resource Center (CMARC) Reception

Singleton Room, Roberts Engineering Hall
Sponsors will send information directly to invitees.

6 - 8 p.m.

Cap & Gown Distribution

McKenna/Peter/Wright Room, UC

6 - 8:30 p.m.

Commencement Welcome Area

Wean Commons, UC

8 p.m.

Doctor's Hooding Ceremony

Wiegand Gym, UC

Sunday, May 20

7:30 - 10 a.m.

Diploma Ceremonies and Department Events

Specific times and locations are listed on page 8.

7:30 - 11 a.m.

Cap & Gown Distribution

McKenna/Peter/Wright Room, UC

8 a.m. - 2 p.m.

Commencement Welcome Area

Wean Commons, UC

First Aid Area

Athletic Equipment Desk, UC

8:30 - 10 a.m.

School of Computer Science Breakfast

Perlis Atrium, Newell-Simon Hall
RSVP to scs-rsvp@cs.cmu.edu or 412-268-8525.

10 a.m.

Robing for all commencement participants

Various locations across campus.

10:15 - 11 a.m.

Procession of graduates

Various locations across campus.

11 a.m.

Main Commencement Ceremony

Gesling Stadium

Noon - 5 p.m.

Cap & Gown Return

McKenna/Peter/Wright Room, UC

12:30 - 7 p.m.

Diploma Ceremonies and Department Events

Specific times and locations are listed on page 8.

UC = University Center

living psychologist. He is credited with pioneering work in the field of behavioral economics, more specifically, the exploration of the irrational ways humans make decisions regarding risk. He was awarded the most prestigious prize in the field of economics "for having integrated insights from psychological research into economic sciences."

In addition to the Nobel Prize, Kahneman has received numerous honors and awards, including the

2007 Lifetime Contribution Award of the American Psychological Association and the 1982 Distinguished Scientific Contribution Award of the American Psychological Association. He is also a member of many distinguished elected societies, including the National Academy of Science, the American Academy of Arts and Sciences, the American Psychological Association and the American Psychological Society. Kahneman holds a number of honorary doctorates.

He received his degrees in the field of psychology, earning his undergraduate degree from the Hebrew University

of Jerusalem in 1954 and his Ph.D. from the University of California, Berkeley in 1961. He began his career in cognitive

psychology at the Hebrew University, where he also began a lengthy collaboration with Amos Tversky in the field of judgment and decision making. Kahneman took a position with the University of British Columbia in 1978, and he became heavily involved in the new approach to economic theory, behavioral economics. He moved on to the University of California,

Berkeley in 1986, and to Princeton University in 1993, where Kahneman is currently the Eugene Higgins Professor of Psychology emeritus and professor of public affairs emeritus at the Woodrow Wilson School of Public and International Affairs.

Kahneman will speak at the Carnegie Mellon doctoral hooding ceremony.

Richard P. Simmons

Doctor of Science and Technology

Richard P. Simmons has been compared to Andrew Carnegie, not only for his remarkable achievements in the world

of business, but also for his unwavering community service. Under his leadership, Allegheny Ludlum became one of the world's most successful specialty steel companies, employing thousands of Pittsburgh residents. For more than 30 years, his dedication to community through philanthropic work and investment have benefitted the region.

After earning his degree in metallurgy in 1953 from the Massachusetts Institute of Technology, Simmons began his career with Allegheny Ludlum as a research metallurgist, moving on to various managerial positions with Republic Steel and Latrobe Steel before returning to the company in 1968. With entrepreneurial vision, he led a management buyout in 1980, took the company public again in 1987 and orchestrated a merger with Teledyne in 1996. It is in this entrepreneurial spirit that Carnegie Mellon established Greenlighting Startups, which supports and accelerates the commercialization of groundbreaking ideas.

Simmons also has been recognized for his outstanding engineering achieve-

ments, winning numerous awards and retaining memberships in distinguished organizations, including his election to the National Academy of Engineering in 1998. He holds four honorary doctorates.

His extensive community work includes serving as chairman and executive committee member of the Allegheny Conference on Community Development, director and chairman of the United Way, trustee of The Carnegie Museums of Pitts-

burgh, emeritus trustee of the University of Pittsburgh, and chairman and life director of the Pittsburgh Symphony. Simmons has been credited with personally rescuing the Pittsburgh Symphony from financial collapse with his gift. He is an active supporter of venture capital startups in Western Pennsylvania. Simmons also has been a generous

benefactor of Carnegie Mellon and as a distinguished adjunct professor of business management, taught a popular course in the Tepper School of Business.

He will speak at the Tepper School of Business diploma ceremony.



DANIEL KAHNEMAN



RICHARD P. SIMMONS

Speakers Challenge Graduates To Innovate

■ Piper Staff

Carnegie Mellon in Qatar celebrated its largest graduating class at a May 7 ceremony at the Qatar National Convention Centre.

His Excellency Sheikh Ahmed bin Jassim bin Mohamed Al-Thani, director general of the Al Jazeera Network, delivered the keynote speech to the 61 graduates and an audience of more than 1,000 family, friends and community members.

“Never stop learning, continue to question, continue to challenge, continue to be curious,” Al-Thani told the graduates. “Think how can I do what I am doing better than I am doing today. We live in an ever-changing world. If you stand still you will be left behind.”

Congratulating the graduating class, Ilker Baybars, dean of Carnegie Mellon Qatar, said, “Graduation is an event that commemorates our heritage,

celebrates our achievements and heralds the promise of a bright future — not only for our graduates, but for the university as well. These graduates will have a lifelong connection to this campus in Qatar, our home campus in the United States, and Carnegie Mellon alumni around the world.”

Sara Abbas, who graduated with honors in business administration and was a recipient of a 2012 Senior Student Leadership Award, was selected to be the class speaker. Abbas reflected on her views on progress and innovation in the Middle East.

“People who continue learning and challenging the status quo to fill a gap are the innovators. Those are the people whose contributions move societies forward. Those are the people Carnegie Mellon has prepared us to be. Those are the people we all must be,” Abbas said.

Diploma Ceremonies

Families and friends are invited to attend their graduate’s diploma ceremony. For additional information about a specific diploma ceremony, please contact the appropriate academic department. Beginning at 12:30 p.m. on Sunday, shuttle service will be provided between campus and off-campus diploma ceremonies (except the Entertainment Technology Center).

Bachelor of Humanities & Arts/Bachelor of Science & Arts/Bachelor of Computer Science & Arts

Sunday, May 20
Ceremony: 8:30 a.m.
Kresge Theater, CFA
Reception: 9:30 a.m.
Alumni Concert Hall, CFA

Biological Sciences

Saturday, May 19
Ceremony: 2 p.m.
Auditorium, Mellon Institute (off campus)
Reception: following ceremony
Social & Conference Rooms, Mellon Institute, 4400 Fifth Ave.

Biomedical Engineering

Saturday, May 19
Ceremony: Noon
McConomy Auditorium, University Center (UC)
Reception: 1 p.m.
Schatz Dining Room, UC

Business Administration (Bachelor’s)

Sunday, May 20
Reception: 12:30 p.m.
Ceremony: 2 p.m.
Soldiers & Sailors Memorial Hall (off campus), 4141 Fifth Ave.

Business Administration (Master’s & Doctor’s)

Saturday, May 19
Ceremony: 2 p.m.
Reception: following ceremony
Soldiers & Sailors Memorial Hall (off campus), 4141 Fifth Ave.

Chemical Engineering

Sunday, May 20
Ceremony: 1 p.m.
Carnegie Lecture Hall, Carnegie Museum (off campus) 4400 Forbes Ave.
Reception: following ceremony
Phipps Conservatory (off campus)
1 Schenley Park/700 Frank Curto Dr.

Chemistry

Sunday, May 20
Ceremony: 2 p.m.
Auditorium, Mellon Institute (off campus)
Reception: following ceremony
Social & Conference Rooms, Mellon Institute, 4400 Fifth Ave.

Civil & Environmental Engineering

Sunday, May 20
Reception: 12:30 p.m.
Ceremony: 2 p.m.
Rooms 120 & 121, David Lawrence Hall,
Univ. of Pittsburgh (off campus)
3942 Forbes Ave.

Economics

Sunday, May 20
Reception: 12:30 p.m.
Ceremony: 2 p.m.
Soldiers & Sailors Memorial Hall (off campus), 4141 Fifth Ave.

Electrical & Computer Engineering

Sunday, May 20
Ceremony: 12:30 p.m.
Reception: following ceremony
Wiegand Gymnasium, UC

Energy Science, Technology & Policy

Sunday, May 20
Ceremony & Reception: 8 a.m.
Singleton Room & Atrium
Roberts Engineering Hall

Engineering & Public Policy

Sunday, May 20
Ceremony & Reception: 8 a.m.
Rangos 2 and 3, UC

Engineering & Technology Innovation Management

Sunday, May 20
Ceremony & Reception: 8 a.m.
Rangos 2 and 3, UC

English

Saturday, May 19
Ceremony: 2:30 p.m.
McConomy Auditorium, UC
Reception: following ceremony
Schatz Dining Room, UC

Entertainment Technology Center

Sunday, May 20
Reception followed by dinner: 4 p.m.
Ceremony: following dinner
East Club Lounge, Heinz Field (off campus), 100 Art Rooney Ave.
NOTE: Shuttle service is not provided.

Heinz College

Saturday, May 19
Ceremony: 2 p.m.
Carnegie Music Hall, Carnegie Museum (off campus)
Reception: following ceremony
Carnegie Music Hall Foyer,
Carnegie Museum, 4400 Forbes Ave.

History

Sunday, May 20
Breakfast Reception: 7:30 a.m.
Ceremony: 8:30 a.m.
Gregg Hall/Porter Hall 100

Information Networking Institute

Sunday, May 20
Ceremony: 3 p.m.
Reception: 4 p.m.
Rodef Shalom Congregation (off campus), 4905 Fifth Ave.

Information Systems

Saturday, May 19
Ceremony: 6 p.m.
Philip Chosky Theater, Purnell Center
Reception: following ceremony
Lobby, Purnell Center

Materials Science & Engineering

Sunday, May 20
Ceremony: 1 p.m.
Winchester Thurston School Auditorium (off campus)
Reception: following ceremony
Winchester Thurston School Cafeteria
555 Morewood Ave.

Mathematical Sciences

Sunday, May 20
Ceremony: 1 p.m.
McConomy Auditorium, UC
Reception: following ceremony
Perlis Atrium, Newell-Simon Hall

Mechanical Engineering

Saturday, May 19
Ceremony & Reception: 2 p.m.
Wiegand Gymnasium, UC

Modern Languages

Sunday, May 20
Ceremony: 8:30 a.m.
Rangos 1, UC
Reception: following ceremony
Skibo Coffeehouse, UC

Philosophy

Sunday, May 20
Breakfast Reception: 8 a.m.
Lower Level Coffee Lounge, Baker Hall
Ceremony: 9 a.m.
Giant Eagle Auditorium, Baker Hall

Physics

Sunday, May 20
Ceremony: 12:30 p.m.
Reception: following ceremony
Room 7500, Wean Hall

Product Development

Saturday, May 19
Ceremony: 10:30 a.m.
Reception: following ceremony
Singleton Room, Roberts Engineering Hall

Psychology

Sunday, May 20
Ceremony & Reception: 12:30 p.m.
Rangos Hall, UC

School of Architecture

Saturday, May 19
Ceremony: 2 p.m.
Philip Chosky Theater, Purnell Center
Reception: following ceremony
Great Hall, CFA

School of Art

Sunday, May 20
Reception: 12:30 p.m.
Regina Gouger Miller Gallery,
Purnell Center
Ceremony: 2:30 p.m.
Philip Chosky Theater, Purnell Center

School of Computer Science

Sunday, May 20
Ceremony: 1 p.m.
Reception: following ceremony
Carnegie Music Hall, Carnegie Museum (off campus) 4400 Forbes Ave.

School of Design

Saturday, May 19
Ceremony & Reception: 3 p.m.
Rangos Hall, UC

School of Drama

Sunday, May 20
Ceremony: 12:30 p.m.
Philip Chosky Theater, Purnell Center
Reception: following ceremony
Lobby, Purnell Center

School of Music

Sunday, May 20
Ceremony: 12:30 p.m.
Kresge Theater, CFA
Reception: following ceremony
Alumni Concert Hall, CFA

Social & Decision Sciences

Sunday, May 20
Breakfast Reception: 7:30 a.m.
Schatz Dining Room, UC
Ceremony: 8:30 a.m.
McConomy Auditorium, UC

Statistics

Sunday, May 20
Ceremony: 12:30 p.m.
Giant Eagle Auditorium, Baker Hall
Reception: following ceremony
Lower Level Coffee Lounge, Baker Hall

Student-Defined Majors

Sunday, May 20
Reception: 8 a.m.
Ceremony: 8:30 a.m.
Adamson Wing/136A (upper level lobby), Baker Hall

CMU Experience

East Harlem Students Visit Pittsburgh Through College Bound Program

■ Heidi Opdyke

It started as a conversation between friends who met at Carnegie Mellon.

Helen Wang (DC'99), associate director of Student Life for First Year Houses and housefellow for Morewood E-Tower, was talking with Christopher Cormier (A'01), whose friend worked at Renaissance Charter High School for Innovation in East Harlem, N.Y.

The result: 35 students visited Carnegie Mellon to learn more about what college is like.

The school, in its second year, has nearly 250 ninth and 10th grade students and that number will grow to 500 by the 2013-2014 school year. About 90 percent of the students receive free and reduced priced lunches, said Arthur Samuels, who coordinates the school's College Bound program.

"Students who grow up in wealthier parts of New York City grow up immersed in a college-going-culture," Samuels said. "Chances are their parents went to college (or beyond), and it is taken for granted that they will attend a selective, four-year college and graduate on time.

"Our College Bound program attempts to imbue students with college

awareness and skills from the moment that they walk into the door. Every single student takes College Bound every single day. We do career research, dissect the graduation requirements, do an in-depth look at the college application process and examine how financial aid works. We want our kids to know about all the options in front of them, and understand what is required to pursue those options."

Samuels said that students visit a minimum of three schools outside of New York City each year, but the majority have been small liberal arts schools.

The recent five-day "College Experience Road Trip" was free for the high schoolers who participated and included stops at CMU, the University of Pittsburgh, Erie Community College, Dickinson College and SUNY Fredonia.

"Going to Pittsburgh and getting to see CMU and Pitt seemed like a great opportunity," he said.

Wang, along with first-year CMU students, organized 10 hours of programming for the high school students. She said faculty, staff and students from around the university worked to make the day a special one.

"It was a beautiful gesture illustrative of the best of Carnegie Mellon in that it allowed our students to give back by sharing their unique experiences while listening and guiding younger students outside of this context," Wang said.

Giving Back

Residents of Morewood E-Tower and invited resident assistants from first-year houses served as mentors and guides for the day, and escorted the high school students to sit in on college classes such as the History of Rock 'n' Roll.

"I hope we can do more things like this because it was transformative for the students who came in ways we can't fully appreciate," Wang said. She said the first-year students also learned from the experience. "A lot of the programming is embedded with the hope that students can learn to see outside of themselves. This experience let them do just that."

Other stops on campus included the Digital Fabrication Lab, seeing the Society of Automotive Engineering's Formula One racecar and learning about conducting research in an academic library.

"The students were amazed," Samuels said. "They thought the architecture lab was like something out of

James Bond. I think what made the most impact was attending class. They really enjoyed the discussions. One student told me that 'this makes me want to study harder, so I can go here.'"

The day concluded with a Pittsburgh-inspired dinner and talk. Nico Slate, an assistant professor in the Department of History, discussed the Arts Greenhouse, a program that brings Pittsburgh teens to Carnegie Mellon to write and record their own hip hop music.

"Every child should have an equal opportunity to end up at a place like Carnegie Mellon," Slate said. "Like the Arts Greenhouse, the Innovation [high school] visit leveraged Carnegie Mellon's many resources to the benefit of students who might not otherwise even dream of coming to a place like CMU."

Wang said many of the students are interested in Carnegie Mellon's Pre-College programs and its Summer Academy for Mathematics and Science.

Samuels said the school would like to bring another group of students to CMU next year.

"We would love to come back. This visit set the bar very high," he said. "There are a lot of students in East Harlem who now want to apply to CMU."

Sky's the Limit

High Point Pittsburgh Team Creates Virtual Simulation of US Steel Tower Rooftop Venue

■ Pam Wigley

If you've ever imagined the view of Pittsburgh's Golden Triangle and beyond from the tallest point in town, virtual satisfaction is headed your way.

A Carnegie Mellon team of researchers and graduate students has created Virtually There — High Point Pittsburgh, an interactive experience that lets people envision a three-story addition to the U.S. Steel Tower. The virtual reality program enables anyone with a computer and Internet access to explore the proposed one-acre space atop Pittsburgh's tallest building, which would be the largest, highest place atop any building on Earth.

A product of the High Point Pittsburgh Investigation, the latest phase of Virtually There (VT), was unveiled in late April in the Randy Pausch Studio of the Entertainment Technology Center (ETC), where the project's producers, artists and programmers offered highlights of what they call their "destination in the sky."

After an overview presentation, guests accessed the VT site from on-site computers and got a glimpse of the virtual simulation's interactive kiosks, which took them on a tour of the structure's media gallery and video theaters, as well as the proposed restaurant/café/bar, central atrium and numerous panoramic viewing areas.



A CENTRAL ATRIUM IS SEEN HERE IN THIS RENDERING OF A PROPOSED THREE-STORY ADDITION ON TOP OF THE U.S. STEEL TOWER.

VT also allowed site visitors to ride elevators or climb stairs to the rooftop promenade and enjoy a virtual fireworks extravaganza.

"The talents of many people have combined to create an exciting, interactive online environment unlike anything you've ever seen," said David Bear, a fellow in Carnegie Mellon's STUDIO for Creative Inquiry who has overseen the multi-year High Point Pittsburgh project. "It's a virtual destination that allows anyone to experience an imaginary place we hope one day might become a reality. In a very

real sense, it provides a whole new way to see what can be."

The VT team includes producer Sean McChesney, programmers Siddhesh Vichare and Cintia Higashi, and artist/designer Sun-Moon Hwang, all ETC graduate students working under faculty advisers Mk Haley, ETC associate executive producer, and John Dessler, an ETC lecturer. CMU School of Architecture fourth-year students Richman Neumann, Daniel Rapoport and John Kim provided architectural design and décor concepts for the project.



AN EXTERIOR VIEW OF THE PROPOSED ADDITION SHOWS AN ELEVATOR TRACK RUNNING UP THE SIDE OF THE BUILDING.



THE VT SIMULATION CAN

BE ACCESSED AT WWW.HIGHPOINTPITTSBURGH.COM.

WWW.HIGHPOINTPITTSBURGH.COM.

MORE INFORMATION ABOUT THE PROJECT

IS AVAILABLE AT WWW.HIGHPOINTPITTSBURGH.ORG, AND ON FACEBOOK AT WWW.FACEBOOK.COM/HIGHPOINTPGH.

WWW.FACEBOOK.COM/HIGHPOINTPGH.

A 3-MINUTE PREVIEW: WWW.YOUTUBE.COM/WATCH?v=6UOJTirV5Ho

WWW.YOUTUBE.COM/WATCH?v=6UOJTirV5Ho

WWW.YOUTUBE.COM/WATCH?v=6UOJTirV5Ho

30-SECOND PROMO: WWW.YOUTUBE.COM/WATCH?v=QKnLWjX5fLg&feature=youtu.be

WWW.YOUTUBE.COM/WATCH?v=QKnLWjX5fLg&feature=youtu.be

Professors Named to Top Spots at UCSD and Clarkson

■ Bruce Gerson

Carnegie Mellon produces leaders. Its students are highly sought after and so are its faculty members.

Pradeep Khosla, the Philip and Marsha Dowd University Professor and dean of the College of Engineering, has been recommended to become chancellor at the University of California, San Diego. The University of California Board of Regents will vote on his recommendation May 16.

Robotics Professor Chuck Thorpe, founding dean of Carnegie Mellon's Qatar campus, has been named senior vice president and provost at Clarkson University in Potsdam, N.Y.

Both earned graduate degrees at Carnegie Mellon, they joined the faculty here, their careers blossomed and they contributed greatly.

"Pradeep has been one of the most important contributors to Carnegie Mellon of any faculty member I can think of during my 35 years at the university," said Provost and Executive Vice President Mark Kamlet. "He has been an excellent educator and scholar as indicated by the fact that he was elected

to the National Academy of Engineering and was a University Professor.

"But, it is as a department head and dean that his accomplishments stand out as truly extraordinary. He has been tireless, not only in his role as dean of CIT, but in his leadership in establishing international campuses of Carnegie Mellon (in Greece, Portugal, Rwanda and China), fundraising, and important construction and building projects. He was also a great friend. He will be most sorely missed here at CMU."

Kamlet emphasized Thorpe's contributions as a pioneering dean of the Qatar campus.

"Chuck Thorpe was the right person at the right time in his several key roles at Carnegie Mellon," Kamlet said. "For me, this was best represented by his willingness to move from being the head of our Robotics Institute to become the founding dean of Carnegie Mellon's undergraduate campus in Qatar. The importance of that role, as the pioneer who forged our new campus, is hard to overstate. He signed up for three years and we somehow convinced him and

Leslie, his wife, to stay for six. The university will forever be grateful for his leadership and efforts."

During nearly eight years as dean, Khosla, who earned his master's and Ph.D. degrees at CMU, initiated reforms to the undergraduate curriculum, which helped the College of Engineering continue to be recognized among the world's leading engineering programs. The college was ranked 12th by the 2011-12 Times Higher Education World University Rankings.

"I believe that I leave CIT and all of its initiatives in good hands," Khosla wrote in an email to faculty and staff in the College of Engineering. "Our rankings are superlative, our students are the best, our sponsored research has doubled, our alumni are engaged and very supportive, and we have launched initiatives in Pittsburgh, the Silicon Valley and internationally. While I may not be here physically to partake in the future successes of CIT and Carnegie Mellon, I will be watching closely and take pride in the fact that I have been a part of this great institution and that as

an alum I will always be a part."

Thorpe, who earned his Ph.D. in computer science at CMU, was director of the Robotics Institute for four years before becoming dean of Carnegie Mellon's Qatar campus from 2004 to 2010. He was inducted into the Robot Hall of Fame for his efforts to create autonomous vehicles.

"I got my job at Clarkson because of all of you [at CMU]," Thorpe said. "They looked at the success of the Robotics Institute and the Qatar campus and decided they'd like to have some of the same things happen. Of course, the institute has grown even more after I left, with Matt Mason running it. The Qatar campus keeps adding students and majors, under Dick Tucker and now Ilker Baybars.

"So it's pretty clear to me that the successes of those places has more to do with the quality of the faculty, staff and students than with my leadership. Thanks to all of you for making me look good," he said.

Adviser Helps Students Research Their Passions CONTINUED FROM PAGE ONE

(SURG) programs. Bravin worked with School of Art Professor Mary Weidner on a related SURG-funded project this semester.

"I think it's really important, especially for underclassmen, to apply for grants," King said. "It helps them learn how to apply for future fellowships and graduate school, and receiving a grant shows that they are already respected by others in their field."

Bravin turned to the Undergraduate Research Office when she needed funding to create large-scale, mixed-media paintings. She wanted to compare Depression-era prizefighting, or boxing, in the United States with the recent resurgence of dogfighting in Kabul,

Afghanistan. International media reports about dogfighting, once banned by the Taliban, sparked her interest.

"Both of these 'blood sports' rose in popularity during times of social, political and economic unrest," Bravin said. "I had worked with Elaine for a couple of years and thought she'd be a great adviser. I was also in constant contact with Stephanie Wallach and Jennifer Keating-Miller from the Undergraduate Research Office as I wrote my first research proposal."

King was in contact with Bravin about once every two weeks last summer.

"I never want to be a 'helicopter adviser' — I only want to be there to engage in a critical dialogue that results in students pushing their ideas," King said.

Bravin said they discussed her research on films, books and photographs to inform her art. She also sent King photos of her paintings as they progressed.

"King is a faculty member and an art critic. She provided me with helpful feedback about my paintings and the processes I was using to create them," Bravin said.

"I saw a major change in Ashley's work from her proposal to her final project. There's a maturation process," King said. "I wish our students could continue developing their projects even further."

Many of King's former students have applied their undergraduate research experiences to life beyond Carnegie Mellon. One of those students is Stefanie Kim (A'09).

Kim approached King after attending her talk "Likeness: Transformations of Portrayal After Warhol" exhibit at the Mattress Factory in 2009. She expressed interest in creating an art history book for children about Warhol, and King challenged her to take it a step further by producing a limited-edition run of her book.

"Stefanie was so amazed that two faculty members bought her \$40 book at Meeting of the Minds," King said.

Kim is now working toward a master's degree in education at Boston University and is a first-grade teaching intern at The Chestnut Hill School in Massachusetts.

NEWS BRIEFS

Steven Huth Named CIO, Vice Provost

Provost and Executive Vice President Mark Kamlet has announced that Steven Huth, chief information officer for Carnegie Mellon Qatar and a member of the Computing Services management team in Pittsburgh, will succeed Joel Smith as CMU's chief information officer and vice provost, effective Aug. 1. This past fall, Smith announced he would be stepping down to join the faculty in CMU's Philosophy Department.

Before joining Computing Services in 2009, Huth served as technical director of Q-CERT, a joint Carnegie Mellon/ictQATAR program to improve information security in Qatar. During his 15 years at CMU, Huth also has been the deputy director of the CERT program, one of the oldest and most respected computer security organizations, and managed the

Information Technology Department for the Software Engineering Institute.

Prior to coming to CMU, Huth was manager of Data Networking and Academic Systems Development at the University of Pittsburgh, where he led the transition to a new campus network, taught telecommunications management, and worked with Academic Computing to provide a variety of student services.

2012 Andy Awards Seeks Nominations

Nominations for the 2012 Andy Awards are now being accepted. The Andy Awards, named for Andrew Carnegie and Andrew Mellon, are a tribute to the spirit of teamwork and dedication embodied by CMU staff.

Individual staff members and teams of colleagues whose work has had a significant impact on the university are recognized for their outstanding performance and commitment to excellence through the

Andy Awards program.

Awards are given in six categories: Dedication, Commitment to Students, Innovation, Culture, University Citizenship and Community Contributions. All nominations must be submitted by July 10. For more information and for nomination and statement of support forms visit www.cmu.edu/andyawards/nomination/index.html.

Game Console Changes Could Save \$1 Billion

Adding an "auto-power down" feature to popular video game consoles, like Nintendo's Wii or Microsoft's Xbox 360, may be one of the most cost-effective strategies for controlling demand for electricity. As the proliferation of video game consoles continues, the modification could save consumers \$1 billion per year in electricity costs.

"We are seeing this big increase because the number of video game consoles is increas-

ing, the amount of time spent on the consoles is increasing so the amount of energy used is also skyrocketing," said Eric Hittinger, a Ph.D. candidate in the Department of Engineering and Public Policy.

CMU-Q Promotes Research for Women

Female high school students and undergraduates from universities in Qatar recently gathered at Carnegie Mellon Qatar for the "Opportunities for Undergraduate Research in Computer Science" (OurCS) Qatar 2012 conference. The participants learned about the important role women can play in developing Qatar's knowledge-based economy by contributing to research efforts in computer science and related fields. The program featured prominent female computer scientists, including keynote speaker Sihem Amer-Yahia, principal research scientist at Qatar Computing Research Institute and former senior scientist at Yahoo! Research.

Bicycle-Friendly

Mechanical Engineering Recognized by League of American Bicyclists

■ Chriss Swaney

Every day is Earth Day for Billy Epting, who in a year saved more than 1,920 pounds of carbon dioxide and more than \$800 by riding his bicycle to his lab.

Through Epting's work spearheading bike-friendly initiatives, CMU's

Mechanical Engineering Department has been recognized as a bronze level Bicycle-Friendly Business (BFB). CMU was one of 67 awardees announced this year by the League of American Bicyclists.

"This is a wonderful honor for the university and I'm proud to be part of this growing initiative to use bicycles as an easy option for transportation," said Epting, a mechanical engineering Ph.D. student from Coopersburg, Pa. Epting reports that he has burned more than 80,000 calories pedaling to school for the past year.

Bicycle-friendly employer initiatives improve the workplace, contribute to the community and benefit even those who do not choose to commute by bicycle.

"CMU's Mechanical Engineering Department is at the forefront of

a movement to make American businesses more competitive, sustainable and attractive to the best and brightest employees," said Andy Clarke, president of the League of American Bicyclists. "An investment in bicycling enhances employee health, increases sustainability and

improves the bottom line." Nadine Aubry, the Raymond J. Lane Distinguished Professor and head of CMU's Mechanical Engineering Department, praised Epting for helping obtain the bicycle award. "Our students are extremely busy, but they always make time

BIKE TO WORK BREAKFAST PLANNED FOR MAY 18

In recognition of National Bike To Work Day, CMU's Green Practices Committee will host a hydration station and breakfast from 7:30 to 9:30 a.m. in Merson Courtyard, University Center. Bike Pittsburgh will be on hand and will have swag bags courtesy of local businesses for participants.



PH.D. STUDENT BILLY EPTING HAS SPEARHEADED THE BICYCLE-FRIENDLY INITIATIVES IN CMU'S MECHANICAL ENGINEERING DEPARTMENT.

to be involved with positive initiatives that spill into the community," Aubry said. Her department set up a special bicycle repair stop for people who commute by bicycle.

Last year, a handful of engineering students working with the Steinbrenner Institute for Environmental Education and Research launched the "Heels on Wheels" program to encourage more

CMU faculty, students and staff to ride bicycles to work.

With this recognition CMU's Mechanical Engineering Department joins more than 400 local businesses, government agencies and Fortune 500 companies across the United States that have been designated bicycle-friendly by the League of American Bicyclists.

"Last Lecture" Enhanced Ebook Edition Now Available

■ Byron Spice

Randy Pausch's "Last Lecture," which remained on the New York Times best-seller list for more than 112 weeks and was translated in 48 languages, is now available with video and new insights in an enhanced ebook edition titled "The Last Lecture — The Legacy Edition" (Hyperion). The enhanced ebook includes more features such as:

- a new foreword by Randy's widow, Jai Pausch, who writes about how the book affected Randy, their family, and

the larger community before and after his passing;

- video clips from the Last Lecture throughout the book, providing readers with a truly immersive reading and viewing experience;
- never-before-seen photos of Randy and his family;
- never-before-seen video with the book's co-author, Jeffrey Zaslow (DC'80), in which he shares details on his friendship with Randy and why he thinks Randy touched millions of people;

- memorable clips from Diane Sawyer's ABC News special, such as Randy visiting the Pittsburgh Steelers and loving one of his childhood dreams by playing ball with legendary receiver Hines Ward;
- Randy's commencement speech to the Carnegie Mellon class of 2008;
- Jeffrey's convocation speech to the Carnegie Mellon class of 2014;
- a new "Your Last Lecture" section that includes a series of questions to prompt readers' inspiration into

action, such as: As a child, what were your dreams? Did you find a way to make them come true, in some form, as an adult? Does Randy's perspective help you look at current brick walls in your life differently? What is the most difficult question you've ever had to ask?



FOR MORE AND TO PURCHASE
A COPY, GO TO WWW.THELASTLECTURE.COM/ABOUTBK.HTM

Data Scientists Helping Hollywood

In Hollywood, movies about "mad scientists" have helped studios attract moviegoers for generations. Today, however, studios are looking for a different type of genius: data scientists.

To meet this need, the Heinz College is introducing a business intelligence and data analysis concentration for its Master of Information Systems Management program.

"There is a real need for data scientists — professionals who not only understand where the data comes from, such as social network sites, blogs, and twitter for example — but also understand how that data can be used by various business units to make better decisions about their marketing and operations," said Professor Ari Lightman, who moderated a panel on the role data analytics plays in creating successful marketing strategies at the recent South By Southwest conference.

Libraries To Circulate iPads, Sewing Machines

Last year, the University Libraries introduced Kindles loaded with a variety of books, available for 14-day check out at Hunt, Mellon Institute and Sorrells E&S libraries (<http://guides.library.cmu.edu/kindle>). Now the libraries have added iPad2s and portable sewing machines to circulate.

iPad2s at Sorrells — Ten iPad2s were purchased for a pilot project, funded by a grant obtained from the Berkman Faculty Development Committee by librarian Donna Beck. Nine iPad2s are available at the Sorrells Library circulation desk for seven-day check out, and one is reserved for in-library use only. All of the iPads2s are pre-loaded with a wide variety of apps; suggestions for additional apps are welcome. More: <http://guides.library.cmu.edu/iPad2>

Sewing machines at Hunt — Two Singer 3300 Series portable sewing machines were purchased from the dean's discretionary fund (gift monies) at the request of students in the College of Fine Arts. They are available at the Hunt Library circulation desk for seven-day check out. Each machine circulates with these peripherals: Singer manual, DVD, operation instructions, a Quick Start Guide, bobbins, needles, a walking foot and a side cutter.

CMU Joins Foundation for Improving Urban Life

Carnegie Mellon has joined the New Cities Foundation (NCF), a prestigious new global platform designed to improve the urban environment, from better lighting to safer roads and improved infrastructure.

"This is a wonderful new partnership as the university works to help find solutions to continued infrastructure deterioration by using

data-driven, intelligent automatic decision support tools," said James H. Garrett, Jr., head of Carnegie Mellon's Department of Civil and Environmental Engineering and faculty co-director of the Pennsylvania Smart Infrastructure Incubator.

The NCF partnership involves four of Carnegie Mellon's research institutes, including the Remaking Cities Institute (RCI), the Traffic21 initiative, the Institute for Complex Engineered Systems and the Pennsylvania Smart Infrastructure Incubator.

Don Carter, director of the Remaking Cities Institute at CMU's School of Architecture, said work on research issues pertaining to urban development continues to attract support from government agencies, foundations and corporate partners, which are also at the core of the NCF membership community.

For more information about the foundation, see www.newcitiesfoundation.org.

Spring Carnival 2012: From Booths to Buggies to Barbecues



PHOTO BY KEN ANDREYO

ALPHA CHI OMEGA SISTERS JESSICA HAN (DC'13) (FROM LEFT), SARA HOGE (MCS'13) AND MIKI BASSEY (CIT'14) ATTENDED THE CAMPUS BARBECUE.



PHOTO BY TIM KAULEN

THIS YEAR'S BOOTH THEME, "AS SEEN ON TV," INSPIRED REINTERPRETATIONS OF CLASSIC SHOWS SUCH AS LOONEY TUNES AND PEANUTS AND CURRENT PHENOMENA LIKE "SHARK WEEK," AND "MYTHBUSTERS."



PHOTO BY PAM WIGLEY

ABOVE: AN ANARCHIC ALTERNATIVE TO BUGGY, THE ANTI-GRAVITY DERBY RACE WAS OPEN FOR THE FIRST TIME TO ALL COLLEGE OF FINE ARTS STUDENTS, FACULTY AND STAFF THIS YEAR.



PHOTO BY KEN ANDREYO

THOUSANDS WERE SERVED AT THIS YEAR'S CAMPUS BARBECUE.

RIGHT: BROCK ALLEN (CS'14) WATCHES HIS ROBOT DURING THE 18TH ANNUAL MOBOT RACE.



PHOTO BY KEN ANDREYO



PHOTO BY KEN ANDREYO

JOE BARBISH (CIT'13) PUSHES THE SDC C BUGGY TO HARRISON TURNER (DC'12).

CMU Joins NYC Partnership CONTINUED FROM PAGE ONE

from the various partner organizations, announced the historic agreement among the city, the Metropolitan Transit Authority (MTA), and a consortium of world-class academic institutions and private technology companies at a press conference in Brooklyn. Led by NYU and NYU-Poly, CUSP will focus on research and developing technologies for the critical challenges facing existing cities, including infrastructure, tech integration, energy efficiency, transportation congestion, public safety and public health. The consortium will grant academic degrees in engineering and/or sciences.

For Carnegie Mellon, CUSP is predominantly a research collaboration that will provide a test bed for CMU faculty to develop research for deployment of smart cities technology. Carnegie Mellon brings strength in

intelligent transportation systems and smart infrastructure research to the program, which involves faculty from many colleges and schools on campus. Vice President for Research Richard McCullough has led the partnership discussions for Carnegie Mellon, and James Garrett, the Thomas Lord Professor and head of the Civil and Environmental Engineering Department, has been involved in the discussions of the technical content of the program.

"Carnegie Mellon is pleased to bring its pioneering work in intelligent transportation systems and infrastructure research to this partnership. Carnegie Mellon is using state-of-the-art computing and communication technologies to advance the safety and efficiency of transportation systems, as well as a number of other urban issues. We applaud Mayor Bloomberg's

continued efforts and we congratulate all the partners who worked to get this done," said Carnegie Mellon President Jared L. Cohon.

The consortium proposes taking the MTA building at 370 Jay St., an underused, run-down building in the heart of downtown Brooklyn, and renovating it into a major hub for research. A projected completion date of 2017 is being targeted, although CUSP will immediately begin operations in space in Brooklyn.

Steven E. Koonin, a former undersecretary in the Department of Energy and provost of the California Institute of Technology, will be CUSP's inaugural director.

In December, Mayor Bloomberg announced that Cornell and Technion universities would develop a technology campus on Roosevelt Island. This recent

announcement is the next milestone in Bloomberg's Applied Science NYC initiative, which seeks to increase New York City's capacity for applied sciences and dramatically transform the city's economy. Bloomberg said CUSP was selected through this highly competitive process "due to its unique and bold vision to provide solutions for the world's growing cities."

Meanwhile, Carnegie Mellon and Steiner Studios continue to pursue the prospects for a digital media project at the Brooklyn Naval Yard. The program will be valuable for Carnegie Mellon faculty and students and to Pittsburgh's and Pennsylvania's efforts to build their film and digital media industries by deepening connections to the New York entertainment cluster.