



the PIPER

CMU'S NEWS SOURCE FOR FACULTY & STAFF

11/12 ISSUE

Carnegie Mellon University

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Andy Awards

Winners Exemplify Community, Dedication and Passion

■ Heidi Opdyke

One nominator summed up the sentiment of this year's Andy Award winners best with a quote from university founder Andrew Carnegie: "Do not look for approval except for the consciousness of doing your best."

President Jared L. Cohon, who praised the passion of all of the nominees, and Provost and Executive Vice President Mark S. Kamlet announced the 2012 Andy Award winners before a standing-room-only crowd in McConomy Auditorium.

CONTINUED ON PAGE SIX

Music Man



PHOTO BY DAN MORAN

ALUMNUS STEPHEN SCHWARTZ (A'68) RECENTLY RETURNED TO CARNEGIE MELLON FOR THE SCHOOL OF DRAMA'S "SCHWARTZ ON SCHWARTZ" CABARET. SCHWARTZ, BEST KNOWN FOR HIS AWARD-WINNING MUSIC AND LYRICS FOR BROADWAY HITS LIKE "GODSPELL," "PIPPIN" AND "WICKED," ACCOMPANIED JUNIOR MUSICAL THEATRE STUDENTS WHO SANG SOME OF HIS CREATIONS.

Bikers' Fix



MAINTENANCE STATIONS AND NEW PARKING SPOTS ARE AVAILABLE FOR BICYCLISTS, THANKS TO THE GRADUATE STUDENT ASSEMBLY. SEE MORE ON PAGE EIGHT.

Volunteerism Important to United Way Campaign

■ Heidi Opdyke

Donating money isn't the only way to give to the United Way.

Being involved and volunteering is just as important.

Gloria Gruber and Pat Schaller have been working as co-mentors for the past four years as part of the Be a 6th Grade Mentor after-school program at Pittsburgh Allegheny Traditional Academy Magnet School on the North Side.

"Just last week we met our new mentee, a sixth grader," said Gruber, who said the program is designed for mentors to stay with the same student through eighth grade.

They said knowing students has been rewarding. Schaller said she ran into a former mentee while attending an eighth grade graduation of another.

"It was nice that she remembered me and it meant something important to her," Schaller said.

The relationships also have been a way for the two women to give back.

"Pat and I have been very blessed," Gruber said. "It's been really great to get to know these youngsters better and to help the kids to become more engaged in school and to work harder. We've seen results — more mentees making the honor roll, decreased suspensions and improved attendance."

The program is a part of the Pittsburgh

Promise, which provides up to \$40,000 for college to students who live in the city, attend Pittsburgh Public Schools for grades 9-12 with at least 90 percent attendance record, graduate with a minimum 2.5 GPA, and earn admission to any accredited public or private post-secondary school in Pennsylvania.

Mentors have a variety of activities they can do with students during their

CONTINUED ON PAGE ELEVEN

Q&A: New Vice Provost Looks To Connect the Dots

■ Pam Wigley

Thanassis Rikakis has a penchant for building interdisciplinary teams encompassing the disciplines of art and technology to create innovations with impact. This past summer, he brought his skills to Carnegie Mellon, the place where no one does it better.

In August, Rikakis joined Carnegie Mellon as its new vice provost for design, arts and technology. He is a full professor in the College of Fine Arts' School of Design and holds courtesy appointments in the School of Music and the College of Engineering's Biomedical Engineering Department. He also oversees the university's Entertainment Technology Center (ETC).

Since his arrival from Arizona State University, Rikakis has been meeting with people inside and outside of the university, gathering information that will help him to gain a better understanding of the synergies that have established Carnegie Mellon as the world-leading university in arts and technology.

He says he is looking forward to working with the many individuals who have helped to build that reputation.

The Piper recently caught up with Rikakis to talk about his new role, the university and the path that led him to Pittsburgh.

You arrived in Pittsburgh about three months ago. What have you been doing?

I've been in data collection mode, and after 11 years [at Arizona State University], it's an interesting change ... a good change of pace.

What observations do you have thus far?

There are complex societal issues specific to the 21st century that need to be addressed. People look to Carnegie Mellon to provide answers to those issues. The people I've talked to confirm that we must make sure as an organization that we recognize that some key issues facing us today

are, essentially, cultural problems that need to be resolved. Resolution comes through an integrative approach — a team-based discussion.

Do you think students are inclined to share that opinion?

Many students today expect to create their own jobs for the future, and a broad college preparation is critical for the 21st century entrepreneur. The 18-year-old needs to be at home at CMU, and I think today's student finds a world of options here. Some students that I have already met are what I call "dot connectors," like [Mark] Zuckerberg [chairman and chief executive officer of Facebook].

What's a "dot connector?"

They are students who don't fall into a linear experience. They see how to connect knowledge across domains in unexpected ways. Although the linear progression of how they connect might look disjointed, the aggregate of their point collection helps us look at the big picture, so to speak.



PHOTO BY TIM KAULEN
THANASSIS RIKAKIS

Do you think that vision among students is specific to CMU?

I think the great thing about CMU is that its culture promotes not only these dot connectors, but also people who excel in traditional disciplines. Students seem to understand that you need a cross-section of people to be successful in any venture, like collaborations between interdisciplinary students and disciplinary experts.

What influenced your own course of study in music composition and computer music?

In the late '80s, while I was at Columbia, computing became integrated with music and was embraced by a diverse group of people — the early computer music scene had classical musicians but also Wall Street professionals, rock musicians

and medical professionals. I saw that music knowledge and creativity could be shared outside the concert hall through countless conduits including the rehabilitation clinic. [Rikakis later led an interdisciplinary team spanning rehabilitation medicine, neuroscience, engineering, design and the arts that developed rehabilitation systems for stroke survivors. Music was a large part of patients' rehabilitation.]

How would you describe your personal philosophy?

I grew up in Greece at a time when the country was in turmoil, so the

expectation for a "normal" tomorrow was not always there. So my philosophy is that we have to engage and appreciate life today while also working for a better tomorrow.

So what is that better tomorrow?

A tomorrow that balances efficiency with contemplation. I believe some of the richest conversations in the next 10 years will be about what "quality of experience" truly means. And there is no better place than CMU, a place with expertise in experience creation, technology and social analysis for this conversation to mature.

the PIPER
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Research Showcase Sees a Million Downloads

■ Cindy Carroll

Carnegie Mellon's institutional repository, Research Showcase (repository.cmu.edu), has passed the milestone of a million downloads.

More than 650,000 downloads occurred within the past year, indicating the rising impact of Research Showcase, which was created in 2008 to provide open access to CMU's scholarly output.

On Oct. 21, an undergraduate honors thesis, "Motivation in Foreign Language Learning: The Relationship between Classroom Activities, Motivation, and Outcomes in a University Language-Learning Environment" (repository.cmu.edu/hsshonors/74), by Jaclyn Bernard (DC'10), became the one-millionth Research Showcase download. Besides Bernard's thesis, more than 1,300 other Carnegie Mellon papers were downloaded on Oct. 21.

The most downloaded paper to date is a pre-print of a 1997 article co-authored by Robotics Institute Professor David Bourne, "Design and Manufacturing of Sheet Metal Parts: Using Features to Aid Process Planning and Resolve Manufacturability Problems" (repository.cmu.edu/robotics/96), which has been accessed 10,589 times (and counting) since it was uploaded to Research Showcase in June 2009.

More than 10,500 full-text articles, dissertations and theses, technical reports and working papers authored by Carnegie Mellon faculty, staff and students are available through Research Showcase, and the repository is continually adding content.

Research Showcase also supports conference management and the publication of peer-reviewed open access journals.

Young Adults Experience CMU's World

■ Piper Staff

Pittsburgh served as a stage for One Young World in October as more than 1,300 young adults from 182 countries met to discuss global issues including business, global health, education, sustainable development, leadership and governance, human rights and social business.

The event included high-profile speakers such as President Bill Clinton, former Secretary General of the United Nations Kofi Annan, celebrity chef Jamie Oliver, 2006 Nobel Peace Prize winner Muhammad Yunus and Twitter founder Jack Dorsey.

"Carnegie Mellon University is pleased to have had the opportunity to partner with the Pittsburgh community to bring One Young World to our city," said Amy Burkert, vice provost for education. "It was gratifying to develop breakout sessions with campus partners and groups throughout the region to frame experiences to engage these young leaders from all over the world in dialogue about some of the most pressing issues of our time."

Carnegie Mellon assisted with four sessions that included:

Technology with a Global Heart

The TechBridgeWorld research group works closely with partners in underserved communities to create computing technologies designed to help them tackle challenges they face. TechBridgeWorld hosted a breakout session related to the One Young World Summit's plenary session on health issues for people with disabilities.

The One Young World delegates



PARTICIPANTS IN AN ETC SESSION LEARNED HOW IMPROV EXERCISES CAN LEAD TO NEW LEADERSHIP STYLES.

saw some of the state-of-the-art technology in the Field Robotics Center, learned about the role of information and communication technology in international development and worked in teams to design and present project concepts for addressing the needs of people with disabilities.

TechBridgeWorld staff members Ermine Teves and Sarah Belousov along with graduate students Hatem Alismail and Ronnell Perry ran the session.

Creative Leadership

Brenda Harger, an associate teaching professor, and Chris Klug, an assistant teaching professor, led a session at the Entertainment Technology Center.

Participants were given a hands-on look into design and development and how to manage creativity and foster innovation in interdisciplinary

group projects. That was followed by a workshop on iterative design and rapid prototyping, and the group playtested projects by current graduate students.

Sustainable Cultivation: Growing Greener Communities Across the Globe

Stephen Lee, head of the School of Architecture, participated in a session at the Phipps Conservatory along with Melissa Bilec, an assistant professor at the University of Pittsburgh; and members of the Phipps staff including Molly Steinwald, director of science education; Adam Haas, interpretive specialist; Melissa Hardin, science education specialist; and Joel Perkovich, sustainable designs and programs manager.

Richard V. Piacentini, executive director of Phipps Conservatory and Botanical Gardens, provided welcome remarks and the participants divided into smaller groups in which they took guided tours of the Center for Sustainable Landscapes and participated in discussions focusing on one of three themes: Energy, Water and Healthy Living.

Breaking the Mold: Innovative Schools

Carnegie Mellon developed a session to highlight innovative programs created by Pittsburgh public and charter schools that use research data to improve education. Ellen Romagni from the Gelfand Center was a session coordinator, and Angel Gonzalez and Lisa Premo provided logistical support.

The session introduced new models and innovative approaches, many developed with Carnegie Mellon faculty, staff and graduate students, to educating children and the process that was used to design these successful new programs. School administrators shared information about the creative features implemented in their programs and the research that is being conducted to document the impact of these features.

STUDENTS FIND PARTICIPATION REWARDING

■ Piper Staff

While Pittsburgh hosted the world's youth, some Carnegie Mellon students also had the opportunity to experience One Young World.

"Getting to hear Kofi Annan speak was very moving for me," said Lauren Murphy (TPR'13), who is pursuing her master's degree in business administration and works at Alcoa.

"I'm just really excited to take the knowledge I gained over these three really intensive days and apply it to the workplace as well as share my insights with my classmates at the Tepper School."

Amy McCarty (HNZ'13), who is pursuing a master's degree in public policy and management, was most impressed with her fellow delegates.

"These youth spoke about organizations they had founded to address an observed need. I cannot say who was most impressive: Catherine, who is adapting books and educational materials to be specific to her culture in Rwanda; Alberto, who is bringing wireless Internet to the primary schools in Belize; or Pamela, who is using decommissioned Cambodian land mines to make and sell jewelry."

After each One Young World Summit, the delegates are encouraged to go forward with their own projects and initiatives, with the goal of positive global change.

To date, almost four million people have been directly impacted by the work of One Young World Ambassadors. There are currently more than 125 projects and initiatives involving more than 100 countries.

McCarty concluded, "I can say that I was deeply humbled to be surrounded by so many young emerging leaders, achieving so much, and I hope that I can do my small part to add to the global solutions needed in today's connected world."



WE ARE MAKING A DIFFERENCE. CARNEGIE MELLON HAS CROSSED THE \$1 BILLION MILESTONE OF OUR INSPIRE INNOVATION CAMPAIGN. BUT WE ARE NOT DONE YET. THANKS IN PART TO THE SUPPORT OF THE CMU CAMPUS COMMUNITY, WE ARE EXPERIENCING THE AMAZING IMPACT THE CAMPAIGN HAS GENERATED ACROSS THE ENTIRE UNIVERSITY. VISIT CMU.EDU/CAMPAIGN FOR THE LATEST CAMPAIGN NEWS AND PROGRESS, OR TO MAKE YOUR GIFT TODAY. PROGRESS SINCE OCTOBER 1, 2012: \$10,583,221.

Nearing Completion

Restoration Wraps Up on Historic Margaret Morrison

■ Bruce Gerson

The disassembly of the scaffolding along the west side of the 1914 addition to Margaret Morrison Carnegie Hall signaled the massive restoration project is nearing completion.

The 15-month, \$3.7 million effort traversed the entire west façade, from the base of the Intelligent Workplace (IW) to the concrete running along the top of the arched basement windows. Work included replacing the terra cotta near the IW with a new multi-colored decorative balustrade made of glass fiber reinforced concrete; raising and installing new third-floor windows; replacing the decayed structural steel behind the brick exterior with new galvanized, stainless steel columns and beams; adding new rainwater drainage and hot water

heating systems; and making extensive reinforced concrete repairs above the vaulted Children's School windows.

Ed Hydzik, project manager for Campus Design and Facility Development, said the work was done with an environmental focus and with an aim to preserve its historic look. For example, 90 percent of the original bricks were used, the new energy-efficient windows were custom-made using the existing wooden frames; and the new mortar was modeled after the original 1914 lime-based mortar.

The lead architect for the project was Sheldon Goettel of Perfido Weiskopf Wagstaff + Goettel. The structural engineer was John Snyder of Atlantic Engineering, and the construction manager was Jendoco Construction Corporation.



A RESTORATION PROJECT HAS BEEN NEARLY COMPLETED ON THE WEST FAÇADE OF MARGARET MORRISON CARNEGIE HALL. WORKERS TAKE DOWN THE SCAFFOLDING ALONG THE ENTIRE WEST FAÇADE OF MMCH.

PHOTO BY TIM KAULEN

Disaster Management

Silicon Valley Demonstrates Community Approach to Communications

■ Jessie Hao

As devastating disasters like Hurricane Sandy have shown, traditional telecommunications infrastructure is highly vulnerable.

But a new project out of Carnegie Mellon Silicon Valley may have a solution that uses smartphones.

At the university's annual Disaster Management Initiative Workshop, "Making Smart Communities Resilient," Bob Iannucci and students demonstrated the new Survivable Social Networks (SSN) project.

The goal is to create a standalone Wi-Fi "bubble" to allow members of a community and emergency personnel to communicate within a local network. For wider communication, such as between two towns, individual "bubbles" could be networked through a satellite connection.

The system would have several

layers. Through a mini social network, residents could report incidents and municipal officials or emergency personnel could send out alerts and announcements, such as evacuation instructions.

"There is great power in this social networking concept when it is combined



ONLINE: CHECK OUT WWW.CMU.EDU/SILICON-VALLEY/DMI/WORKSHOP2012/PROGRAM.HTML FOR IMAGES AND DETAILS FROM THIS YEAR'S WORKSHOP.

with inexpensive, scalable and resilient infrastructure. We've created SSN such that it requires no installation and no training," Iannucci said. "Our hope is that this will become a tool that can be self-deployed at the neighborhood level, affording community members critical resources during a disaster and the ability to be resources to each other."

SSN is a part of the Silicon Valley Resilient Network (SVRN), a collaboration between CMUSV and the City of Palo Alto. Kenneth Dueker, director of Emergency Services for Palo Alto, said the city's partnership with the university is an asset to the Bay Area community.

"Because of [Martin] Griss and his leadership, CMUSV is different from the typical academic environment where concepts are often purely theoretical," he said. "There's certainly value to the academic side of things but we're trying to find points of tangency where the needs of our practitioner world meets academia."

But interest in the project expands even further. Mountain View Mayor Mike Kasperzak acknowledged the significance of the project and played a role in the demonstration. Lynn Brown, manager of Mountain View's Office of Emergency Services, said that SSN was something local community emergency response teams should consider.

A Good Neighbor

Carnegie Mellon continues to collaborate with industry and community members to create practical solutions to real-world problems.

Bruce Mueller, director of Next Generation Broadband Wireless Research for Motorola Solutions, emphasized the importance of community interaction during emergencies.

"The response from neighbors

before, during and after Hurricane Sandy is a sign of hope," he said. "It shows that people haven't given up on community but that it plays a critical role in communication during disasters."

One of the students participating in the demonstration had a personal experience to bring to the day's presentations.

Stu Kennedy, a student in CMU's Information Networking Institute, was stuck in New York after Hurricane Sandy and experienced first-hand the difficulties first responders had communicating with each other during and after the disaster.

"It makes the work we're doing on SSN both practical and meaningful," Kennedy said.

DMI Workshop

The third annual DMI workshop at the Silicon Valley campus at NASA Ames Research Center took place in early November.

"The key idea of our workshop this year was to focus on interoperability actions and low cost, open source technologies to simplify communications among citizens, first responders and emergency vehicles," said Martin Griss, DMI director.

The program included presentations from FEMA, American Red Cross, Motorola Solutions and other industry leaders.

CMUSV Distinguished Research Fellow Steven Ray also led an Emergency Vehicle Plugfest to collect data on measures of interoperability among mobile command and communication vehicles from Palo Alto, Mountain View, Sunnyvale and Monterey County.

Jessie Hao is a marketing coordinator at Carnegie Mellon Silicon Valley.



MARTIN GRISS (RIGHT) AND STUDENTS COLLABORATE WITH THE PALO ALTO MOBILE EMERGENCY OPERATIONS CENTER IN THE SURVIVABLE SOCIAL NETWORKS PROJECT.

COURTESY OF CMU SILICON VALLEY

A Merry Meal

Madrigal Dinner Promises Evening of Mirth, Music and Magic

■ Heidi Opdyke

You don't have to be a king to be entertained like one.

In a tradition that stretches nearly 30 years, Carnegie Mellon is celebrating the end of the semester and the start of the holiday with a madrigal dinner.

The event is sponsored by the Office of Orientation, Student Affairs, Alumni Relations, Student Senate, Carnegie Mellon School of Music, Student Dormitory Council and CulinArt.

"I like the event because it is different and showcases the talents and curiosity of our students," said Anne Witchner, assistant dean of Student Affairs. "It also highlights for me what a unique place Carnegie Mellon is. I think it is wonderful to have events that faculty and staff can bring their families to."

Veronica Kawaka (DC'11 '12) is assisting Witchner with the festivities and transporting guests back in time.

"We wanted to keep it in tune with the Scottish cultural surroundings at CMU," she said. "We're going to incorporate some Highland game elements and a Scottish court."

Royal twins and a case of mistaken identities will be the center of the merriment.

Performers at the event will be in costume, and Witchner said guests may dress up as well. The event has been held off and on since 1984, with the last one in 2008.

"Our campus lends itself to this

Madrigal Dinner

MUSIC, MAGIC, MIME, MIRTH AND MORE!

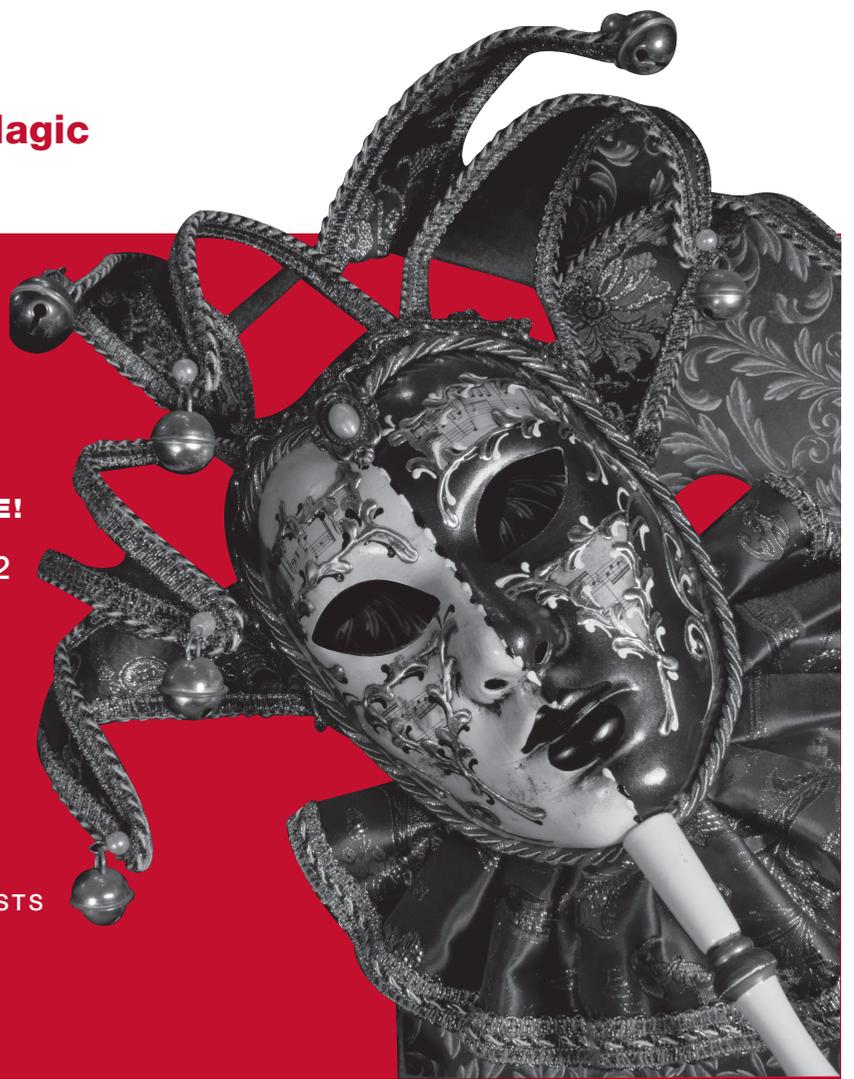
CARNEGIE MELLON MADRIGAL DINNER 2012

SATURDAY, DEC. 1

**6:30 P.M. RECEPTION, UNIVERSITY CENTER
FIRST AND SECOND FLOORS**

7:30 P.M. DINNER, RANGOS BALLROOM

**\$10 CARNEGIE MELLON STUDENTS AND
CHILDREN UNDER 12; \$20 ALL OTHER GUESTS**



event because of the diversity of talents via our academic programs," Witchner said. "The natural tie to the School of Music is huge and the talents of students from all over campus who have performed, acted in it, written the script and more makes it special."

The evening, which is open to the public, will include strolling entertainers including jugglers, stilt-walkers and "Acts of Alchemy" from Karen Stump, director of undergraduate studies and

laboratories for the Department of Chemistry.

The School of Music's Chamber Singers, directed by Michael Van Camp, are a featured part of the evening.

Will Weiner, chair of the Undergraduate Student Senate, will serve as master of ceremonies.

Tickets are on sale and available at the University Center Information Desk. For more information, call 412-268-4886.

Madrigal Dinner Bill of Fare

Wassail

Roast Water Chestnut Salad

Hearty Breads

Chicken Strudel

(or vegetarian option)

Rustic Roasted Vegetables

School of Music Celebrates Holiday Tradition

■ Dana Casto

It's a treasured Carnegie Mellon tradition. A time to enjoy life, said Robert Page.

"The Annual Holiday Concert is just that — a celebration of the holidays, including Christmas and Chanukah, as well as the season itself," said Page, the Paul Mellon University Professor of Music and director of choral studies. "It's a time to leave academia for a while and just enjoy life."

Under Page's direction, the School of Music will present two performances of its holiday tradition on Friday, Dec. 7. The first performance will be at noon in the University Center's Rangos Ballroom, and the second performance will be at 8 p.m. in the Great Hall of the College of Fine Arts.

Both performances are free and open to the public with first-come, first-served seating. These concerts will showcase the combined forces of the Carnegie Mellon Philharmonic, Concert Choir and Repertory Chorus.

This year's program will feature "Une Cantate de Noel (Christmas

Cantata)" by Arthur Honegger. This masterpiece works together traditional carols sung in their native languages — French, German, English and Latin. Written in 1953, this is believed to be the last composition Honegger wrote before he died.

A variety of traditional carols will round out the concert, including: "Gloucestershire" and "Boar's Head Carol" for choirs and brass, which was commissioned and recorded by River City Brass with the Mendelssohn Choir of Pittsburgh; The Biebl "Ave Maria," a poignant a cappella setting, a long-time favorite of choruses and a major bestseller by Chanticleer; and the late Marvin Hamlisch's popular "Chanukah Lights," a festive song celebrating the traditional Jewish holiday with a special dedication to Hamlisch, who was a cherished friend of the entire Pittsburgh community.

Graduate student Alysoun Kegel will share the conducting duties for the concerts and will conduct two of the dances from Tchaikovsky's ballet, "The Nutcracker." Michael Van Camp will

WHAT:

ANNUAL HOLIDAY CONCERT

WHEN/WHERE:

FRIDAY, DEC. 7, NOON,
UNIVERSITY CENTER
8 P.M., GREAT HALL OF THE
COLLEGE OF FINE ARTS

direct the women of the chorus and the woodwinds of the orchestra in a Meredith Willson favorite, "It's Beginning To Look a Lot Like Christmas." Music icons such as Perry Como, The Fontane Sisters and Bing Crosby recorded Willson's popular holiday classic.

Concertgoers will leave the Great Hall on a high note with the exultant "Hallelujah Chorus" from Handel's Messiah.

For those who cannot attend in person, the noon performance will be broadcast live on WQED-FM 89.3.

For more information about the Annual Holiday Concerts, go to <http://music.cmu.edu>.

Page To Retire

The two performances in December will be Robert Page's final holiday concerts at CMU. Page announced his retirement at the end of this academic year after more than three decades as a member of the faculty.

Considered by his peers as the "Dean of American Choral Conductors," Page's distinguished career has included two Grammy Awards, the Prix Mondial de Montreux, the Grand Prix du Disque, and Pennsylvania's "Artist of the Year" award. The American Record Review has called Page "a national treasure" in recognition of his extensive catalog of recordings with choirs and orchestras — a collection that spans more than 44 discs.

"Maestro Page has been a prominent and enormously important member of our faculty for much of the past 37 years," said Denis Colwell, head of the School of Music. "His contributions to the school are too numerous to list and the prospect of finding a suitable replacement for this fabulous musician and pedagogue is daunting, to say the least. We will be looking for ways to honor Maestro Page throughout this school year. Please join me in congratulating him on his impending retirement, and help me thank him for his sacrifices, contributions, and hard work on behalf of generations of music students."

Andy Award Winners Exemplify Community, Dedication and Passion

CONTINUED FROM PAGE ONE

Outstanding Dedication: Judy Abrams, Cyert Center for Early Education

More than 1,000 CMU employees and students with children have worked with Judy Abrams during the past 38 years.

Abrams is program director for the Cyert Center for Early Education. Previously she was an early childhood educator and educational coordinator.

“The reputation of The Cyert Center for Early Education as a place of high quality is largely due to the dedication of Judy Abrams and her ability to look at obstacles as challenges to overcome on the path to excellence,” said Sandy Johns, an educational coordinator who nominated Abrams for the award.

Johns said that Abrams has been dedicated to the staff, parents and children at the Cyert Center, and has made contributions to the field of early childhood education at local and national levels.

Gina Casalegno, dean of Student Affairs, was one of many parents who lauded Abrams.

“I know that as a new parent ... I found my days at Cyert during the welcoming period as some of the most special and tender times we spent as a family as we built community with all members of the Cyert family,” Casalegno wrote. “That kind of community doesn’t just happen.... That has everything to do with Judy Abrams.”

Outstanding Commitment to Students: Maxine Leffard, Civil & Environmental Engineering

As the graduate program administrator for Civil and Environmental Engineering (CEE), Maxine Leffard works with students from the application process through graduation.

She has worked to create a monthly graduate program coordinator’s meeting to discuss best practices, policy changes and student issues, and is available to students 24/7.

“She sincerely cares for the students and their well-being,” said David A. Dzombak, the Walter J. Blenko, Sr. University Professor, who nominated Leffard. “Maxine provides an outstanding example of professional behavior and commitment for our students. She is an outstanding role model in addition to being an outstanding Graduate Program Administrator.”

Saurabh Taneja, a graduate research assistant, said Leffard takes the time to know each student and plans many social activities, organizes talks and provides administrative and academic assistance.

“I sincerely feel that Maxine loves her job and her students and is fully committed toward making sure that graduate students have a comfortable stay at CMU and in Pittsburgh during their pursuit of advanced degrees,” Taneja wrote.

Leffard has been honored with a College of Engineering Staff Award and was an Andy Award nominee in 2008.



THIS YEAR’S ANDY AWARD WINNERS (FROM LEFT) INCLUDED WARREN “CHUCK” WHITTAKER, CHRISTINA COWAN, BRIAN PARKER, CARRIE CHISHOLM, SONYA BELL, MAXINE LEFFARD AND JUDY ABRAMS. NOT PICTURED: DAN JENKINS, STEPHEN CHABASSOL, AMANDA BERNEBURG AND JOHN PRZYBORSKI.

Outstanding Innovation: The iTunes U Course Team, including Amanda Berneburg, Stephen Chabassol, Carrie Chisholm, Dan Jenkins, Brian Parker and John Przyborski

Thanks to the work of the iTunes U Course Team, a new iPad Programming class not only allowed CMU students to learn about creating apps, but also opened the Human-Computer Interaction Institute’s expertise to a global audience.

The course, co-taught by CMU Assistant Professor Niki Kittur and top industry developers, has more than 107,000 subscribers, and there have been more than 234,000 views of the lecture videos. Apple promoted the course on the front page of the main iTunes U site.

Members of the Marketing and Media Relations’ digital productions and Web groups worked with Media Technologies to capture high-quality video recording of lectures with a live-mix of the camera feed and on-screen presentation material.

“The integrated iTunes U Course Team developed an efficient workflow expertise that allowed each of the 28 lecture videos to be edited, closed captioned, compressed and posted to CMU’s iTunes U site within a week of being captured, all while maintaining Apple’s quality specifications for the course,” wrote nominator Bonnie Cersosimo, associate vice president for Marketing and Media Relations.

Kittur said “without the team’s dedication, the course would have never been able to have the impact and dissemination that it did.”

Outstanding Culture: Christina Cowan, Institute for Complex Engineered Systems

Christina Cowan, special projects coordinator and executive assistant in the Institute for Complex Engineered Systems (ICES), is recognized for fostering a balanced and inclusive workplace.

“Christina has been faithful to the ICES mission, being responsible for literally connecting people with their physical environment,” wrote Alicia Angemeer, external relations and outreach coordinator. “This is an accomplishment that she executes every work day with her usual positive and humorous approach to practicality.”

Cowan has initiated a number of streamlined processes including creating databases, registration systems and event websites.

“Having the best possible working environment is one of Christina’s primary goals. She accomplishes this with her enthusiasm,” wrote Rhonda Moyer, administrative and financial managers for ICES. “She is constantly evaluating how things could be done and strives to make the institute as successful, visual and exciting as possible.”

Cowan has taken steps to create a more welcoming work environment through understanding, encouragement and education. She has been involved in many CMU committees, is a member of Staff Council, chair of the CIT Staff Awards and spearheaded a CIT cookbook to benefit the National Pancreas Foundation.

Outstanding University Citizenship: Sonya Bell, University Police

Sonya Bell, a member of University Police, displays a clear passion for serving and caring for the students at Carnegie Mellon.

Her dedication has resonated so much that 44 students wrote letters in support of her Andy Award nomination.

Patrick Hogan, a student and resident assistant, called her an energetic member of the university community.

“She has made all of my friends feel very safe and protected and watched out for, on a personal level. ... That contribution has not gone unnoticed amongst my friends.”

Resident Assistant Colin Chaderton noted that not only is she an excellent officer but she has developed a connection between CMU Police and Scobell House.

“For the residents in this dorm, CMUPD is not some anonymous group of officers in police cars that show up only to crack down on nonsense or escort someone to the ER, they are people like Sonya Bell who put their heart into their work and leave positive impacts even beyond their call of duty,” he wrote.

Outstanding Community Contributions: Warren “Chuck” Whittaker, Robotics Institute

Warren C. Whittaker’s nominators call the field robotics specialist an exceptional systems engineer who loves what he does and inspires others with his work.

CONTINUED ON PAGE SEVEN

PHOTO BY KEN ANDREYO

“Chuck is greatly appreciated by the faculty because of his always find-a-way, never-say-impossible attitude. Time and effort are never factors, and we have yet to see a barrier to his delivering on research objectives,” wrote David Wettergreen, a research professor in robotics. “In many ways, Chuck Whittaker is the oil that keeps the Field Robotics Center running smoothly. He clearly loves what he does and inspires others with his work.”

Whittaker is recognized for crucial but often unsung contributions to major robotics projects, including the Three-Mile Island decontamination robots and the Pioneer robot built for Chernobyl. He helped found RedZone Robotics and Workhorse Robotics. He is the driving force behind decades of mining robots that include automated machines, mine mapping and rescue vehicles.

David Kohanbash, senior research programmer at the Robotics Institute, wrote that “Chuck volunteers whenever something needs to be done.”

Whittaker also mentors staff and students, and the CMU “Girls of Steel” FIRST (For Inspiration in Science and Technology) Robotics Team.

Honorary Awards for Exemplary Service: President Jared Cohon and Provost and Executive Vice President Mark Kamlet

The Andy Awards selection committee extended honorary Andy Awards for Exemplary Service to Jared Cohon and Mark Kamlet.

“For the past 15 years, Drs. Cohon and Kamlet have been tireless supporters for the entire staff community of Carnegie Mellon,” said Staff Council President Jeffrey Harris during the awards ceremony. “Their vision and leadership have enabled our staff to achieve more, to have greater impact on our research, students, programming, our educational mission and to move the entire institution into the 21st century. They have also been incredible supporters of the Andy Awards, and have demonstrated many of the same qualities that the committee looks for in Andy Award recipients.”

The Andy Awards named for Andrew Carnegie and Andrew Mellon, are a tribute to the spirit of teamwork and dedication embodied by the staff at Carnegie Mellon.



STAFF COUNCIL PRESIDENT JEFFREY HARRIS PRESENTS PROVOST AND EXECUTIVE VICE PRESIDENT MARK KAMLET AND PRESIDENT JARED COHON WITH HONORARY ANDY AWARDS.

Posthumous Award for Outstanding Dedication: Rich Lyons, copy center technician

Rich Lyons, a longtime and well-known copy center technician who died earlier this year, received a posthumous Andy Award for Dedication. The award was

presented to his sister, Maureen Twigg.

President Cohon noted his compassion for others. He said Lyons once took a PTO day to take a fellow worker to a doctor’s appointment and literally gave a University of Pittsburgh shirt off his back to a colleague who was a Pitt fan.

Office of Admission Travels Far and Wide

■ Abby Simmons

In a university first, road warriors from the Office of Undergraduate Admission are visiting all 50 states this fall.

Mike Steidel, director of admission, is making inaugural visits to Great Plains states such as Montana, South Dakota and Wyoming in addition to his annual trip to New England. He discussed some of his department’s recruitment efforts by phone while waiting for a flight at Boston’s Logan Airport.

“We targeted areas this year that we haven’t been as successful at recruiting from in the past,” Steidel said. “We want our student body to be as representative as possible.”

As the university’s reputation has grown and technology has evolved, the team has elected to participate in fewer college fairs. Staff members continue to visit individual public and private schools, although their most popular events are evening information sessions in targeted cities. The CMU-focused events typically attract 50 to 300 prospective students and parents.

CMU was one of the first admission departments in the country to move away from using “inquiry cards,” an industry standard for collecting prospective students’ contact information. Admission staff and alumni volunteers

with the Carnegie Mellon Admission Council direct students to connect with the office online.

Jason Nevinger, associate director of admission, said social media has become an essential part of the team’s engagement strategy for students “because that’s the environment they are living in.” The vast majority of phone calls and emails his office receives come from parents.

Although technology has changed the way prospective students and parents communicate with admission professionals, the types of questions they ask have remained consistent — they often focus on academic quality and affordability.

“Students today seem to be more anxious about their chances for admission and making sure the school they choose is a good fit,” Steidel said.

Global Awareness

While expanding the geographical reach of U.S. visits, the Office of Undergraduate Admission continues to recruit abroad. Nevinger traveled to China, Hong Kong, Singapore, South Korea, Taiwan and Thailand, with recruiters representing other University Athletic Association (UAA) schools in September. In previous years, he’s visited India

ASSISTANCE FOR HURRICANE SANDY VICTIMS

In the wake of Hurricane Sandy, Carnegie Mellon’s Office of Admission, like many other admission offices across the country, pushed back the traditional deadline for early admission to Nov. 5. Director of Undergraduate Admission Mike Steidel said additional accommodations for early applicants needing more time will be considered.

“We’re trying to be as flexible and as accommodating as we possibly can,” Steidel said in an interview with USA Today. “If they’re applying for early decision here, they’re basically saying, ‘Carnegie Mellon is my first choice.’ So we definitely want to be flexible for students that really want to be here.”

and the Middle East.

UAA admission staff hold collective information sessions that include a five-to-ten-minute introduction to each school followed by a traditional college fair. In some instances, they host a general question-and-answer session about applying to competitive U.S. universities.

“We are constantly on the go during these trips,” Nevinger said. “I see the insides of the hotels, the schools and the airport. I’ve made four or five trips to Beijing, and I was thankful to have an afternoon off this year to see the

Forbidden City.”

More than 17,000 domestic and international students applied for undergraduate admission for fall 2012.

“It’s a challenge to manage all of this interest and still work to the individual student,” Nevinger said. “Some of our peer institutions no longer conduct interviews or set aside the month of April like we do to focus on our yield. We want students to say, ‘CMU cares about me.’”

For more information about CMU admission events visit <http://admission.enrollment.cmu.edu/events>.

Pedal and Park

Cyclists Have Added Options on Campus Thanks to Graduate Student Assembly

■ Bruce Gerson

There's a lot more parking on campus these days. And it's free, if you're riding a bicycle.

The new, free parking for bicyclists comes courtesy of the Graduate Student Assembly (GSA), which recently purchased and installed 11 bicycle racks and four maintenance stations around campus. Eight of the 11 are stainless steel racks for outdoor use. Three have been placed indoors, two in the Gates Garage and one in Mellon Institute, down the hallway to the right off the Bellefield Street entrance.

The maintenance stations include a hanger to elevate and hold the bicycle steady while making repairs, an air pump and basic tools needed to make minor adjustments — from repairing a flat tire to adjusting brakes.

A committee of GSA officers and Carnegie Mellon staff members selected the locations (see below) for the racks and repair stations. Staff members included Director of Parking and Transportation Services Michelle Porter, Fitness Operations Manager Pattye Stragar, Environmental Coordinator Barb Kviz and Facilities Management Services Associate Director for Client Services Kyle Tomer.

Carolyn Norwood, a Ph.D. candidate in the Materials Science and Engineering Department and vice president of communications for the GSA, said the nearly \$30,000 in equipment was funded by the GSA's capital reserves, which had built up over the past few years. She said the capital reserve must be used for projects that benefit graduate students over the long term.

"After soliciting input from the graduate student body about potential capital investments, GSA received overwhelming feedback about the bike rack situation on campus," Norwood said. "We looked into this potential need and found that, indeed, many of the current bike racks were consistently overcrowded.



GRACE HECKMANN, PRESIDENT OF THE GRADUATE STUDENT ASSEMBLY, SHOWS SOME OF THE MAINTENANCE STATION'S TOOLS.

"In addition, in the process of scouting out locations for new racks, we saw a lot of them were in a state of disrepair, some corroded and rusted to the point of falling over. Due to the popularity of biking to campus as well as our large capital reserves, GSA decided to invest in high-quality stainless steel bike racks and maintenance stands. We expect that this investment will serve the greater campus community for many years to come," Norwood said.

Norwood and Porter hope the bicycle-friendly enhancements continue to promote biking as a healthy, environmentally friendly alternative mode of

transportation to and from campus.

Last month Parking and Transportation hosted a Bike Community Forum in which representatives from Bike Pgh spoke about bike safety and the many bike trails in the area.

"We also spoke about building a communication network for CMU bicyclists, like a d-list or list-serv, safety issues, particularly at the intersection of Forbes and Morewood, and holding events such as 'Car-Free Fridays' and a transportation fair with a focus on bicycles," Porter said.

She said Parking and Transportation and FMS are looking to identify

additional locales for racks and repair stations.

Last April, CMU's Mechanical Engineering Department was honored as a bicycle-friendly workplace by the League of American Bicyclists for its repair stop and racks near Scaife Hall and, for helping to launch "Heels on Wheels," a program aimed at encouraging students, faculty and staff to bike to work.

To celebrate National Bike to Work Day, CMU has partnered with Bike Pgh to host a Bike to Work Breakfast. The next National Bike to Work Day is May 17, 2013.

Google Bikes

Google is gearing up for a new personal transportation option for its employees and associates between its offices at Bakery Square and Carnegie Mellon.

While a shuttle already exists, this new ride-sharing program would feature the bright orange bicycles docked behind Hamburg Hall.

When up and running, Google affiliates will be able to sign up for a key to access the bikes from docks at CMU and Bakery Square between 6 a.m. and midnight.

For additional information or questions, contact the Parking & Transportation Services at 412-268-6278.

New Bicycle Racks:

- Hamburg Hall (right of the high bay door)
- Doherty Hall (back entrance)
- Hammerschlag Hall (side entrance) - 2 racks
- Porter Hall (Frew Street side entrance)
- Tepper School (near Frew Street overhang)
- Purnell Center (porch area, Warner Hall Side) - 2 racks
- Gates Garage (first floor) - 2 racks
- Mellon Institute (down the hallway to the right off the Bellefield Street entrance)

New Maintenance Stations:

- East Campus Garage - 2 stations
- Gates Garage (first floor)
- Mellon Institute

NOVA Profiles CMU Research

The Nov. 14 episode of PBS/NOVA scienceNOW, "What Will the Future Look Like," featured two Carnegie Mellon research projects. The episode is available online at www.pbs.org/wgbh/nova/sciencenow/.

Reporter Challenge to Just, Mitchell Leads to Mind Reading 2.0

■ Shilo Rea

Carnegie Mellon professors Marcel Just and Tom Mitchell shocked the world in 2008 with their thought identification research, using a brain scanner to demonstrate, for the first time, the ability to read people's minds.

They did this by applying machine-learning techniques to brain imaging data to identify an individual's thoughts of concrete objects. A demonstration of how the process works — from one computer displaying a labeled picture of a concrete object (e.g. hammer) to a person in the MRI scanner, to a separate computer analyzing the resulting brain image to determine which object was shown — was featured on 60 Minutes.

Since the initial discovery, Just and Mitchell have been working to identify other types of thoughts besides concrete objects — from numbers to emotions to social interactions — all involving a visual stimulus (usually a printed word) for the person inside the brain scanner to think about.

That was, until recently.

In August, a PBS/NOVA scienceNOW media crew visited CMU's Scientific Imaging and Brain Research (SIBR) Center. Host David Pogue, who served as the research subject, was shown 10 pairs of objects two times while in the fMRI. With the cameras rolling, the brain analysis computer then correctly identified each object that Pogue had been thinking about.

Pogue was impressed but unsatisfied. As an amateur magician, he said he found it disquieting that the computer that presented the words "knew" what he would be thinking about. He was concerned that the presentation computer and the brain analysis computer could have been in cahoots with each other.

He challenged the research team to find some way to cut the presentation computer out of the loop, so that only he, Pogue, knew what he had been thinking about at any given time.

The team accepted the challenge.

"We had never tried anything like this before in the lab, let alone on national TV," said Just, the D.O. Hebb



TOM MITCHELL (LEFT), DAVID POGUE AND MARCEL JUST PUSHED SCIENCE FORWARD WHILE FILMING A SEGMENT FOR PBS/NOVA SCIENCENOW.

Professor of Psychology in the Dietrich College and director of CMU's Center for Cognitive Brain Imaging. "But the theory said it should be possible."

Mitchell, the E. Fredkin University Professor of Machine Learning in the School of Computer Science, added, "I always tell my students not to mess with a computer demonstration that works."

The team constructed a new experiment on the fly, and Pogue went back into the scanner. This time, nothing was presented on the screen. Instead, he could choose between two objects, a skyscraper or a strawberry. Over a series of 10 trials, he thought about a word and then wrote it down.

When the scan was complete, Just, Mitchell, Pogue and the video crew anxiously waited to see whether the brain analysis computer could correctly identify Pogue's thoughts, despite no explicit instruction of which word he should think of, and that the computer had never seen a person's fMRI data for the two words, "strawberry" and "skyscraper."

With the cameras rolling, the analysis computer issued the correct identification all 10 times. It was a 100 percent match and a major scientific experiment producing a fascinating new finding, done in the context of a demo for a science documentary.

"We were all nervous about trying this experiment for the first time with the cameras rolling," Mitchell said. "But, we had seen before that our computer model had successfully predicted neural representations for new words, and that these neural representations are remarkably similar across different people."

Just added, "It's exciting to know that it is possible to identify internally generated thoughts, and something we will follow up on more formally in our future studies."

Treuille's EteRNA Taps Into Online Game Play

■ Byron Spice

The same NOVA ScienceNOW episode also included a profile of Adrien Treuille, assistant professor of computer science and robotics, and featured EteRNA, his unique research project that taps online game play to explore RNA design.

EteRNA was the first online game to tap the wisdom of the crowd and test the results in a wet lab. Players use the latest computer modeling programs to create possible solutions to RNA design challenges. The best of their virtual designs are then synthesized in a biochemistry lab at Stanford University and evaluated to see if they work in real life.

Treuille leads the project with Rhiju Das, an assistant professor of biochemistry at Stanford, and Jeehyung Lee, a Carnegie Mellon Ph.D. student in computer science.

The game already has engaged more than 30,000 citizen-scientists in the study of RNA design. Treuille says it has helped identify a number of people, some without formal science training, who display a strong aptitude for RNA design and are generating important scientific insights.

Filming of the ScienceNOW episode occurred this summer in California, where Treuille is spending a leave of absence. EteRNA was featured in The New York Times when it launched last year and was the subject of a Wired magazine article this summer.

Two Recognized for Research in Qatar

■ Sarah Nightingale

Khaled Harras, an assistant professor of computer science at Carnegie Mellon in Qatar, and Carnegie Mellon Qatar computer science 2012 graduate Dania Abed Rabbou were among a group of 12 researchers and students that received awards for their groundbreaking discoveries at the Qatar Foundation's Annual Research Forum.

The awards aim to inspire collaboration for future research and advance the nation's developmental goals.

Harras, in collaboration with Egypt-Japan University of Science and Technology in Egypt, was awarded Best Computing and

Information Technology Research Program of the Year for OPERETTA: An Optimal Deployable Energy Efficient Bandwidth Aggregation System. The award comes with a \$100,000 cash prize for use in future research.

Rabbou's senior thesis last year, "SCOUT: Extending the Research of Social-Based Context-Aware Ubiquitous Systems," received the award for Best Student Computing and Information Technology Research of the Year. Harras and computer science post-doctoral associate Abderrahmen Mtibaa were Rabbou's advisers. The award came with a cash prize of about \$5,500.

PHOTO BY SHILO REA

ECE Celebrates New Partnership with Portuguese Business School

■ Chriss Swaney

Carnegie Mellon's Department of Electrical and Computer Engineering and the University of Porto's Business School in Porto, Portugal, have embarked on a new double-degree graduate program in engineering and business.

A special event celebrated the program launch in Portugal. CMU's Ed Schlesinger and James Hoe joined Nuno de Sousa Pereira, dean of the Porto Business School; Jorge Farinha, vice dean of the Porto Business School; Sebastião Feyo de Azevedo director of the faculty of engineering of the University of Porto; Carlos Oliveira, Portugal's secretary of state for Entrepreneurship and Innovation; and Allan Katz, U.S. ambassador to Portugal, at a program that included a panel discussion about "Technology, Entrepreneurship and Management Education." Representatives from several national and international IT companies and entrepreneurs also participated.

"We have our first students enrolled in the new program, and we expect the initiative to grow as more companies globally seek the problem-solving, managerial and technical skills acquired through engineering and business studies provided by this double MS MBA experience," said Schlesinger, the David Edward Schramm Memorial Professor and head of CMU's Electrical and Computer Engineering Department.

The two-year program gives participants the opportunity of studying one year in Portugal at the University of Porto and another year in the U.S. at Carnegie Mellon. Students are required to meet academic requirements from both universities to receive a master's

degree in electrical and computer engineering from Carnegie Mellon and a master's degree in business administration ("The Magellan MBA") from Porto Business School.

Over the past decade, increasing numbers of engineering students have found career opportunities from startup companies to venerable consulting firms and Wall Street. Industry analysts and recruiters report that engineering students find unique opportunities in business because of their sharply honed technology skills and team building experience.

"This new program builds on the longstanding relationship developed with the successful ICTI program (Information and Communication Technology Institute) in which Carnegie Mellon has partnered with a number of leading Portuguese universities," Schlesinger said.

"Bringing together engineering and business in this double-degree program will be a major step toward preparing the next generation of highly skilled individuals that will be able to handle the most advanced technologies and related products while keeping at all times a business and managerial perspective.

We expect to observe here the formation of a new breed of top engineers that are able to understand the language and practices of business and to effectively use soft skills such as communication, team management, negotiation or leadership to help companies achieve success in the marketplace in very complex organizational settings," Farinha said.

For additional information about the double degree see <https://www.ece.cmu.edu/programs-admissions/study-abroad/graduate.html>.

Gittis Was Named Finalist for Eppendorf & Science Prize for Neurobiology

■ Jocelyn Duffy

Aryn Gittis, an assistant professor in the Department of Biological Sciences and the Center for the Neural Basis of Cognition, was a finalist in the competition for The Eppendorf & Science Prize for Neurobiology.

This international prize encourages the work of promising young neurobiologists by providing support in the early stages of their careers. It is awarded annually for the most outstanding neurobiological research by a young scientist, as described in a 1,000-word essay based on research performed during the past three years. Published in the Oct. 5 issue of *Science*, Gittis's essay, "Striatal Interneurons: Causes or Cures for Movement

Disorders?" describes her research on a group of neurons located in a brain region called the striatum that show abnormalities in both the rate and timing of their firing in patients with movement disorders.

The striatum is the largest part of the basal ganglia, a primary motor control system of the brain. Gittis's research interests focus on the organization and function of neural circuits in this area. A wide range of diseases are associated with dysfunction of the basal ganglia, including movement disorders such as Parkinson's disease and dystonia, psychiatric disorders such as obsessive-compulsive disorder and depression, and various forms of addiction.

"Developing a better understanding

of how neural circuits are organized in the basal ganglia brings us closer to the ability to develop better treatments for a broad spectrum of human diseases," said Gittis, who joined the Department of Biological Sciences in August 2012.

Gittis and fellow finalist Bertrand Coste from the Research Center of Neurobiology-Neurophysiology of Marseilles, France, and this year's winner of The Eppendorf & Science Prize for Neurobiology, Marlene Cohen, who is also a member of the Center for the Neural Basis of Cognition and a faculty member at the University of Pittsburgh, were recognized at the annual meeting of the Society for Neuroscience in mid-October in New Orleans.

NEWS BRIEFS

Alumni Association Seeks Service Award Nominations, New Board Members

The Alumni Association is accepting nominations in the service categories for alumni and students through Dec. 1, to be awarded at the 2013 Alumni Awards. An online nomination form, list of current and previous award recipients, and descriptions of the award categories can be found at www.alumni.cmu.edu/awards. If you are unable to submit your packet before the deadline, it will be filed for the 2014 award selections. For more information, please contact the Alumni Association at 1-800-226-8258 or alumni-awards@andrew.cmu.edu.

The Alumni Association also is seeking nominations for new board members for its 2013 class. Five new members will be elected to serve four-year terms beginning July 1, 2013. To view the Alumni Association Board Frequently Asked Questions and access the AAB Nomination Form, visit <http://alumni.cmu.edu/s/1410/alumni/index.aspx?sid=1410&gid=1&pgid=375>.

Questions? Contact Lynn DeFabio at defabio@cmu.edu. The deadline for nominations is Nov. 30.

Abel Named Learning and Development Director

Kim Abel, director of Housing & Dining Services since 2007, has been named director of Learning & Development within Human Resources, effective Feb. 1. As director of L&D, Abel will run the university's staff development and education programs.

"Kim's proven leadership and teaching capabilities, her passion, creativity and strong work ethic, her deep and abiding commitment to the university, and her keen ability to identify and fulfill customer needs will be important foundations as she builds a program that furthers the university's mission and also solidifies CMU as an employer of choice," wrote Dianne Kenney, associate vice president for Human Resources, and Michael Murphy, vice president for Campus Affairs, in an email announcement.

Kenney and Murphy praised Abel for shepherding "profound improvements in the university's residential housing throughout the campus and community," and for putting dining "on a path of continuous improvement."

Murray Named BXA Director

M. Stephanie Murray has been named director and academic adviser of the BXA Intercollege Degree Programs, part of the College of Fine Arts. Murray also serves as adjunct assistant professor at CMU.

In her new role, Murray will increase her involvement in the administration of the BXA programs, working with affiliated departments, schools and colleges that are part of this cross-disciplinary experience.

The three BXA bachelor's degree programs offer students the opportunity to combine fine arts and other areas of study for "integrated degrees" that are increasingly popular — not only among students, but also among companies recruiting graduates who are both academically and creatively accomplished.

"We're confident that Stephanie's leadership will be key to helping the BXA programs continue to flourish and grow," said Dan Martin, dean of the College of Fine Arts. "We're seeing more students investigating where a BXA degree can take them, and Stephanie will help them craft a plan."

CMU's Alcohol and Drug Policies Online

The university's annual alcohol and drug policies brochure, compiled as a resource by staff in the Office of the Dean of Student Affairs, is now available on the Student Affairs website. Carnegie Mellon takes seriously its obligation to ensure community members understand Pennsylvania law and the university's policies and expectations regarding alcohol and other drugs. Additionally, the university seeks to provide information on the support available for anyone in need. For more information, questions or comments, call 412-268-2075.

Six Faculty Named Fellows of Mathematical Society

Lenore Blum, Irene Fonseca, Alan Frieze, David Kinderlehrer, Walter Noll and Dana S. Scott have been selected to the first class of fellows named by the American Mathematical Society. A total of 1,119 people representing more than 600 institutions are in this initial class.

The AMS Fellows designation recognizes members who have made outstanding

Volunteerism A Part of United Way

CONTINUED FROM PAGE ONE

45-minute weekly sessions.

“We are provided a structured workbook, which centers around values and encourages discussion on topics such as respect, commitment, careers and volunteerism. We can help with homework, or we can play games that build teamwork, it’s pretty open. The program

also brings in speakers and provides field trips,” Schaller said. “There are usually three or four mentor sessions going on in each classroom, as well as the people overseeing it. We have support.”

Communities in Schools, a United Way organization, oversees the program at the school. But the mentor relationship goes beyond the classroom. One of their mentees was invited to participate in a math camp over the summer, and she invited Gruber and Schaller to visit.

partnerships with local government, corporations, schools and agencies.

According to a 2007 study commissioned by the United Way of Allegheny County, more than a third of all fifth graders in the county cannot adequately read, and in many of the high schools, one in two students drop out.

But it’s not just youth who benefit from United Way agencies. Financially struggling families, seniors, young adults at risk and more are aided by the many health and service organizations that receive assistance.

Megan Worbs, administrative assistant for Equal Opportunity Services at CMU, said that Carnegie Mellon’s United Way site is promoting an “Agency of the Week” throughout the campaign, with the idea of informing the



CMU CAMPAIGN CAN AID HURRICANE VICTIMS

HURRICANE SANDY HAS AFFECTED MILLIONS, AND MILLIONS MORE ARE STEPPING UP TO HELP. YOU CAN, TOO, THROUGH CARNEGIE MELLON’S 2012 UNITED WAY CAMPAIGN THROUGH DEC. 21.

UNITED WAY WORLDWIDE HAS CREATED A HURRICANE SANDY RELIEF FUND THAT IS BEING MANAGED BY UNITED WAY OF NEW YORK CITY. YOU CAN GIVE DIRECTLY TO THE FUND BY MAKING YOUR PLEDGE THROUGH THE CMU CAMPAIGN USING CODE 11059086.

ALL CONTRIBUTIONS, NO MATTER THE AMOUNT, WILL HELP TO MAKE A SIGNIFICANT IMPACT. MAKE YOUR PLEDGE TODAY AT WWW.CMU.EDU/HR/UNITEDWAY/

“I think it meant a lot to her to have us visit and hear about the program, and see a presentation that she had worked on with her classmates,” Gruber said.

The United Way of Allegheny County is committed to helping children succeed in school through its Be One In A Million initiative. With opportunities for tutors and mentors, the United Way’s goal is to recruit 4,000 volunteers through

university community of the work that different nonprofits are involved in.

Last year, the university community raised \$182,000 for United Way and the organizations that United Way supports in our region. This year’s campaign runs until Dec. 21.

To donate and track the university’s progress, visit www.cmu.edu/hr/united-way.

contributions to the creation, exposition, advancement, communication and use of mathematics. A goal of the program is to create an enlarged class of mathematicians recognized by their peers for their contributions to the profession and to honor excellence.

“The new AMS Fellows Program recognizes some of the most accomplished mathematicians — AMS members who have contributed to our understanding of deep and important mathematical questions, to applications throughout the scientific world, and to educational excellence,” said Eric M. Friedlander, president of the 30,000-member AMS.

Presenters Needed for Daughters and Sons To Work Day

Staff Council is looking for individuals and groups who would like to present or lead an activity at Take Our Daughters and Sons to Work Day on Thursday, April 25, 2013. This annual program gives staff and faculty children between the ages of 8 and 15 an opportunity to see the wide

range of career and learning opportunities that Carnegie Mellon can offer them. Each activity or presentation will be visited by two groups of about 25-30 students for a repeating 20-minute presentation. The total time commitment is approximately 1 and ½ hours. If you would like more information or would like to be included as a possible presenter or volunteer in 2013, please contact Alicia Angemeer at adbrown@andrew.cmu.edu.

Send FMS Requests to fixit@andrew.cmu.edu

The e-mail address for Facilities Management Services has changed to fixit@andrew.cmu.edu. Use Fix it for questions or work order requests. For urgent service requests call 412-268-2910. For more information, contact Kyle Tomer at 412-268-6332 or kt2n@andrew.cmu.edu.

Dzombak Named Interim Vice Provost of Sponsored Programs

David Dzombak, the Walter J. Blenko Sr. Professor of Environmental Engineering in

Army Grant Aims To Improve Control of Prosthetic Limbs

New Device Could Translate Thoughts of Wounded Soldiers Into Motion

■ Chriss Swaney

Carnegie Mellon’s Christopher T. Bettinger and Krzysztof Matyjaszewski have received \$1.6 million for the next four years from the U.S. Army to improve the use of prosthetic devices.

“This is very exciting research as we work to create devices that can translate neural activity of a patient into instructions to move robotic limbs or other prosthetic devices,” said Bettinger, an assistant professor in the departments of Materials Science and Engineering and Biomedical Engineering.

One of the researchers key challenges is designing brain-machine interfaces for long-term reliability because the signal-to-noise ratio in these materials typically decays as the body reacts to the implant and tries to ward off foreign material.

The project, led by Bettinger and Matyjaszewski, the J.C. Warner Professor of Natural Sciences at the Mellon College of Science, along with Kacey Marra, a collaborator at the University of Pittsburgh, aims to engineer autologous tissues using mechanically compliant electrically conducting polymeric materials.

“The tissue constructs are designed to make stable long-term connections between nerves in the peripheral nervous system by mimicking the native tissue areas,” Bettinger said.

“New techniques in polymer

chemistry have allowed us to make smarter, more durable materials. We have been able to create materials with great potential in a variety of applications. It’s exciting to see if we can make something that will help those who wear prostheses,” Matyjaszewski said.

The researchers also noted that the project has broad impact on wounded warriors by providing amputees with better control of prosthetic limbs. American soldiers walking combat patrols in Afghanistan have suffered a surge of gruesome injuries, losing one or both legs.

“It is imperative that we develop pioneering tools and devices to better help our wounded warriors recover from such traumatic injuries,” Bettinger said.

In related news, the Pittsburgh Tissue Engineering Initiative (PTEI), of which Carnegie Mellon is a partner, sponsored its annual Run for the Wounded Warrior, a 5K/5-Mile Run/Walk on Nov. 3.

Now in its third year, the race has raised more than \$100,000, which benefits the Wounded Warrior Project (WWP) and the National Association on Disability (NOD). The WWP aims to raise awareness of the needs of severely injured service members and provide them with unique, direct programs and services. The NOD helps service members connect with and sustain careers.

the Department of Civil and Environmental Engineering, has agreed to serve as Interim Vice Provost of Sponsored Programs.

Reporting to Provost Mark Kamlet, Dzombak will oversee the Office of Sponsored Programs (OSP) as well as the university’s research compliance operations.

In addition he will chair the recently established search committee for the next director of the OSP. The previous head of the OSP, Susan Burkett, retired last June.

In 2010, Dzombak became a University Professor, the highest academic rank at Carnegie Mellon. Among his many internal roles, he serves as the director of the Steinbrenner Institute for Environmental Education and Research, and has been the Associate Dean for Graduate and Faculty Affairs for CIT and chair of the Faculty Senate. While serving as interim vice provost, Dzombak will continue his current duties and activities in the College of Engineering.

City Parking Authority Seeks Your Feedback

The Pittsburgh Parking Authority is interested in your feedback on the

new multi-space pay by license plate meters. Visit the Oakland Transportation Management Association website, www.otma-pgh.org, to take the survey. The new system has been installed in Oakland, the South Side and North Shore, with installation downtown slated in a few weeks. For more information, please contact Anthony Boule at 412-560-2514 or ABoule@pittsburghparking.com.

Interim Deputy Chief Financial Officer Appointed

Elizabeth (Liz) A. Milavec has been appointed interim deputy chief financial officer and will assume the day-to-day oversight of the department heads in the Finance Division, except for Internal Audit, which, as previously announced, will report directly to the president. Milavec also will continue with her ongoing responsibilities as controller. Milavec joined CMU in 2004 as director of financial reporting and taxation. She became controller in 2006. Prior to coming to CMU, Milavec was senior manager at KPMG. She became a certified public accountant in 1994.

Send in the Bots

Hall of Fame, Research Initiatives, New Products Made October a Month To Remember

Robots were in the news throughout last month as Carnegie Mellon announced the latest inductees into the Robot Hall of Fame, helped host the RoboBusiness 2012 Leadership Summit, added a new additional undergraduate major and celebrated research and spinoff innovations.

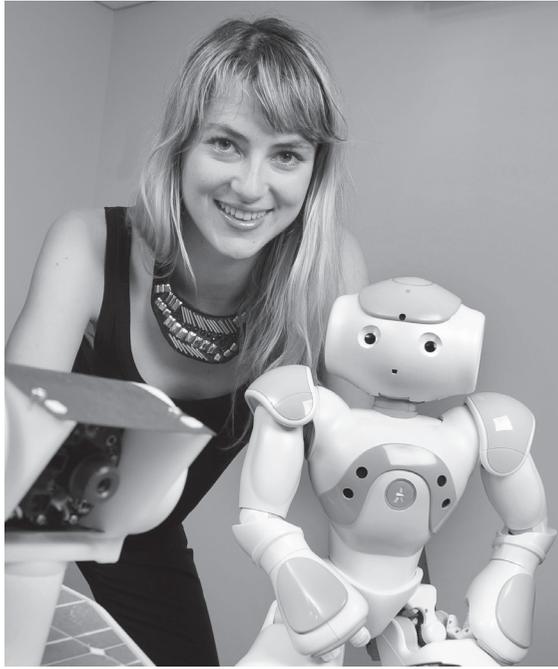


PHOTO BY KEN ANDREVO

▲ Robotics Ph.D. student Heather Knight and her NAO robot, Data, performed a standup comedy routine at the Oct. 23 Robot Hall of Fame induction ceremony at Carnegie Science Center in Pittsburgh. Four robots were chosen for the first time by a popular vote — Aldebaran Robotics' NAO humanoid, iRobot's PackBot bomb disposal robot, Boston Dynamics' four-legged BigDog and WALL-E, the fictional robot of the namesake Pixar movie.



PHOTO COURTESY OF BOSSA NOVA

◀ Bossa Nova Robotics, a company founded by Robotics Institute Ph.D. alumnus Sarjoun Skaff, announced that it is producing mObi, the first commercially available robot that uses a unique locomotion technology pioneered by the Robotics Institute's Ralph Hollis in his Ballbot robot. Unveiled in 2006, Ballbot remains an active research project.

Like Ballbot, mObi has no wheels or legs, but balances and moves atop a large sphere, similar in size to a bowling ball. The robot balances dynamically, enabling the robot to be made tall and slim. Its size, about 5 feet tall, combined with the ability to move omnidirectionally, makes it particularly suitable for maneuvering in human environments.

"MObi is the pre-cursor for the future of personal robots," said Martin Hitch, CEO of San Francisco-based Bossa Nova.

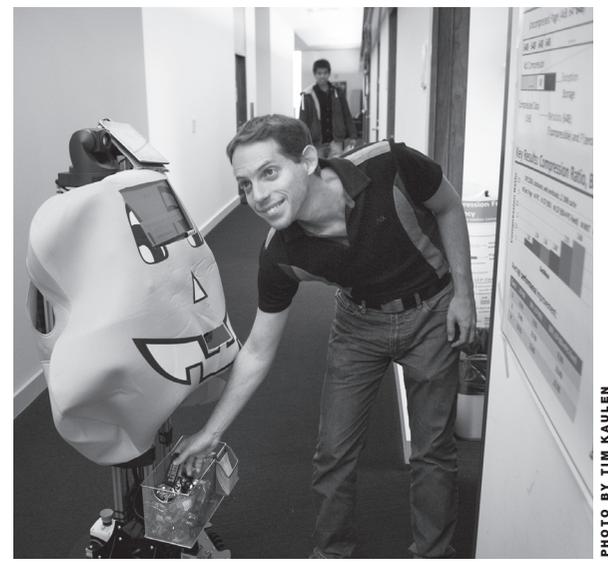


PHOTO BY TIM KAULEN

▲ Guy Zinman, a project scientist in the Lane Center for Computational Biology, accepts a treat from CoBot as the pumpkin-garbed robot handed out candy for Halloween in the halls of the Gates and Hillman centers. The autonomous robot is a project of Manuela Veloso, professor of computer science, and her research group.

Major Addition

Students can now opt for an additional undergraduate major in robotics.

Students pursuing computer science, engineering or other undergraduate degrees have the option to include an additional major in robotics in addition to its established minor, master's and Ph.D. programs.

Current CMU students interested in the additional major should plan to apply for the program by Feb. 1 of their freshman year, though sophomores also are welcome to apply. High school students and other non-CMU students must first apply and be accepted as undergraduates by Carnegie Mellon before applying for the additional major in robotics. For more information, visit Carnegie Mellon's Additional Major in Robotics website at <http://addlmajor.ri.cmu.edu/>.

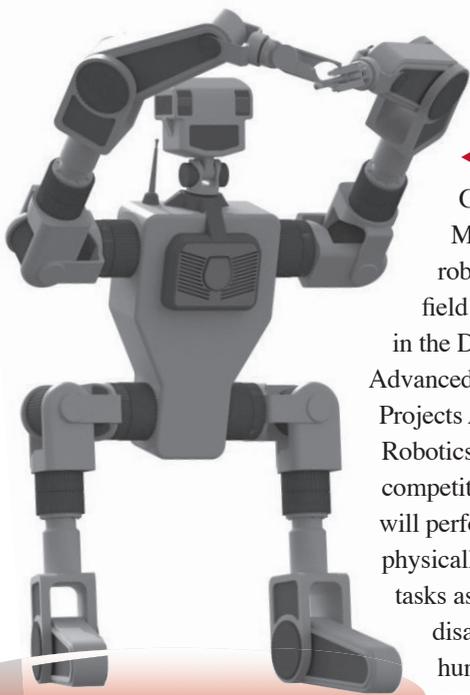


PHOTO COURTESY OF NREC

◀ Carnegie Mellon roboticists will field two teams in the Defense Advanced Research Projects Agency (DARPA) Robotics Challenge, a competition in which robots will perform complex, physically challenging tasks as they respond to disaster scenarios in human-engineered environments, such as nuclear power plants.

DARPA officials announced that it had selected "Tartan Rescue Team," headed by Tony Stentz, director of the National Robotics Engineering Center (NREC) and research professor of robotics, and "Team Steel," led by Christopher Atkeson, professor in the Robotics Institute and Human-Computer Interaction Institute, to receive funding in the competition. A team from a Robotics Institute spinoff company, RE2 Inc. of Pittsburgh, also was selected.

A rendering of Tartan Rescue Team's submission is shown.

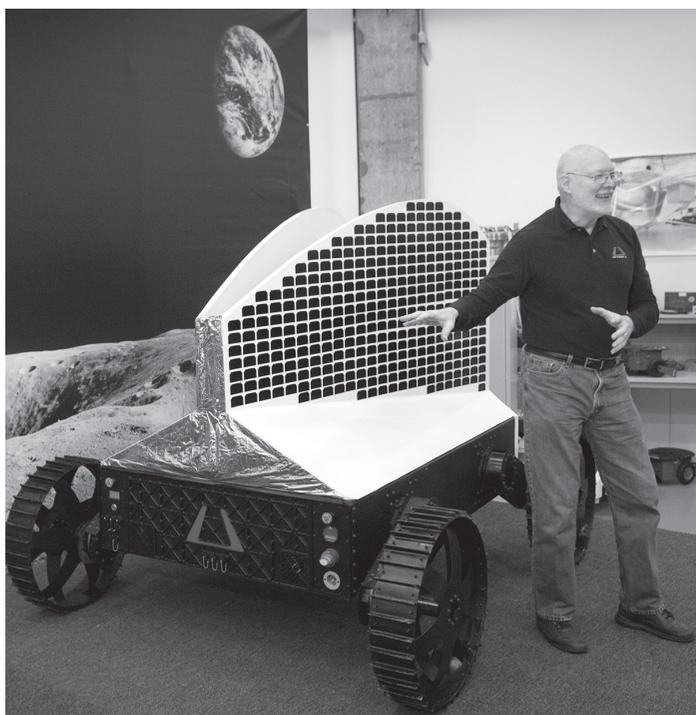


PHOTO COURTESY OF ASTROBOTIC

◀ Carnegie Mellon spinoff Astrobotic Technology Inc. has unveiled a prototype of Polaris, a solar-powered robot that will search for deposits of water and ice at the moon's northern pole.

William "Red" Whittaker, Astrobotic CEO and founder of CMU's Field Robotics Center, said Polaris is the first rover developed specifically for drilling lunar ice. It can accommodate a drill to bore one meter into the lunar surface and can operate in regions characterized by dark, long shadows and a sun that hugs the horizon.

The robot would launch from Cape Canaveral atop a SpaceX Falcon 9 launch vehicle. Astrobotic, in partnership with CMU, seeks to win the Google Lunar X Prize of more than \$20 million.