



# the PIPER

CMU'S NEWS SOURCE FOR FACULTY & STAFF

3/14 ISSUE

## Carnegie Mellon University

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## A New Twist on Health & Wellness



PHOTO BY KEN ANDREYO

"EXPLORING HEALTH, DISCOVERING WELLNESS," A FIRST-OF-ITS-KIND INTERACTIVE EVENT FOR THE CARNEGIE MELLON COMMUNITY, FEATURED SEVERAL ACTIVITIES AIMED AT REDUCING STRESS, INCLUDING AN INFLATABLE TWISTER GAME. PICTURED ABOVE (L-R) ARE STUDENTS HENRY LIU (DC'14), COLIN MERET (DC'14), PHILIP DOMINICI (DC'17), JANET LORENZ (E, BXA'14) SANGEETHA SANKARAN (S'17) AND PRIYANSH CHORDIA (E'15). READ MORE ABOUT THE EVENT ON PAGE 6.

## Decade in Doha Faculty, Staff Reflect on Experience

■ Sarah Nightingale

When the first employees signed on with Carnegie Mellon Qatar a decade ago, they arrived to little more than a contract between Qatar Foundation and the university. There was no CMU-Q building, no website and no students.

The first faculty and staff had to "jump in with both feet and get to work," recalled Gloria Khoury, assistant dean for student affairs. "We always call the first class the pioneers, but I think we felt like we were pioneers too."

Khoury is one of a handful of people hired to set up Carnegie Mellon Qatar and is still working on the campus today.

CONTINUED ON PAGE EIGHT

## "Academic Idols" Crowned



DAVID ROLLINSON AND HIS THESIS "ROBOTS IN THE WILD!" WON FIRST PLACE IN THE THREE MINUTE THESIS COMPETITION, WHICH CHALLENGED PH.D. CANDIDATES TO BOIL DOWN YEARS OF RESEARCH INTO JUST THREE MINUTES. SEE THE STORY ON PAGE NINE.

## Restoration Project

### Alumni House Makeover Feels Like Home

■ Kelly Solman

Alumni House has just undergone a renovation to better serve visiting alumni, many of whom remember the campus landmark as the old Theta Xi fraternity house.

"We are looking forward to the improved perception that alumni will have when they experience the house firsthand," said Andy Shaindlin, associate vice president for Alumni Relations & Annual Giving. "Feeling welcomed and recognized translates into positive attitudes toward an alma mater."

It was February 1966 when Lonna (Holstein) Smith (A'69) and Michael Smith (E'68) shared their first dance in the party room of the Theta Xi house on Forbes Avenue in Oakland.

The Smiths, now married nearly 45

years, said the house still feels like home.

"The floor here in the entryway was black and white tile," Lonna recalled, as the couple embarked on a sneak preview during a recent trip to Pittsburgh. The couple resides in San Jose, Calif. "Over there in that room on the left is where the cook prepared the meals, and over

here in this room the brothers would hold Greek Sing rehearsals."

The impromptu tour took them down memory lane and into the basement, where they discovered original fireplaces that still remained and enough of the old brick walls to reconstruct in their minds

CONTINUED ON PAGE FOUR

# Conference Gives Students Look at Innovations in Health Care

■ Jennie Dorris

Innovation in health care technology could mean microbial vigilantes, mannequins that scream when injected with too much epinephrine or a future in which 80 percent of doctors provide virtual services.

All of these topics were discussed at Carnegie Mellon's third annual Innovation in Health Care Technology Conference.

Hosted by the BioPharma and Healthcare Club of the Heinz College and Tepper School of Business in February, participants explored "innovative disruption" in the field.

"It's all about thinking differently. Instead of trying to make something better, maybe it should be totally different," said conference co-chair Ruth Shaw (HNZ'14), a student in the Health Care Policy and Management program.

Disruption was explored by the more than 250 attendees through panel discussions addressing topics from the digitization of medicine to analyzing the future of the pharmaceutical industry. Alan J. Russell, head of CMU's Disruptive Health Care Innovation Institute, and William Bria, chief medical information officer of the HCI Group, delivered the keynotes.

Despite not having a medical school, CMU is a leader in health care. Faculty members as well as alumni shared their stories.

Steve Bollinger is an adjunct faculty member at Heinz's Biotechnology and Management Program and CEO and president of Rinovum



Women's Health Inc., a company that helps couples struggling with infertility. He was joined by Curtis Stratman (TPR'08), a senior product manager at Omnyx, which digitizes slide imaging for pathologists diagnosing cancer, and Steve Fleck (TPR'04), CEO and president of Proximedics, which he describes as the "agile tech-savvy partner to large pharma organizations." The final member of the panel was Christine Robins, CEO of BodyMedia (which has since

been acquired by Jawbone). BodyMedia was founded by two CMU graduates, Astro Teller (CS'98) and John "Ivo" Stivoric (A'93, '98).

Among the health care professionals and information technology experts were students interested in health care, such as Kyle Buescher (HNZ'14).

Buescher was drawn to the panel on the digitization of medicine, which featured Dan Pellegrini (HNZ'12) and Stivoric, where panelists and audience members discussed the benefits and problems of virtual care delivery.

"I like hearing a different perspective, especially the physicians' perspective, because I'm going to work for Epic [Systems Corp.] after graduation, and I'll be on the other side of it," Buescher said.

Student research also touches on a number of health care fronts.

Emily Sale (HNZ'14) and Thomas Romanoff (HNZ'14), both public policy and management students, presented research on how nursing homes for rural communities could be revamped to provide a floor plan that is conducive to community, as well as a design for high-tech watches for residents to communicate needs to the staff. Others discussed CMU research about phage therapy helping bacterial strains that are resistant to antibiotics.

Shaw was pleased with the diversity of perspectives represented at the conference.

"There's a lot of strong opinions in health care," Shaw said. "When people open their eyes, that's when disruption and innovation happens. Hopefully [the conference] fosters new collaborations, and it leads to better health care in the future for everybody."

## "Under Construction"

### Dietrich College Alumni Share Experiences With Students



JULIE WILSON (DC'99) TALKS TO DIETRICH COLLEGE STUDENTS ABOUT HER WORK AS THE ASSOCIATE GENERAL COUNSEL AT THE NATIONAL TREASURY EMPLOYEES UNION. WHILE AT CMU, SHE WAS PART OF THE PRE-LAW SOCIETY, DIRECTED BY DIETRICH COLLEGE ASSOCIATE DEAN JAY DEVINE.

as 'who we are' than 'what we do.'"

- "Regardless of where we are in our lives and careers, we're all under construction."

Babcock-Lumish said she would have enjoyed participating in an event such as "Under Construction" as a student.

"At CMU, we all map out our own paths," she said, using her own career twists as examples. "CMU taught me how to problem-solve, to be resourceful... We can't plan for life; we have to be open."

Through lectures, panels and informal discussions, students engaged alumni from as far as Houston and San Francisco.

Kristin Gilmore (DC'02), a U.S. Department of State Foreign Service officer, flew in from her post in the Bahamas.

"I thought it was a phenomenal opportunity to share some experiences with students deciding what to do with their DC degrees," Gilmore said.

"It was great to hear that many alumni had an indirect way of getting to what they are really passionate about doing," Acosta said. "'Under Construction' made me proud to be a DC undergraduate — and had that effect on a lot of students."

■ Melissa Silmore

Nearly 60 alumni returned to Carnegie Mellon's Dietrich College of Humanities and Social Sciences to support 150 students and help them build their careers.

The second annual "Under Construction: Building Your Future" event encouraged students to explore the diverse fields available after graduation.

"The alumni are extremely inspirational," said Juan Acosta (DC'15), a student organizer. "The students are very excited that Dietrich College is actively pursuing events like this to help them with their future career paths."

Alexandria Hernandez (DC'15) agreed.

"I think it's wonderful," she said. "Dietrich College is really expanding the network. It's a great chance to connect with alumni and learn about jobs we may want to pursue."

Career areas represented ranged from entrepreneurship and consulting

to education and politics. Numerous alumni from each field were on hand to share personal stories and answer questions.

"There are many, many career paths and developing a plan can be a major challenge," Dietrich College Dean John Lehoczyk told attendees.

"It's easy to learn the overall goals of a job but difficult to explain day-to-day life," said Max Goetchel (DC'16). "I think it's important to hear all the nice things about a job, but also learn about the daily realities. You can't ask those things in an interview."

In her keynote address, Terry Babcock-Lumish (DC'97), founder and president of Islay Consulting, relayed fond undergraduate memories and three key pieces of advice:

- "Semper 'Gumbie'" — always be flexible.
- "We start living more interesting lives when we define ourselves more



## the PIPER

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# Partners Have “Project InMind” To Further Mobile Technology

■ Byron Spice

Yahoo and Carnegie Mellon have announced a five-year, \$10 million partnership that aims to improve the mobile user experience.

“We’re thrilled to be partnering with the exceptional faculty and students at Carnegie Mellon, which has established itself as a premier institution for machine learning and user interface technologies,” said Ron Brachman, chief scientist and head of Yahoo Labs. “By creating a way for Carnegie Mellon University researchers to work directly with Yahoo software and infrastructure, we hope to speed up the pace of mobile and personalization research and create a better user experience.”

A mobile toolkit will enable CMU researchers to experiment with Yahoo’s realtime data services, which will allow researchers to explore new approaches to understanding human behavior by using machine learning algorithms to more accurately predict user needs and intentions.

The InMind Project will be directed at CMU by Tom Mitchell, the Fredkin University Professor of Computer Science and Machine Learning and head of the Machine Learning



REPRESENTATIVES FROM CMU AND YAHOO CELEBRATE THE NEW PARTNERSHIP.

PHOTO BY KEN ANDREVO

Department, and by Justine Cassell, the Charles M. Geschke Director of the Human-Computer Interaction Institute.

“The InMind program provides unique new opportunities for the outstanding faculty and students at CMU to partner with Yahoo and its talented scientists and engineers to potentially further the frontiers of mobile applications and technologies,” said CMU President Subra

Suresh. “This partnership is a clear demonstration, in the tradition of CMU, of how scholarly scientific research combined with industry relevance and perspectives could advance technologies that have a global social impact.”

“This is a one-of-a-kind opportunity for our students and faculty to work directly with a team of leading-edge researchers from Yahoo Labs on tech-

nologies that could benefit hundreds of millions of mobile users,” said Randal E. Bryant, University Professor and dean of the School of Computer Science. “The overall commitment in this new partnership is a testament to our shared desire to advance the science of machine learning, user interfaces and mobile technologies.”

## Business Plan

### Venture Capitalist Makes Major Investment

■ Mark Burd

Carnegie Mellon has received another boost to enhancing its scope and impact in innovation and entrepreneurship.

A \$10 million gift from James R. and Susan S. Swartz will help CMU shape the future through business education, cutting-edge research, learning technologies and interdisciplinary collaboration.

James Swartz (TPR’66) is a distinguished entrepreneur, venture capitalist and founding partner of Palo Alto, Calif.-based Accel Partners. His commitment follows a \$67 million gift from the charitable foundation of renowned investor David A. Tepper (TPR’82) to create a major new academic hub along the Forbes (Ave.) Innovation Corridor called the David A. Tepper Quadrangle, which will enable CMU to enhance student programs, expand opportunities for innovative research and interdisciplinary degrees and offer a flexible technological framework that anticipates the future of learning.

These gifts will be used for the construction of a 295,000 square-foot facility in the Tepper Quad that will house a number of strategically interconnected entities, including the university’s Tepper School of Business, the Center for Innovation and Entrepreneurship, The Simon Initiative and quality of life enhancements for the entire CMU community. This new facility will serve as

the cornerstone for integrating elements of research and education across the university’s Pittsburgh campus.

“At Carnegie Mellon I learned to master management science, constructing business models to solve challenges that were completely new to the marketplace and unleashing the power of data for smarter business decisions,” Swartz said. “Those lessons, and the skills that I developed as a result of them, have greatly benefited me throughout my entrepreneurial career.”

As a director of more than 50 successful companies in five decades as a venture capitalist, Swartz has been involved as a lead investor of numerous pioneering technology companies. He received the 2013 Tepper School Alumni Achievement Award in recognition of his professional accomplishments and his commitment to education.

“Jim’s track record of private sector investment is awe-inspiring. He is a Silicon Valley icon, and is counted among the most successful venture capitalists worldwide,” said CMU President Subra Suresh. “Jim has also been a steadfast benefactor of the university, sharing not only his wealth, but his experience and his vision. We are grateful that he and his wife, Susan, have chosen Carnegie Mellon for this significant philanthropic investment in future generations of young entrepreneurs.”

## Thank You, Donors



PHOTO BY NICOLE COOK ATWELL

ADRIAN BOTTA (DC’15) AND MICHELLE LIN (DC’15) ARE AMONG THE STUDENTS WHO PARTICIPATED IN WRITING THANK YOU LETTERS TO CMU DONORS. CARNEGIE MELLON CELEBRATED ITS FIFTH ANNUAL LOVE A DONOR WEEK (FEB. 10-14) TO HONOR ALUMNI, PARENTS, FACULTY, STAFF AND FRIENDS WHO SUPPORT CARNEGIE MELLON. AT EVENTS ACROSS CAMPUS STUDENTS CAME TOGETHER TO EXPRESS THEIR GRATITUDE IN A PERSONAL WAY BY WRITING “THANK YOU” NOTES TO DONORS FOR MAKING ANNUAL GIFTS TO THE UNIVERSITY IN 2013. CARNEGIE MELLON ALSO THANKED THE MANY FACULTY AND STAFF DONORS WITH AN APPRECIATION LUNCH, WHERE MORE THAN 130 FACULTY AND STAFF DONORS ATTENDED.

LOVE A DONOR WEEK ALSO EDUCATES STUDENTS ABOUT THE ESSENTIAL ROLE PHILANTHROPY PLAYS IN THE LIFE OF A UNIVERSITY. LEARN MORE ABOUT LOVE A DONOR WEEK, AND READ STORIES ABOUT CMU DONORS AT [WWW.GIVING.CMU.EDU/LOVE](http://WWW.GIVING.CMU.EDU/LOVE).

# Alumni House Makeover Feels Like Home

CONTINUED FROM PAGE ONE

the rooms they had inhabited in their youth.

“This is where we met,” Lonna said, as she recalled the night.

Earlier in the week, she and her friends had stolen Theta Xi’s trophies. To get them back, the brothers had to invite the girls for dinner.

“They put green food coloring in all the food. Eventually, the meal turned into a food fight,” Lonna said.

Frustrated with both the outcome and her date that evening, Lonna said she walked down to the party room where she found Michael standing alone.

“Well, Lonna, what are you going to steal next?” Michael asked her. After looking him over, she said, “Your heart.”

Back in the present, Michael found the outside steps where he declared his love for Lonna by giving her his fraternity pin.

Upstairs, they passed an office that once served as the house mother’s room, although her fireplace now sits behind freshly painted drywall.

The nearly two dozen bunk beds which once filled the third floor where the brothers slept are long gone.

Today, that space is occupied by offices and cubicles of the university’s Alumni Relations and Annual Giving staff.

“We want our alumni to think of the house as a home base when they visit campus, to serve as a hub for any of their needs and as a gathering place where they can relax, meet and engage with others in the CMU community,” said Toni Sapet Ungaretti (MM’70), president of the Alumni Association Board.

Before the Smiths’ visit ended, they paged through a few Thistles — CMU’s yearbooks — that they noticed on some nearby shelves.

Michael collects Thistles along with other CMU memorabilia, including old postcards, football programs and anything related to Carnegie Tech.

“Lonna still has her old dink,” Michael said, referring to the beanie that freshmen had to wear during the first week of classes.

Michael graduated in 1968 with a bachelor’s degree in mechanical engineering. Lonna received her bachelor of fine arts degree in music in 1969.

“Alumni expect — and deserve — a place on campus that they can call home, whether they are stopping by casually or attending events,” Shaundlin said. “CMU’s 94,000 living alumni are the university’s only permanent constituency, so having a welcoming physical presence here will help us to reconnect them with Carnegie Mellon.”

The official unveiling of the restored Alumni House is one of the



MICHAEL (E'68) AND LONNA SMITH (A'69, SECOND FROM RIGHT) LOOK AT YEARBOOKS WITH GENA HENRY (LEFT) AND MARY ANN MCCOLLOUGH, ANNUAL GIVING STAFF MEMBERS.

spotlight events for Spring Carnival, now in its 100th year. An Open House will be held from 10:30 a.m. to 2:30 p.m., Friday, April 11.

Visitors will be able to stop by the Alumni House, take a tour and learn about its history as well as what the

house and the university’s Alumni Association have to offer alumni, students, parents and friends.

“Lonna and I were very pleased to see how good the house looks after the recent renovation,” Michael said. “Upon entering the front door, we were

both struck by how warm and inviting it seems. While still retaining the character of the house we knew in college, it feels much more open and airy.

“I’m definitely impressed and look forward to stopping by on future visits to campus.”

## STAFFER RECALLS FUN TIMES



PHOTO BY TIM KAULEN

DAVID LANDIS (E'73)

Alumni House, once home to Theta Xi fraternity, looked a lot different in 1970 when David Landis (E'73) was a pledge.

“I do remember the wood being a lot darker then. It’s nice to see the pocket doors still here,” Landis said.

The doors were rediscovered during the latest renovation. They

had been hidden behind walls for years.

Landis is executive director of CMU’s engineering master’s program in energy, science, technology and policy. What he remembers as a large kitchen and dining room on the first floor is now a mini-kitchen and conference room.

“We sat around that dining room a lot,” Landis said. “I had many a peanut butter and jelly sandwich in that space.”

Theta Xi moved into fraternity quad space in fall 1970, so Landis didn’t live in the old house. But he spent a great deal of time there.

“The most economical to place to stay on campus back then was in a fraternity,” he said. “It was less expensive than being in the dorms. And it gave you more independence. Also, things like Buggy were good for bringing everybody in the house together.”

Some of the buggies at that time were bicycles, but not Theta Xi’s.

“Ours was a feet-first fiberglass shell buggy that we ran back in 1970s. I wasn’t an athlete, so I got involved with the design,” Landis said.

While the fraternity is no longer active at Carnegie Mellon, Landis said he enjoyed being part of the group.

“The friends and memories from those days stay with you for life,” he said.

# Midway on the Move

## Carnival Committee Seeks New Location for 2015

■ Dan Mohler

Spring Carnival will begin its second century in 2015 with a distinctive new look.

The mainstays — buggies, booths, carnival rides and live entertainment — will remain, but the Midway will have a new home as work moves forward to transform the Morewood parking lot into the Tepper Quadrangle, a major academic hub that will include a new home for the Tepper School of Business, a new welcome center, a fitness center and café, and meeting spaces and classrooms.

Alternative Midway sites have been the focus of a committee of students, faculty and staff, and in early February Tim Leonard, coordinator of Student Activities, hosted a town hall meeting to present the possible new venues.

The committee's proposals are:

- The College of Fine Arts (CFA) parking lot;
- The East-West Walkway Extension and Merson Courtyard;
- The Doherty parking lot;
- Margaret Morrison Street;
- The fourth floor of the East Campus Garage;
- Morewood Avenue; and
- Gesling Stadium.

Leonard said the committee looked at the positives and negatives of each location.

"We specifically looked at carnival noise and its proximity to neighbors, accessibility for pedestrians, the parking and traffic consequences, accessibility for emergency medical services and the locations' impact on campus grounds," Leonard said.



THIS IS THE LAST YEAR THE SPRING CARNIVAL MIDWAY WILL BE HOSTED ON MOREWOOD PARKING LOT.

The committee rejected the Margaret Morrison Street and Morewood Avenue locations because the City of Pittsburgh would require a large payment to close down city streets for 10 days — the time needed for set-up, Carnival events and tear-down of all booths, amusement rides and clean-up. Funds from this payment would offset lost revenue from parking meters and the cost incurred for changes in traffic patterns.

The massive weight alone of Swank's Steel City Shows amusement rides would destroy Gesling Stadium's artificial turf, the East-West Walkway Extension and Merson Courtyards. Height restrictions prevent any two-

story structure from being built on top of the East Campus Garage.

While Leonard said the new site for 2015 has yet to be determined, the CFA parking lot and the adjacent CFA lawn and Mall area between Baker/Porter, Doherty and Hamerschlag halls is gaining the most traction because of its central location.

Leonard noted that the potential booth layout in the CFA parking lot would consist of two rows between the lot entrance and The Cut allowing a natural flow for carnival-goers.

The amusement rides on the lawn, however, could cause a problem if the grounds are wet and soggy. Leonard said the weight of the rides would

wreak havoc on the lawns, not to mention the heavy foot traffic, so the weather would be a major concern for this area.

Through all of the restrictions and considerations, CFA is the best choice, Leonard said.

"The CFA location will centralize Carnival Weekend programming and will add an abundance of activity that will present a new vibrancy to Spring Carnival," Leonard said. "Midway won't be tucked off in a distant parking lot — it will flourish right in the middle of Buggy, Mobots, Downhill Derby and the AB [Activities Board] concert."

A final decision is expected to be announced by the end of this spring.

## Buhl Lecturer To Discuss DNA Molecules on March 25

■ Jocelyn Duffy

Within all living cells is a network of complex molecular machines that carry out the functions essential for survival. Molecular motors move proteins from place to place, connect enzymes with their substrates and unravel and copy DNA.

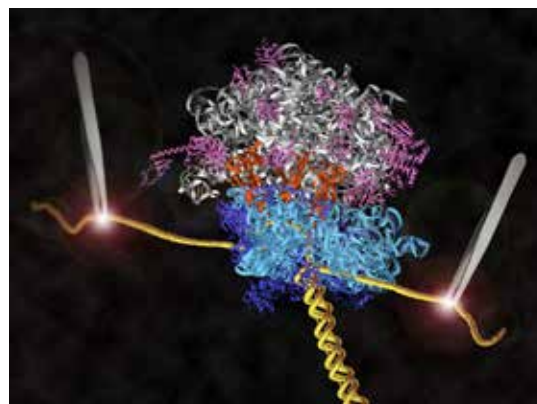
And just as with non-living machines and motors, physical forces drive the movement of the motors inside of the cell.

Understanding these physical forces is key to knowing how cells work. This year's Buhl Lecturer, Carlos Bustamante, has developed novel methods using magnetic beads, atomic force microscopes and laser tweezers to measure and manipulate the forces within DNA and other macromolecules.

Most notably, Bustamante, the



CARLOS BUSTAMANTE



BUSTAMANTE USES LASER TWEEZERS TO MEASURE AND MANIPULATE FORCES WITHIN DNA.

Raymond and Beverly Sackler Chair of Physics at the University of California, Berkeley, was the first to use laser tweezers to trap and stretch DNA molecules. This allowed his research group to measure the DNA's elasticity and study the mechanics involved in DNA replication.

Bustamante will give the 2014 Buhl Lecture in Theoretical Physics at 4:30 p.m., Tuesday, March 25 in the Mellon Institute Auditorium.

In his lecture, titled "Biochemistry and Biophysics One Molecule at a Time: When Less is More," Bustamante will

discuss how forces can affect molecular behavior and the methods his lab has been using to study molecular interactions.

Bustamante is also a professor of molecular and cell biology and a professor of chemistry at UC Berkeley and has been a Howard Hughes Medical Institute Investigator since 2000. He has received the Alexander Hollaender Award in Biophysics from the National Academy of Science, the Hans Neurath Prize from the Protein Society and the Biological Physics Prize from the American Physical Society.

Sponsored by the Department of Physics, the Buhl Lecture is funded under the auspice of the Buhl Professorship in Theoretical Physics, which was established in 1961 by The Buhl Foundation.

# Research for Life

## Community Shares Tips for a Healthy Lifestyle

■ Bruce Gerson

The University Center was transformed into a university health club for the body, mind and soul.

Free fitness demonstrations and exercise classes, massages, a knitting and crochet room, and a gaming and arts and crafts area highlighted the second floor.

The first floor featured the talents of CulinArt chefs preparing Salmon Pasta Pomodoro and Albacore Stir Fry, a relaxation room with comfy chairs, mood-lighting and videos of a peaceful forest and sun-drenched beach, and a trail-mix bar area where about 1,000 students, faculty and staff shared their tips for a healthy lifestyle on bulletin boards. Eighteen individuals were pictured on posters with a description of their healthy activity.

Those tips in the Kirr Commons “Wellness Area” included volunteering, knitting, walking, running, spending time with family, refinishing furniture, getting enough sleep, balancing work and personal life, praying, laughing and thinking positive thoughts.

Anita Barkin, director of University Health Services, said the Wellness Area was one of her favorite aspects of the day, which put a positive light on health and wellness.

“I enjoyed reading what people shared about what they do to keep healthy and what wellness means to them,” Barkin said. “We can all help promote the health of our community by sharing our personal health strategies with others.”

The healthy thoughts and venues were all part of “Exploring Health,

Discovering Wellness,” a first-of-its-kind interactive event at Carnegie Mellon in late February promoting health and wellness. The daylong activities were sponsored by the university’s Healthy Campus initiative and were part of “Crossing Boundaries, Transforming Lives,” the yearlong celebration of the inauguration of Subra Suresh as CMU’s ninth president.

A featured event during the day was a symposium titled “Research Into Practice: Health and Wellness for Ourselves and Our Community,” in which a panel of CMU faculty spoke about their health-related research. Mary Suresh, a longtime public health professional and former director of public health for Wellesley, Mass., moderated the panel.

CMU panelists were:

- Baruch Fischhoff, the Howard Heinz University Professor of Social and Decision Sciences and Engineering and Public Policy;
- Sheldon Cohen, the Robert E. Doherty Professor of Psychology;
- Rema Padman, professor of management science and healthcare informatics at the Heinz College; and
- Kristen Kurland, teaching professor in the School of Architecture and Heinz College.

Dr. Karen Hacker, director of the Allegheny County Health Department (ACHD), opened the discussion with an overview of the ACHD and the challenges it faces, specifically the high rate of obesity and smoking, and the poor air and water quality in the county.

Fischhoff, an expert in risk communication and decision science, spoke



KIM SQUIRREL PREPARES ALBACORE STIR FRY AS PART OF A COOKING DEMONSTRATION. SEE THE RECIPE ON PAGE SEVEN.

about the need for easy-to-understand food and drug information. He is a member of the Environmental Protection Agency’s Scientific Advisory Board and chair of the Food and Drug Administration Risk Communication Advisory Committee.

“Some of the labels [on products] aren’t very good. We need to insist on better information,” Fischhoff said. “The fact that a drug is FDA approved doesn’t mean that it’s FDA recommended. That only means that there are some [very sick] people who would want to take that drug. Sometimes they approve drugs that are highly dangerous for people who are really suffering. The fact that they’re out there doesn’t mean they’re recommended.”

Cohen’s research has shown that stress increases your susceptibility to infectious disease, including the common cold. His studies also have proven that the more interpersonal relationships a person has and the more diverse his or her social network is, the less susceptible a person is to getting a cold.

“Very clearly loneliness is a driving force for new students. There’s a good

deal of it, and we’ve shown it’s related to markers of health,” Cohen said. “I think the university has already implemented a number of programs trying to get new students integrated into groups and into the university, but it’s something we have to keep working on.”

Padman spoke about how the growing “digitization of health care” is increasing the amount of data per individual in clinical information systems, but the challenge for the health care industry is how it can be used to provide “cognitively guided, real-time decision support at the point of care.” She calls it a “consumability” challenge.

She said by using information technology that reveals both population level and individual level information in a visual and interactive format, information can be accessed quickly and shared between patients and clinicians to potentially improve outcomes, communication and education.

Kurland, co-author of “GIS Tutorial for Health,” studies how the environment affects our health. Her studies have shown how childhood obesity is affected by proximity to fast food

## PEERS PROMOTE HEALTHY LIVING

A group of students at Carnegie Mellon are encouraging their peers to live healthy by hosting and serving at a variety of programs and events on campus that are geared toward wellness.

Most recently, these Peer Health Advocates (PHAs) promoted participation in a number of free activities as part of “Crossing Boundaries, Transforming Lives: Exploring Health, Discovering Wellness.”

The PHAs greeted students walking through the University Center and informed them about the many activities going on, increasing participation in the drum circle, a craft room, massages, a game of inflatable Twister and ballroom dance.

“Because we had a lot of student participation, I think the Wellness event was a great success,” said Janet Lorenz, lead PHA.

Students are encouraged to attend the “Help Yourself” fair on April 8, the PHAs’ largest event of the year. The event will include make-your-own yogurt parfaits, a raffle for free 30-minute massages, games, activities and plenty of “swag.”

“Help Yourself” is a fun way to remind students about services and support available to help them finish the semester strong,” said program director Paula Martin. — Kelly Solman



#### Albacore Stir Fry

Makes four 1 cup servings

- 1 pouch 2.6 oz. Starkist Albacore Tuna, drained and chunked
- ½ cup chopped onion
- 1 tsp. minced garlic
- 3 tbsp. soy sauce, reduced sodium
- 1 tbsp. lemon juice
- 2 tbsp. vegetable oil
- 1 bag frozen oriental vegetables or 4 cups fresh thinly sliced, carrots, broccoli, snow peas, bell peppers, mushrooms and celery
- 1 tsp. sugar or 2 packets from Entropy

Heat oil in skillet or wok and stir fry onion and vegetables until crisp-tender, about 4 minutes.

Add tuna, soy sauce, sugar, lemon juice, garlic and 1 tbsp. of water, until tuna is heated through.

Serve over hot rice.  
Contains: fish, soy, wheat

#### NUTRITION FACTS:

Per serving: 320 calories, 45g. carbohydrate, 9g. protein, 6g. fiber, 12g. fat



TOP: J.R. MARSHALL (DC'16) SHARED HIS HEALTHY LIVING TIP "GYM WITH MY BUDDIES EVERY DAY."

LEFT: FREE FITNESS CLASSES WERE HELD THROUGHOUT THE DAY SO PARTICIPANTS COULD SAMPLE ACTIVITIES SUCH AS SPINNING.

BOTTOM: MEMBERS OF THE CARNEGIE MELLON WOMEN'S ASSOCIATION HOSTED A KNITTING AND CROCHET ROOM. MEMBERS INCLUDE JAMIE ROSSI, ASSISTANT VICE PROVOST FOR GRADUATE EDUCATION, AND ANNE WITCHNER LEVIN (DC'73, RIGHT), ASSISTANT DEAN OF STUDENT AFFAIRS.



restaurants and parks, and how pedestrian injuries are more common among youth living far from parks and among youth living in poverty. She also spoke about the "walkability" of neighborhoods and their importance in health and wellness.

Kurland, who wears a Jawbone Up wristband that records and uploads her daily activity to her smartphone, recommends walking as a way to keep healthy.

"Set a goal and try to meet that goal. I set a goal of [walking] five miles a day. Find a collaborator. You have to have some device to help you track what you're doing," Kurland said.

Prior to the symposium, the panelists, student leaders and several students planning a career in public health attended a luncheon.

"The conversation was very, very lively. It was a great opportunity for Dr. Hacker to connect with the panelists and students," Mary Suresh said. "As the students described what they do you could just see Dr. Hacker's face light up when she saw the firepower in the room.

"The panelists beautifully described how their research translates into practice that benefits all of us. The title of the symposium, 'Research Into Practice: Health and Wellness for Ourselves and Our Community' said it all."



PHOTO COURTESY OF CARNEGIE MELLON QATAR

LEFT TO RIGHT: AHMED HUSAINE, FADHEL ANNAN, ABDULLAH IBRAHIM, AMAL AL-MALKI, BENJAMIN REILLY, GLORIA KHOURY, STEPHEN MACNEIL AND MARION OLIVER (S'67) WERE FACULTY AND STAFF PIONEERS AT CARNEGIE MELLON QATAR.

Carnegie Mellon Qatar is celebrating its 10th anniversary with an event in Doha on March 18. The event will be webcast live at the Pittsburgh campus. Details to be announced.

Joining Khoury were faculty members Marion Oliver (S'67) and Benjamin Reilly; Fadhel Annan, assistant dean for Government and Corporate Affairs; Ahmed Husaine, Housing and Transportation manager; Abdullah Ibrahim, Housing and Transportation coordinator; and Stephen MacNeil, Web manager. Amal Al-Malki, an associate professor of English currently on a leave of absence, also joined the university in 2004 as the orientation manager.

About 40 staffers joined the university during that first year, with most moving on to other jobs.

The university's first home in Education City consisted of two corridors in the Weill Cornell University in Qatar building. From here, the team got to work on developing the business administration, computer science and general education curricula, as well as the supporting programs.

First on the agenda was to bring in a little of the Carnegie Mellon spirit. To create a student lounge, staff scoured local home stores, bringing back comfortable sofas, funky lamps, games and pop-art posters. All that was missing were the students.

## First Encounters

With admission handled through the Pittsburgh campus, the inaugural class consisted of just names on a roster to most of the Qatar staff. The campus came together for the first time at Family Day, the beginning of new student orientation.

"I remember standing nervously at the Ritz Carlton with the dean, and then the students started to arrive one-by-one with their families. We said the first 'hellos' and gave the first handshakes,



and that to me was the moment when it all became real," Khoury said.

The students were excited and nervous. While many of them could have travelled overseas to study, they had stayed in Qatar to support the country's ambitious educational initiatives, said Reilly, an associate teaching professor of history. Among them was Lulwa

They lived there, worked there, napped there and ate there, and it was just what we wanted," Khoury said.

The students didn't stay quiet for long, Oliver recalled.

"That group has always been known as being the loudest class, and they were proud of that," he said.

So loud, that Weill Cornell sent emails asking if Carnegie Mellon could please keep the noise down.

## A Carnegie Mellon Education

The transition from high school to college can be a bumpy road for many students, and it was no exception for Carnegie Mellon Qatar's first class.

"They came from being the best in their high schools to realizing they were going to have to work really hard. They were in boot camp trying to get through this thing," Oliver said.

When a student shows up late for Oliver's class, they'll probably find

begin. To avoid becoming a commuter campus, Khoury and her team looked for ways to keep students on campus between classes.

"Our first goal was to have them stay during the day and not go off to the mall, which was tending to happen because at that time Landmark Mall was only a 10-minute drive away," Khoury said.

The team started workshops, talks and activities to complement the academic programs and build leadership skills. They encouraged students to start clubs by pitching ideas, applying for funding and creating the content.

Programs that started during the first year and are still going strong today include "Pizza and Politics," a series that encourages students to talk about current issues, International Day, the CMBA business club and the All Around student newspaper. The first Student Majlis was elected in 2004, with Fahad Al Jefairi as the president.

## Making Progress

In spring 2005, five Carnegie Mellon students spent a week on the Pittsburgh campus, paving the way for cross-campus relations and becoming the first Carnegie Mellon Qatar ambassadors. That same spring, some of the students spoke at an event for the Carnegie Mellon trustees, who had traveled from Pittsburgh to visit Doha. This was the moment when Khoury realized what the group had achieved.

"It really blew me away because they were able to talk about their experience, and they began to call it the 'Carnegie Mellon' experience, which included both the academic and non-academic components," she said. "And I thought to myself, 'wow, we're really on the right path here.'"

Since then, Carnegie Mellon Qatar has grown every year, moving to its second home in Education City's LAS Building before the addition of the Information Systems program in 2007. The first students graduated a few months before the university's state-of-the-art building was completed in fall 2008. In 2011, the university expanded again, adding programs in biological sciences and computational biology.

While the inaugural faculty and staff have different reasons for staying, all have appreciated CMU's ongoing sense of community.

Oliver, who earned his doctorate at Carnegie Mellon 35 years ago and worked on the main campus for 10 years before leaving, returned to start the Qatar campus. He said he plans to stay indefinitely.

"I am here because I am having a great time and I am appreciated by the people I work for. As long as I'm healthy, I'll be here," he said.



ONLINE: [WWW.QATAR.CMU.EDU/10/](http://WWW.QATAR.CMU.EDU/10/)

Al-Thani, daughter of the H.E. Sheikh Hamad Bin Khalifa Al-Thani, the Father Emir of Qatar.

During their first few days on campus, the students were as quiet as mice, Khoury recalled. They walked past the new lounge but didn't sit down, assuming it must be for faculty and staff.

Oliver, teaching professor of mathematics, said the small space in Weill Cornell helped faculty, staff and students get to know each other. It also allowed the academic and co-curricular programs to become integrated from day one.

"That kind of thing happens once," Oliver said. "It doesn't last, but at that time it was pretty special."

After a little encouragement, the students started to hang out in the lounge.

"No sooner did they get the hang of it and you couldn't get them out of there.

themselves locked out of the class. If they show up late for Reilly's class, he'll sometimes yell out, "You're so late," in an attempt to embarrass them in front of their friends. Those instances have become legends at Carnegie Mellon Qatar, but they were happening for the first time for the 41 students who joined in 2004. While they didn't always appreciate things like this, the first class rose to the challenges, Oliver said.

"As a group, I believe they had a lot of self confidence, and they were fighters," he said. "I remember sitting down with that group to give them some bad news about an assignment, and they were getting so mad that there were tears in their eyes. These weren't tears of sadness, they were tears of anger."

It wasn't only in the classroom that Carnegie Mellon traditions and legends



# “Shipbreakers” Makes US Premiere in CMU Film Festival

## Film Documents Dangerous Scrapping Work

■ Shilo Rea

In Alang, India, there is a six-mile stretch of an oily, smoky beach where huge ocean vessels no longer seaworthy are run aground, broken apart and stripped of everything from portholes and paneling to furniture, engines and propellers.

Forty thousand migrant workers making \$1-2 per day do the scrapping. They cut the ships apart by hand, working in extremely dangerous conditions and without any safety or labor regulations. Ship owners make millions off the process.

To bring this process of ship-breaking to life — and to highlight the human rights and environmental issues — involved the late filmmaker and Carnegie Mellon Professor Paul Goodman, CMU’s Ralph Vituccio and Tom Clancey, an award-winning cinematographer whose resume includes Hollywood films such as “Fast & Furious,”

ing Platform Conference on global regulations for shipbreaking,” said Vituccio, an assistant teaching professor in the Entertainment Technology Center who has won several awards for films and interactive media on topics including racism, conflict management, art history and military service. “There, we were able to interview people involved in trying to set new regulations for the industry.”

“Shipbreakers” will make its U.S. premiere as part of CMU’s 2014 International Film Festival, running March 20 – April 5.

“This is one of the most dangerous industrial sites in the world — there are explosions all the time, people die, people are maimed,” Vituccio said. “The ships are 20 stories high and several football fields long, and the men are wearing sandals, climbing up the ships on rope ladders and using chisels and hammers to break up propellers and other precious metals.”



IMAGE COURTESY OF RALPH VITUCCIO

“SHIPBREAKERS” DOCUMENTS DANGEROUS CONDITIONS FACED BY MIGRANT WORKERS SCRAPPING UNSEAWORTHY VESSELS IN INDIA.

Vituccio hopes “Shipbreakers” brings awareness to how shipbreaking in less-developed countries has become a major international concern because of the human sacrifice involved and the environmental damages it causes. It pales in contrast to places, such as the U.S., where international laws for dealing with the proper disposal of toxic substances and occupational safety are followed.

“Shipbreakers” will screen at 7:15 p.m., on Friday, March 21, in McConomy Auditorium and will feature a panel of experts discussing the issues the film raises.

The film recently was nominated for Best Feature Documentary and Best Producer for Feature Documentary at the 2014 Madrid International Film Festival. It also has been accepted at the

Palm Beach International Film Festival, Flagler International Film Festival and the American Online Documentary Film Awards.

The theme of this year’s International Film Festival pays homage to Goodman, a revered filmmaker, and will highlight work across different cultures, which was his professional focus.

“Paul was about the process. He was a world-renowned organizational psychologist and was interested in work processes — how people organize, get along and manage each other. He was passionate about how film could help tell their stories. We all miss him,” said Vituccio, who had worked with Goodman on numerous films during the past 15 years.

CMU’s International Film Festival is sponsored by the Humanities Center.



**ONLINE: FOR A FULL FESTIVAL SCHEDULE AND TO PURCHASE TICKETS, VISIT [WWW.CMU.EDU/FACES/](http://WWW.CMU.EDU/FACES/).**

spent four years making the documentary “Shipbreakers.”

They had shot the footage in India and were working on the script when Goodman passed away.

Goodman’s widow, Denise Rousseau, the H.J. Heinz II University Professor of Organizational Behavior and Public Policy, stepped in to keep the project moving. Working off Goodman’s original script, Vituccio rewrote it to include more of the environmental and human rights issues.

“We were invited to the European Parliament in Brussels to present our unfinished work to the NGO Shipbreak-

The environmental pollution is devastating because the ships are laden with toxic materials, which are buried in surrounding farmlands or simply left to pollute the once pristine tidal flats.

“Every ship is a sump of toxic waste,” Vituccio said. “If workers aren’t killed on the job from explosions or falling objects, exposure to toxic waste, for many, will result in longterm illness or early death. They don’t have a union or any protection. If they complain, they don’t get hired. There’s no pay standardization, and if — or when — they get hurt, there is no medical or lost wages compensation.”

## Graduate Students Rapidly Relay Research

■ Cindy Carroll

Ph.D. candidates explained years of research in just minutes at Carnegie Mellon’s inaugural Three Minute Thesis (3MT) Championship.

The competition, brought to CMU by Dean of Libraries Keith Webster, challenges students to give a compelling talk explaining their work for a general audience.

“Many of our students are working on research that has a broader impact on society, health and the economy,” Webster said. “Challenging them to communicate their findings to a non-specialist audience, in a concise manner, helps to share their contribution. It also offers a great venue for students both to showcase their research, and to step back and reflect upon the big picture of their research.”

The Public Communication for Researchers (PCR) student group provided support for the event. PCR President Jesse Dunietz said that communicating

essential elements, and conveying them compellingly to smart people from other backgrounds.”

The rules are simple. The only aid



**WATCH THE FINALISTS’ PRESENTATIONS AT [WWW.YOUTUBE.COM/PLAYLIST?LIST=PL1HXVG\\_MCUKV BK5JNTFP2GU4UXRMLA7G9](http://WWW.YOUTUBE.COM/PLAYLIST?LIST=PL1HXVG_MCUKV BK5JNTFP2GU4UXRMLA7G9)**

with others is an essential part of a scientist’s job.

“Researchers possess knowledge that can make a crucial difference in the ability of others to make good decisions, so it’s our responsibility to help society use what we’ve learned,” Dunietz said. “Projects like 3MT hone participants’ skills for doing just that: boiling down a complex research idea to its most es-

students are allowed is a single Power Point slide. The goal is to engage the audience with simple spoken words that communicate the essence of their thesis work.

Eleven Ph.D. candidates made it to the final round out of 140 initial registrants. The first-place winner was David Rollinson, of the Robotics Institute, who presented his thesis “Snake

Robots in the Wild!” Second place went to Suchitra Ramachandran of Biological Sciences, who presented “The Brain as a Statistician.” Third place went to Patrick Foley, a statistics student, whose thesis is “Statistics and the Human Connectome.”

Rollinson is at the final stages of his Ph.D. work. He said it took time to whittle the presentation down to three minutes, but the end result was a “fantastically distilled elevator pitch.”

“I really liked the idea of taking a step back and reviewing everything from a more ‘big picture’ perspective,” he said.

Ramachandran said the competition provided him a way to think about why people should care about his research. To prepare, he talked to people outside his field.

“Those conversations helped me not only figure out the best language to use to communicate to them, but also made

CONTINUED ON PAGE ELEVEN

# Dietrich's Next Dean Looks To Build on Past Success

■ Heidi Opdyke

Richard Scheines has built his career on crossing academic disciplines.

He'll bring that same approach to the Office of the Dean of Carnegie Mellon's Dietrich College of Humanities and Social Sciences on July 1.

Scheines will succeed John Lehoczy, who has served as dean since 2000 and will return to the Department of Statistics faculty.

"At the dean's level, I hope to find opportunities to seed projects that involve faculty from humanities and social sciences as well as other parts of the university," Scheines said.

He already has helped make some connections by playing a role in the development of the university's new Simon Initiative, which aims to accelerate the use of learning science and technology to improve student learning, and to harness and leverage CMU's decades of learning data and research to improve educational outcomes for students everywhere.

"When we asked faculty to meet about creating a new center for learning sciences, a project which is still in the works, almost 40 percent of the faculty who showed up were from Dietrich," he said. "It's clear that our faculty are willing to combine their research and educational mission if they can do so in a supportive interdisciplinary context."

Scheines credits Herbert Simon for inspiring his own work in technology-enhanced learning. Scheines' research focuses on causal discovery, the philoso-

phy of social science, and educational technology and online courses.

"I saw Simon do this, and I was one of the early people to get hooked. If you just turn your research mind toward educational problems, it's a win-win. Herb saw that educational research is interesting and hard, but very rewarding," he said.

Another area he said is ripe for development is computational social science.

"There's lots of work going on with big data sets, Google has them, Facebook has them, Twitter, etc. — the recent partnership with Yahoo. We have great opportunities to combine talent in machine learning, social and decision sciences and psychology," he said.

CMU has been home to Scheines since 1990. He said he loves the intellectual freedom the university offers.

"The reason you go into academics is that you're curious, and you like the stimulation and the activity of working with ideas," he said.

Since 2005, Scheines has led the Philosophy Department to distinction with a focus on research that connects to a wide array of other fields, including computer science, math, statistics, brain science, medical ethics and psychology.

Scheines has additional appointments in the Machine Learning Department and Human-Computer Interaction Institute. He said philosophers have had a long tradition of influencing other fields.



RICHARD SCHEINES

"Newton, Einstein, Darwin were also philosophers of science," he said. "Many fields started in philosophy, and spun off into the disciplines we house separately today. In our world, at Carnegie Mellon, the philosophers are encouraged to not only interact with but also to contribute to other disciplines. We have faculty making contributions to statistics, to mathematics, to biology, etc.

"One thing I hope to do as dean is to give the faculty a sense that it's OK to reach out beyond one's own discipline."

Scheines also will continue to help CMU's humanities departments stand far apart from their peers.

"Our humanities emphasis in Dietrich is more connected to the real world than any other program I know of," he said.

## NEWS BRIEFS

### Cohon Named Scott Institute Director

President Emeritus and University Professor Jared L. Cohon has been named the new director of the Wilton E. Scott Institute for Energy Innovation. He will assume the post on July 1 from current director M. Granger Morgan, the Lord Professor and head of the university's Department of Engineering and Public Policy. Andrew Gellman, the Lord Professor of Chemical Engineering, will continue to serve as co-director.

"As an engineer, civic leader, administrator and intellectual force, Jerry is superbly suited to lead Carnegie Mellon's multidisciplinary efforts at the Scott Institute," said President Subra Suresh.

A distinguished environmental engineer, Cohon has been a thought leader for energy-related research and policy issues throughout his career. He chaired a National Academy of Sciences panel that found the harm inflicted on public health by the pollution generated by burning coal or gasoline approaches \$120 billion.

Requested by Congress, the report

quantified many of the external effects and costs of energy, and results were reported to the White House. Currently on sabbatical leave, Cohon is also an expert on environmental and water resource systems analysis, and has worked on water resource problems in the United States, South America and Asia.

In related news, the Scott Institute has announced a second round of seed grants to explore energy-related questions, such as how consumers might change their behavior if they received feedback on the electricity usage of their plug-in appliances, and what kind of methods and techniques can be derived for optimum partitioning of power in distributed power generation systems.

"When we put out our most recent call for short proposals, we quickly received 34 innovative and interdisciplinary ideas from across the campus," Morgan said. "The response demonstrates the many opportunities to build new bridges and undertake new innovative projects on our campus."

### Bigger Isn't Always Better

Portion sizes have steadily increased over the last few decades, but bigger isn't better when it comes to food. New research from the Tepper School suggests that larger portions lead consumers to enjoy the foods they eat less, and to eat those foods less frequently.

Each bite of a food or sip of a drink is enjoyed less than the previous one, a familiar phenomenon called "sensory-specific satiety." So consuming a larger portion means that we reduce our average enjoyment of what we eat or drink.

"Our conclusions suggest that how much we enjoy our last bite of a food — the end of an eating experience — appears to determine how long we will choose to wait before eating the same food again," said Carey Morewedge, associate professor of marketing at the Tepper School.

### Alumnus Designed USA Olympic Bobsleds

As creative director of BMW's Designworks USA, industrial design alumnus Matt Scully (A'95) has spent the last two years working on the ultimate driving machine for the U.S. Olympic team.

His work paid off as team USA won the

silver and bronze in the women's two-man bobsled, and a bronze medal in the men's two-man bobsled competition in Sochi, Russia. It was the first men's two-man bobsled medal for USA since 1952.

Scully joined BMW right after graduation. He designed the 2004 BMW H2R, which established new world speed records for hydrogen-powered automobiles.

### CMU Alert App Now On Android

The CMU Mobile Alert App is now available on Android smartphones for students, faculty, staff and parents. Also available on iPhones, the app was developed to provide:

- Emergency procedures and guidance for 21 different emergencies;
- Information regarding crimes and crime prevention;
- Links to important Carnegie Mellon websites;
- Interactive maps that provide information about locations of Automatic External Defibrillators (AEDs); and
- Automatic dialing for University Police, Safety Escorts and 911.

Download the Android app at <https://play.google.com/store/apps/details?id=com.cmu.cmualert>.

# Walk on the Wild Side



PHOTO BY LOUIS STEIN



PHOTO BY TIM KAULEN

AT LEFT, JOE VENTRUCELLI (A'14) AND ASHLEY BROOKE TWOMEY (A'14) PERFORM DURING THE SCHOOL OF DRAMA'S PRODUCTION OF "THE WILD PARTY." AFTER THE PERFORMANCE THE SCHOOL HELD ITS FIRST CELEBRATION IN HONOR OF ITS 100TH ANNIVERSARY IN THE PURNELL CENTER LOBBY. ADDITIONAL PARTIES WILL TAKE PLACE MARCH 10 AT STEINER STUDIOS AT THE BROOKLYN NAVY YARD IN NEW YORK CITY AND MAY 8 AT UNIVERSAL STUDIOS IN LOS ANGELES. ALUMNI, STAFF, STUDENTS, FACULTY, FRIENDS AND THE PUBLIC CAN SHARE THEIR MEMORIES AND TELL THEIR STORIES AT THE SCHOOL OF DRAMA'S INTERACTIVE TIMELINE AT [HTTP://TIMELINE.DRAMA.CMU.EDU/](http://TIMELINE.DRAMA.CMU.EDU/).

# Graduate Students Rapidly Relay Research

CONTINUED FROM PAGE NINE

me open to interesting intuitions and perspectives they had about my research as outsiders," he said.

In an audience vote, Ramachandran and Arun R. Shrivats (Biomedical Engineering) with the thesis "siRNA Therapeutics for Fibrodysplasia Ossificans Progressiva" tied for the People's Choice Award.

Shrivats said he has always enjoyed sharing his research with friends and family, and the competition helped him put more thought into the best ways to do that.

All three said the competition broadened their knowledge of work being done by graduate students.

"I learned of a lot of different avenues of research going on at CMU that I would have otherwise never been exposed to," Shrivats said. "The competition was also a great reminder for me to focus on what I could control. There were a lot of students that wanted to do well in this competition, but at the

end of the day, the only thing each of us could control was our own performance. I really enjoyed this experience as there was a huge focus on simply bringing out the best in yourself."

Webster, who joined CMU earlier this academic year, was previously at the University of Queensland (UQ) where 3MT launched in 2008. It has now been adopted by dozens of universities and Universitas 21, a global network of research-intensive universities hosted its inaugural international competition last fall.

"The success of the competition at UQ showed that there was great demand for opportunities like this," Webster said.

"I have been overwhelmed by the response by the CMU Ph.D. student community to the 3MT competition," Webster said. "They have risen to the challenge, and presented some truly transformational research."

# World Economic Forum's Top 10 Emerging Technologies List Cites CMU

■ Byron Spice

The World Economic Forum has released its 2014 list of the Top 10 Emerging Technologies, which cites Carnegie Mellon's pioneering research in one of these technologies, the quantified self.

The report, released Feb. 26 by the WEF's Global Agenda Council on Emerging Technologies, notes that the quantified-self movement has existed for

years, based on the idea that continually collecting data on everyday activities can help individuals make better choices on health and behavior.

Justine Cassell, director of CMU's Human-Computer Interaction Institute (HCII) and chair of the WEF's Global Agenda Council for Robotics and Smart Devices, helped compile this year's list.

As examples of the potential impact of the quantified self, the report notes a

project by Jason Hong and John Zimmerman, both associate professors in the Human-Computer Interaction Institute, who are exploring the use of smartphone data to help detect the onset of depression. Changes in sleep patterns, physical activity and people in contact via phone, email and social media may all be useful in determining if someone might be suffering from depression or if a patient is responding to therapy.

The report also cites Livehoods, a project that includes Hong and Norman Sadeh, professor in the Institute for Software Research. Livehoods uses Foursquare check-ins and other geo-tagged data gathered by smartphones to create maps of urban areas. These maps show how different groups of people use urban areas, reflecting communities defined as much by lifestyle as geography.

Download the iPhone app at <https://itunes.apple.com/us/app/cmu-alert/id687695603?mt=8&ign-mpt=uo%3D4>.

## Student Employees To Be Honored at Lunch

Registration is now open for the Student Employee Appreciation Lunch from noon – 1:30 p.m., April 2 in the University Center's Rangos Hall. Campus supervisors can host their student employees, and join them for lunch to celebrate the great work they do. Entertainment will be provided by musical theater students in the School of Drama.

Registration deadline is March 28. Register at [www.cmu.edu/career/student-employment-experiential/](http://www.cmu.edu/career/student-employment-experiential/).

## Dates Added for Research Seminars

New dates have been scheduled for the Responsible Conduct of Research (RCR) Seminar Series this semester. Upcoming sessions are scheduled from noon – 1 p.m. in the University Center. Dates and topics are:

- Tuesday, March 18: Who Owns the Data?
- Wednesday, March 26: Data Security
- Tuesday, April 8: Research Data Management
- Tuesday, April 15: Ethical Issues with

- Research Involving Human Subjects
- Tuesday, April 22: International Research Considerations: Foreign Travel and Foreign Collaborators

More information is available on the RCR website. Space is limited, so register early.

## HCII Faculty Member Named Sloan Fellow

The Alfred P. Sloan Foundation has named Jeffrey Bigham, associate professor in the Human-Computer Interaction Institute, as a winner of a 2014 Sloan Research Fellowship.

The fellowships are given to early-career scientists and scholars whose achievements and potential identify them as rising stars and the next generation of scientific leaders. Bigham investigates crowd-powered technologies, enabling groups to do things individuals can't and leveraging the on-demand labor of people to perform tasks beyond the capability of today's computers.

His other interests include accessible technologies. He is the scientific director of the Disability Rehabilitation Research Project (DRRP) on Inclusive Cloud and Web Computing, a five-year project sponsored by the U.S. Department of Education to develop methods that enable people with disabilities to take full advantage of online resources.

## CMU Technology Teaches Children Fus-ha

A team of researchers at Carnegie Mellon in Qatar has developed a new way to teach fus-ha, Modern Standard Arabic (MSA), using interactive technology. The project, "Advancing Arabic Language Learning in Qatar," was funded by a Qatar National Research Fund (QNRF) grant in 2009 and this year the Carnegie Mellon researchers partnered with Qatar Academy to bring their technology into kindergarten classes.

Before starting school, most Arab children do not realize that there are two variants of the Arabic language: the local dialect they speak at home and MSA. While rarely used for day-to-day interactions, MSA is the variety used in writing and formal speech.

To introduce students to MSA, the team of researchers created a series of activities based on the folk tale Aladdin, which they presented on large, interactive surfaces called Microsoft PixelSense. The 40-inch displays allow children to interact with the program — and each other — at any one time.

Among the activities are an alphabet bingo, where students score points by pairing objects with their first letters, and a storyboard, where students recreate the Aladdin tale by placing scenes in the right order. While the

lessons meet Qatar's Supreme Education Council Arabic curricula, this is the first time such an approach has been used in Qatar.

## A Sticky Situation

Carnegie Mellon's Metin Sitti and his research team have created a synthetic gecko-adhesive and are commercializing it for use in several industries, including defense, consumer products, sports, automotive, medicine, aerospace and robotics.

To create the adhesive, Sitti's research team emulated how the gecko sheds contaminants with each step to keep its feet sticky and clean in dirty environments.

"We performed contact self-cleaning experiments with three different sizes of mushroom-shaped elastomer microfibers and five different sizes of spherical silica contaminants. Using a load-drag-unload dry contact cleaning process similar to the loads acting on the gecko foot during climbing, our fully-contaminated synthetic gecko-adhesive could recover lost stickiness and lost adhesion at a rate comparable with that of the gecko," said Sitti, a professor of mechanical engineering and head of CMU's NanoRobotics Lab.

# Series Pages Through CMU Authors

■ Dan Mohler

Carnegie Mellon's University Store is opening a new chapter with its inaugural Author Reading Series.

"We think these readings are a great way for us to contribute to what is going on artistically, intellectually and for entertainment across campus," said Katie Charles-McGrath, who is organizing the series. "We plan on making this a tradition every fall and spring semester."

Charles-McGrath, associate book buyer for the store, said that while CMU and outside authors have offered lectures at the store, the new venture is aimed at offering ways to interact and support the campus community.

The series kicked off in January with Rob Fallon, assistant professor of music, who spoke about the life and work of French composer Messiaen. Fallon discussed two volumes of "Messiaen Perspectives," in which he was a contributing writer and editor.

In mid-February, Barbara Johnstone, professor of rhetoric and linguistics in the Department of English, presented the popular book "Speaking Pittsburghese: The Story of a Dialect."

"This book is the result of 12 years of research using multiple humanistic and social-scientific methods, both qualitative and quantitative," Johnstone said. "I've found it fascinating to piece together the story I tell here, and I have

been truly surprised by some of what I found."

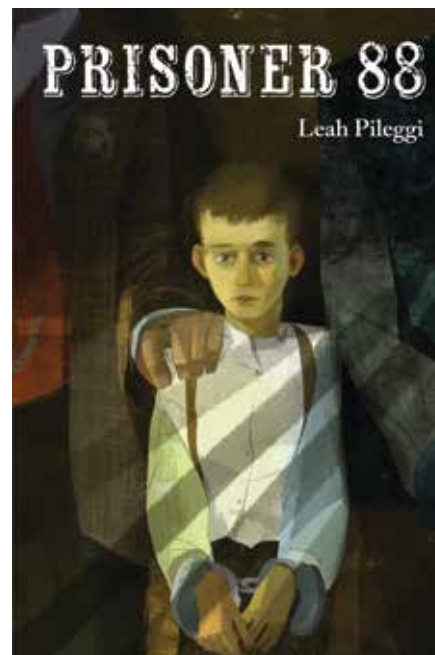
In "Speaking Pittsburghese," Johnstone traces the history of the language used by native western Pennsylvanians.

The store carries more than 500 books by faculty authors and the books highlighted in the series span a broad range of topics.

Some of science fiction's biggest questions will be answered March 18 by Barry Luokkala, a teaching professor of physics and author of "Exploring Science Through Science Fiction."

Luokkala, who came to Carnegie Mellon in 1980 and started teaching in 1983, uses examples from science fiction films and television as a springboard for discussing major questions such as: What is the nature of space and time? What is the universe made of? Can a machine ever become self-aware? Are we alone in the universe? What does it mean to be human?

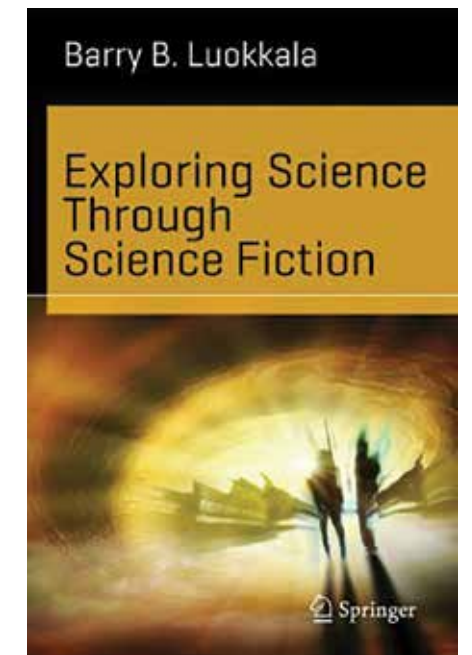
"The major goal of 'Exploring Science Through Science Fiction' is to get people who are not already technically oriented to become more interested in science. But the contents are also very appealing to those from technical backgrounds, who love science fiction, and enjoy examining some of the science in sci-fi films from a critical perspective," Luokkala said.



Leah Pileggi, a professional assistant and special projects director for Electrical and Computer Engineering, will discuss "Prisoner 88," a historical middle-grade novel for ages 10 and up, on April 15.

During a visit to Boise, Idaho, Pileggi toured the Old Idaho State Penitentiary. A tour guide shared a story about a 10-year-old prisoner who arrived in 1885. He was sentenced to five years for shooting a man who threatened his father.

Pileggi's book is based on the true story and tells about Jake's friendships



with the warden, a few fellow prisoners and a young guard. He put his friendships to the test when he tried to foil a brave escape attempt of other prisoners.

Pileggi, who also wrote "How to Design a World-Class Engineering College: A History of Engineering at Carnegie Mellon University," is currently working on a middle-grade historical novel about race relations in Pittsburgh in the 1950s. She is also researching the Fort Pitt Block House for her next project.

Students, faculty and staff are encouraged to attend the authors' readings held in the upper level of the store.

## School of Art Symposium Draws Artists

■ Kelly Solman

Even in a digital age, artists and educators are drawn to the simplicity of drawing.

DRAW2014 brought together artists and practitioners from around the world to Carnegie Mellon at the end of February to emphasize the fundamentals of drawing.

Fashion/art "it girl" Shantell Martin invited the audience to join her in a multimedia performance. She said she hoped participants walked away wanting to make their own mark on the world.

"Drawing has a bad reputation. Basically, there is this idea, if you ask adults if they can draw, they say, 'oh I can only draw a stick man.' In the educational system, we've told them that that's what drawing is. And for those of us who couldn't color inside the lines, our confidence was crushed," Martin said. "You don't have to be doing what everyone else is doing. The point is to leave your own style and personality in your work."

John Carson, head of CMU's School of Art, said symposia such as DRAW2014 are important for examining what drawing really is.

"Most people were educated to think drawing is being able to take a



SHANTELL MARTIN SAYS THE POINT OF DRAWING IS TO USE YOUR OWN PERSONALITY.

pencil and make a realistic representation of something like a photograph. But drawing can be a way of thinking, exploring ideas, fantasizing, speculating. It can be all sorts of things, not just a still life," Carson explained.

In terms of drawing media, Carson said most people think of pencils, charcoal or painting. But he wanted to open participants' minds to what drawing has been and can be.

"Dancing is about people using their bodies and drawing in space. Tire tracks in the snow can be a kind of drawing. With this symposium, we wanted to get as many interesting practitioners together as possible and encour-

age expansive thinking," Carson said.

Highlights of the symposium included lectures from:

- Amy Sillman, 2014 Distinguished Lepper Lecturer and visiting artist at CMU;
- Stephen Farthing, painter and Chair of Drawing at the University of the Arts London;
- Helen Molesworth, chief curator at the Institute of Contemporary Art, Boston, curated Dance/Draw 2011/2012; and
- Shahzia Sikander, Pakistani-American artist known for her politically rich, experimental take on Indo-Persian miniature painting.

In addition, 2013 Carnegie International artist and prizewinner Nicole Eisenman led a figure drawing session in the Carnegie Museum of Art's Grand Hall of Sculpture.

Visiting artists, CMU faculty and alumni hosted workshops spanning silverpoint, comics and animation, generative drawing with code, botanical illustration, post-Google drawing, drawing as political action, drawing as performance and much more. An arcade provided an opportunity to meet local artists, illustrators and bookmakers showing and selling work, conducting demos, providing information and provoking conversation.

The symposium was co-organized by Clayton Merrell, associate head and associate professor of art, and Patricia Bellan-Gillan, professor of art.

"Drawing is so often the starting point and the first manifestation of an idea, an artwork, a building. It's very close to the thinking process itself," Merrell said. "It's a very direct and pure tool for communication. We draw today in myriad ways with low-tech and high-tech tools, but the act of representing spaces and ideas through schematic lines is just as immediate, powerful and useful today as ever."